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THE
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THE STANDARD DICTIONARY OF FACTS

HISTORY, LANGUAGE, LITERATURE, BIOGRAPHY, GEOGRAPHY, TRAVEL, ART, GOVERNMENT, POLITICS, INDUSTRY, INVENTION, COMMERCE, SCIENCE, EDUCATION, NATURAL HISTORY, STATISTICS AND MISCELLANY

EDITED BY

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EDITOR OF "CENTURY BOOK OF FACTS," "UNIVERSAL MANUAL OF
READY REFERENCE," "THE CAPITALS OF THE WORLD,"
"LEADERS OF MEN," ETC.

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EDITOR'S PREFACE

IN the year 1900, the editor of this volume presented to the public a more or less comprehensive book of general information—**THE CENTURY BOOK OF FACTS**—which has since found a place in upward of half a million American homes. This immense circulation would seem to be conclusive that a work of this type meets with the intelligent approval of a large contingent of the book-buying public. There is additional evidence, however, that the demand for comprehensive, concise, reliable, up-to-date, books of reference and instruction, in almost every department of knowledge, is becoming more insistent. And it is in consequence of this demand, as well as the desire of the editor to enlarge and improve and standardize his original plan, that the present work has been prepared.

The present work is in no sense a revision of the old one—which, practically, has never been revised. It has been built entirely anew, guided by the defects and limitations of the old one, to be sure, but chiefly in the light of the advances of the past eight years. It is divided into Ten Books, covering the entire range of general knowledge, so classified as to bring to the reader or consulter the essentials of many diverse subjects in the most direct and expeditious manner. Numerous tabulations have been introduced which in themselves will be found valuable substitutes for volumes, even, along the same lines.

The aim has been to adapt the work to the needs of all classes of readers—to the home, to the school, to the office, to the library. Live, practical, every-day information, touching the manifold interests of the day, has been given a place alongside the previously recorded facts of history, literature, science, industry, biography, and achievement. The past has been linked with the present in such fashion as to make the survey of the world's progress at once complete and concise.

Many hundreds of volumes have been laid under tribute to complete the present work, and much valuable assistance has been rendered by many persons throughout the entire country, both by suggestion and contribution. To Miss Susan F. Chase, M. A., Pd. D., and Miss Helen L. Dunston, of the Buffalo State Normal School, in particular, the credit is due for the best features in the departments of Literature and Language, respectively.

It is to be hoped that the hundreds of thousands of patrons of **THE CENTURY BOOK OF FACTS** will give the same appreciative welcome to **THE STANDARD DICTIONARY OF FACTS** that they accorded the editor's first effort. Indeed, the large amount of additional matter in the latter, the improved arrangement of the various departments, and the importance of recording many recent occurrences in a swiftly-moving age, not only constitute it the logical successor of the former, but make it a practical necessity. Its readiest patrons should be the present possessors of **THE CENTURY BOOK OF FACTS**.

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FIRST BOOK

HISTORY .

PATRICK HENRY IN THE CONTINENTAL CONGRESS

HISTORY

Abdication is the act of giving up an office. It is sometimes compulsory, and sometimes the result of vexation and disappointment. The following monarchs have abdicated:

Amadeus I. (duke of Aosta) Spain,	1873
Charles IV. of Spain (forced),	1808
Charles V. of Spain and Germany,	1556
Charles X. of France (forced),	1830
Charles Albert of Sardinia (forced),	1849
Charles Emmanuel of Sardinia,	1802
Christina of Sweden,	1654
Diocletian and Maximian,	305, 308
Felipe V. of Spain,	1724
Francis II. of the Two Sicilies (forced),	1860
James II. of England (forced),	1689
Louis Bonaparte of Holland,	1810
Louis Philippe of France (forced),	1848
Ludwig of Bavaria (forced),	1848
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Poniatowski of Poland (forced),	1795
Richard II. of England (forced),	1399
Stanislaus Leszczinski (forced),	1735
Victor Amadeus of Sardinia,	1730
Victor Emmanuel,	1821
Charles X.,	1830
Louis Philippe,	1848
Ferdinand of Austria,	1848
Amadeus of Spain,	1873
Oscar II. of Sweden,	1907
Emperor of Corea,	1907

Several dethroned without even the mocking show of abdication, like Edward II. of England (1327); Henry VI. of England (1471); Emperor of Corea (1907), etc.

Achæan League, The. A confederacy of the twelve towns of Achæa. It was dissolved by Alexander the Great, but reorganized B. C. 280, and again dissolved B. C. 147. The second of these leagues, founded at Megalopólis, contained all the chief cities of Peloponnesus. It contended with the Macedonians and the Romans for the liberty of Greece; but, being beaten at Scarpheâ by Metellus, and at Leucopëtra by Mummius, it dissolved soon after the taking of Corinth.

The twelve cities of Achæa, in Ionia, were founded by the Heraclidae.

Achæan War, The. Roman ambassadors at Corinth enjoin the dismemberment of the Achæan League and are insulted (B. C. 147). Kritolios, general of the league, at once besieged Heracleia (B. C. 146), but was defeated at Scarpheâ by Metellus, and slew himself. Dicos, successor of Kritolaos, was defeated at Leucopëtra by Mummius (B. C. 146); Corinth was then destroyed; and all Greece was erected into a Roman Province, September 146.

Actiac War, The. This arose out of the rupture between Octavian and Antony, two of the Triumvirs (B. C. 33). Octavian declared war against Cleopatra, Queen of Egypt, and defeated Antony at Actium, 2d September, B. C. 31. Both Cleopatra and Antony killed themselves. Alexandria was taken by Octavian, August 30th (B. C. 33), and Egypt was made a Roman Province, B. C. 30.

Ætolian Confederacy, The, B. C. 323, called into existence by the Lamian War. The states used to assemble annually in the autumn at Thermum, and the assembly was called the Panætolicon. B. C. 189, the Ætolian states were subjected to the Romans.

The object of the Lamian War was (on the death of Alexander the Great) to liberate Greece from Macedonia. The Athenians were the principal insurgents, but were defeated in 322 at Cranon, by Antipater.

Ætolian League, The. Ætolia joined the Greek confederates in the Lamian War, B. C. 313, but the Ætolian League rose into no great prominence till the Macedonian War (B. C. 214), when Sparta joined it, and it became the antagonist of the Achæan League, which sided with Philip V. of Macedon. It was the unwise policy of the Ætolian League which made Rome master of Greece.

Abyssinia. The oldest accounts of the Abyssinians are full of fables, but seem sufficient to prove that they attained some degree of civilization even in remote antiquity. Christianity was introduced about the middle of the Fourth Century, and soon prevailed extensively. Axum was at that time the capital. Two centuries later the Abyssinians were powerful enough to invade Arabia, and conquer part of Yemen. In the Tenth Century a Jewish Princess overthrew the reigning dynasty, the surviving representative of which fled to Shoa. After three centuries of confusion the empire was restored under Icon Amlac, and some progress was made in improvement. Early in the Fifteenth Century the Abyssinians entered into close relations with the Portuguese. Under the influence of the Portuguese missionaries the royal family adopted the Roman Catholic faith, and the old Coptic Church was formally united to the See of Rome. The people and ecclesiastics obstinately resisted the innovation; the emperor gave way; and ultimately, in 1632, the Romish priests were expelled or put to death. Though Christianity is still the professed religion of Abyssinia, it exists only in its lowest form, and is little more than ceremonial. The Church is national and independent, but the visible head, or *Abuna* ("our father"), is ordained by the Coptic Patriarch of Alexandria. The doctrines of the Abyssinian coincide with those of the Coptic Church, especially in the monophysite heresy; but several peculiar rites are observed, including the rite of circumcision and observance of the Mosaic laws respecting food, etc.; love-feasts, and adult baptism. The oldest Abyssinian churches are hewn out of rocks. The modern churches are mostly round or conical buildings, thatched with straw and surrounded by pillars of cedar. Statues and bas-reliefs are not tolerated in churches, but paintings are numerous. In 1860, King Theodore (born 1818, crowned 1855) felt himself insulted by the British Consul, whom he imprisoned with some missionaries.

A large English force under Lord Napier then came to Abyssinia and captured the strong fortress of Magdala in April, 1868. On this Theodore committed suicide. After an interval of anarchy Prince Kassai assumed power as Johannes II. in 1872. He died in 1889, and was succeeded by Menelek II. Abyssinia then practically became an Italian protectorate. During 1895 a war prevailed between Abyssinia and Italy, which was closed in 1896. In 1906, an agreement between Great Britain, France, and Italy, as to their interests in Abyssinia, was concluded. In 1907, a decree was issued by Menelek II. announcing the formation of a cabinet on European lines.

Abyssinian War, The. Between the British and Theodore, King of Abyssinia. This expedition (for the release of missionaries, Captain Crawford, and others) was under Sir R. Napier, who joined the army at Senafé, January, 1868. Colonel Phayre defeated Theodore at Magdala, 10th of April, which was bombarded and taken on 13th of April. The return of the British army commenced 18th of April, 1868.

Afghanistan. The history of Afghanistan belongs almost to modern times. The collective name of the country itself is of modern and external origin (Persian). In 1738, the country was conquered by the Persians under Nadir Shah. On his death, in 1747, Ahmed Shah, one of his generals, obtained the sovereignty of Afghanistan, and became the founder of a dynasty which lasted about eighty years. At the end of that time Dost Mohammed, the ruler of Cabul, had acquired a preponderating influence in the country. On account of his dealings with the Russians the British resolved to dethrone him and restore Shah Shuja, a former ruler. In April, 1839, a British army under Sir John Keane, entered Afghanistan, occupied Cabul, and placed Shah Shuja on the throne, a force of 8,000 being left to support the new sovereign. Sir W. MacNaghten remained as envoy at Cabul, with Sir Alexander Burnes as assistant envoy. The Afghans soon organized a wide-spread insurrection, which came to a head on November 2, 1841, when Burnes and a number of British officers, besides women and children, were murdered, MacNaghten being murdered not long after. The other British leaders now made a treaty with the Afghans, at whose head was Akbar, son of Dost Mohammed, agreeing to withdraw the forces from the country, while the Afghans were to furnish them with provisions and escort them on their way. On January 6, 1842, the British left Cabul and began their most disastrous retreat. The cold was intense, they had almost no food—for the treacherous Afghans did not fulfill their promises—and day after day they were assailed by bodies of the enemy. By the 13th, 20,000 persons, including camp-followers, women, and children, were destroyed. Some were kept as prisoners, but only one man, Dr. Brydon, reached Jelalabad, which, as well as Kandahar, was still held by British troops. In a few months General Pollock, with a fresh army from India, retook Cabul and soon finished the war. Shah Shuja having been assassinated, Dost Mohammed again obtained the

throne of Cabul, and acquired extensive power in Afghanistan. He joined with the Sikhs against the British, but afterward made an offensive and defensive alliance with the latter. He died in 1863, having nominated his son Shere Ali his successor. Shere Ali entered into friendly relations with the British, but in 1878, having repulsed a British envoy and refused to receive a British mission (a Russian mission being meantime at his court), war was declared against him, and the British troops entered Afghanistan. They met with comparatively little resistance, the ameer fled to Turkestan, where he soon after died; and his son Yakoob Khan having succeeded him concluded a treaty with the British (at Gandamak, May, 1879), in which a certain extension of the British frontier, the control by Britain of the foreign policy of Afghanistan, and the residence of a British envoy in Cabul, were the chief stipulations. The members of the mission were again treacherously attacked and slain, and troops were again sent into the country. Cabul was again occupied, and Kandahar and Ghazni were also relieved; while Yakoob Khan was sent to imprisonment in India. In 1880, Abdur-Rahman, a grandson of Dost Mohammed, was recognized by Britain as emir of the country, and has since been on friendly terms with the British, by whom he is subsidized. Encroachments by the Russians on territory claimed by Afghanistan almost brought about a rupture between Britain and Russia in 1885, and led to the delimitation of the frontier of Afghanistan on the side next the territory now occupied by Russia. In 1897, a punitive expedition was again sent against the tribes around the Khyber Pass, who disregarded their pledges. In 1905, the Ameer ratified a treaty with Great Britain agreeing to accept the advice of the British Government in regard to his foreign relations; and was guaranteed against unprovoked aggressions on his dominions.

Afghan War, The. A diplomatic contest between France and Russia induced Dost Mohammed of Cabul to invite the friendship of Great Britain in 1836. This led to a diplomatic contest between Great Britain and Russia respecting Afghanistan. Dost Mohammed joined Persia, and war was proclaimed against him at Simla by Lord Auckland, Governor-General of India, October 1, 1838. Dost Mohammed gave himself up at Cabul to Sir W. MacNaghten, November 3, 1840; but his son Akbar Khan completely outwitted General Elphinstone and the envoy, Sir William MacNaghten, both of whom were treacherously put to death. Negotiations for quitting Cabul were purposely delayed till winter had set in; and then the whole British force, which, with women and children amounted to 20,000 souls, were as treacherously destroyed in the Khyber Pass, 1842.

African War, The. The first African War was undertaken by the Romans for the restoration of Hiempsal to the throne of Numantia. Ahenobarbus, the leader of the Marian party in Africa, had dethroned him, but Cneius Pompey slew Ahenobarbus, and restored Hiempsal, B. C. 81.

The second African War was between Cæsar and Scipio, B. C. 46. Cæsar defeated the party

of Pompey at Thapsus, in Africa, and thus put an end to the Civil War.

The third African War was undertaken by the Romans against Tacfarinas, a Numidian, in the reign of Tiberius. Tacfarinas, having collected a large gang of freebooters, defied for some years the Roman arms in Numidia, but was ultimately overthrown and slain by Dolabella, A. D. 17-24.

The fourth African War was between the Romans and Vandals in Africa. The Vandals under Genseric took possession of the Roman dominions in Africa, and continued masters for 105 years (A. D. 429-534). Belisarius was sent into Africa by the Emperor Justinian to win back the African dominions, and he utterly overthrew the Vandals, took Carthage in 533, and returned to Rome in triumph in the autumn of the year following, A. D. 534.

Agrarian Agitation, B. C. 480. The great Roman agrarian agitation was set on foot by Spurius Cassius, who had been three times consul. To win popular favor, he told the people that the Senate ought to give an account of the land taken from the Volsci, which ought to have been equally divided amongst the whole people irrespective of rank. The Senate, to allay the popular clamor, promised to give the matter their best consideration, but arrested Cassius and hurled him from the Tarpeian Rock. Things went on till B. C. 464, when Herdonius, the Sabine, got possession of the capital. Then the Senate promised to pass an agrarian law, if the people would eject the invaders. The invaders were expelled, but it was not till B. C. 365 that Licinius Stolo, the plebeian tribune, got a law passed making it penal for anyone to hold more than 500 acres of the public lands.

Alabama. The name, derived from the Indians, denotes "Here we rest." Originally a part of Georgia, the country included in Alabama and Mississippi was organized as a Territory in 1798. In 1812, that part of Florida, then belonging to Spain, lying between the Perdido and Pearl rivers on the Gulf Coast, was seized by the United States troops and annexed to the Territory. Alabama remained a Territory after the western portion was admitted as a State under the name of Mississippi, and was itself

admitted as a State in 1819. On January 11, 1861, the Ordinance of Secession was adopted by the Secession Convention, and on February a provisional congress met at Montgomery and organized the Government of the Confederate States. Jefferson Davis was inaugurated President of the Confederacy at Montgomery, February 18, 1861, and the government seat was moved from Montgomery to Richmond in July, 1861. Mobile was finally captured by the Federals, April 12, 1865, and on May 4th the State was included in the surrender made by General Richard Taylor. After the Confederate surrender, the State passed under the phases of provisional and military government until 1868, when it was regularly reconstituted as a State in the Union. In 1901, a Constitutional Convention, called to regulate negro suffrage, was in session from May 21st to September 2d at Montgomery. On November 11, 1901, the new constitution was ratified by popular vote. In 1907, a notable effort was made by Governor Comer opposing federal interference in the regulation of the railroads of the State.

Alamo, The, a mission church at San Antonio, in what is now Bexar County, Texas, converted into a fort. In 1836 it was occupied by about 150 of the revolutionists in the Texan War of Independence. Though attacked by 4,000 Mexicans under Santa Ana, the Texans held it from February 23d to March 6th, when Santa Ana took it by storm. All but seven of the garrison perished, six of these being murdered after their surrender, and one man escaping to report the affair. In this garrison were the celebrated David Crockett, and Colonel James Bowie, inventor of the bowie-knife. The memory of this massacre became an incitement to the Texans in subsequent encounters, and "Remember the Alamo!" became a war-cry in their struggle for freedom.

Alemanni, a confederacy of tribes which appeared on the banks of the Rhine in the Third Century, and for long gave no small trouble to Rome, but whose incursions were arrested, first by Maximinus, and finally by Clovis in 496, who made them subject to the Franks, hence the modern names in French for Germany and the Germans.

AMERICAN BATTLES, TABULATED

Naval engagements are indicated by *italics*; * means that it was a drawn battle; † means a general estimate.

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
July 2, 1898	Aguares (including July 1st), . .	Spanish	U. S.	0	12	10	30
Feb. 11, 1865	Aikens,	Conf.	U. S.	6†	9†	31	160
May 5, 1864	Albemarle,	Conf.	U. S.	4	25	0	0
Oct. 27, 1864	Albemarle,	Conf.	U. S.	2	0	0	0
Oct. 5, 1864	Allatoona,	Conf.	U. S.	142	352	338	704
Nov. 13, 1776	Alfred-transport,	English	U. S.	0	2	3	10
May 28, 1781	Alliance-squadron,	English	U. S.	5	20	11	30
Jan. 26, 1814	Alligator,	English	U. S.	2	2	8	14†
March 2, 1815	America-Elizabeth,	English	U. S.	0	0	2	13
Oct. 2, 1863	Anderson's Cross-Roads,	Conf.	U. S.	8	16	32	41
Aug. 12, 1776	Andrea Doria-Racehorse,	English	U. S.	4	8	6	3
March 17, 1813	Antelope-Zephyr,	English	Eng.	1	3	0	2
Sept. 16, 1862	Antietam (continued),	Conf.	U. S.				
Sept. 17, 1862	Antietam (ended),	Conf.	U. S.	2,010	9,416	1,842	9,399

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
April 9, 1865	Appomattox,	Conf.	U. S.	203	297	189	386
Aug. 14, 1813	Argus-Pelican,	English	Eng.	6	17	2	5
July 15, 1862	Arkansas,	Conf.	U. S.	18	50	10	15
Jan. 10, 1863	Arkansas Post (continued),	Conf.	U. S.	6	25	10†	30†
Jan. 11, 1863	Arkansas Post (ended),	Conf.	U. S.	129	831	60	78
Oct. 12, 1863	Arrow Rock (continued),	Conf.	Conf.	...	...	...	...
Oct. 13, 1863	Arrow Rock (ended),	Conf.	U. S.	45	162	84	205
Oct. 9, 1779	Assault on Savannah,	English	Eng.	68	173	18	37
July 14, 1813	Asp, attack on the,	English	Eng.	4	6	10	21
Sept. 23, 1864	Athens, Ala.,	Conf.	U. S.	0	0	12	18
July 22, 1864	Atlanta, Hood's first sortie,	Conf.	U. S.	499	2,142	1,162	7,337
Aug. 3, 1812	Atlas-Planter and Pursuit,	English	U. S.	2	5	2	4
Aug. 3, 1804	Attack on Tripoli,	Tripolitan	*	1	13	60	70
Aug. 7, 1804	Attack on Tripoli,	Tripolitan	*	22	6	50†	80†
Nov. 29, 1813	Autosse,	Indians	U. S.	11	54	204	0
March 16, 1865	Aversyboro,	Conf.	U. S.	77	477	86	632
Feb. 1, 1864	Bachelor's Creek,	Conf.	Conf.	24	77	13	22
Oct. 21, 1861	Ball's Bluff,	Conf.	Conf.	223	226	58	242
Feb. 4, 1863	Batesville,	Conf.	U. S.	2	4	5†	7†
Aug. 5, 1862	Baton Rouge,	Conf.	U. S.	99	203	125	234
Oct. 4, 1863	Baxter's Springs,	Conf.	Conf.	80	21	12	32
Aug. 27, 1863	Bayou Metee,	Conf.	U. S.	2	8	11	31
Jan. 29, 1863	Bear River,	Indians	U. S.	12	49	224	8
June 24, 1813	Beaver Dam,	English	Eng.	25	50†	30†	34
Nov. 6, 1861	Belmont (continued),	Conf.	Conf.	...	...	...	...
Nov. 7, 1861	Belmont (ended),	Conf.	U. S.	90	173	231	682
Aug. 16, 1777	Bennington,	English	U. S.	30	41	59	81
March 18, 1865	Bentonville (continued),	Conf.	U. S.	...	...	...	...
March 18, 1865	Bentonville (ended),	Conf.	U. S.	191	1,108	267	1,381
May 26, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	...	...	...	...
May 27, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	...	...	...	...
May 28, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	...	...	...	...
May 29, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	...	...	...	...
May 30, 1864	Bermuda Hundreds (ended),	Conf.	U. S.	...	...	...	...
June 9, 1863	Beverly Ford,	Conf.	U. S.	201	998	864	2,136
Jan. 11, 1865	Beverly, W. Va.,	Conf.	Conf.	156	289	253	354
July 26, 1864	Big Creek,	Conf.	Conf.	5	20	3	6
Oct. 24, 1864	Big Blue (continued),	Conf.	U. S.	18	32	48	102
Oct. 25, 1864	Big Blue (ended),	Conf.	U. S.	...	...	...	...
June 25, 1876	Big Horn,	Conf.	Ind.	41	62	78	135
May 17, 1863	Black River,	Conf.	U. S.	261	0	81	126
Aug. 24, 1814	Bladensburg,	Conf.	Eng.	29	242	40	186
Feb. 13, 1862	Blooming Gap,	Conf.	U. S.	30	42	183	297
Oct. 10, 1863	Blue Springs,	Conf.	U. S.	0	2	13	26
Sept. 8, 1862	Boat attack on Charleston,	Conf.	Conf.	33	62	48	94
April 3, 1780	Boats-Black Snake,	Conf.	Conf.	23	57	0	2
June 3, 1776	Boats-tender to Nautilus,	English	U. S.	0	2	3	5
Sept. 23, 1779	Bonhomme Richard-Serapis,	English	U. S.	1	3	4	18
Oct. 12, 1800	Boston-Berceau,	French	U. S.	49	67	49	68
March 31, 1865	Boydton and White Oak Road,	Conf.	U. S.	4	11	4	17
Sept. 11, 1777	Brandywine,	Conf.	U. S.	177	1,134	236	998
June 10, 1864	Brice's Cross-Roads, Miss.,	English	Eng.	289	568	98	398
April 29, 1862	Bridgeport, Ala.,	Conf.	Conf.	223	394	124	582
Oct. 14, 1863	Bristow Station,	Conf.	U. S.	3	8	31	42
Aug. 4, 1812	Brownstown,	Conf.	*	50	150	150	250
Oct. 19, 1863	Buckland's Mills,	English	Eng.	17	30	0	0
Feb. 22, 1847	Buena Vista (continued),	Conf.	Conf.	8	23	4	31
Feb. 23, 1847	Buena Vista (ended),	Mexican	U. S.	...	...	...	...
July 21, 1861	Bull Run,	Conf.	U. S.	267	456	568	1,241
Aug. 29, 1862	Bull Run No. 2 (continued),	Conf.	Conf.	481	1,011	362	1,390
Aug. 30, 1862	Bull Run No. 2 (ended),	Conf.	Conf.	...	...	...	...
June 17, 1775	Bunker Hill,	Conf.	Conf.	798	4,023	1,090	6,154
July 1, 1863	Cabin Creek,	English	Eng.	145	304	359	695
July 7, 1862	Cache Swamp,	Conf.	U. S.	8	15	42	108
Oct. 7, 1812	Caledonia and Detroit-boats,	Conf.	U. S.	8	45	110	150
Aug. 16, 1780	Camden,	English	U. S.	1	4	5	10
June 11, 1898	Camp McCalla (continued),	English	Eng.	94	281	80	245
June 12, 1898	Camp McCalla (continued),	Spanish	U. S.	...	...	...	...
June 13, 1898	Camp McCalla (continued),	Spanish	U. S.	...	...	...	...
June 14, 1898	Camp McCalla (ended),	Spanish	U. S.	6	11	60†	140†
Nov. 16, 1863	Campbell Station,	Conf.	Conf.	112	186	136	214
Jan. 27, 1814	Camp Defiance,	Conf.	U. S.	17	132	37	0
April 23, 1864	Cane River,	Conf.	U. S.	98	152	108	164
April 13, 1813	Canonnie-Medusa,	English	Eng.	1	3	0	4
March 1, 1813	Canonnie-Warspite,	English	Eng.	1	3	0	1
Nov. 20, 1856	Canton Forts (continued),	Chinese	U. S.	...	...	...	...
Nov. 21, 1856	Canton Forts (continued),	Chinese	U. S.	...	...	...	...
Nov. 22, 1856	Canton Forts (ended),	Chinese	U. S.	12	28	400	540
April 26, 1863	Cape Girardeau,	Conf.	U. S.	6	18	22	43
Jan. 14, 1863	Carney's Bridge,	Conf.	U. S.	7	27	14	36
July 7, 1777	Castletown,	Conf.	Eng.	211	583	35	144
Aug. 19, 1780	Catawba Fords,	English	Eng.	162	281	2	21
Oct. 19, 1864	Cedar Creek,	Conf.	U. S.	588	3,516	961	3,239
Aug. 8, 1862	Cedar Mountain (continued),	Conf.	Conf.	...	...	...	...

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Aug. 9, 1862	Cedar Mountain (ended),	Conf.	Conf.	450	660	223	1,060
April 18, 1847	Cerro Gordo,	Mexican	U. S.	63	368	100†	500†
May 16, 1863	Champion Hills,	Conf.	U. S.	426	1,842	486	1,954
April 30, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 1, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 2, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 3, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 4, 1863	Chancellorsville (ended),	Conf.	Conf.	1,512	9,518	1,718	10,563
Sept. 13, 1847	Chapultepec,	Mexican	U. S.	116	671	1,000†	2,000
June 4, 1782	Charming Sally-Revenge,	English	U. S.	1	4	3	6
Feb. 25, 1815	Chasseur-St. Lawrence,	English	U. S.	5	8	15	23
July 6, 1864	Chattahoochee (continued),	Conf.	U. S.	....	....	....	....
July 8, 1864	Chattahoochee (continued),	Conf.	U. S.	....	....	....	....
July 10, 1864	Chattahoochee (ended),	Conf.	U. S.	80	450	201	402
Nov. 23, 1863	Chattanooga, including Orchard Knob, Lookout Mountain, and Missionary Ridge (continued),	Conf.	U. S.	....	....	....	....
Nov. 24, 1863	Chattanooga, etc. (continued),	Conf.	U. S.	....	....	....	....
Nov. 25, 1863	Chattanooga, etc. (ended),	Conf.	U. S.	757	4,529	850	2,150
June 1, 1813	Chesapeake-Shannon,	English	Eng.	47	99	24	59
Dec. 7, 1777	Chestnut Hill,	English	*	14	36	42	64
Sept. 18, 1863	Chickamauga (continued),	Conf.	Conf.	....	....	....	....
Sept. 19, 1863	Chickamauga (continued),	Conf.	Conf.	....	....	....	....
Sept. 20, 1863	Chickamauga (ended),	Conf.	Conf.	1,644	9,262	6,000	10,000
Feb. 27, 1847	Chihuahua,	Mexican	U. S.	3	5	33	67
July 5, 1814	Chippewa,	English	U. S.	60	244	199	328
Nov. 11, 1813	Chrysler's Fields,	English	*	102	237	22	147
Aug. 20, 1847	Churubusco,	Mexican	U. S.	131	876	1,000†	3,000†
May 9, 1864	Cloyd's M'tain and New River Bridge,	Conf.	U. S.	126	585	248	652
Dec. 5, 1863	Coffeeville,	Conf.	Conf.	38	62	21	32
June 5, 1864	Columbia, Ark.,	Conf.	U. S.	19	73	22	81
April 16, 1865	Columbus, Ala.,	Conf.	U. S.	10	14	30	50
Dec. 9, 1862	Col. Matthews,	Conf.	U. S.	18	22	32	68
April 4, 1864	Col. Gooding,	Conf.	U. S.	8	26	18	39
June 2, 1864	Cold Harbor (continued),	Conf.	Conf.	....	....	....	....
June 3, 1864	Cold Harbor (ended),	Conf.	Conf.	1,905	10,570	364	1,336
Jan. 14, 1813	Comet-frigate,	Port'guese	U. S.	1	3	10	14
Aug. 3, 1814	Comoeta Creek,	English	U. S.	2	8	10	20
Dec. 1, 1782	Commerce-brig and schooners,	English	*	1	2	14	24
April 21, 1775	Concord and retreat,	English	Eng.	49	34	74	199
Sept. 6, 1781	Congress-Savage,	English	U. S.	11	19	25	31
Feb. 9, 1799	Constellation-Inaugent,	French	U. S.	2	3	29	41
Feb. 2, 1800	Constellation-Vengeance,	French	U. S.	14	25	50	110
Aug. 19, 1812	Constitution-Guerriere,	English	U. S.	7	7	15	63
Dec. 29, 1812	Constitution-Java,	English	U. S.	9	25	60	101
Feb. 20, 1815	Constitution-Cyane and Levant,	English	U. S.	4	10	35	42
Aug. 19, 1847	Contreras,	Mexican	U. S.	20	40	700	2,200
Oct. 19, 1814	Cook's Mills,	English	U. S.	11	54	20	60
Feb. 23, 1813	Cora-boats,	English	Eng.	1	3	1	2
Oct. 3, 1862	Corinth (continued),	Conf.	U. S.	....	....	....	....
Oct. 4, 1862	Corinth (ended),	Conf.	U. S.	315	1,812	1,423	5,692
Feb. 29, 1812	Courier-Andromache,	English	Eng.	0	3	0	1
Jan. 17, 1781	Cowpens,	English	U. S.	12	60	120	199
Sept. 14, 1862	Crampton Gap,	Conf.	U. S.	115	418	98	342
June 22, 1813	Craney Island,	English	U. S.	0	0	75†	125†
June 8, 1862	Cross Keys,	Conf.	*	125	498	29	302
Aug. 1, 1863	Culpeper Court-House,	Conf.	*	16	98	22	104
Feb. 21, 1865	Cumberland, Md.,	Conf.	U. S.	1	3	2	8
Feb. 5, 1865	Dabney's Mills (continued),	Conf.	U. S.	....	....	....	....
Feb. 6, 1865	Dabney's Mills (continued),	Conf.	U. S.	....	....	....	....
Feb. 7, 1865	Dabney's Mills (ended),	Conf.	U. S.	232	1,062	249	751
July 11, 1812	Decatur-Commerce,	English	U. S.	0	0	4	7
Aug. 5, 1813	Decatur-Dominica,	English	U. S.	4	16	18	45
June 17, 1776	Defense-transport,	English	U. S.	0	9	18	30†
Sept. 9, 1847	Del Rey,	Mexican	U. S.	8	31	46	89
April 27, 1805	Derne,	Turkish	U. S.	6	8	10†	20†
Dec. 6, 1864	Deveraux's Neck (continued),	Conf.	*	....	....	....	....
Dec. 8, 1864	Deveraux's Neck (continued),	Conf.	*	....	....	....	....
Dec. 9, 1864	Deveraux's Neck (ended),	Conf.	*	39	360	112	228
April 15, 1813	Diligent-squadron,	English	Eng.	1	3	0	1
Aug. 22, 1814	Diomedes-Upton,	English	U. S.	0	0	1	2
Sept. 2, 1812	Dolphin-two ships,	English	U. S.	4	7	3	8
Jan. 25, 1813	Dotphin-squadron,	English	U. S.	3	8	6	9
June 28, 1863	Donaldsonville,	Conf.	U. S.	1	3	85	114
Feb. 3, 1863	Dover, Col. Harding,	Conf.	U. S.	16	60	150	400
May 15, 1862	Drewry's Bluff,	Conf.	Conf.	422	2,380	514	1,086
Nov. 6, 1863	Droop Mountain,	Conf.	U. S.	41	79	82	158
May 5, 1864	Dunn's Bayou,	Conf.	Conf.	38	64	4	18
Aug. 23, 1864	Duval's Bluff,	Conf.	Conf.	13	42	6	33
Dec. 23, 1813	Econochaca,	Indians	U. S.	1	6	30	400
July 1, 1898	El Caney,	Spanish	U. S.	88	356	120	400
Feb. 10, 1862	Elizabeth City,	Conf.	U. S.	2	2	4	10
Jan. 22, 1814	Emuefau,	Indians	U. S.	20	75	220†	0
Nov. 20, 1780	Ennoree Ford,	English	U. S.	3	4	92	102

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Jan. 24, 1814	Enotachopeo,	Indians	U. S.	40	60	200†	0
Sept. 5, 1813	Enterprise-Bozer,	English	U. S.	2	10	4	17
Aug. 1, 1801	Enterprise-Tripoli,	Tripolitan	U. S.	0	0	20	30
Aug. 13, 1812	Essex-Alert,	English	U. S.	0	0	0	3
March 28, 1814	Essex-Phæbe and Cherub,	English	Eng.	58	66	5	10
Sept. 8, 1781	Butaw Springs,	English	U. S.	130	349	85	402
July 28, 1864	Ezra Chapel,	Conf.	U. S.	99	601	864	3,778
Oct. 27, 1864	Fair Oaks (continued),	Conf.	*	120	783	150	301
Oct. 28, 1864	Fair Oaks (ended),	Conf.	U. S.	25	80	125	354
July 13, 1863	Falling Waters,	Conf.	U. S.	15	3	6	0
Feb. 26, 1863	Falmouth,	Conf.	Conf.	5†	8†	0	8
Feb. 28, 1862	Farragut at Vicksburg,	Conf.	U. S.	15	3	0	0
Aug. 5, 1864	Farragut in Mobile,	Conf.	U. S.	145	170	12	20
Oct. 7, 1863	Farmington,	Conf.	U. S.	8	16	22	37
April 18, 1863	Fayetteville,	Conf.	U. S.	4	26	17	36
April 1, 1865	Five Forks,	Conf.	U. S.	124	706	450	750
April 9, 1865	Fort Blakely,	Conf.	U. S.	113	516	242	874
May 20, 1863	Fort Blunt,	Conf.	U. S.	12	38	25	37
Sept. 15, 1814	Fort Bowyer,	English	U. S.	4	5	32	40
Sept. 27, 1864	Fort Davidson,	Conf.	Conf.	47	154	245	756
Feb. 15, 1862	Fort Donelson,	Conf.	U. S.	560	746	466	1,534
Aug. 15, 1814	Fort Erie,	English	U. S.	17	56	222	309
Sept. 17, 1814	Fort Erie (sortie),	English	U. S.	79	216	110	250
March 12, 1864	Fort De Russey,	Conf.	U. S.	18	29	14	33
Dec. 24, 1864	Fort Fisher (continued),	Conf.	Conf.	20	63	3	55
Dec. 25, 1864	Fort Fisher (continued),	Conf.	Conf.	20	63	3	55
Jan. 13, 1865	Fort Fisher (continued),	Conf.	U. S.	184	749	150	249
Jan. 14, 1865	Fort Fisher (continued),	Conf.	U. S.	39	121	108	163
Jan. 15, 1865	Fort Fisher (ended),	Conf.	U. S.	198	304	249	353
May 27, 1813	Fort George,	English	U. S.	2	2	8	20
April 2, 1865	Fort Gregg and Alexander,	Conf.	U. S.	0	0	4	25
Sept. 5, 1812	Fort Harrison,	Indians	U. S.	2	2	8	20
Aug. 28, 1861	Fort Haller,	Conf.	U. S.	0	0	4	25
Feb. 6, 1862	Fort Henry,	Conf.	U. S.	17	27	5	11
April 25, 1862	Fort Macon,	Conf.	U. S.	0	3	7	18
March 3, 1863	Fort McAllister,	Conf.	Conf.	0	1	0	1
May 5, 1813	Fort Meigs,	English	U. S.	64	124	30†	60†
Oct. 6, 1777	Fort Montgomery and Clinton,	English	Eng.	84	166	62	141
June 28, 1776	Fort Moultrie,	English	U. S.	11	26	68	437
March 11, 1863	Fort Pemberton (continued),	Conf.	Conf.	7	19	3†	8†
March 12, 1863	Fort Pemberton (continued),	Conf.	Conf.	0	4	2	1
March 13, 1863	Fort Pemberton (continued),	Conf.	Conf.	348	52	19	61
March 14, 1863	Fort Pemberton (continued),	Conf.	Conf.	1	3	1	7
March 16, 1863	Fort Pemberton (ended),	Conf.	Conf.	1	6	44	108
May 10, 1862	Fort Pillow,	Conf.	U. S.	120	268	86	204
April 12, 1864	Fort Pillow,	Conf.	Conf.	10	15	12	19
April 11, 1863	Fort Pulaski,	Conf.	Conf.	68	337	134	698
Oct. 17, 1862	Fort Ridgeley,	Indians	U. S.	1	7	50	101
Aug. 6, 1777	Fort Schuyler,	English	Eng.	624	876	26	74
July 27, 1864	Fort Smith,	Conf.	Conf.	20	31	29	42
March 25, 1865	Fort Stedman,	Conf.	U. S.	90	478	201	538
Aug. 2, 1813	Fort Stephenson,	English	U. S.	1	3	14	8
July 18, 1863	Fort Wagner,	Conf.	Conf.	17	20	79	163
April 17, 1864	Fort Wessels,	Conf.	U. S.	189	1,033	1,141	5,113
Dec. 18, 1862	Foster's Expedition (ended),	Conf.	Conf.	1,152	9,101	505	4,061
Jan. 6, 1813	Fox-Lapwing,	English	U. S.	12	55	30†	50†
April 10, 1863	Franklin,	Conf.	U. S.	357	64	150	155
Nov. 30, 1864	Franklin, Tenn.,	Conf.	U. S.	32	122	0	13
Dec. 11, 1862	Fredericksburg (continued),	Conf.	Conf.	3,000	4,500	2,000	4,000
Dec. 12, 1862	Fredericksburg (continued),	Conf.	Conf.	17	20†	26	117
Dec. 13, 1862	Fredericksburg (ended),	Conf.	Conf.	0	1	10	19
Jan. 18, 1813	Frenchtown,	English	U. S.	2	7	137	107
Jan. 22, 1813	Frenchtown No. 2,	English	Eng.	1	3	8	12
May 23, 1862	Front Royal,	Conf.	Conf.	8	32	16	49
July 27, 1862	Gaines Mill,	Conf.	Conf.	94	162	2	5
Jan. 1, 1863	Galveston,	Conf.	Conf.	2	6	0	1
Sept. 7, 1813	Gen. Armstrong-Queen,	English	U. S.	189	542	98	402
Aug. 26, 1814	Gen. Armstrong-British boats,	English	U. S.	2	7	137	107
June 4, 1780	Gen. Pickering-Achilles,	English	U. S.	1	3	8	12
Jan. 16, 1864	Gen. Sturgis,	Conf.	U. S.	8	32	16	49
Sept. 21, 1777	Gen. Wayne,	English	Eng.	94	162	2	5
Feb. 18, 1815	George Little-Granicus,	English	Eng.	2	6	0	1
Oct. 4, 1777	Germantown,	English	Eng.	189	542	98	402
July 1, 1863	Gettysburg (continued),	Conf.	U. S.	2,834	13,709	4,000	14,000
July 2, 1863	Gettysburg (continued),	Conf.	U. S.	10	14	1	3
July 3, 1863	Gettysburg (ended),	Conf.	U. S.	8	18	9	18
Nov. 8, 1813	Glasgow,	English	U. S.	2	1	4	4
Sept. 25, 1812	Globe-packets,	English	U. S.	0	0	1	4
Nov. 2, 1813	Globe-Sir Simon Clarke,	English	U. S.	0	0	1	4
April 20, 1863	Governor Tompkins-Mary Ann,	English	U. S.	19	57	8	16
Dec. 15, 1775	Grand Gulf,	Conf.	Conf.	0	0	24	81
Nov. 17, 1847	Great Bridge,	English	U. S.	0	0	12	18
June 17, 1815	Guaymas,	Mexican	U. S.	0	0	12	18
	Guerriere-Mashouda,	Algerine	U. S.	3	11	12	18

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
March 15, 1781	Guilford Court-House,	English	Eng.	123	314	231	318
May 21, 1863	Gum Swamp,	Conf.	U. S.	3	8	4	16
May 11, 1777	Hancock-Fox,	English	U. S.	3	5	14	18
May 27, 1862	Hanover Court-House,	Conf.	U. S.	53	344	198	732
Sept. 16, 1776	Harlem Plains,	English	*	7	8	2	20
Sept. 13, 1863	Harper's Ferry,	Conf.	Conf.	80	120	0	0
June 5, 1862	Harrisonburg,	Conf.	U. S.	15	32	20	50
Oct. 1, 1864	Harrison,	Conf.	U. S.	8	24	16	46
Dec. 7, 1862	Hartsville,	Conf.	Conf.	48	102	35	115
Jan. 10, 1863	Hartsville,	Conf.	U. S.	7	69	18	74
Oct. 27, 1864	Hatcher's Run,	Conf.	*	56	1,047	247	763
Jan. 11, 1863	Hatteras-Alabama,	Conf.	Conf.	2	6	0	1
March 16, 1779	Hazard-Active,	English	U. S.	3	5	13	20
Feb. 22, 1812	Hazard-Caledonia,	English	U. S.	0	7	2	11
July 9, 1780	Hazard-Duff,	English	U. S.	2	4	31	64
July 4, 1863	Helena,	Conf.	U. S.	98	152	205	504
March 21, 1864	Henderson's Hill,	Conf.	U. S.	1	3	5	18
April 5, 1779	Hibernia-brig of war,	English	*	1	3	3	9
July 22, 1812	Highflyer-Caledonia,	English	U. S.	0	7	3	9
Feb. 17, 1813	Highflyer-Poictiers,	English	Eng.	1	3	0	0
Nov. 18, 1813	Hillabee towns,	Indians	U. S.	0	0	61	0
April 25, 1781	Hobkirk's Hill,	English	Eng.	52	141	38	104
July 30, 1779	Holker-brig,	English	U. S.	6	16	6	20
Feb. 17, 1781	Holker-Hypocrisie,	English	U. S.	3	1	4	7
Dec. 20, 1862	Holly Springs,	Conf.	Conf.	3	4	2	21
Nov. 30, 1864	Honey Hill, S. C.,	Conf.	Conf.	66	645	18	114
July 17, 1863	Honey Springs,	Conf.	U. S.	17	60	153	378
Feb. 24, 1813	Hornet-Peacock,	English	U. S.	1	4	5	33
March 23, 1815	Hornet-Penguin,	English	U. S.	1	11	10	28
March 27, 1814	Horseshoe Bend,	Indians	U. S.	26	106	557	0
April 14, 1779	Hunter-armed ship,	English	*	0	4	3	6
Jan. 4, 1862	Huntersville, Va.,	Conf.	*	1	3	2	4
April 8, 1782	Hyder Ally-Gen. Monk,	English	U. S.	4	11	20	33
Nov. 15, 1779	Impertinent-Harlem,	English	U. S.	0	1	8	3
Feb. 24, 1863	Indianola,	Conf.	Conf.	1	1	2	5
Nov. 16, 1776	Industry-brig,	English	*	2	6	3	8
March 19, 1776	Industry-brig,	English	Eng.	0	3	2	6
Sept. 4, 1804	Intrepid,	Tripolitan	Trip	13	0	20	30
April 7, 1863	Ironclads at Charleston,	Conf.	*	3	18	0	3
April 7, 1862	Island No. 10,	Conf.	U. S.	19	32	1	3
Sept. 19, 1862	Iuka,	Conf.	U. S.	144	598	385	692
July 12, 1863	Jackson,	Conf.	U. S.	88	765	71	504
May 14, 1863	Jackson,	Conf.	U. S.	37	228	64	392
July 16, 1863	James Island,	Conf.	U. S.	24	76	48	152
July 6, 1781	Jamestown Island,	English	Eng.	37	81	21	49
Nov. 1, 1779	Jason-Perseus,	English	Eng.	18	12	7	9
July 25, 1779	Jason-privateer,	English	U. S.	1	3	3	6
April 30, 1864	Jenkins Ferry,	Conf.	U. S.	222	978	842	1,458
Aug. 31, 1864	Jonesboro, Ga. (continued),	Conf.	U. S.	...	...	...	...
Sept. 1, 1864	Jonesboro (ended),	Conf.	U. S.	...	1,149	498	1,502
July 31, 1812	Julia-Gloicester,	English	U. S.	0	0	0	3
June 19, 1864	Kearsarge-Alabama,	Conf.	U. S.	1	2	9	21
June 10, 1864	Kellar's Bridge,	Conf.	U. S.	13	54	0	0
Jan. 30, 1862	Kelly's Stores,	Conf.	*	24	80	22	28
Dec. 3, 1815	Kemp-merchantmen (armed),	English	U. S.	1	4	3	8
March 23, 1862	Kernstown,	Conf.	U. S.	103	441	80	342
Oct. 7, 1780	King's Mountain,	English	U. S.	28	60	168	284
Dec. 14, 1862	Kingston,	Conf.	U. S.	90	478	71	268
Aug. 6, 1862	Kirksville,	Conf.	U. S.	28	60	180	498
Nov. 17, 1863	Knoxville,	Conf.	*	24	72	18	64
Nov. 29, 1863	Knoxville,	Conf.	U. S.	24	68	259	432
March 30, 1814	La Colle Mill,	English	Eng.	8	66	11	47
June 3, 1776	Lady Washington-barges,	English	U. S.	0	2	3	11
Dec. 14, 1814	Lake Borgne,	English	Eng.	6	35	17	77
Oct. 11, 1776	Lake Champlain,	English	Eng.	30	50	15	26
Sept. 11, 1814	Lake Champlain,	English	U. S.	52	58	84	110
Sept. 10, 1813	Lake Erie,	English	U. S.	27	96	41	94
Sept. 28, 1813	Lake Ontario,	English	U. S.	10	17	12	20
June 24, 1898	Las Guasimas,	Spanish	U. S.	16	50	28	124
Aug. 21, 1863	Lawrence,	Conf.	Conf.	140	22	3	14
July 5, 1862	Lebanon,	Conf.	Conf.	4	8	3	4
Nov. 22, 1776	Lee-ship,	English	*	1	3	2	8
July 7, 1864	Legareville,	Conf.	Conf.	36	61	12	25
May 23, 1862	Lewisburg,	Conf.	U. S.	11	52	49	76
April 19, 1775	Lexington,	English	Eng.	7	9	0	0
Sept. 20, 1777	Lexington-Alert,	English	Eng.	3	10	2	3
April 17, 1776	Lexington-Edward,	English	U. S.	2	2	5†	8†
Sept. 12, 1861	Lexington, Mo.,	Conf.	*	42	108	33	65
April 12, 1864	Lexington, Red River,	Conf.	U. S.	0	0	164	341
Sept. 10, 1863	Little Rock,	Conf.	U. S.	22	59	31	45
Aug. 17, 1862	London, Ky.,	Conf.	Conf.	12	18	3	8
Aug. 27, 1776	Long Island,	English	Eng.	62	188	61	257
Feb. 14, 1813	Lottery-boat,	English	Eng.	8	10	2	4
June 17, 1864	Lynchburg (continued),	Conf.	Conf.	....	....	....	....

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
June 18, 1864	Lynchburg (ended),	Conf.	Conf.	99	503	47	157
Aug. 9, 1812	Maguaga,	English	U. S.	18	58	50	75
Sept. 30, 1863	Major Montgomery,	Conf.	Conf.	14	40	0	2
July 1, 1862	Malvern Hill,	Conf.	U. S.	2,860	3,500	3,023	4,077
Aug. 4, 1862	Malvern No. 2,	Conf.	U. S.	6	8	10	18
July 24, 1863	Manassas Gap,	Conf.	U. S.	30	59	41	79
Aug. 27, 1862	Manassas Junction,	Conf.	Conf.	14	28	11	16
May 1, 1898	Manila,	Spanish	U. S.	0	7	318	298
Aug. 13, 1898	Manila,	Spanish	U. S.	8	40	...	...
Aug. 12, 1898	Manzanillo,	Spanish	U. S.	0	0	10†	(?)
Nov. 4, 1812	Marengo-Leonidas,	English	U. S.	0	0	0	1
April 25, 1864	Mark's Mills,	Conf.	Conf.	98	142	126	394
May 16, 1864	Marksville,	Conf.	U. S.	9	18	32	64
Aug. 20, 1779	Mars-Active,	English	U. S.	0	3	2	7
July 23, 1864	Martinsburg (continued),	Conf.	U. S.	...	...	...	...
July 24, 1864	Martinsburg (ended),	Conf.	U. S.	342	836	26	152
Dec. 2, 1777	Massachusetts-Lawnsdale,	English	U. S.	3	5	6	13
Dec. 17, 1812	Massassinewa,	Indians	U. S.	11	26	39	0
June 27, 1861	Mathias Point,	Conf.	Conf.	1	4	0	0
May 8, 1862	McDowell's,	Conf.	Conf.	80	176	71	390
April 20, 1863	McMinnville,	Conf.	U. S.	0	0	4	8
June 26, 1862	Mechanicsville,	Conf.	U. S.	149	224	156	236
June 6, 1862	Memphis,	Conf.	U. S.	10	4	20†	30†
March 8, 1862	Merrimac in Hampton Roads,	Conf.	Conf.	250	301	8	11
Jan. 7, 1862	Middle Creek,	Conf.	U. S.	3	8	11	32
June 12, 1863	Middletown,	Conf.	U. S.	1	4	18	32
June 7, 1863	Milliken's Bend,	Conf.	U. S.	154	223	148	294
Jan. 19, 1862	Mill Spring (Logan Cross Roads),	Conf.	U. S.	39	207	192	132
Nov. 28, 1863	Mine Run (ended),	Conf.	U. S.	99	398	121	432
Feb. 3, 1863	Mingo Swamp,	Conf.	U. S.	0	0	8	20
April 14, 1780	Monk's Corner,	English	Eng.	26	73	3	6
March 9, 1862	Monitor-Merrimac,	Conf.	U. S.	0	1	0	2
June 28, 1778	Monmouth,	English	U. S.	72	160	294	170
July 9, 1864	Monocacy,	Conf.	Conf.	90	579	78	322
Sept. 24, 1846	Monterey,	Mexican	U. S.	142	364	200†	450
Dec. 6, 1812	Montgomery, armed-ship,	English	U. S.	4	13	6	21
Feb. 14, 1776	Moore's Creek,	English	U. S.	0	3	13	22
Aug. 30, 1814	Moorfields,	English	U. S.	0	3	13	20
Oct. 5, 1813	Moravian towns,	English	U. S.	7	22	80	101
Nov. 16, 1776	Mount Washington,	English	Eng.	48	101	252	448
Sept. 14, 1862	Mumfordsville,	Conf.	Conf.	15	22	29	31
July 13, 1862	Murfreesboro,	Conf.	U. S.	33	62	47	103
Dec. 30, 1862	Murfreesboro (continued),	Conf.	U. S.	...	...	...	...
Dec. 31, 1862	Murfreesboro (continued),	Conf.	U. S.	...	...	...	...
Jan. 1, 1863	Murfreesboro (continued),	Conf.	U. S.	...	...	...	...
Jan. 2, 1863	Murfreesboro (ended),	Conf.	U. S.	1,533	7,245	1,384	6,892
Dec. 15, 1864	Nashville (continued),	Conf.	U. S.	...	...	...	...
Dec. 16, 1864	Nashville (ended),	Conf.	U. S.	399	1,741	584	3,021
Sept. 13, 1814	Near Baltimore,	English	Eng.	24	139	80	301
July 12, 1863	Near Donaldsonville,	Conf.	Conf.	151	349	88	126
Dec. 23, 1814	Near New Orleans,	English	Eng.	24	113	99	230
Dec. 28, 1814	Near New Orleans,	English	U. S.	7	8	120	149
Nov. 3, 1863	Near Opelousas,	Conf.	*	26	124	58	298
July 19, 1863	Near Pomeroy,	Conf.	U. S.	2	8	12	41
June 15, 1847	Near Tabasco,	Mexican	U. S.	0	7	20†	30†
March 14, 1862	New Berne,	Conf.	U. S.	102	432	50	152
May 24, 1862	New Bridge,	Conf.	U. S.	3	5	4	15
July 26, 1863	New Lisbon,	Conf.	U. S.	1	12	22	43
Sept. 6, 1781	New London,	English	Eng.	88	34	86	142
Sept. 28, 1864	New Market Heights (continued),	Conf.	U. S.	...	...	...	...
Sept. 20, 1864	New Market Heights (continued),	Conf.	U. S.	...	...	...	...
Sept. 30, 1864	New Market Heights (ended),	Conf.	U. S.	398	2,031	399	1,601
May 15, 1864	New Market, Pa.,	Conf.	Conf.	120	563	96	306
Jan. 1, 1815	New Orleans,	English	U. S.	11	23	20	30†
Jan. 8, 1815	New Orleans,	English	U. S.	4	13	700	1,400
April 23, 1862	New Orleans,	Conf.	U. S.	37	147	12	40
Aug. 29, 1779	Newtown,	Indians	U. S.	8	22	12	34
Nov. 28, 1812	Niagara batteries,	English	U. S.	8	12	14	30
July 25, 1814	Niagara (Lundy's Lane),	English	U. S.	171	572	201	559
June 18, 1781	Ninety-six,	English	Eng.	48	107	24	61
Sept. 28, 1812	Nonesuch-privateer,	English	U. S.	3	8	7	16
Oct. 31, 1799	Norfolk-Picaroons,	Picaroons	U. S.	0	0	65	70
May 26, 1864	North Anna (continued),	Conf.	U. S.	...	...	...	...
May 27, 1864	North Anna (ended),	Conf.	U. S.	223	1,460	304	1,513
June 25, 1862	Oak Grove, near Richmond,	Conf.	U. S.	51	401	60	300
Jan. 31, 1863	Off Charleston,	Conf.	Conf.	23	24	0	0
Oct. 4, 1812	Ogdensburg,	English	U. S.	0	3	6	7
Feb. 10, 1863	Old River,	Conf.	U. S.	5	7	4	6
Feb. 20, 1864	Oluster,	Conf.	Conf.	193	1,175	150	350
Nov. 26, 1863	Operations at Mine Run, Va. (continued),	Conf.	U. S.	...	...	...	...
Nov. 27, 1863	Operations at Mine Run (continued),	Conf.	U. S.	...	...	...	...
Sept. 19, 1864	Opequan,	Conf.	U. S.	653	3,719	1,632	3,868
May 6, 1814	Oswego,	English	U. S.	6	38	70	165

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
May 8, 1846	Palo Alto,	Mexican	U. S.	4	42	102	127
Dec. 31, 1862	Parker's Cross-Roads,	Conf.	U. S.	23	139	48	152
Feb. 2, 1864	Paterson Creek,	Conf.	Conf.	0	3†	4	5†
Aug. 18, 1779	Paulus Hook,	English	U. S.	2	3	5	12
Nov. 5, 1812	Paul Jones-Hassan,	English	U. S.	0	1	1	1
April 29, 1814	Peacock-Epervier,	English	U. S.	0	2	8	15
June 30, 1815	Peacock-Nautilus,	English	U. S.	0	0	6	8
March 6, 1862	Pea Ridge (continued),	Conf.	U. S.	....	....	....	....
March 7, 1862	Pea Ridge (continued),	Conf.	U. S.	....	....	....	....
March 8, 1862	Pea Ridge (ended),	Conf.	U. S.	203	972	1,040	3,638
July 20, 1864	Peach Tree Creek,	Conf.	U. S.	301	1,411	880	3,916
April 22, 1847	Perote,	Mexican	U. S.	0	3	0	4
Oct. 8, 1862	Perryville,	Conf.	U. S.	916	2,943	980	1,520
April 2, 1865	Petersburg,	Conf.	U. S.	298	2,565	341	3,092
June 19, 1864	Petersburg (from June 15),	Conf.	*	1,298	7,474	984	6,721
June 20, 1864	Petersburg (continued to June 30),	Conf.	U. S.	....	....	....	....
June 30, 1864	Petersburg (ended),	Conf.	U. S.	112	506	801	1,417
July 31, 1864	Petersburg (from July 1, exclusive of losses at the Crater and Deep Bottom),	Conf.	U. S.	419	2,076	799	4,023
Aug. 31, 1864	Petersburg (August 1 to August 31),	Conf.	U. S.	87	484	101	605
Oct. 30, 1864	Petersburg (September 1–October 30),	Conf.	U. S.	170	822	240	761
Feb. 16, 1804	Philadelphia (frigate),	Tripolitans	U. S.	0	1	100†	0
Oct. 20, 1863	Philadelphia, Tenn.,	Conf.	Conf.	26	73	34	62
June 5, 1864	Piedmont,	Conf.	U. S.	130	650	633	2,337
Jan. 5, 1781	Pilgrim-Mary,	English	U. S.	4	16	13	22
Oct. 25, 1863	Pine Bluff,	Conf.	U. S.	17	40	39	111
Aug. 13, 1863	Pineville,	Conf.	U. S.	3	18	28	92
April 6, 1862	Pittsburgh Landing (continued),	Conf.	U. S.	....	....	....	....
April 7, 1862	Pittsburgh Landing (ended),	Conf.	U. S.	1,735	7,882	1,128	8,012
Sept. 11, 1814	Plattsburg,	English	U. S.	37	62	50	98
April 8, 1864	Pleasant Hill (continued),	Conf.	U. S.	....	....	....	....
April 9, 1864	Pleasant Hill (ended),	Conf.	U. S.	99	688	348	1,654
April 20, 1864	Plymouth,	Conf.	Conf.	41	59	125	174
Oct. 22, 1862	Pocotaligo (continued),	Conf.	Conf.	....	....	....	....
Oct. 23, 1862	Pocotaligo (ended),	Conf.	Conf.	84	152	14	102
May 1, 1863	Port Gibson,	Conf.	U. S.	130	718	144	832
March 13, 1863	Port Hudson,	Conf.	U. S.	8	7	0	0
June 14, 1863	Port Hudson,	Conf.	*	250	680	188	364
May 27, 1863	Port Hudson,	Conf.	Conf.	293	1,549	110	173
June 9, 1862	Port Republic,	Conf.	Conf.	67	361	104	796
Nov. 7, 1861	Port Royal,	Conf.	U. S.	8	23	11	48
April 10, 1863	Prairie d'Anne,	Conf.	U. S.	8	15	18	36
Dec. 7, 1862	Prairie Grove,	Conf.	U. S.	167	798	164	817
Sept. 30, 1864	Preble's Farm (continued),	Conf.	U. S.	....	....	....	....
Oct. 1, 1864	Preble's Farm (ended),	Conf.	U. S.	141	788	214	686
June 23, 1812	President-Belvidere,	English	U. S.	3	19	2	22
Jan. 15, 1815	President-Endymion,	English	Eng.	24	56	11	14
Oct. 9, 1814	Prince de Neuchatel-Endymion,	English	U. S.	7	23	33	37
Jan. 3, 1777	Princeton,	English	U. S.	31	64	49	151
Dec. 4, 1781	Prosperity-privateer,	English	U. S.	3	8	4	9
Jan. 9, 1779	Protector-Admiral Duff,	English	U. S.	1	3	140	3
May 7, 1779	Providence-Diligent,	English	U. S.	4	10	8	19
May 15, 1847	Puebla,	Mexican	U. S.	18	62	83	142
Feb. 7, 1832	Qualla Battoo,	Malays	U. S.	2	11	120†	200†
Dec. 31, 1775	Quebec,	English	Eng.	18	42	1	8
Oct. 13, 1812	Queenstown,	English	Eng.	90	160	50	101
Sept. 3, 1777	Raleigh-Druid,	English	U. S.	1	2	6	26
March 7, 1778	Randolph-Yarmouth,	English	Eng.	311	0	5	12
April 24, 1778	Ranger-Drake,	English	U. S.	2	6	18	24
Oct. 16, 1776	Ranger-privateer,	English	U. S.	3	11	16	24
May 5, 1813	Rapids of Miami,	English	U. S.	80	101	15	45
Nov. 7, 1863	Rappahannock Station,	Conf.	U. S.	149	250	80	160
May 12, 1863	Raymond,	Conf.	U. S.	69	341	103	720
Aug. 25, 1864	Ream's Station,	Conf.	*	127	546	289	1,211
Oct. 22, 1777	Red Bank,	English	U. S.	11	21	142	258
Jan. 14, 1865	Red Hill,	Conf.	U. S.	7	27	14	36
April 7, 1864	Red River,	Conf.	U. S.	23	39	45	88
April 26, 1864	Red River,	Conf.	U. S.	17	31	28	61
May 13, 1864	Resaca,	Conf.	U. S.	598	2,147	861	1,949
May 9, 1847	Resaca de la Palma,	Mexican	U. S.	39	83	160	228
March 29, 1813	Revenge-Narcissus,	English	Eng.	0	3	0	1
Aug. 30, 1862	Richmond, Ky.,	Conf.	Conf.	199	689	153	248
Feb. 8, 1862	Roanoke Island,	Conf.	U. S.	47	198	25	30
Feb. 12, 1864	Rock House,	Conf.	U. S.	3	5	15	23†
Nov. 6, 1863	Rogeraville,	Conf.	U. S.	5	12	3	24
Sept. 16, 1812	Rossie-Princess Amelia,	English	U. S.	0	8	3	0
Dec. 19, 1776	Rover-Africa,	English	U. S.	0	3	23	0
April 8, 1864	Sabine Cross-Roads,	Conf.	Conf.	199	893	486	1,024
Sept. 8, 1863	Sabine Pass,	Conf.	Conf.	17	19	0	0
Jan. 21, 1863	Sabine Pass,	Conf.	Conf.	1	3	0	2
July 6, 1776	Sachem-privateer,	English	U. S.	1	3	2	6
May 29, 1813	Sackett's Harbor,	English	U. S.	21	84	29	101
May 6, 1865	Sailor's Creek,	Conf.	U. S.	166	1,014	268	2,032

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Feb. 3, 1865	Sakelatchie,	Conf.	U. S.	18	70	20	80
Dec. 21, 1779	Sally-transports,	English	*	5	12	6	11
Jan. 12, 1848	San Blas,	Mexican	U. S.	0	2	3	8
April 30, 1814	Sandy Creek,	English	U. S.	1	3	13	28
Jan. 8, 1847	San Gabriel,	Mexican	U. S.	2	9	70	150
July 1, 1898	San Juan (continued),	Spanish	U. S.	....	....	....	....
July 2, 1898	San Juan (continued),	Spanish	U. S.	....	....	....	....
July 3, 1898	San Juan (ended),	Spanish	U. S.	151	1,007	204	1,340
Feb. 16, 1847	San José,	Mexican	U. S.	3	8	13	30†
Nov. 21, 1847	San José,	Mexican	U. S.	0	3	8	20
July 10, 1898	Santiago (continued),	Spanish	U. S.	....	....	....	....
July 11, 1898	Santiago (continued),	Spanish	U. S.	....	....	....	....
July 12, 1898	Santiago (ended),	Spanish	U. S.	2	13	0	0
June 22, 1898	Santiago forts bombarded,	Spanish	*	1	11	(?)	(?)
Oct. 7, 1777	Saratoga,	English	U. S.	32	61	98	156
Dec. 22, 1778	Saratoga-Chance,	English	U. S.	4	9	5	13
Oct. 8, 1780	Saratoga-Molly,	English	U. S.	2	4	6	10
Dec. 10, 1812	Saratoga-Morgiana,	English	U. S.	3	7	2	5
April 30, 1814	Saucy Jack-Pelham,	English	U. S.	2	9	4	11
Nov. 10, 1813	Saucy Jack-Sherbrooke,	English	U. S.	0	3	2	5
Oct. 3, 1814	Saucy Jack-troop ship,	English	U. S.	8	15	3	2
Dec. 29, 1778	Savannah,	Eng.	Eng.	28	69	7	19
Oct. 8, 1779	Savannah,	Eng.	Eng.	98	136	20	35
Jan. 10, 1865	Scottsboro,	Conf.	U. S.	1	8	14	32
June 16, 1862	Secessionville,	Conf.	Conf.	137	438	63	141
April 2, 1865	Selma,	Conf.	U. S.	153	347	198	409
May 31, 1862	Seven Pines, or Fair Oaks,	Conf.	*	891	3,627	1,987	2,233
June 27, 1863	Shelbyville,	Conf.	U. S.	143	361	164	344
July 15, 1863	Shepardstown,	Conf.	U. S.	22	78	34	66
May 12, 1780	Siege of Charleston (ended),	English	Eng.	92	142	76	189
May 3, 1863	Siege of Suffolk, N. C. (ended),	Conf.	U. S.	15	94	898	1,202
Aug. 18, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 19, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 20, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 21, 1864	Six-Mile House (ended),	Conf.	U. S.	212	1,155	862	3,138
March 30, 1863	Somerset,	Conf.	U. S.	11	38	24	73
April 19, 1864	Southfield-Albemarle,	Conf.	Conf.	2	12	0	0
April 20, 1862	South Mills or Camden,	Conf.	U. S.	15	98	12	67
Sept. 14, 1862	South Mountain,	Conf.	U. S.	312	1,234	224	860
March 26, 1865	Spanish Fort (to April 8),	Conf.	U. S.	99	695	152	401
July 3, 1898	Spanish squadron destroyed off Santiago	Spanish	U. S.	1	1	342	461
May 8, 1864	Spottsylvania (continued),	Conf.	U. S.	....	....	....	....
May 9, 1864	Spottsylvania (continued),	Conf.	U. S.	....	....	....	....
May 11, 1864	Spottsylvania (ended),	Conf.	U. S.	3,288	19,278	3,342	20,187
May 18, 1864	Spottsylvania (continued),	Conf.	U. S.	2,031	7,956	1,752	7,248
Jan. 8, 1863	Springfield,	Conf.	U. S.	14	145	23	164
March 5, 1863	Spring Hill,	Conf.	Conf.	8	14	1	4
June 17, 1863	St. Charles,	Conf.	U. S.	136	20	6	8
Sept. 19, 1777	Stillwater,	English	U. S.	98	252	161	328
June 28, 1779	Stone Ferry,	Eng.	Eng.	51	99	31	63
Aug. 11, 1814	Stonington,	English	U. S.	1	5	21	55
June 6, 1813	Stony Creek,	English	Eng.	17	38	20†	30
Jan. 23, 1813	Stony Creek,	Indians	Ind.	400	0	0	0
July 29, 1863	Stony Lake,	Indians	U. S.	12	42	32	98
Aug. 18, 1864	Strawberry Plains, etc.,	Conf.	U. S.	401	1,754	338	762
Dec. 26, 1781	St. James-ship (armed),	English	*	1	4	3	8
July 16, 1779	Stony Point,	English	U. S.	20	70	63	31
April 28, 1863	Streight's Raid (to May 3),	Conf.	U. S.	12	69	0	0
Jan. 28, 1815	Surprise-Star,	English	U. S.	0	0	1	1
Jan. 20, 1864	Sturgis' Raid (January 16-28),	Conf.	U. S.	6	17	30	62
May 9, 1864	Swift Creek (continued),	Conf.	Conf.	....	....	....	....
May 10, 1864	Swift Creek (ended),	Conf.	Conf.	90	401	124	376
Oct. 26, 1846	Tabasco,	Mexican	U. S.	0	0	4	10
Nov. 9, 1813	Talladega,	Indians	U. S.	15	86	299	0
Nov. 3, 1813	Tallushatches,	Indians	U. S.	5	41	186	0
June 30, 1847	Tamulaty,	Mexican	U. S.	6	53	42	103
March 4, 1863	Thompson's Station (continued),	Conf.	Conf.	....	....	....	....
March 5, 1863	Thompson's Station (ended),	Conf.	Conf.	99	301	152	453
July 4, 1863	Tibb's Bend,	Conf.	U. S.	6	23	280	687
May 10, 1775	Ticonderoga,	English	U. S.	....	....	....	....
Nov. 7, 1811	Tippecanoe,	Indians	U. S.	37	151	120	180
Nov. 12, 1813	Tom-Townsend,	English	U. S.	0	2	8	13
Feb. 20, 1865	Town Creek,	Conf.	U. S.	5†	8†	8†	18†
Dec. 25, 1776	Trenton,	English	U. S.	2	4	17	78
June 11, 1864	Trevilian Station (continued),	Conf.	U. S.	....	....	....	....
June 12, 1864	Trevilian Station (ended),	Conf.	U. S.	85	490	124	582
Aug. 7, 1781	Trumbull-Iris,	English	Eng.	5	11	0	3
June 2, 1780	Trumbull-Watt,	English	*	19	20	39	52
April 9, 1777	Trumbull-transports,	English	U. S.	7	8	9	14
Feb. 22, 1864	Tunnel Hill,	Conf.	U. S.	150†	200†	80†	180
July 15, 1864	Tupelo, Harrisonburg, and Old Town Creek,	Conf.	U. S.	85	563	184	516
April 18, 1847	Tuspan,	Mexican	U. S.	3	11	25	34
June 13, 1776	Tyrannicide-Dispatch,	English	U. S.	1	2	2	5

AMERICAN BATTLES, TABULATED—Continued

DATE	NAME OF BATTLE	OPPONENT	VICTOR	CASUALTIES			
				UNITED STATES		OPONENTS	
				Killed	Wo'nd'd	Killed	Wo'nd'd
March 29, 1779	<i>Tyrannicide-Revenge</i> ,	English	U. S.	0	8	11	22
Jan. 5, 1813	<i>Ullor-boats</i> ,	English	U. S.	0	2	1	7
Jan. 30, 1864	<i>Underwriter</i> ,	Conf.	Conf.	9	20	6	32
Jan. 26, 1813	<i>Union-Iris</i> ,	English	Eng.	1	3	0	2
Oct. 25, 1812	<i>United States-Macedonian</i> ,	English	U. S.	5	7	36	68
June 21, 1863	Upperville,	Conf.	U. S.	30	70	50	100
Nov. 19, 1847	Urias,	Mexican	U. S.	0	0	8	12
Feb. 28, 1863	Van Buren, Ark.,	Conf.	U. S.	0	3	2	5
March 20, 1863	Vaught's Hill,	Conf.	U. S.	23	33	63	241
Oct. 15, 1779	<i>Vengeance-Defiance</i> ,	English	U. S.	3	5	4	11
Sept. 18, 1778	<i>Vengeance-Harriet</i> ,	English	U. S.	1	3	3	8
March 24, 1847	Vera Cruz,	Mexican	U. S.	11	56	981	2,000†
April 16, 1863	Vicksburg,	Conf.	U. S.	0	3	7	18
May 19, 1863	Vicksburg (continued to May 22),	Conf.	Conf.	....	....	....	....
May 22, 1863	Vicksburg (continued to May 25),	Conf.	Conf.	....	....	....	....
May 25, 1863	Vicksburg (ended),	Conf.	U. S.	1,848	2,378	1,420	2,151
Dec. 27, 1862	Vicksburg assault (continued),	Conf.	Conf.	....	....	....	....
Dec. 28, 1862	Vicksburg assault (ended),	Conf.	Conf.	724	990	63	134
July 4, 1863	Vicksburg (ended),	Conf.	U. S.	545	3,688	25	20
Sept. 1, 1814	<i>Wasp-Avon</i> ,	Conf.	U. S.	2	1	10	32
Oct. 6, 1782	<i>Wasp-packet</i> ,	English	U. S.	3	10	4	17
Oct. 18, 1812	<i>Wasp-Frolic</i> ,	English	U. S.	5	5	15	47
June 28, 1814	<i>Wasp-Reindeer</i> ,	English	U. S.	11	15	25	42
Oct. 27, 1863	Wauhatchie (continued),	Conf.	U. S.	....	....	....	....
Oct. 28, 1863	Wauhatchie (continued),	Conf.	U. S.	....	....	....	....
Oct. 29, 1863	Wauhatchie (ended),	Conf.	U. S.	76	339	153	208
May 15, 1780	Waxhaws,	English	Eng.	250	130	5	14
June 17, 1863	<i>Weehawken-Atlanta</i> ,	Conf.	U. S.	0	0	0	8
June 23, 1864	Weldon Railroad,	Conf.	U. S.	604	2,494	156	344
May 7, 1862	West Point,	Conf.	U. S.	84	110	3	15†
June 29, 1862	White Oak Swamp,	Conf.	U. S.	34	42	65	86
Oct. 25, 1776	White Plains,	English	*	24	66	89	144
June 27, 1864	White River,	Conf.	U. S.	52	148	162	341
Sept. 3, 1863	Whitestone Hill,	Indians	U. S.	8	23	194	42
Aug. 26, 1863	White Sulphur Springs,	Conf.	Conf.	63	144	42	75
March 8, 1865	Wilcox's Bridge (continued),	Conf.	Conf.	....	....	....	....
March 9, 1865	Wilcox's Bridge (continued),	Conf.	Conf.	....	....	....	....
March 10, 1865	Wilcox's Bridge (ended),	Conf.	Conf.	80	421	132	643
May 5, 1864	Wilderness (continued),	Conf.	U. S.	....	....	....	....
May 6, 1864	Wilderness (continued),	Conf.	U. S.	....	....	....	....
May 7, 1864	Wilderness (ended),	Conf.	U. S.	2,309	12,188	1,956	10,444
Nov. 14, 1813	<i>Wile Renard-ship</i> ,	English	U. S.	6	40	82	0
May 5, 1862	Williamsburg,	Conf.	U. S.	456	1,400	351	1,403
Feb. 8, 1865	Williston Station,	Conf.	U. S.	2	3	3	6
Aug. 10, 1861	Wilson Creek,	Conf.	U. S.	223	721	331	764
June 30, 1864	Wilson's Raid (June 22-30),	Conf.	U. S.	76	265	48	252
March 22, 1865	Wilson's Raid (to April 24),	Conf.	U. S.	99	598	352	1,231
May 25, 1862	Winchester,	Conf.	Conf.	38	154	68	329
June 14, 1863	Winchester (continued),	Conf.	Conf.	....	....	....	....
June 15, 1863	Winchester (ended),	Conf.	Conf.	203	397	50	81
Feb. 19, 1862	<i>Winton, N. C.</i> ,	Conf.	U. S.	0	0	1	4
Sept. 22, 1862	Wood Lake,	Indians	U. S.	8	24	84	138
July 3, 1778	Wyoming, or Fort Forty,	English	Eng.	225	0	2	8
July 16, 1863	<i>Wyoming-Japanese batteries</i> ,	Japanese	U. S.	6	4	100	200
July 18, 1863	Wytheville,	Conf.	Conf.	21	62	3	8
Aug. 1, 1812	<i>Yankee-Royal Bounty</i> ,	English	U. S.	0	2	2	7
May 19, 1864	Yellow Bayou,	Conf.	U. S.	42	108	74	158
April 27, 1813	York,	English	U. S.	66	203	100†	302
April 18, 1814	<i>York-Lord Somers</i> ,	English	*	0	0	6	12
Oct. 19, 1781	Yorktown (ended),	English	U. S.	8	16	199	353

Arabia. The history of Arabia before the time of Mohammed is involved in mystery. The aborigines of Arabia were probably Cushites, most of whom passed over into Abyssinia. A few, however, remained, who inhabited the west coasts. Subsequently another Semitic race, descended from Abraham, settled in the land. The oldest Arabian tribes are now extinct, and only a traditional memory even of their names exists; but the Semitic chiefs, Joktan, or Kohtan, and Ishmael, are generally considered to be the fathers of the present inhabitants. Christianity found an early entrance into Arabia. The Jews, in considerable numbers, migrated into Arabia after the destruction of Jerusalem, and made many proselytes. The great diversity of creeds in the peninsula was

favorable to the introduction of the doctrine of Mohammed, which forms the grand epoch in Arabian history, and brings it into close connection with the general history of civilization. Now, for the first time, the people of Arabia became united, and powerful enough to erect new empires in the three quarters of the world. The dominion of the Arabs, from the time of Mohammed to the fall of the caliphate of Bagdad in 1258, or even to the expulsion of the Moors from Spain in 1492, is an important period in the history of civilization. But the movements which had such great effect on the destinies of other nations produced but little change in the interior of Arabia; and after the brilliant career of conquest was ended the peninsula was left in an exhausted condition. Then

followed the subjugation of Yemen by the Turks in the Sixteenth Century; their expulsion in the Seventeenth Century; the dominion of the Portuguese over Muscat, 1508-1659; the conquests of Oman and the temporary victories gained by the Persians at the close of the Sixteenth Century; and, lastly, the appearance of the Wahabees (1770), whose moral influence is still felt. The latter took an important part in the political affairs of Arabia, but their progress was interrupted by Mehemet Ali, the Pasha of Egypt, who subjugated the coast-country of Hedjaz, with some parts of the coast of Yemen, and in 1818 gained a decisive advantage through the victory of Ibrahim Pasha. The subsequent events of the year 1840, in Syria, compelled Mehemet, however, to concentrate his forces and to resign all claims upon the territories lying beyond the Red Sea. Politically, Hedjaz, Yemen, and El Hasa are really three Turkish provinces; the Sinaitic peninsula is in Egyptian hands; England exercises much influence in Hadramaut through her possession of Aden; the Sultan of Oman is practically independent, and in alliance with England; Nejd, the seat of the once powerful Wahabee state, may be said to be independent, though the Emir of Shomer, or Shammer, its most powerful potentate, pays a small annual tribute to the Sherif of Mecca, in recognition of Turkish supremacy.

Archon (*är'kon*). One of the chief magistrates of the city and commonwealth of Athens. At first the Archon succeeded to the kings, and had regal power. Their authority was then divided among nine, and was made annual. In the time of the Romans, the archonship was merely titular and honorary.

Argentine Republic. In 1515, Juan Diaz da Solis, while searching for a passage into the Great South Sea newly seen by Balboa, entered the Rio de La Plata. In 1526, Sebastian Cabot, son of the discoverer of Newfoundland, penetrated nearly to the confluence of the Parana and the Paraguay, being arrested by the rapids, which afterwards gave name to Corrientes. In 1535, Buenos Ayres was founded, to command, though indirectly, the most practicable channel of the only outlet of the country, a city, which, in conjunction with its own colony of Monte Video, on the opposite bank, has virtually monopolized the history of a region equal in extent to Western Europe. Gradually other cities were planted, partly by colonists from Spain, and partly by adventurers from Peru, each city generally giving its own name to its own province. The chief staples of the country — horses and cattle — had been largely introduced before 1552. Down to 1775, the basin of the Rio de La Plata was a dependency of the viceroyalty of Lima. In that year, however, was erected the viceroyalty of Buenos Ayres, which, to the basin in question, added Bolivia, under the name of Upper Peru, thus embracing the headwaters of the Amazon, and also most of the plateau of Titicaca. The year 1806 ushered in a new order of things. Spain, as an ally of France, being then at war with England, both Buenos Ayres and Monte Video were occupied by the English — a change which, brief as was its duration, virtually sowed the seeds of

revolution. The colonists had felt the inconvenience of belonging to a state which left them, in a great measure, to defend themselves; they had successfully tried their strength against a foe more powerful than their own masters; and they had been encouraged not less by the sayings, than by the doings, of their invaders to assert their independence. These influences were, in fact, instantaneously exemplified. The triumphant militia, after deposing and expelling the legitimate viceroy for cowardice, elected in his stead the French officer who had led them to victory. Thus had the viceroyalty of Buenos Ayres become peculiarly ripe for taking its share in the outbreak, which Napoleon's dethronement of the Bourbons, in the spring of 1808, almost immediately occasioned throughout Spanish America. The constituents of the Argentine Republic did not, however, submit to the sovereignty of Joseph Bonaparte when he was shuffled on to the Spanish throne to replace Ferdinand VII. In 1810, they organized a government in the name of the latter monarch. This arrangement, which lasted only for a short and inglorious period, ended, like a great many others, in utter confusion. In 1816, a General Congress declared the independence of the "United Provinces of Rio de La Plata"; but those provinces, in 1827, returned once more to a state of isolation. In 1831, Buenos Ayres, Entre Rios, Corrientes, and Santa Fé, sometimes classed as the coast or riverine states, entered into a federal compact, and invited the others to form a voluntary alliance with them. This Argentine Confederation led to little but anarchy till 1835, when General Rosas was elected captain-general or governor of it, with all but absolute power. He secured quiet and order for a time; but the great aim of his policy, both warlike and commercial, being to achieve the supremacy of Buenos Ayres, the struggles with this end in view, to which he was goaded on also by personal ambition and reckless daring, led to his ultimate overthrow in 1851. Buenos Ayres, refusing to submit to Urquiza, the next governor of the Argentine Republic, declared itself independent in 1854; but was compelled by a signal defeat at Cepeda in 1859 to reënter the confederation. Continuing restless, however, another war, in which its army was ably led by General Mitré, placed that province in the position of supremacy which it still holds. In 1865, the Argentine Republic became involved along with Brazil and Uruguay in a war against Paraguay, which ended only with the death of Lopez, President of Paraguay, in 1870, and which accomplished little in the interest or to the credit of the Argentine Republic. In 1881, the Argentine Republic, in conjunction with Chile, came into possession of Patagonia and Tierra del Fuego. A financial crisis in 1890 did much to temporarily retard the industrial progress of the republic. In 1906-07, immigration was encouraged on an extensive scale, and railroad building received a renewed impetus.

Arkansas. The name, derived from the Indian, signifies "smoky water," with a French prefix meaning "bow." The State was originally a portion of the Louisiana Territory purchased from the French in 1803. When the

State of Louisiana was admitted, in 1812, the remaining portion was organized as Missouri Territory, which name it held till 1819, when Missouri formed a State Constitution, and Arkansas became a Territory under its present name. It became a State in 1836. The people passed the ordinance of secession on May 6, 1861. During the late Civil War the principal battles fought within the State boundaries were Pea Ridge, Prairie Grove, Arkansas Post, and Helena. Arkansas was temporarily reorganized as a State in the Union in 1864, but it was relegated to military government under the reconstruction acts of 1867. The new constitution was adopted in 1868, and the State resumed permanent federal relations. In 1903, charges were preferred against Governor Jeff Davis, alleging gross official misconduct. In the following election he received full vindication.

Armada. A Spanish word, signifying generally an *armed force*, but applied specially to the great naval expedition sent out against England by Philip of Spain, A. D. 1588. The object of the expedition was to strike a decisive blow at the Protestant interest. The expedition had been long in preparation, and consisted of no fewer than 132 vessels, chiefly galleons, which carried, besides 8,000 sailors and the galley-slaves, an army of 20,000 men. These were destined for the coast of Flanders, where Alexander Farnese, Prince of Parma, was to embark with 35,000 men in addition. The news of these hostile preparations aroused all the enthusiasm of England. Her navy, which had been reduced to thirty-six ships, was rapidly increased until 191 vessels were ready for sea. These were placed under the command of Lord Howard of Effingham, under whom served Drake, Hawkins, Frobisher, and others. The command of the army was given to the Earl of Leicester. The main body of the ships was stationed off Plymouth, while a squadron, under Lord Seymour, was ordered to cruise off the coast of Flanders. The Armada set out from the Tagus on the 29th of May. On the 19th of July, the fleet (which had been delayed by storms) was observed entering the Channel. On the 23d, there was a whole day's fighting off Portland; and the 25th saw a similar scene with a similar result—the capture or crippling of Spanish ships—off the Isle of Wight. On the 27th, the fleet anchored off Calais. Two nights later, eight small vessels, daubed with pitch and resin, and filled with explosive substances, were drifted down with the tide towards the floating castles, and were set on fire. In the panic which the fire and the frequent crashes struck through the Spanish fleet, many vessels cut their cables and cleared off from the shore, while others were disabled or seriously injured. Next morning the scattered vessels of the Armada fell an easy prey to the English ships, which, being much smaller in size than those of the Spaniards, had all along been more easily manœuvred. Four thousand Spaniards were killed. Many of their vessels were either taken, sunk, or driven ashore. The rest fled northward at the bidding of their admiral, who saw no way home but round the northern coast of Scotland; and, at the end of September, fifty-three weather-beaten and muti-

lated ships, all that remained of “The Invincible Armada,” were brought to an anchor in Santander Bay.

Assembly. The four great legislative bodies which succeeded each other during the period of the first French revolution are usually termed: (1) *The National or Constituent Assembly*, commenced June 17, 1789, by the resolution of the deputies of the communes in the States-General, constituting themselves a national assembly, to which the deputies of the nobles and clergy afterwards adhered; termed Constituent Assembly from having framed a constitution; dissolved on the acceptance of the constitution by the king, September 30, 1791. (2) *The Legislative Assembly*. It commenced its sittings October 1, 1791; suspended the royal authority by its decree of August 10, 1792; and was dissolved September 21, 1792. (3) *The Convention*. It commenced its sittings September 21, 1792, with a proclamation of the Republic; was dissolved 4 Brumaire, fourth year of the Republic (October 26, 1795). (4) Two-thirds of this assembly were then included in the new body of the *Corps Législatif*, which commenced its sittings October 27, 1795, forming the *Council of the Five Hundred* (des Cinq-Cents), and the *Council of the Ancients* (des Anciens), 250 in number. The latter body named the *Directory*. This assembly subsisted until the dissolution of the Directory by Bonaparte, 17 Brumaire, eighth year of the Republic (November 10, 1799). The term *Assemblée Nationale* was revived by the legislative body under the second Republic, May, 1848; and under the third Republic, 1870.

Assyria (äs-sür'-re-ah). The name of the first great empire of antiquity recorded in Holy Writ. Assyria Proper was a region east of the Tigris, including Nineveh, and derived its name from *Asshur*, the second son of Shem. It appears to have comprised the modern pashalics of Van and Diarbekr, with Pensarmenia, including at least part of Azerbaijan; corresponding pretty exactly to modern Kurdistan. The first empire of Assyria was founded by Belus, B. C. 1993. Ninus, son of Belus (1968–1916), and his widow, Semiramis (1916–1874), were its most famous monarchs. The last of their successors, Sardanapalus, infamous for his luxury and voluptuousness, was dethroned by his subjects, and burned himself in his palace, with his eunuchs, concubines, and all his treasures, about 820 B. C. The empire was then divided into Media, Assyria, and Babylonia. Salmanassar, or Shalmaneser, conquered Judea about 724 B. C. The second empire of Assyria finished with Nabopolassar, who united Assyria to Babylonia, B. C. 625. Assyria, with Babylonia, was conquered by Cyrus, B. C. 538, and became a province of Persia.

Augur (au'gür). A public officer appointed to interpret the will of the gods, as expressed by signs or omens, for national or individual guidance. Their office was one of great importance in the state, as no enterprises or ceremonies were performed unless they declared the omens favorable. Accordingly, the members of their college were always elected from the most honorable citizens. Their divinations were called *augurics* or *auspices*, between which there is sometimes a distinction made; the latter meaning such as

were derived from the inspection of birds, the former being extended to all omens or prodigies whatever. The Augurs bore a staff or wand as the ensign of their authority. From B. C. 300 to Sylla's time, the College of Augurs consisted of nine. They were then increased to fifteen. Julius Cæsar added another. Their office was suppressed, 390 A. D.

Aulic Council. One of the two supreme courts of the old Germanic, or Holy Roman, Empire, the other being the Imperial Chamber. The nomination of the Aulic Councillors belonged to the emperor, and each new emperor made a new appointment. The Council, which was called into existence in 1501 by the Emperor Maximilian, ultimately attained to great authority, and was held to be equal in dignity to the Imperial Chamber. At the extinction of the old Germanic Empire, by the renunciation of Francis II., and the establishment of the Confederation of the Rhine under the protection of the Emperor Napoleon, in 1806, the Aulic Council ceased to exist.

Austria-Hungary. The history of Austria is the history of the House of Habsburg. When Rudolph of Habsburg became Emperor of Germany, and Ottokar, King of Bohemia and Duke of Austria, Styria, and Carinthia, refused to take the oath of allegiance, the emperor succeeded in dispossessing him of his fiefs (1278), and subsequently conferred them, with the consent of the electors of the German Empire, on his son (1282). Thus the dynasty of Habsburg was founded. In the first half of the Sixteenth Century, Duke Ferdinand of Austria was elected King of Hungary by one party, while John Zapolya of Transylvania was chosen by another. After several wars, in which John was supported by the Turks, Ferdinand finally came out victorious and united Hungary to Austria. Thus possessed of a large territory, fertile and densely peopled, and regularly elected emperors of Germany, the House of Habsburg was, for several centuries, the richest and most powerful family in Europe. But humiliations came, thick and heavy, with Napoleon. Driven out of Germany, the Emperor Francis assumed, August 11, 1804, for himself and his successors, the title of Emperor of Austria. But, besides Germany, he also lost his possessions in Italy, and was completely shut out from the sea. After the fall of Napoleon, Austria was restored to its former size, and under the administration of Metternich it also regained its former prestige in European politics. But it was internally weak, and its weakness became surprisingly apparent, first by the revolution of 1848, when only the support of Russia prevented the whole fabric from falling to pieces, and then after the battle of Sadowa, 1866, when, for the second time, it was driven out of Germany, and lost its hold on Italy. Since that time the Austrian Government has been principally occupied with the internal reconstruction of the empire, and it is now constituted as a double state — Austria and Hungary — each with a representation of its own, out of which is formed a common representation, in which all common affairs, army and navy, foreign policy, etc., are treated. In 1878, the administration of Bosnia and Herzegovina was

given to Austria-Hungary. In 1882, the dual kingdom entered into the triple alliance with Germany and Italy. An anti-Semitic agitation assumed vast proportions in 1895, and resulted in the Czechs carrying the Bohemian Diet. More internal unrest has recently been displayed in Austria-Hungary than in any other nation of Europe, Turkey excepted. In 1907-08, socialist demonstrations in favor of universal suffrage were frequent and impressive. (*See Hungary.*)

Battles (*The fifteen decisive*), according to Professor Creasy: (1) *Marathon* (B. C. 490), in which the Greeks, under Miltiades, defeated Darius, the Persian, and turned the tide of Asiatic invasion. (2) *Syracuse* (B. C. 413), in which the Athenian power was broken, and the extension of Greek domination was prevented. (3) *Arbela* (B. C. 331), by which Alexander overthrew Darius, and introduced European habits into Asia. (4) *Metaurus* (B. C. 207), in which the Romans defeated Hannibal, and Carthage was brought to ruin. (5) *Arminius* (A. D. 9), in which the Gauls overthrew the Romans under Varus, and established their independence. (6) *Châlons* (A. D. 451), in which Attila, "the Scourge of God," was defeated by Aëtius, and Europe saved from utter devastation. (7) *Tours* (A. D. 732), in which Charles Martel overthrew the Saracens, and broke from Europe the Mohammedan yoke. (8) *Hastings* (A. D. 1066), by which William of Normandy became possessed of the English Crown. (9) *Orléans* (A. D. 1429), by which Jeanne d'Arc raised the siege of the city, and secured the independence of France. (10) *Armada* (*The*), (A. D. 1588), which crushed the hopes of Spain and of the papacy in England. (11) *Blenheim* (A. D. 1704), in which Marlborough, by the defeat of Tallard, broke the ambitious schemes of Louis XIV. (12) *Pultova* (A. D. 1709), in which Charles XII. of Sweden was defeated by Peter the Great of Russia, and the stability of the Muscovite Empire was established. (13) *Saratoga* (A. D. 1777), in which General Gates defeated Burgoyne, and virtually decided the fate of the American Revolution. (14) *Valmy* (A. D. 1792), in which the allied armies, under the Duke of Brunswick, were defeated by the French revolutionists, and the Revolution was suffered to go on. (15) *Waterloo* (A. D. 1815), in which Wellington defeated Napoleon, and rescued Europe from French domination.

Belgium. The territory now known as Belgium originally formed only a section of that known to Cæsar as the territory of the Belgæ, extending from the right bank of the Seine to the left bank of the Rhine, and to the ocean. This district continued under Roman sway till the decline of the empire; subsequently formed part of the Kingdom of Clovis; and then of that of Charlemagne, whose ancestors belonged to Landen and Herstal on the confines of the Ardennes. After the breaking up of the empire of Charlemagne, Belgium formed part of the Kingdom of Lotharinga under Charlemagne's grandson, Lothaire; Artois and Flanders, however, belonging to France by the treaty of Verdun.

For more than a century this kingdom was contended for by the kings of France and the emperors of Germany. In 953, it was conferred by the Emperor Otto upon Bruno, archbishop of Cologne, who assumed the title of archduke, and divided it into two duchies: Upper and Lower Lorraine. In the frequent struggles which took place during the Eleventh Century, Luxemburg, Namur, Hainaut, and Liège usually sided with France, while Brabant, Holland, and Flanders commonly took the side of Germany. The contest between the civic and industrial organizations and feudalism, which went on through the Twelfth and Thirteenth Centuries, and in which Flanders bore a leading part, was temporarily closed by the defeat of the Ghentese under Van Artevelde in 1382. In 1384, Flanders and Artois fell to the House of Burgundy, which, in less than a century, acquired the whole of the Netherlands. The death of Charles the Bold at Nancy, in his attempt to raise the duchy into a kingdom (1477), was followed by the succession and marriage of his daughter, Mary of Burgundy, by which the Netherlands became an Austrian possession. With the accession, however, of the Austrian House of Habsburg to the Spanish throne, the Netherlands, after a brief period of prosperity, attended by the spread of the reformed religion, became the scene of increasingly severe persecution under Charles V. and Philip II. of Spain. Driven to rebellion, the seven northern states under William of Orange, the Silent, succeeded in establishing their independence, but the southern portion, or Belgium, continued under the Spanish yoke.

From 1598 to 1621, the Spanish Netherlands were transferred as an independent kingdom to the Austrian branch of the family by the marriage of Isabella, daughter of Philip II., with the Archduke Albert of Austria. He died childless, however, and they reverted to Spain. After being twice conquered by Louis XIV., conquered again by Marlborough, coveted by all the powers, deprived of territory on the one side by Holland and on the other by France, the Southern Netherlands were at length in 1714, by the peace of Utrecht, again placed under the dominion of Austria, with the name of the Austrian Netherlands. During the Austrian war of succession the French, under Saxe, conquered nearly the whole country, but restored it in 1748 by the peace of Aix-la-Chapelle. The Seven Years' War (1756-63) did not affect Belgium, and in that period, and during the peace which followed, she regained much of her

prosperity under Maria Theresa and Charles of Lorraine. On the succession of Joseph II., the "philosophic emperor," a serious insurrection occurred, the Austrian army being defeated at Turnhout, and the provinces forming themselves into an independent state as United Belgium (1790). They had scarcely been subdued again by Austria before they were conquered by the revolutionary armies of France, and the country divided into French departments, the Austrian rule being practically closed by the battle of Fleurus (1794), and the French possession confirmed by the treaties of Campo Formio (1797) and Lunéville (1801).

In 1815, Belgium was united by the Congress of Vienna to Holland, both countries together now forming one state, the Kingdom of the Netherlands. This union lasted till 1830, when a revolt broke out among the Belgians, and soon attained such dimensions that the Dutch troops were unable to repress it. A convention of the great powers assembled in London, favored the separation of the two countries, and drew up a treaty to regulate it; the National Congress of Belgium offering the crown, on the recommendation of England, to Leopold, Prince of Saxe-Coburg, who acceded to it under the title of Leopold I., on July 21, 1831. In November of the same year, the five powers guaranteed the crown to him by the treaty of London, and the remaining difficulties with Holland were settled in 1839, when the Dutch claims to territory in Limburg and Luxemburg were withdrawn. The reign of Leopold was for Belgium a prosperous period of thirty-four years. Leopold II. succeeded his father in 1865. In recent years the chief feature of Belgian politics has been a keen struggle between the clerical and the liberal party. Till 1878 the clerical party maintained the upper hand, but to a large extent by corruption at the elections. In 1877, a bill was passed to put down corruption, and to increase the number of town deputies to the Chamber of Representatives; and at the next elections, in June, 1878, the Liberals gained a majority, which they lost in 1884. In 1885, on the constitution by the Congress of Berlin of the Congo Free State, in which Leopold II. had shown an active interest, he was invited to become its sovereign, and has since held that title. Prince Albert, the king's nephew, born 1875, is his heir presumptive.

The Congo Free State passed under the suzerainty of Belgium in 1890, and was subject to a species of absolutism down to 1908.

BISHOPS AND POPES OF ROME

PONTIFF	PONTIFICATE		SURNAME	NATIONALITY
	<i>First Century</i>			
	A. D.	A. D.		
St. Peter,	41	67		
Linus,	67	79		
Cletus or Anacletus,		79-91		
Clement,		91-100		
	<i>Second Century</i>			
Evaristus,		100-109		
Alexander I.,	about	109-119		
Sixtus I.,		119-128		
				Roman.

BISHOPS AND POPES OF ROME—Continued

PONTIFF	PONTIFICATE		SURNAME	NATIONALITY
	A. D.	A. D.		
Telesphorus,	128	139		Greek.
Hyginus,	139	142		Athenian.
Pius I.,	142	157		Native of Aquileia.
Anicetus,	157	168		Syrian.
Soter,	168	176		Greek.
Eleutherus,	177	190		Greek.
Victor I.,	190	202		African.
Zephyrinus,	202	217		
<i>Third Century</i>				
Callixtus I.,	217	222		Roman.
Urban I.,	222	230		Roman.
Pontianus,	230	235		Roman.
Antherius,	235	236		Greek.
Fabianus,	236	250		Probably Roman.
Cornelius,	251	253		Roman.
Lucius I.,	253	254		Roman.
Steven I.,	254	257		Roman.
Sixtus II.,	257	258		Roman.
Dionysius,	259	268		Greek.
Felix I.,	269	274		Roman.
Eutychianus,	275	283		Uncertain.
Caius,	283	296		Roman.
<i>Fourth Century</i>				
Marcellinus,	296	304		Roman.
Marcellus I.,	304	309		Roman.
Eusebius,	309			Roman.
Melchiodes,	310	314		African.
Sylvester I.,	314	335		Roman.
Marcus,	336			Roman.
Julius I.,	337	352		Roman.
Liberius,	352	366		Roman.
Damascus I.,	366	384		Spaniard.
Siricius,	384	398		Roman.
Anastasius I.,	398	401		Roman.
<i>Fifth Century</i>				
Innocent I.,	401	417		Native of Albano.
Zosimus,	417	418		Greek.
Boniface I.,	418	422		Roman.
Celestinus I.,	422	432		Roman.
Sixtus III.,	432	440		Roman.
Leo I., "The Great,"	440	461		Roman.
Hilarius,	461	468		Native of Sardinia.
Simplicius,	468	483		Native of Tibur.
Felix II.,	483	492		Roman.
Gelasius,	492	496		Roman.
Anastasius II.,	496	498		Roman.
<i>Sixth Century</i>				
Symmachus,	498	514		Native of Sardinia.
Hormisdas,	514	523		Native of Frusino.
John I.,	523	526		Tuscan.
Felix III.,	526	530		Native of Beneventum.
Boniface II.,	530	532		Roman.
John II.,	532	535		Roman.
Agapetus I.,	535	536		Roman.
Silverius,	536	537		Native of Campania.
Vigilius,	537	555		Roman.
Pelagius I.,	555	561		Roman.
John III.,	560	574		Roman.
Benedict I.,	575	579		Roman.
Pelagius II.,	579	590		Roman.
<i>Seventh Century</i>				
Gregory I., "The Great,"	590	604		Roman.
Sabinianus,	604	606		Tuscan.
Boniface III.,	607			Roman.
Boniface IV.,	608	615		Native of Abruzzi.
Deusdedit,	615	618		
Boniface V.,	619	625		
Honorius,	625	638		Native of Capua.
Severinus,	638	640		Roman.
John IV.,	640	642		Native of Dalmatia.
Theodore,	642	649		Greek.
Martin I.,	649	653		Native of Tudertum.
Eugenius I.,	654	657		Roman.
Vitalianus,	657	672		Native of Signia.
Adeodatus,	672	676		Roman.
Donus I.,	676	678		Roman.
Agatho,	678	681		Sicilian.
Leo II.,	682	683		
Benedict II.,	684	685		Roman.
John V.,	685	686		Native of Syria.
Conon,	686	687		Native of Thrace.

BISHOPS AND POPES OF ROME—Continued

PONTIFF	PONTIFICATE		SURNAME	NATIONALITY
<i>Eighth Century</i>				
	A. D.	A. D.		
Sergius,	687	701		Native of Palermo.
John VI.,	701	705		Native of Greece.
John VII.,	705	707		Greek.
Sisinnius,	708			Syrian.
Constantinus I.,	708	715		
Gregory II.,	715	731		Roman.
Gregory III.,	731	741		Syrian.
Zachary,	741	752		Greek.
Steven II.,	752	757		
Paul I.,	757	767		Roman.
Steven III.,	768	772		Sicilian.
Adrian I.,	772	795		Roman.
<i>Ninth Century</i>				
Leo III.,	795	816		Roman.
Steven IV.,	816	817		Roman.
Pascal I.,	817	824		Roman.
Eugenius II.,	824	827		Roman.
Valentine,	827			Roman.
Gregory IV.,	827	844		Roman.
Sergius II.,	844	847		Roman.
Leo IV.,	847	855		Roman.
Benedict III.,	855	858		Roman.
Nicholas I.,	858	867		Roman.
Adrian II.,	867	872		Roman.
John VIII.,	872	882		Roman.
Martin II.,	882	884		
Adrian III.,	884	885		Roman.
Steven V.,	885	891		Roman.
Formosus,	891	896		Bishop of Porto.
Boniface VI.,	896			
Steven VI.,	896	897		Roman.
Romanus,	897			
Theodore II.,	897			
John IX.,	898	900		Native of Tiber.
<i>Tenth Century</i>				
Benedict IV.,	900	903		Roman.
Leo V.,	903			Native of Ardea.
Sergius III.,	904	911		
Anastasius III.,	911	913		Roman.
Landon,	913	914		Native of Sabina.
John X.,	914	929		Roman.
Leo VI.,	929			Native of Rome.
Steven VII.,	929	931		Roman.
John XI.,	931	936		
Leo VII.,	936	939		Roman.
Steven VIII.,	939	942		Roman.
Martin III.,	942	946		
Agapetus II.,	946	955		
John XII.,	955	964	Ottaviano Conti. He was the first who changed his name on his elevation.	
Benedict V.,	965			Roman.
John XIII.,	965	972		Roman.
Benedict VI.,	973	974		
Benedict VII.,	974	983	(Conti),	Roman.
John XIV.,	983	984	(Boniface VII., Franco, anti-pope.)	
John XV.,	985	996		Roman.
<i>Eleventh Century</i>				
Gregory V.,	996	999	Bruno.	
Sylvester II.,	999	1003	Gerbert,	Native of Auvergne.
John XVII.,	1003		Philagathus.	
John XVIII.,	1003	1009	Secco,	Roman.
Sergius IV.,	1009	1012		
Benedict VIII.,	1012	1024	Fasio,	Roman.
John XIX.,	1024	1033		
Benedict IX.,	1033	1045	Sylvester,	Native of Tusculum.
Gregory VI.,	1045	1046	Giovanni Braziano,	Roman.
Clement II.,	1046	1047	Suger,	Native of Saxony.
Damasus II.,	1048		Pappo,	
Leo IX.,	1048	1054	Bruno,	Bishop of Toul.
Victor II.,	1054	1057	Gebhard,	Bishop of Eichstadt.
Steven IX.,	1057	1058	Frederick,	Abbot of Monte Casino.
Nicholas II.,	1058	1061		Native of Burgundy.
Alexander II.,	1061	1073		Native of Milan.
Gregory VII.,	1073	1085	Hildebrand,	Native of Tuscany.
Victor III.,	1086	1087		Native of Beneventum.
Urban II.,	1088	1099	Otho or Endes,	Native of France.
<i>Twelfth Century</i>				
Pascal,	1099	1118		Native of Tuscany.
Gelasius,	1118	1119		Native of Caleta.

BISHOPS AND POPES OF ROME—Continued

PONTIFF	PONTIFICATE		SURNAME	NATIONALITY
	A. D.	A. D.		
Calixtus II.,	1119	1124		Native of Burgundy.
Honorius II.,	1124	1130	Cardinal Lambert,	Bishop of Ostia.
Innocent II.,	1130	1143	.....	Roman.
Celestine II.,	1143	1144	.....	Tuscan.
Lucius II.,	1144	1145	.....	Native of Bologna.
Eugenius III.,	1145	1153	.....	Native of Pisa.
Anastasius IV.,	1153	1154	.....	Roman.
Adrian IV.,	1154	1159	Nicholas Breakpearce,	Englishman.
Alexander III.,	1159	1181	Cardinal Orlando Bandinello,	Native of Sienna.
Lucius III.,	1181	1185	Cardinal Ubaldo,	Native of Lucca.
Urban III.,	1185	1187	Uberto Crivelli,	Archbishop of Milan.
Gregory VIII.,	1187		Paul,	Native of Beneventum.
Clement III.,	1187	1191	Cardinal Hyacinthus,	Bishop of Praenesie.
Celestine III.,	1191	1198		Roman.
<i>Thirteenth Century</i>				
Innocent III.,	1198	1216	Cardinal Lotharius,	Native of Signia.
Honorius III.,	1216	1227	Cardinal Savelli,	Roman.
Gregory IX.,	1227	1241	Cardinal Hugo,	Native of Anagui.
Celestine IV.,	1241		.....	Native of Milan.
Innocent IV.,	1243	1254	Sinibaldo Fieschi,	Native of Genoa.
Alexander IV.,	1254	1261	Cardinal Rinaldo Conti,	Native of Anagui.
Urban IV.,	1261	1264	James, Patriarch of Jerusalem,	Frenchman.
Clement IV.,	1265	1268	Guy,	Native of St. Gilles, in Languedoc.
Gregory X.,	1271	1276	Tebaldo Visconti,	Native of Placenzia.
Innocent V.,	1276		Cardinal Peter,	Native of Tarentaise.
Adrian V.,	1276		Ottobono Fieschi,	Native of Genoa.
John XXI.,	1276	1277	.....	Native of Lisbon.
Nicholas III.,	1277	1281	Cardinal Orsini,	Native of Rome.
Martin IV.,	1281	1285	Cardinal Simon de Brie,	Frenchman.
Honorius IV.,	1285	1288	Cardinal James Sevelly,	Roman.
Nicholas IV.,	1288	1292	Cardinal Jerome,	Native of Ascoli.
Celestine V.,	1294		Pietro da Morrone,	Native of Abruzzi.
Boniface VIII.,	1294	1303	Cardinal Benedetto Gaetani,	Native of Anagui.
<i>Fourteenth Century</i>				
Benedict XI.,	1303	1304	Cardinal Nicholas,	Native of Treviso.
Clement V.,	1305	1314	Bertrand, removed Papal See to Avignon,	
John XXII.,	1316	1334	James,	Native of Bordeaux.
Benedict XII.,	1334	1342	.....	Native of Cahoras in France.
Clement VI.,	1342	1352	James Fournier,	Frenchman.
Innocent VI.,	1352	1362	Peter Roger,	Native of Limoges in France.
Urban V.,	1362	1370	Steven Aubert,	Native of Limoges.
Gregory XI.,	1370	1378	William Grimoard,	Frenchman.
Urban VI.,	1378	1389	Peter Roger,	Frenchman.
Boniface IX.,	1389	1404	Bartolomew Prignano,	Neapolitan.
<i>Fifteenth Century</i>				
Innocent VII.,	1404	1406	Peter Tomacelli,	Of Naples.
Gregory XII.,	1406	1415	Cosmo Migliorati,	Native of Sulmona.
Martin V.,	1415	1431	Angelo Corradi,	Native of Venice.
Eugenius IV.,	1431	1447	Otho Colonna,	Roman.
Nicholas V.,	1447	1455	Gabriel Condulmero,	Venetian.
Calixtus III.,	1455	1458	Cardinal Thomas,	Native of Sargana.
Pius II.,	1458	1464	Alfonso Borgia,	Spaniard.
Paul II.,	1464	1471	Aeneas Sylvius Piccolomini,	Native of Siena.
Sixtus IV.,	1471	1484	Peter Barbo,	Native of Venice.
Innocent VIII.,	1484	1492	Francis della Rovere,	Genoese.
Alexander VI.,	1492	1503	Gian Battista Cibo,	Genoese.
<i>Sixteenth Century</i>				
Pius III.,	1503		Rodrigo Lenzoli Borgia,	Spaniard.
Julius II.,	1503	1513	Francis Todeschini Piccolomini,	Genoese.
Leo X.,	1513	1521	Julian della Rovere,	
Adrian VI.,	1521	1523	Giovanni de Medici,	Son of Lorenzo, the Magnificent.
Clement VII.,	1523	1534	.....	Native of Utrecht.
Paul III.,	1534	1549	Guilio de Medici,	Nephew of Lorenzo.
Julius III.,	1549	1555	Alessandro Farnese,	Roman.
Marcellus,	1555		Giovann Maria Giocci,	Roman.
Paul IV.,	1555	1559	Cardinal Cervini,	Native of Montepulciano.
Pius IV.,	1559	1565	Gianpietro Caraffa,	Neapolitan.
Pius V.,	1565	1572	Giovanni Angelo Medichino,	Native of Milan.
Gregory XIII.,	1572	1585	Michelo Chisleri,	Native of Alessandria.
Sextus V.,	1585	1590	Hugo Buoncampagni,	Native of Bologna.
Urban VII.,	1590		Felice Peretti of Montaito,	Native of March Ancona.
Gregory XIV.,	1590	1591	Gian Battista Castagna,	Genoese.
Innocent IX.,	1591		Nicola Sfrondati,	Native of Milan.
Clement VIII.,	1591	1605	Gian Antonio Facchinetti,	Native of Bologna.
			Ippolito Aldobrandino,	Native of Fano.

BISHOPS AND POPES OF ROME—Continued

PONTIFF	PONTIFICATE		SURNAME	NATIONALITY
<i>Seventeenth Century</i>				
	A. D.	A. D.		
Leo XI.,	1605		Alessandro de Medici, . . .	Native of Florence.
Paul V.,	1605	1621	Camillo Borghese, . . .	Native of Rome.
Gregory XV.,	1621	1623	Alessandro Ludovici, . . .	Native of Bologna.
Urban VIII.,	1623	1644	Maffeo Barberini, . . .	Florentine.
Innocent X.,	1644	1655	Gian Battista Pamfili, . . .	Roman.
Alexander VII.,	1655	1667	Fabio Chigi,	Native of Siena.
Clement IX.,	1667	1669	Giulio Rospigliosi, . . .	Native of Pistoia.
Clement X.,	1669	1676	Emilio Attieri,	Native of Rome.
Innocent XI.,	1676	1689	Benedetto Odescalchi, . . .	Native of Como.
Alexander VIII.,	1689	1691	Pietro Ottobani,	Native of Venice.
Innocent XII.,	1691	1700	Antonio Pignatelli,	Native of Naples.
<i>Eighteenth Century</i>				
Clement XI.,	1700	1721	Gian Francesco Albani, . .	Native of Urbino.
Innocent XIII.,	1721	1724	Michael Angelo Conti, . .	Native of Rome.
Benedict XIII.,	1724	1730	Vincenzo Maria Orsini, . .	Native of Rome.
Clement XII.,	1730	1740	Lorenzo Corsini,	Native of Florence.
Benedict XIV.,	1740	1758	Prospero Lambertini, . . .	Native of Bologna.
Clement XIII.,	1758	1769	Carlo Rezzonico,	Native of Venice.
Clement XIV.,	1769	1775	Gian Vincenzo Ganganeli, .	Born near Rimini.
Pius VI.,	1775	1799	Angelo Braschi,	Native of Cesena.
<i>Nineteenth Century</i>				
Pius VII.,	1800	1823	Gregario Barnaba Chiaramonti,	Native of Cesena.
Leo XII.,	1823	1829	Annibale della Genga, . . .	Native of Romagna.
Pius VIII.,	1829	1830	Cardinal Castiglioni, . . .	Native of Cingoli.
Gregory XVI.,	1830	1846	Mauro Cappellari,	Native of Belluno.
Pius IX.,	1846	1878	Giovanni Maria Mastai-Ferretti,	Native of Sinigaglia.
Leo XIII.,	1878	1903	Gioacchino Pecci,	Native of Carpinetto.
Pius X.,	1903		Giuseppe Sarto,	Venice.

Blue Laws. The code of 1660, a compilation of the earliest laws and customs of Connecticut. It is almost verbally copied from the Mosaic Law. After the restoration of Charles II. "Presbyterian true blue" became a term of derision applied to anything which smattered of Puritanism, and "blue laws" simply meant puritanical laws, or laws with a blue tinge. These laws inflicted the penalty of death for worshipping any god but the God of the Bible; for speaking disrespectfully of the Bible, Christ, or the Holy Ghost; for witchcraft, adultery, theft, false-swearing, and disobedience to parents. Said to have been drawn up by the Rev. Samuel Peters, but generally supposed to be apocryphal.

Boer War, The. The reinforcing of the British troops in South Africa, along the borders of the Transvaal Republic, together with differences on the franchise question, coupled with grim recollections of former armed clashes between Great Britain and the sturdy, patriotic Boers, all tended to hasten the conflict of 1899-1900, one of the most sanguinary in the world's history. As an effort to avert war, a conference was held May 31, 1899, between Sir Alfred Milner, Governor of Cape Colony, and the Presidents of the Dutch Republics at Bloemfontein, in which terms for the adjustment of the claims of the Outlanders were discussed, but no agreement was reached. Between June 1 and October 10, negotiations proceeded between the governments of Great Britain and the Transvaal, while the legislature of the latter adopted franchise laws which were not acceptable to Great Britain. In the meantime, both countries made energetic preparations for war, and the Orange Free State announced that in case of hostilities it would support the Transvaal.

On October 10th, the Transvaal sent to the British Government an ultimatum demanding: That all points of mutual difference be regulated by friendly recourse to arbitration or by whatever amicable way might be agreed upon by the governments concerned; that all British troops on the border of the Transvaal Republic should be instantly withdrawn; that Great Britain should withdraw all reinforcements of troops landed in South Africa since June 1, 1899, with assurance that during further negotiations the Republic would not attack any British possessions, and that upon compliance with the ultimatum the Republic would be prepared to withdraw from the borders the armed burghers of the Transvaal; that the British troops then on the high seas should not be landed in any part of Africa; that an answer to the ultimatum be received by the Republic not later than 5 o'clock P. M. on October 11th; that an unsatisfactory answer would be regarded by the Republic as a formal declaration of war by Great Britain, as would also be a further movement of British troops in a nearer direction to the Republic's borders.

On October 12, 1899, the reply of the British having been unsatisfactory, the Transvaal Boers invaded Natal, advancing toward Newcastle, which was defended by the British generals White and Symons. The British evacuated Newcastle and fell back on Ladysmith, where, on October 13th, there was a strong British force. On October 20th, the Boers begun the siege of Kimberley, and on the same day in Natal was fought the battle of Dundee, in which the British repulsed the Boers, suffering a loss of 215 in killed and wounded. On October 21st, General French captured the Boers' position at Elandslaagte after a hard battle, with a British

loss of 257 killed and wounded. General White repulsed a Free State force at Rietfontein, near Ladysmith, October 24th. Five days later the Boers began the siege of Ladysmith. On October 30th, in a sortie near Ladysmith, the British were entrapped and defeated, and the Boers captured 870 prisoners. Communication with Ladysmith was cut off by the Boers on November 2d, and the next day the British evacuated Colenso, in Natal. The Boers shelled Mafeking November 6th, but were repulsed in an attack on the British position. The first British reinforcement carrying reinforcements reached Cape Town on November 9th, and proceeded to Durban. The Boers wrecked a British armored train near Eastcourt, Natal, on November 16th, capturing fifty-six prisoners, including Winston Churchill. On November 23d, near Gras Pan, Lord Methuen attacked the Boers and drove them from their position, and on November 26th the British won a sanguinary victory at Modder River. A series of Boer successes then followed. On December 10th, the British, under General Gatacre, were led into a Boer ambush near Stormberg Junction and lost 1,000 men, including 672 captured, while on the same and following day Lord Methuen failed to take the Boer position at Spytfontein after desperate fighting and heavy losses, General Wauchope being killed. On December 15th, General Buller was severely defeated while attempting to force the Tugela River, near Colenso, he losing 1,000 men and eleven guns. The British losses to this date were 7,630 men killed, wounded, and missing, and the attention of the civilized world was riveted upon the war. After Buller's signal defeat, Field Marshal Lord Roberts was ordered, December 18th, to South Africa, to take command of military operations, with Lord Kitchener as chief of staff, and with a reinforcement of 100,000 men.

General French captured Colesburg on New Year's Day, 1900. On January 6th, Roberts and Kitchener arrived in South Africa, and on the same date the Boers were repulsed with heavy loss in an attack on Ladysmith. On January 23-25th, occurred some of the most desperate and famous fighting of the war, when a British storming party under General Warren captured Spion Kop, but, after heavy losses, withdrew. General Buller made a third attempt to relieve Ladysmith, but failed, February 9th, and Lord Roberts began an invasion of the Orange Free State on February 12th. General French relieved Kimberley on February 15th. On February 22-27th there was severe fighting between Roberts and Cronje, terminating with the capitulation of the latter, with 4,600 men and six guns. Lord Dundonald entered Ladysmith on February 28th, and General Gatacre occupied Stormberg on March 5th. On March 7th, Lord Roberts turned the Boer position near Modder River and advanced triumphantly on Bloemfontein, capital of the Orange Free State, which surrendered to the British on March 13th. The Boer Commander-in-Chief, General Joubert, died on March 27th, and Colonel de Villebois Mareuil, French officer with the Boers, was killed in a skirmish on April 5th. General Cronje and the other Boer prisoners were sent

to St. Helena, where they arrived April 14th, and the demoralization of the Boers seemingly begun. On April 20th, Mr. Pettigrew, in the United States Senate, introduced a resolution of sympathy with the Boers, but it was voted down, 29 to 20. On May 3d, Lord Roberts began his advance on Pretoria.

The Boers now turned to the United States and Europe for intervention, but the United States was the only government in the world of all those approached by the South African Republic which tendered its good offices to either of the combatants in the interest of the cessation of hostilities.

So the war continued. On May 10th, the British crossed the Zand River and occupied Kroonstad, and on May 15th, General Buller occupied Dundee. The Boer envoys to the United States reached New York on May 16th, the day that Mafeking was relieved, after a siege of 217 days. President McKinley received the envoys unofficially, but they were officially informed by Secretary of State Hay that the United States could not intervene in the war. The end of the struggle was not yet, however, in sight. On May 28th, Lord Roberts proclaimed the annexation of the Orange Free State to the British Empire. The British entered Johannesburg on May 30th, and on the same day President Kruger retired from Pretoria, which city surrendered on June 5th to the British army. General Prinsloo and 3,348 Boers surrendered at Naauwpoort, and Harrismith surrendered to General Macdonald on August 4th. Several conspirators against the life of Lord Roberts were tried at Pretoria August 17th, and their leader was executed. Machadodorp, Kruger's new capital, was occupied by General Buller August 28th. On September 1st, the Transvaal was proclaimed a part of the British Empire by Lord Roberts. Guerilla warfare, which had begun July 1st, was now general in the Transvaal, and the Boer Generals DeWet and Botha continued to harass the British by sporadic raids. Ex-President Kruger, abandoning the Transvaal, began his journey to Europe September 12th. He arrived at Marseilles on November 22d, and had an ovation from the French people, the demonstrations of welcome continuing through his journey to Paris, while the National French Assembly adopted resolutions of sympathy. On November 30th, the supreme military command in South Africa was turned over to Lord Kitchener by Lord Roberts, who departed for home, sailing for England from Cape Town on December 12th. In the meantime, the German Government intimated to Mr. Kruger on December 1st, that a visit by him to Berlin would be inopportune. Queen Wilhelmina of the Netherlands, on the contrary, welcomed Mr. Kruger at a dinner on December 15th. The British met with a severe reverse at Nooltgedacht December 13th, Colonel Legge being killed. On December 14th, Sir Alfred Milner was appointed Administrator of the Orange River and Transvaal colonies, and the year closed with both sides grimly determined to continue the terrible warfare to a definite conclusion.

The first battle of 1901 was at Lindley,

Orange River Colony, where forty British officers and men were killed or wounded. On January 7th, the British position along Delagoa Bay Railway was unsuccessfully attacked by the Boers, who were also driven back on January 17th near Standerton, when they attacked a British column under General Colville. On January 18th, New Zealand troops and Bushmen, under Colonel Gray, routed 800 Boers near Veutersburg. On January 30th, the Bloemfontein-Ladybrand line was crossed by DeWet near Israel's Poort, and the Boers captured the British post at Modderfontein, in the Transvaal. On February 3d, at about which time the British War Office decided to reinforce Kitchener with 30,000 additional mounted troops. General Smith-Dorrien was attacked by Louis Botha with 2,000 men at Orange Camp February 6th, but repulsed him. On the same date the Boers cut the Delagoa Bay Railroad, near Lorenzo Marques; ten days later DeWet crossed the railroad at Bariman's Siding and was engaged by Crabbe and an armored train, and on February 19th the Boers blew up a supply train at Clip River. Four severe Boer reverses then followed in quick succession. The Boers, 5,000 strong, were defeated by General French at Piet Retief, February 22d; DeWet's force was scattered by Colonel Plummer at Disselfontein, Orange River, February 23d; General French captured 300 Boers, ammunition cattle, and supplies at Middleburg, February 26th; Lord Kitchener drove DeWet north of the Orange River, with a loss of 280 men captured, March 1st. Lord Kitchener then granted General Botha a seven days' armistice to make communication with other Boer leaders, after which truce hostilities were resumed. The Boers captured a British supply train near Viaklaagte March 22d, but were defeated three days later near Vryheid by General French. On March 27th, Fourie's commando and Bruce Hamilton's command held a running fight for twenty miles. Commandants Prinsloo and Englebrecht surrendered to the British March 30th, and the British reoccupied Pietersburg on April 9th, on which date the Boers captured seventy-five men of the Fifth Infantry and Imperial Yeomanry. General Botha, on April 10th, renewed negotiations for peace. Sir Alfred Milner, returning home from South Africa, was received by the king and created a peer May 21st. The Boers, again for a time, rejoiced over successes. They attacked and partially destroyed the convoy of General Plummer's column May 25th; captured a British post of forty-one men near Maraisburg, May 27th, and attacked General Dixon's brigade of the Seventh Yeomanry near Vlakkfontein, May 29th, causing a heavy British loss. On June 3d, an attack by 700 Boers under Scheeper upon Willomore, Cape Colony, was repulsed after a nine hours' fight. The British and Boers lost heavily in an engagement between Elliot and DeWet near Reitz, June 6th, and on the same day Colonel Wilson, with 240 men, routed 400 Boers under Bever, near Warm Baths. The Boers captured 200 members of the Victoria Mounted Rifles at Steenkoolspruit, June 12th, and the Midland Mounted Rifles were overpowered by Commandant Malan at Waterkloof, June 20th.

President Schalk-Burger, of the South African Republic, and President Steyn, of Orange Free State, issued a proclamation for "no peace without independence," June 20th, and on August 7th, Lord Kitchener issued a proclamation of banishment against all Boers in South Africa not surrendering by September 15th. In the meantime, General Benson repulsed the Boers in a mountain pass near Dullstroem, and, though the inevitable end of the warfare was becoming daily more apparent, fighting was continued. Fifty of General French's scouts were captured in Cape Colony August 16th; three officers and sixty-five British, north of Ladybrand, were captured August 21st; the Boers attacked a convoy near Koolpoppe and killed nine men of the Seventy-fourth Yeomanry, wounding twenty-three, on August 24th; Colonel Vandeleur and nine men were killed and seventeen wounded by the blowing up of a train in the Transvaal, August 31st; Von Tonder and Delarey engaged General Methuen in the Great Maries valley, September 8th. Then, on September 16th, the British troops captured Lotter's entire command south of Pietersburg, and on the following day the Boers partially evened matters by ambushing and capturing three companies of British mounted infantry under Major Gough, near Scheeper's Nek, and also by capturing a company of mounted British infantry and two guns at Vlakkfontein, September 20th. Two Boer commandos were captured September 21st, near Adenburg, and Colonel the Hon. A. Murray and Captain Murray, his adjutant, were killed in a fight with Krantzinger, who crossed the Orange River. On September 29th, Commandant Delarey attacked Colonel Kekewich's camp at Moedwill, with loss on both sides.

Martial law was declared throughout Cape Colony on October 9th. The following day General Sir Redvers Buller admitted, in a speech, that he advised the surrender of Ladysmith, and was severely criticised for his utterances. Commander Scheeper was captured October 12th, and Captain Bellew and four others were killed in a fight, October 16th, at Twenty-four Streams. On November 1st, in a heavy Boer attack on Colonel Benson's column near Brakenlaagte, the British lost twenty-five officers and 214 men in killed and wounded. During the next sixty days numerous small skirmishes were reported, and during the first three months of 1902 the war was more or less of a desultory character, negotiations for peace between the Boer leaders and the British Government beginning on March 23d, the latest notable Boer accomplishment having been the capture of General Methuen and 200 men, forty-one British being killed, on March 11th.

On May 31, 1902, Lord Kitchener announced that a peace treaty had been signed between Great Britain and the Boers, Commandant-General Louis Botha, assisted by General Delarey and Chief Commandant DeWet, acting for the Boers.

Bohemia. The *Boii*, from whom Bohemia derives its name, settled in the country in the Second Century B. C., but were expelled by the Marcomanni about the beginning of the Christian era. The victors themselves soon gave place to

others, and as early as the Fifth Century A. D. we find Bohemia peopled by the Czechs, a Slavic race. In the latter part of the Ninth Century, Swatopluk, the King of Moravia, subjugated Bohemia and introduced Christianity. After his death, the Dukes of Prague, who, in 1061, had the title of king conferred on them by the Emperor Henry IV., ruled the country as a state in the German Empire, until 1306, when the last of the dynasty was assassinated. From 1310 to 1437, Bohemia was ruled by kings of the House of Luxembourg. In the time of Wenzel IV. (Wenceslas), a reformation of religion took place under John Huss and Jerome of Prague. After the death of Wenzel IV., the imprudent measures adopted by the Emperor Sigismund excited in Bohemia a war of sixteen years' duration, which ended in making Bohemia an elective kingdom. In 1458, the shrewd and able Protestant noble, George von Podiebrad, ascended the throne. His successor, Ladislaus (1471-1516), was elected (1490) to the throne of Hungary, and removed the royal residence to Ofen, where also his son and successor, Louis (1516-26), resided. After his death in battle against the Turks at Mohacz (1526), Bohemia and Hungary passed into the hands of Ferdinand I. of Austria, who had married Louis' sister. From that time the history of Bohemia merges into the history of Austria.

Boii. A Celtic people, who emigrated from Transalpine Gaul into Italy, where they occupied the old seat of the Umbrians, between the Po and the Apennines. In B. C. 283, the Boii were defeated by the Romans at the Vadimonian Lake, and thereafter prolonged through numerous campaigns, especially in support of Hannibal, but sometimes single-handed, their resistance to the Roman arms, till their complete defeat by Scipio Nasica, B. C. 191. They were subsequently compelled to recross the Alps, and dwelt for more than a century in a part of modern Bohemia (which derives its name from them), but were ultimately exterminated by the Dacians.

Bonaparte's Egyptian Campaign (1799). Alexandria fell into his hands; he won the great battle of the Pyramids; completed the subjugation of Egypt; passed into Syria, made himself master of Gaza and Jaffa; won the battle of Mount Tabor; returned to Egypt, attacked the Turks at Aboukir, and utterly destroyed their whole army, June 25, 1799.

Bonaparte's Forty Days Campaign. He left Paris May 6, 1800; marched over the Alps, and reached Aosta May 23d; he entered Milan June 2d; won the battle of Montebello over the Austrians, June 9th, and the great battle of Marengo, June 14th; returned to Paris, July 2d. The forty days count from his arrival at Aosta, May 23d, to his return to Paris, July 2d.

Bonaparte's Italian Campaign (1796-97). He was 27 years of age. April 11th, he defeated Beaulieu, the Austrian general, at Montenotte, in Sardinia; April 14th, he won the battle of Millesimo; April 15th, he won the battle of Dego; April 22d, he won a victory over the Piedmontese at Mondovi; May 10th, he defeated the Austrian general, Beaulieu, at the Bridge of Lodi, and entered Milan; June 10th,

he occupied Bologna, Ferrara, and Ancona; August 3d, he defeated the Austrian general, Würmser, at Lonato; August 5th, he defeated the same general at Castiglione; September 8th, he defeated him again at Bassano; November 17th, he won the great battle of Arcola over Alvinzi, the Austrian general; January 14, 1797, he won the battle of Rivoli over Alvinzi and Würmser; January 15th, he won a battle at the faubourg of St. George, near Mantua; January 16th, he won a battle near the palace called The Favorite; March 16th, he defeated the Austrians, led by the Archduke Karl, at Tagliamento; October 17th, the treaty of Campo Formio, and in December he returned to France. He had won fifteen battles; added Savoy and Nice to France, the Netherlands, and Italy; had obtained vast money compensations, and returned to France laden with treasures of art.

Boxer Rebellion, The. The causes of the Boxer outbreak in China were cumulative. For three years prior to the enforced occupation of China by the powers, in 1900, a number of acts of foreign countries had a disquieting effect upon the empire. Since 1898, Russia had taken Port Arthur and the adjacent harbor of Talienwan. Germany had leased Kiaochau and gained great concessions in the province of Shang Tung. France had suggested privileges in portions of Chinese territory adjacent to the French possessions of Tonquin. Great Britain, to cap the climax, had obtained from China a lease of Wei-Hai-Wei, on the south shore of the Gulf of Pechili, opposite Port Arthur, and thus commanded the entrance to the gulf and the water approach to Peking. Many Chinese were resentful of these encroachments by foreigners, but the Dowager Empress did not oppose them, and hence she was bitterly arraigned by her people.

The leader of this opposition was Prince Tuan, the sixth son of the Emperor Kwang-Su's grandfather. Prince Tuan had long been an athlete and had a following of many athletic young men in the kingdom, who, because of their ability in sports, were known as boxers, a name which Tuan's recruits adopted. Tuan proclaimed his nine-year-old son heir presumptive to the throne. The emperor, then but a figurehead, dominated by the Dowager Empress, had little popular support. The Boxers revolted, massacred missionaries at many interior points of the empire, and finally made a concerted attack upon the foreign legations in Peking, in which movement the imperial troops eventually participated.

The Chinese Tsung-li-Yamen, the equivalent to a responsible government ministry in Europe, was in sentiment hostile to foreigners, and hence either would not, or could not, protect the legations or escort them safely from the country. The civilized world received distressing reports of massacres and outrages, and was for several weeks in suspense as to the fate of the foreign ministers in China, their families, legation attaches, and converted Chinese under foreign protection. The offended powers decided upon concerted action and hurried vessels and troops to the ports nearest to the danger points. Upon Chinese resistance to the landing

of marines at Taku, the forts were shelled by all the allies except Americans, and on June 17th, while the Chinese shelled the allies' fleet, the allied troops landed and captured the Taku forts, after a sanguinary conflict. On June 18th the Ninth United States Regiment was ordered from Manila to China, other troops following. On June 20th, German fury and general international indignation was aroused when Baron von Ketteler, the German Minister, while proceeding on a diplomatic mission to the Tsung-li-Yamen in Peking, was beset by Chinese soldiers and butchered. On the same day an allied expedition under Vice-Admiral Seymour, of the British Navy, began a march upon Peking for the relief of the British legationers. Such countless hordes of Chinese opposed him that he was obliged to turn back, suffering casualties of 374. The allied warships shelled Tien-tsin on June 21st, and the combined forces, two days later, occupied the foreign quarters of that city. The Chinese, on June 23d, requested an armistice through Minister Wu at Washington. The United States promptly replied that free communication must first be allowed with the legations, and on July 4th, Secretary of State Hay outlined to the powers the American policy.

On July 13-14th, occurred one of the noted conflicts of history, when the allied forces stormed the Chinese port of Tien-tsin, which they captured with a loss of 800 killed and wounded. Colonel E. H. Liscum, commanding the United States contingent, was among the slain. On July 19th, the Emperor of China appealed to President McKinley for peace. The advance of the allies upon Peking began August 4th, under command of Field Marshal von Waldersee, of the German army, who was unanimously selected to command the allied forces.

The first news from the beleaguered foreigners reached the United States in the form of a cipher message from Minister Conger. It read: "Still besieged. Situation more precarious. Chinese Government insisting on our leaving Peking, which would be certain death. Rifle firing upon us daily by imperial troops. Have abundant courage, but little ammunition or provisions. Two progressive Yamen ministers beheaded. All connected with the legation of the United States well at present moment." The receipt of this message caused intense excitement throughout the United States, for, though it broke the long suspense, it added to public fury and anxiety. On August 8th, Li Hung Chang was appointed Envoy Plenipotentiary to propose to the several powers for the immediate cessation of hostile demonstrations. On August 14th, Peking was captured by the allied forces of the Americans, British, Germans, French, Austrians, Italians, and Japanese. The American troops were the first to enter the city, and Captain Reilly was the first victim. The emperor and empress had fled. The legationers were promptly relieved and told thrilling stories of their danger and distress during the long siege. The Chinese, on August 16th, asked for an armistice, which was refused. Li Hung Chang's appeal was rejected by the United States, and China was informed that the demands of this Government must be complied with. At the same

time General Chaffee was given full power to act. The American refugees from Peking reached Tien-tsin safely on August 25th.

On November 19th, the negotiations between the allies and the Chinese authorities for terms of peace and compensation, which were begun when the allies took full possession of Peking, had progressed so far that the German Imperial Chancellor in the Reichstag announced that the allies had unanimously agreed upon the following as their demands upon China:

First. China shall erect a monument to Baron von Ketteler on the site where he was murdered and send an Imperial Prince to Germany to convey an apology. She shall inflict the death penalty upon eleven princes and officials already named, and suspend provincial examinations for five years where the outrages occurred.

Second. In future all officials failing to prevent anti-foreign outrages within their jurisdiction shall be dismissed and punished.

Third. Indemnity shall be paid to states, corporations and individuals. The Tsung-li-Yamen shall be abolished and its functions vested in a Foreign Minister. Rational intercourse shall be permitted with the emperor, as in civilized countries.

Fourth. The forts at Taku and other forts on the coast of Chili shall be razed, and the importation of arms and war material prohibited.

Fifth. Permanent legation guards shall be maintained, and also guards of communication between Peking and the sea.

Sixth. Imperial proclamations shall be posted for two years throughout the empire suppressing Boxers.

Seventh. Indemnity is to include compensation for Chinese who suffered by being employed by foreigners, but not compensation for native Christians.

Eighth. China shall erect expiatory monuments in every foreign or international burial ground where the graves have been profaned.

Ninth. The Chinese Government shall undertake to enter upon negotiations for such changes in existing treaties regarding trade and navigation as the foreign governments deem advisable, and with reference to other matters having in view the facilitation of commercial relations.

In December, 1900, the Chinese authorities had accepted all the foregoing conditions imposed by the allies, and the preliminary note of the demands of the powers was signed by Li Hung Chang and Prince Ching. Peking was evacuated by the American cavalry and artillery May 5th, and General Chaffee embarked for the Philippines May 18th. The powers, on May 9th, demanded of China a formal indemnity of 450,000,000 taels (about \$300,000,000), which was agreed to by China, and the powers, on July 26th, formally accepted China's offer to pay the sum named on time at 4½ per cent. interest. Prince Chun, at Berlin, September 4th, formally apologized to Emperor William for the insult to German honor in the murder of Baron von Ketteler. On September 17th, the American and Japanese troops in Peking handed over the Forbidden City to the Chinese.

Brazil. It was only in 1531 that the Portuguese, busy as they were in India, here planted their first settlement. In 1578, Brazil fell with Portugal, under the power of Spain, and became a prey to the Dutch; and, though Portugal regained its own independence in 1640, it was not until 1654 that Brazil was entirely recovered from the Hollanders. In 1807, the royal family of Portugal fled to Brazil; in 1815, the colony was declared "a kingdom"; and the Portuguese court having returned to Europe in 1821, a national congress assembled at Rio de Janeiro, and on May 13, 1822, Dom Pedro, eldest son of King João VI. of Portugal, was chosen "Per-

petual Defender" of Brazil. He proclaimed the independence of the country on September 7, 1822, and was chosen "Constitutional Emperor and Perpetual Defender" on October 12th, following. In 1831, he abdicated the crown in favor of his only son, Dom Pedro II., who reigned as emperor until November 15, 1889, when, by a revolution, he was dethroned, exiled, and Brazil declared a republic under the title of the United States of Brazil. A new constitution was adopted in 1891. Fonseca, first president, succeeded, November, 1891, by Vice-President Peixoto. Admirals Mello and Da Gama rebelled, 1893. Rio de Janeiro several times bombarded. Prudente de Moraes and Manoel Victorino Pereira elected president and vice-president, 1894. In 1906-07, Brazil took the lead in an effort to reach a better understanding among the countries of North and South America. A great demonstration was given by the city of Rio de Janeiro, in 1908, to the United States Pacific squadron.

Brunswick, The House of. The Duchy of Brunswick, in Lower Saxony, was conquered by Charlemagne, and governed afterward by counts and dukes. Albert-Azzo, Marquis of Italy, and Lord of Este, died in 1097, and left by his wife, Cunegonde (the heiress of Guelph, Duke of Carinthia in Bavaria), a son, Guelph, who was invited into Germany by Imtza, his mother-in-law, and invested with all the possessions of his wife's stepfather, Guelph of Bavaria. His descendant, Henry the Lion, married Maud, daughter of Henry II. of England, and is always looked upon as the founder of the Brunswick family. His dominions were very extensive; but, having refused to assist the Emperor Frederick Barbarossa in a war against Pope Alexander III., through the emperor's resentment he was proscribed at the Diet at Wurtzburg, in 1180. The Duchy of Bavaria was given to Otho, from whom is descended the family of Bavaria; the Duchy of Saxony to Bernard Ascanius, founder of the House of Anhalt; and his other territories to different persons. On this he retired to England; but, at the intercession of Henry II., Brunswick and Lüneburg were restored to him. The House of Brunswick, in 1409, divided into several branches. Brunswick was included by Napoleon in the Kingdom of Westphalia, in 1806, but was restored to the duke in 1815.

Buccaneers. A celebrated association of piratical adventurers, who, from the commencement of the second quarter of the Sixteenth Century to the end of the Seventeenth, maintained themselves in the Caribbean seas, at first by systematic reprisals on the Spaniards, latterly by a less justifiable and indiscriminate piracy. The name is derived from the Caribbee *boucan*, a term for preserved meat, smoke-dried in a peculiar manner. The Buccaneers were also sometimes called "Brethren of the Coast." The arrogant assumption by the Spaniards of a divine right — sanctioned by the pope's bull — to the whole New World was not, of course, to be tolerated by the enterprising mariners of England and France; and the enormous cruelties practiced by them upon all foreign interlopers, of which the history of that time is full, natu-

ally led to an association for mutual defense among the adventurers of all other nations, but particularly among the English and French. The fundamental principles of the policy were close mutual alliance, and war with all that were Spanish. The center of their predatory life was Tortuga. Their last great exploit was the capture of Carthagená, 1697.

Bull Run, or Bull's Run. A stream in Virginia, dividing Fairfax and Prince William counties, in the northeastern part of the State, and flowing into the Occoquan River, fourteen miles from the Potomac. On its banks were fought two of the most memorable battles during the Civil War. After a series of heavy skirmishes, July 16-19, 1861, the Union army, under General McDowell, was on the 21st utterly routed by the Confederates, under the command of Generals Beauregard and J. E. Johnston. The Union loss was about 3,000 men, while that of the Confederates was estimated at nearly 2,000 men. The former lost, in addition, twenty-seven guns, besides an immense quantity of small arms, ammunition, stores, provisions, and accoutrements. On August 30, 1862, another great battle was fought here between the Union forces, commanded by General Pope, and the Confederates, under Generals Lee, Longstreet, and "Stonewall" Jackson, when the former were again defeated with heavy loss. The three battles of Groveton, Bull's Run, and Chantilly, fought in three successive days, cost the Union cause about 20,000 men in killed, wounded, missing, and prisoners, thirty guns, and 30,000 small arms. The first battle of Bull Run is sometimes known as the Battle of Manassas.

Bunker's Hill, Battle of. A famous engagement between American and British troops, June 17, 1775. The former were commanded by Colonel Prescott and General Putnam, and the latter by General Howe. The British loss in killed and wounded was 1,054; that of the Americans, 450. Although the latter were driven from their position after their powder was exhausted, and the victory remained with the British, the moral effect of this first battle on the Americans, and the heavy loss to the enemy, made it equivalent to a victory for the Continentals. On the ground where the hottest of the battle was fought a granite obelisk, 220 feet in height, has been erected at a cost of \$100,000, raised by popular subscriptions. The corner stone was laid by General La Fayette, when on his visit to this country in 1825; it was completed July, 1842, and, on the occasion of its dedication, Daniel Webster delivered his famous oration, generally regarded as his best effort.

Burmah. The Burmese Empire was founded in the middle of the Eighteenth Century by Alompra, the first sovereign of the dynasty, which fell in the person of King Theebaw in 1886. In 1824, the British commenced hostilities against Burmah, and captured Rangoon on May 11th. Successive victories led to the cession of Arracan in 1826. In 1852, further complications resulted in the cession of Pegu to the British Indian Empire. In 1885, King Theebaw, relying upon French assistance, interfered with a British trading company. The British Gov-

ernment took up the case, and demanded of the Burmese monarch security for his future good behavior. Theebaw rejected these demands, whereupon the queen declared war on November 10th. On November 28th, General Prendergast entered Mandalay, the Burmese capital. The king surrendered on the following day, and was immediately deported to British territory. The government was thenceforth administered by a British resident, and on December 31, 1885, Burmah was formally annexed to British India, thus closing the history of Burmah as an independent kingdom.

Cade's Rebellion. In June, 1450, Jack Cade, an Irishman who called himself Mortimer, with 15,000 or 20,000 armed men of Kent, marched on London, and encamped at Blackheath, whence he kept up a correspondence with the citizens, many of whom were favorable to his enterprise. The court sent to inquire why the good men of Kent had left their homes. Cade, in a paper entitled "The Complaint of the Commons of Kent," replied that the people were robbed of their goods for the king's use; that the men of Kent were especially ill-treated and overtaxed, and that the free election of knights of their shire had been hindered. The court sent its answer in the form of an army, before which Cade retreated to Sevenoaks, where he awaited the attack of a detachment, which he defeated. The royal army now objected to fight against their countrymen; the court made some concessions, and Cade entered London on the 3d of July. For two days he maintained the strictest order; but he forced the mayor and judges to pass judgment upon Lord Say, one of the king's hated favorites, whose head Cade's men immediately cut off in Cheapside. A promise of pardon now sowed dissension among his followers, who dispersed, and a price was set upon Cade's head. He attempted to reach the Sussex coast, but was followed by an esquire, named Alexander Iden, who fought and killed him July 11th. His head was stuck upon London Bridge as a terror to traitors, 1450.

Calendar. A systematic division of time into years, months, weeks, and days, or a register of these or similar divisions. The present calendar was adopted in the Sixteenth Century, the Julian, or old Roman calendar, having become grossly erroneous.

Luigi Lilio Ghiraldi, frequently called Aloysius Lilius, a physician of Verona, projected a plan for amending the calendar, which, after his death, was presented by his brother to Pope Gregory XIII. To carry it into execution, the pope assembled a number of prelates and learned men. In 1577, the proposed change was adopted by all the Catholic princes; and in 1582, Gregory issued a brief abolishing the Julian calendar in all Catholic countries, and introducing in its stead the one now in use, under the name of the Gregorian or reformed calendar, or the "new style," as the other was now called the "old style." The amendment ordered was this: Ten days were to be dropped after the 4th of October, 1582, and the 15th was reckoned immediately after the 4th. Every 100th year, which, by the old style was to have been a leap year, was now to be a common year, the fourth excepted; that

is, 1600 was to remain a leap year, but 1700, 1800, 1900 to be of the common length, and 2000 a leap year again. In this calendar the length of the solar year was taken to be 365 days, 5 hours, 49 minutes, and 12 seconds, the difference between which and subsequent observations is immaterial. In Spain, Portugal, and the greater part of Italy, the amendment was introduced according to the pope's instructions. In France, the ten days were dropped in December, the 10th being called the 20th. In Catholic Switzerland, Germany, and the Netherlands, the change was introduced in the following year; in Poland, in 1586; in Hungary, in 1587. Protestant Germany, Holland, and Denmark accepted it in 1700, and Switzerland in 1701. In the German Empire a difference still remained for a considerable time as to the period for observing Easter. In England the Gregorian calendar was adopted in 1752, in accordance with an act of Parliament passed the previous year, the day after the 2d of September becoming the 14th. Sweden followed in 1753. The change adopted in the English calendar in 1752 embraced another point. There had been previous to this time, various periods fixed for the commencement of the year in various countries of Europe. In France, from the time of Charles IX., the year was reckoned to begin from the 1st of January; this was also the popular reckoning in England, but the legal and ecclesiastical year began on March 25th. The 1st of January was now adopted as the beginning of the legal year, and it was customary for some time to give two dates for the period intervening between January 1st and March 25th, that of the old and that of the new year, as January 175 $\frac{2}{3}$. Russia alone retains the old style, which now differs twelve days from the new.

California. The name, signifying "hot furnace," is derived from the Spanish. Though discovered by Sir Francis Drake in 1578, it was first settled by the Spaniards in 1768, at San Diego. Lower California, however, was settled by the Jesuit missionaries in 1683. Spanish power was overthrown by the Mexican Revolution of 1822. By the treaty of peace which followed the Mexican War, California was ceded to the United States for \$15,000,000 in 1847. At this time the white population amounted to only 15,000. In February, 1848, gold was discovered by Colonel Sutter, a verification of Humboldt's prophecy more than a dozen years before. The emigration from all parts of the world was unparalleled, soon increasing the population to a quarter of a million. The State was admitted to the Union on September 9, 1850.

The history of the Chinese in California has been more remarkable than that of any other foreign element. By 1860, the number of Chinese had reached 34,933; by 1870, 49,310; and by 1880, 75,218. A plebiscitum was taken, and the people of California voted with remarkable unanimity in favor of the restriction of Chinese immigration. In 1882, Congress passed the restriction law which, by successive renewals, has been kept in force till the present time. The Chinese population of California, by 1890, had declined to 71,066; and by 1900, to 45,753.

In 1900, the Japanese numbered 10,151, and within the last five years they have become much more numerous. They have largely taken the place formerly held by the Chinese as agricultural laborers and domestic servants, and quite recently there has commenced a new agitation in favor of the exclusion of all Asiatic immigration.

In 1906, the State suffered from one of the most destructive earthquakes of modern times. More than half a million dollars in property were destroyed, and many lives lost.

Caliph, Kalif, or Khalif (*kal'if*). The chief sacerdotal dignity among the Saracens or Mohammedans, vested with absolute authority in all matters relating both to religion and political affairs. The government of the original caliphs continued from the death of Mohammed till the 655th year of the Hegira, that is, from A. D. 632 to 1277. The Fatimite caliphs of Africa and the Omniad sovereigns of Spain, each professed to be the only legitimate successors of Mohammed, in opposition to the Abbasside caliphs of Bagdad, which latter caliphate reached its zenith of power and splendor under Haroun-al-Raschid, in the Ninth Century. The title is now one assumed by the Turkish Sultans, as successors to the Prophet, and also by the Persian Sophis, as successors of Ali.

Campus Martius (Lat., *The field of Mars*). In ancient times, a field by the side of the Tiber, where the Roman youth practiced themselves in warlike exercises. It was consecrated to Mars, the god of war, and a temple of that deity stood on it. During the earlier days of the Roman Republic, it was also made use of as a place for holding the *comitia*, or assemblies of the people; and, in after times, it was adorned with a great number of fine statues. It constitutes the principal part of the modern city of Rome.

Canada. In 1534, Jacques Cartier, a French navigator, entering the St. Lawrence on the festival of the saint of that title, took nominal possession of North America in the name of his king, Francis I. In 1608, Quebec was founded by De Champlain; and here, fifteen years later, he built Fort St. Louis, from which stronghold France ruled for 150 years a vast region extending eastward to Acadia (now Nova Scotia), westward to Lake Superior, and ultimately down the Mississippi as far as Florida and Louisiana. The Recollet and Jesuit missionaries traversed the country in all directions, and underwent incredible hardships in their zeal for the conversion of the Indians. These fearless priests were the pioneers of civilization in the far West, and to one of the most intrepid — LaSalle — is due the discovery of the Mississippi valley. In 1670, Charles II. granted to Prince Rupert and his company, known ever since as the Hudson Bay Company, the perpetual exclusive right of trading in the territory watered by all the streams flowing into Hudson's Bay. Garrisoned forts were now raised at suitable points, and the bitter enmity between the French and the English traders frequently led to bloody struggles, in which sometimes the Indians also took a part. The most warlike native tribe was that of the Iroquois, who were persistent ene-

mies of the French, while the peaceful Hurons were steady allies. Meanwhile, the wars on the American continent followed the course of the wars in Europe, until the long struggle between France and England for the supremacy in America came to a close on the "Plains of Abraham," in 1759, when General Wolfe defeated Montcalm. This victory opened the gates of Quebec. The capitulation of Montreal next year brought to a close the era of French dominion in Canada. The people of the conquered country were secured, by the terms of the treaty agreed to, in the free exercise of their religion; and peace was concluded between Britain and France, 1763, when Canada was formally ceded to England, and Louisiana to Spain. In the same year a small portion of the recently acquired territory was, by royal proclamation, organized under English laws. In 1774, the new province was extended by parliamentary enactment, and that under French laws, down the Ohio to its confluence with the Mississippi, and up the latter stream to its source. Finally, Canada receded to its present limits in 1783, giving up to the American Republic, at the close of the Revolutionary War, the sites of six States: Minnesota, Wisconsin, Michigan, Ohio, Indiana, and Illinois. In 1791, Canada was divided under separate legislatures into two sections — the eastern retaining French institutions, and the western receiving those of England; and these sections, again, after political discontent had in each ripened into armed insurrection, were reunited for legislative purposes in 1841.

In 1867, March 28, the British North America act for confederation of the colonies passed the imperial parliament. It united Upper Canada, or Ontario, Lower Canada, or Quebec, New Brunswick, and Nova Scotia, into one territory, to be named the Dominion of Canada. Newfoundland declared against joining the confederation, but with that exception all the British territory north of the United States was gradually included within the Dominion — the Hudson Bay Company territory by purchase in 1868, British Columbia in 1871, Prince Edward Island in 1873. In 1870, an insurrection of the Red River settlers, who were under apprehensions as to how their titles to their lands might be affected by the cession of the Hudson Bay Company's rights, took place under the leadership of Louis Riel, and had to be suppressed by a military expedition under Colonel (now Viscount) Wolseley. To reassure the settlers, a part of the newly-purchased territory was erected into an independent province under the name of Manitoba, the unorganized territory beyond receiving the name of the Northwestern Territory. In 1871, the Washington Treaty arranged that the fisheries of both Canada and the United States should be open to each country for the next twelve years, Canada receiving a compensation, afterwards fixed at five and a half million dollars, for the superior value of its fisheries. In 1884, considerable disaffection was caused amongst the half-breeds and Indians in the Saskatchewan and Assiniboine districts, on account of the difficulty of obtaining valid titles to their lands. The discontent at length took shape in an insurrection, which Louis Riel was invited to head.

The rebels seized the government stores at Duck Lake and induced some of the Indian tribes to cooperate with them, with the result that a massacre of settlers took place at Frog's Lake. Within a few months an expedition under General Middleton, who had under his command several thousand volunteers, suppressed the rebellion. Only the leaders were arrested. Riel was tried and executed at Regina on July 28, 1885. On November 7th, of the same year, the Canadian Pacific Railway (which see) was completed, being opened for through traffic the following year. Since 1883, when the Washington Treaty expired, disputes between the American and Canadian fishermen have again been frequent, and several American fishing vessels have been seized on the British North American coasts, and others prevented from buying bait. For the adjustment of the differences connected with the fisheries a joint British and American commission was instituted in 1887, the Rt. Hon. Joseph Chamberlain being appointed to act as commissioner for England, and Sir Charles Tupper for Canada. A treaty was signed in February, 1888, but was rejected by the United States Senate. In 1887, also, an arbitration board was appointed to settle a dispute with the United States concerning the Behring Sea seal fisheries, and ten years later made an award in favor of the Canadian's claims. Later on, another commission, sitting in London (1903), decided the Alaskan boundary controversy in favor of the United States.

In September, 1907, a serious riot, directed against the Japanese and Chinese, broke out in Vancouver, largely organized by the American Labor agitators, but supported by the local rowdies of the city. The Dominion authorities at once expressed their regret, and took steps to suppress the outbreak.

Carthage (called *Carthago* by the Romans, and by the Greeks, *Karchēdon*). One of the most celebrated cities of the ancient world, situated on the north coast of Africa, on a peninsula in what is now the state of Tunis. It was founded by the Phœnicians of Tyre, about 100 years before the building of Rome, or, according to tradition, 853 B. C. The builder of the city was said to be Dido. It became the seat of a powerful kingdom; maintained three wars against Rome, which are usually called the three *Punic Wars*; and in the third of these wars was totally destroyed by Scipio Æmilianus, 146 B. C. The greatness of the city at this time may be judged from the fact that it took seventeen days to burn. It is said to have been twenty-three miles in circumference, and to have contained within its walls a population of 700,000. Caesar afterwards planted a colony on the site, which he called *Colonia Carthago*. It became again the first city in Africa, and occupied an important part in ecclesiastical as well as in civil history. It was taken by the Vandals, A. D. 439; was retaken by Belisarius, A. D. 533; and was finally destroyed by the Saracens, A. D. 698. Of this once splendid city there are now almost absolutely no remains. The Cathedral of Pisa is said to have been built out of the ruins of Carthage.

Charter Oak, a tree which formerly

stood in Hartford, Conn., in the hollow trunk of which the colonial charter is said to have been hidden. The story is that when Governor Andros went to Hartford in 1687, to demand the surrender of the charter, the debate in the Assembly over his demand was prolonged until darkness set in, when the lights were suddenly extinguished, and a patriot, Captain Wadsworth, escaped with the document and hid it in the oak. The venerable tree was preserved with great care until 1856, when it was blown down in a storm.

Chile. Chile originally belonged to the Incas of Peru, from whom it was wrested by the Spaniards under Pizarro and Almagro, in 1535. From this period Chile continued a colony of Spain till 1810, when a revolution commenced, which terminated in 1817 in the independence of Chile. Several internal commotions have since occurred; but the country has been free from these compared with other South American States. A war begun with Spain, in 1865, led to the blockade of the coast by the Spanish fleet, and the bombardment of Valparaíso, in 1866. In 1879, a war broke out with Bolivia and Peru, in reference to the rights of Chile in the mineral district of Atacama. This war was virtually finished in 1881, and the victorious Chileans gained a large accession of territory from both Bolivia and Peru. In 1891, an insurrection, headed by influential members of Congress, caused by dissatisfaction with President Balmaceda's administration, was successful and resulted in his overthrow. In 1907, a number of labor disturbances in the mining regions called for armed intervention.

China. The early history of the Chinese is shrouded in fable, but it is certain that civilization had advanced much among them when it was only beginning to dawn on the nations of Europe. The Chow dynasty, which was founded by Woo-wang and lasted from about 1100 B. C. to 258 B. C., is perhaps the earliest that can be regarded as historic, and even of it not much more is historic than the name. Under Ling-wang, one of the sovereigns of this dynasty, Confucius is said to have been born, some time in the Sixth Century B. C. During the latter half of the period, during which this line of sovereigns held sway, there appear to have been a number of rival kings in China, who lived in strife with one another. Chow-siang, who was the founder of the Tsin dynasty, from which China takes its name, gained the superiority over his rivals, and died in 251 B. C. His great-grandson, a national hero of the Chinese, was the first to assume the title of "Hoang" (emperor), and called himself Che-Hoang-ti. He ruled over an empire nearly continuous with modern China proper. In his reign, the great wall, which was designed as a protection against marauding Tartars, was begun about 214 B. C. Buddhism was introduced in 65 A. D. Subsequently, the empire broke up into three or more states, and a long period of confusion and weak government ensued. In 960, a strong ruler managed to consolidate the empire, but the attacks of the Tartars were now causing much trouble. In the Thirteenth Century the Mongols, under Jenghis Khan and his son, Ogdai,

conquered China, and in 1259, the celebrated Kublai Khan, a nephew of the latter, ascended the throne and founded the Mongol dynasty. His ninth descendant was driven from the throne, and a native dynasty, called Ming, again succeeded in 1368, in the person of Hungwu. A long period of peace ensued, but was broken about 1618, when the Manchus gained the ascendancy, and after a war of twenty-seven years, founded the existing Tartar dynasty in the person of Tungchi, establishing their capital in the northern city of Peking, which was nearer their native country and resources than the old capital Nanking. The earliest authentic accounts of China, published in Europe, are those of Marco Polo, who visited the country in the Thirteenth Century. The first British intercourse was attempted under Queen Elizabeth, in 1596, and a trade was subsequently established by the East India Company, but no direct intercourse between the governments took place till the embassy of Lord Macartney, in 1792. A second embassy in 1816, by Lord Amherst, was treated with insolence; and, subsequently, the treatment of British merchants became such that a collision was inevitable. In 1840, the British, on being refused redress for injuries, partly real and partly alleged, proceeded to hostilities, and after scattering, almost without a struggle, every force which was opposed to them, were preparing to lay siege to Nanking, when the Chinese found it necessary to sue for peace. A treaty was then concluded (1842), by which the five ports of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai were opened to British merchants, the island of Hong-Kong ceded to the British in perpetuity, and the payment of 21,000,000 dollars agreed to be made by the Chinese. In 1850, an insurrection, headed by Hung-seu-tseuan, or Tien-te, broke out in the provinces adjoining Canton, with the object of expelling the Manchu dynasty from the throne, as well as of restoring the ancient national religion of Shan-ti, and of making Tien-te the founder of a new dynasty, which he called that of Tai-ping, or Universal Peace. After a long period of civil war, the Tai-ping rebellion was at length suppressed in 1865, chiefly by the exertions of General Gordon and other British and American officers at the head of the Chinese army. In October, 1856, the crew of a vessel belonging to Hong-Kong were seized by the Chinese. The men were afterwards brought back, but all reparation or apology was refused. In consequence of this, a war with China commenced, in which the French took part with the British. Peking had to be taken (in 1860) before the Chinese Government finally gave way, and granted a treaty securing important privileges to the allies. The present emperor, Tsaitien, succeeded in 1875, but only assumed the reigns of government in 1887, on reaching the age of sixteen. War was declared between China and Japan on July 31, 1894. Japan, by a series of brilliant victories, both on land and sea, brought the war to an end in April, 1895. Corea was declared independent, Formosa ceded to Japan, and China was forced to pay a very large war indemnity. The following succinct statement of recent progress in China was lately made by a missionary who

has labored in that country since 1863: "Who among us, ten years ago, would have dared to imagine that to-day China would have (1) a national fleet; (2) the telegraph radiating to the most distant provinces; (3) government colleges for engineering, navigation, military tactics, electricity, and medicine; (4) the Kai-ping mines supplying steamers and the north ports with excellent and cheap coal." During 1898, both Russia and Germany had taken possession of certain provinces of China. In 1900, the Boxers rose against the foreigners, attacked the legations in Peking, murdered the German and other attachés, a number of the missionaries and native converts, and destroyed the stations. A punitive war by the powers followed; indemnity and future guarantees and punishment of the principals were demanded, and subsequently paid.

In 1903, insurrection and rebellion kept several provinces in a state of disturbance during a greater part of the year. Kwang Si, Che Kiang, Canton, Chi-li, Hu Pei, and Yun Nan, widely separated provinces, were the scenes of the most important of the revolts. That in Kwang Si assumed the most alarming proportions, and lasted from January until May. Rebels in North China proclaimed Pu Chun, Prince Tuan's son, as emperor, but the movement was suppressed before it reached great importance. As a result of the rebellion in the Province of Kwang Si, the country was desolated and a serious famine threatened. It was reported that 1,000,000 persons were starving, and that men were selling their wives and children in order to get food. A complete crop failure in the region around Peking threatened to bring about the same conditions in that province. In 1907-'08, a number of edicts were issued looking to the extension of self-government in the cities, and a larger degree of civil liberty.

Cisalpine Republic. A former political division of Italy, embracing portions of Mantua, the Milanese, the Valteline, Venetia west and south of the Adige, Modena, and the northern Pontifical States. Inaugurated by Napoleon I. in 1797, it was named the *Italian Republic* in 1802, and three years later constituted the principal part of the Italian Kingdom.

Cispadane Republic (*sîs'pah-dân*). One of the embryo states — the other being the so-called *Transpadane Republic* — initiated by Napoleon I., 1796; they were composed of Italian territory reconquered from the Austrians, etc., and, in 1797, became absorbed in the Cisalpine Republic, *q. v.*: so termed from being on that side of the river Po (*Padus*) nearest to Rome.

Colorado. Colorado was first organized as a territory in 1861, from parts of Kansas, Nebraska, New Mexico, and Utah. A portion of it was derived from the Louisiana purchase of 1803, and a part from the Mexican cession of 1848. This region was first settled by Coronado in 1540. It was thoroughly explored by expeditions sent out by the government, under Major Zebulon M. Pike, in 1806; under Colonel S. H. Long, in 1820; and under Colonel J. C. Fremont, in 1842-44. The first American settlements were made by mining parties in 1858-59, since which time Colorado has become even

more prolific than California in its yield of the precious metals. The State was admitted August 1, 1876. The famous Leadville mines were opened in 1879, and the same year saw the Ute uprising. In 1891 the Cripple Creek gold discoveries were made. In 1894 the legislature passed a bill, making equal suffrage for men and women a law.

Committee of Public Safety. A committee of nine created by the French Convention, April 6, 1793, to concentrate the power of the executive, "the conscience of Marat, who could see salvation in one thing only, in the fall of 260,000 aristocrats' heads." It was notable, therefore, for its excesses in that line; was not suppressed till October 19, 1796, on the advent of the Directory to power.

Confederation of the Rhine. During the war of 1805, so disastrous for Austria, several German princes, too weak to remain neutral, were forced to ally themselves with France. The first to do so were the Electors of Bavaria and Würtemberg, who, in recompense of their services, were elevated to the dignity of kings by the Peace of Presburg, December 26, 1805. Some months after (May 28, 1806), the archchancellor of the empire announced at the Diet that he had chosen as his coadjutor and successor Cardinal Fesch, the uncle of Napoleon, a thing entirely contrary to the constitution of the Germanic Empire. Finally, at Paris, on the 12th of July, 1806, sixteen German princes formally signed an act of confederation, dissolving their connection with the Germanic Empire, and allying themselves with France. These sixteen princes were: the kings of Bavaria and Würtemberg, the arch-chancellor, the Elector of Baden, the new Duke of Cleves and Berg (Joachim Murat), the Landgraf of Hesse-Darmstadt, the princes of Nassau-Usingen, Nassau-Weilburg, Hohenzollern-Hechingen, Hohenzollern-Sigmaringen, Salm-Salm, Salm-Kyrburg, the Duke of Arenberg, the princes of Isenburg-Birstein and Lichtenstein, and the Count of Leyen.

Connecticut. One of the thirteen original States. Its name was derived from the Indian, and signifies "Long River." The territory, originally claimed by the Dutch of New Netherlands by right of prior exploration, was finally acquired by the English under a patent granted to Lords Say and Seal, and Brooke and associates, in 1631. Permanent settlements were made in 1636, by colonists from Massachusetts, at Hartford, Windsor, and Wethersfield. In 1638, New Haven was settled by a distinguished company of emigrants from England. The first constitution was adopted in 1639, being the first time in history when a government was organized and defined by a written constitution. Its leading features were afterward copied in the constitutions of the other States and of the United States, and it was the basis of the charter of 1662. The attempt to revoke and supersede this charter by James II. through his representative, Sir Edmund Andros, in 1687, led to what might be called the first colonial act of rebellion against royal authority. During the Revolution no State furnished so large a proportionate body of soldiers to the Continental army. During the Civil War, 54,882 men were furnished by the State.

Consul. The title of the two chief magistrates of Rome, whose power was in a certain degree absolute, but who were chosen only for one year; they were instituted B. C. 509. The authority of the two consuls were equal; yet the Valerian law gave the right of priority to the elder, and the Julian law to him who had the greater number of children; and this one was generally called *Consul major* or *prior*. In the first ages of the republic, they were elected from patrician families; but in the year of Rome, 388, the people obtained the privilege of electing one of the consuls from their own body, and sometimes both were plebians. After the establishment of the empire in 91, the office of consul became merely honorary; the last holder of the dignity at Rome was Decimus Theodorus Paulinus, A. D. 536; at Constantinople, Flavius Basilius Junius, 541.

Consulate. A trio of three persons, to whom, after the dissolution of the French Directory in 1799, the provisional government was intrusted. Napoleon, Cambacérès, and Lebrun, were elected as first, second, and third consul, respectively, with different degrees of authority, 1800; but the influence of the first becoming gradually augmented, the transition to imperial dignity became easy to him. On August 4, 1802, he was made consul for life; and on May 18, 1804, the title of emperor was substituted for that of consul.

Continental System. A plan devised by Napoleon to exclude Britain from all intercourse with the continent of Europe. It began with the decree of Berlin of November 21, 1806, by which the British Islands were declared to be in a state of blockade; all commerce, intercourse, and correspondence were prohibited; every Britain found in France, or a country occupied by French troops, was declared a prisoner of war; all property belonging to Britons, fair prize, and all trade in goods from Britain or British colonies entirely prohibited. Britain replied by orders in council prohibiting trade with French ports, and declaring all harbors of France and her allies subjected to the same restrictions as if they were closely blockaded. Further decrees on the part of France, of a still more stringent kind, declared all vessels of whatever flag, which had been searched by a British vessel or paid duty to Britain, denationalized, and directed the burning of all British goods, etc. These decrees caused great annoyance, and gave rise to much smuggling, till annulled at the fall of Napoleon, 1814.

Convention, National. A revolutionary convention in France, which, on September 20, 1792, succeeded the Legislative Assembly, proclaimed the republic, condemned the king to death, succeeded in crushing the royalists of La Vendée and the south, in defeating all Europe leagued against France, and in founding institutions of benefit to France to this day. It was dissolved on October 26, 1793, to make way for the Directory.

Corea or Korea. The seeds of Christianity were sown in Corea in 1592, by the invading army, composed chiefly of Christian converts of the Japanese usurper, Tiasosama. Hamel, a Dutch sailor, was wrecked here and

detained for thirteen years; from his narrative it was that, till very recently, most of our scanty knowledge of Corea was obtained. In 1784, Jesuit missionaries found their way into Corea and had great success among the people. From 1835 till 1860, several intrepid and devoted French missionaries contrived to find shelter, and, in spite of incessant persecutions, the Christian community continued rather to increase, rising in 1852 to 11,000 souls. The massacre of nine missionaries, in 1866, led to an invasion of Corea by a small French force, but without success. Nor did two successive American expeditions, provoked by attack on an American vessel, succeed in breaking down the barriers that separated the Coreans from the rest of the world. The pseudonym of "Hermit Nation" has attached to Corea, not because of vast deserts and deadly jungles which interposed as physical barriers to constitute the Nile sources a region of myths and mysteries—for Corea, situated in the open sea, had none of these to bar ingress—but because of a persistent policy of isolation which, consecrated by time, became in fact, a sort of Corean religion. To be let alone by the *So Yang Saram* ("men from the Western Ocean"), this was the policy of government until our own day. About 1881, however, Corea made a treaty with Japan, and, later on, through Admiral Shufeldt, U. S. N., with the United States—treaties which were followed by others with England, Russia, France, Germany, and Italy. After Japan's victory over China, in 1895, Corea was made independent. In 1907, Corea practically passed under a Japanese protectorate.

Covenanters. In Scottish history, the name given to the party which struggled for religious liberty from 1637 on to the revolution; but more especially applied to the insurgents who took up arms in defense of the Presbyterian form of church government. The Presbyterian ministers who refused to acknowledge the bishops were ejected from their parishes and gathered around them crowds of their people on the hillsides to attend their ministrations. The first outbreaks took place in the hill country on the borders of Ayr and Lanark shires. The murder of Archbishop Sharp, on Magus Moor, and a skirmish near there alarmed the government, who sent troops to put down the insurgents, who had increased in number rapidly. The two armies met at Bothwell Bridge, when the Covenanters were totally defeated, June 22, 1679.

In consequence of the rebellious protest, called the "Sandquhar Declaration," put forth in 1680, by Cameron, Cargill, and others, as representing the more irreconcilable of the Covenanters, and a subsequent proclamation in 1684, the government proceeded to more severe measures. An oath was now required of all who would free themselves of suspicion of complicity with the Covenanters; and the dragoons, who were sent out to hunt down the rebels, were empowered to kill anyone who refused to take the oath. After the accession of William, some of the extreme Covenanters refused to acknowledge him, owing to his acceptance of Episcopacy in England, and formed the earliest dissenting sect in Scotland.

Crimean War. In 1854, the Crimea became the theater of a sanguinary war, undertaken by England, France, Turkey, and Sardinia in support of the integrity of the sultan's power and to check the growing ascendancy of Russia on the Black Sea. The allies landed near Eupatoria, and defeated the Russians at the River Alina, September 20, 1854; at Balaklava, October 25th; at Inkerman, November 5th; at the River Tchernaya, August 16, 1855. The siege of Sebastopol continued from October 9, 1854, to September 8, 1855, when the important fortresses known as the Malakoff and the Redan were stormed by the French and English, and the Russians evacuated the city. An armistice was concluded February 26, 1856, and peace was proclaimed in April of the same year. The British loss, during the war, was nearly 24,000, of which number, however, 16,500 died of disease and privation. The French lost about 63,500. The Russian loss was estimated at 500,000.

Crusades (Lat. *crux*, a cross). The name given to the religious wars which were carried on during the middle ages between the Christian nations of Western Europe and the Mohammedans of Eastern Europe and Western Asia. Originally, the object of the Crusades was to obtain free access for pilgrims to the Holy Sepulchre, but they afterwards developed into a contest for the possession of Jerusalem itself. The Crusades lasted for nearly two centuries. They are usually divided into eight, as follows: First (1096–1100), led by Godfrey of Bouillon, and preached up by Peter the Hermit; second (1147–1149), led by Louis VII. and the Emperor Konrad, at the instigation of St. Bernard; third (1189–1193), led against Saladin, the Sultan of Syria and Egypt, by Richard the Lion-hearted of England and Philip Augustus of France; fourth (1202–1204), led by Baldwin of Flanders and the Doge of Venice; fifth (1217), led by John Brienne, titular sovereign of Jerusalem; sixth (1228–1229), led by Frederick II. of Germany; seventh and eighth (1248–1254 and 1268–1270), to satisfy the religious scruples of Louis IX. of France. Although the Crusades did not accomplish their main object, and the "Holy City" remained finally in the hands of the "Infidels," they yet called forth an amount of enterprise that has exerted a powerful influence upon modern civilization. On the other hand, they cost many millions of lives, and the deeds that were done during the Crusades in the sacred name of Christ would be altogether repugnant to all modern ideas of religion or even of humanity. The name *Crusades* was derived from the symbol of the cross, which the warriors engaged in them wore over their armor.

Cuba, spoken of as the "Queen of the Antilles," was discovered by Columbus in 1492, the discoverer calling it "the most beautiful land that eyes ever beheld." It was first settled by Spaniards at Baracoa in 1511. Havana, first settled in 1519, was reduced to ashes by the French in 1538, and again in 1554. For about one and a half centuries, Cuba was in constant danger from French, Dutch, English, and West Indian filibusters. In 1762, the English, under Lord Albemarle, took Havana,

which, however, was by the treaty of Paris next year restored to Spain. From 1789 to 1845, the island was a vast slave-trading center. Negro insurrections occurred in 1845 and 1848. In the latter year the United States offered \$100,000,000 to Spain for the island. Rebelions against Spanish rule broke out in 1849 and in 1868. They were put down after long campaigns; another insurrection, begun in 1895, gained formidable proportions by 1898. The United States battleship "Maine," while on a friendly visit, was blown up in Havana harbor, February 15, 1898, and on April 19th, the Congress of the United States adopted resolutions declaring Cuba independent. War with Spain began at once. Cervera's Spanish fleet was destroyed at Santiago de Cuba, July 3d, and Santiago and its large army were surrendered on July 17th. The leading military events of the war, so far as Cuba was concerned, were the fights at El Caney and San Juan, the battle at Santiago, and the destruction of Cervera's fleet. A Constitutional Convention assembled in November, 1900, and adopted a constitution providing for a republican form of government, with a president, vice-president, senate, and house of representatives. Thereupon, the United States Congress authorized the transfer of the government to the people of Cuba on condition that: (1) No treaty should be made with any other foreign power impairing the independence of Cuba, or allowing military or naval occupation of the island; (2) the United States should have the right to intervene for the discharge of her obligations under the Treaty of Paris; (3) the United States should have certain naval stations (at Bahia Honda and Guantanamo). These conditions were included in the Law of Constitution, and confirmed in the permanent treaty between Cuba and the United States, which was signed in May, 1903.

The formal transfer of the government to the Cuban authorities took place on May 20, 1902. Tomas Estrada Palma was elected first president, and Luis Esteves, vice-president. An insurrection broke out in August, 1906, and led to American intervention and the appointment of Hon. Charles E. Magoon as provisional governor.

Czar, Tsar, Tzar (*zahr*), [Russ. *tsar*]. The Slavonic form of *Casar*, the title assumed by the emperors of Russia, borne first by Ivan II. in 1579, as *Czar* of Muscovy. The eldest son of the czar was called *Czarovitch*, or, as we usually write it, *Czarovitch*, or *Cesarowitch*; but this appellation was discontinued after the murder of Alexis, the son of Peter the Great, until revived by Paul I. in 1799, in favor of his second son, Constantine. The consort of the czar is termed *czarina*.

Decemviri (*de-sēm've-re*). A body of men who were elected by the patricians, B. C. 451, for the purpose of drawing up a body of laws, founded on the most approved institutions of Greece. They compiled a code, which they inscribed on ten tables, and stated that their labors were not yet complete. Next year, therefore, another body of ten, which probably included some of the patricians, was appointed with the same powers; and these added two

more tables, altogether making the famous *Twelve Tables*, which were, from that time, the foundation of all Roman law. The second body of decemvirs attempted to prolong their period of office, committed some acts of violence, and altogether gave such dissatisfaction, that they were dissolved. The traditionary history of the decemviri is, however, very doubtful. There were other decemvirs, who were appointed for judicial and other purposes.

Defenestration of Prague, The (May 23, 1618). That is, the ejection out of windows by the Bohemians. The Bohemians had two Protestant churches, one in the diocese of Prague, and the other in the territory of the abbot of Braunau. The Archbishop of Prague and the abbot pulled down these reformed churches, and when the Protestants remonstrated they were told it was the king's pleasure. So Count Thurn of Bohemia headed a deputation, which went to the royal castle of Prague to lay their grievance before the king. Being admitted into the council hall, they were so insolently received that they threw two of the councillors and the king's private secretary out of the windows into the moat. This was the beginning of the Thirty Years' War.

Delaware. Though the State was first discovered by the Dutch in 1609, Lord Delaware, Governor of Virginia, who visited it the following year, and afterward gave name to it, claimed it on behalf of England. In 1637, colonies were planted near Wilmington by the Swedish East India Company, which brought on a conflict with the Dutch and led to the expulsion of the Swedes in 1655. When New Netherlands was conquered by the English, this territory went with it. William Penn, having received the Pennsylvania grant, secured, also, from the Duke of York rights over Delaware by patent, and until the Revolution the territory was governed under the same proprietary. In 1776, the people declared themselves an independent State, and as such fought in the Continental ranks. Delaware was the first State to ratify the Federal Constitution, and its own constitution, adopted in 1792, still forms the fundamental law. It was a slave State, but sided with the Union in 1861-65.

Deluge. The Deluge was threatened in the year of the world 1536, and began December 7, 1656, and continued 377 days. (*Genesis* vi, vii, viii.) The ark rested on Mount Ararat, May 6, 1657, and Noah left the ark December 18th, following. The year corresponds with that of 2348 B. C. The following are the epochs of the Deluge, according to Dr. Hales:

	B. C.		B. C.
Septuagint,	3246	Clinton,	2482
Jackson,	3170	Playfair,	2352
Hales,	3155	Usher and E. Bible,	2348
Josephus,	3146	Marsham,	2344
Persian,	3103	Petavius,	2329
Hindoo,	3102	Strauchius,	2293
Samaritan,	2998	Hebrew,	2288
Howard,	2698	Vulgar Jewish,	2104

In the reign of Ogyges, King of Attica, 1764 B. C., a deluge so inundated Attica that it lay waste for nearly 200 years. Buffon thinks that the Hebrew and Grecian deluges were the same,

and arose from the Atlantic and Bosphorus bursting into the Valley of the Mediterranean.

The deluge of Deucalion in Thessaly is placed 1503 B. C. according to *Eusebius*. It was often confounded by the ancients with the general flood but considered to be merely a local inundation occasioned by the overflowing of the River Pineus whose course was stopped by an earthquake between the Mounts Olympus and Ossa. Deucalion, who then reigned in Thessaly, with his wife Pyrrha and some of their subjects, are stated to have saved themselves by climbing up Mount Parnassus.

Denmark. The Kymri were the earliest known inhabitants of Scandinavia and made themselves formidable to the Romans 100 years B. C. To them succeeded the Goths who, under their mythical leader, Odin, established their rule over the Scandinavian lands. Odin's son, Skjold, is reputed to have been the first ruler of Denmark; but the little that is known of Danish history in these remote ages seems to indicate that the country was split up into many small territories, whose inhabitants lived by piracy. The people were divided into "Bønder" and "Trælle," freemen and bondmen. The former busied themselves with war and "Vikingetog," or piracy, and the government of the land; while to the latter were left the peaceful pursuits of hunting, fishing, and tilling the soil. The mission of Ansgarius the Apostle of the North to South Jutland, in 826, when he baptized Harald Klack, one of the Smaa Kongar, or the little kings of Denmark, was the means of first opening the Danish territories to the knowledge of the more civilized nations. The country was soon torn by civil dissensions between the adherents of the ancient and modern faith. Gorm the Old, the first authentic King of Denmark, the bitter enemy of Christianity, died in 935, after having subjugated the several territories to his sway; and, although his death gave fresh vigor to the diffusion of the new faith, paganism kept its ground for 200 years longer, and numbered among its adherents many of those half-mythical heroes, whose deeds are celebrated in the Eddas and the *Kæmpeviser* of the Middle Ages. The success that attended the piratical incursions of the Northmen drew them from their own homes; and, while Gorm's descendants, Svend and Knud, were reigning in England, Denmark was left a prey to anarchy. On the extinction of Knud's dynasty, in 1042, his sister's son, Svend Estridsen, ascended the throne. Internal dissensions and external wars weakened the country, and the introduction of a feudal system raised up a powerful nobility and ground down the once free people to a condition of oppressed serfage. Valdemar I., by the help of his great minister, Axel Hvide, known in history as Bishop Absalon, subjugated the Wends of Rügen and Pomerania, and forced them, in 1168, to renounce the faith of their god, Svantevit, and accept Christianity. During the time of Knud VI., and in the early part of the reign of Valdemar II.—sons of Valdemar I.—the conquest of Denmark extended so far into German and Wendic lands that the Baltic was little more than an inland Danish sea. The jealousy of the German princes and the treachery

of his vassals combined to rob Valdemar II. of these brilliant family conquests. His death, in 1241, was followed by a century of anarchy and inglorious decadence of the authority of the crown, during which the kingdom was brought to the brink of annihilation under the vicious rule of his sons and grandsons. Under his great-grandson, Valdemar III., the last of the Estridsen line, Denmark made a quick but transient recovery of the conquests of the older Valdemars, and the national laws were collected into a well-digested, comprehensive code. From his death, in 1375, till 1412, his daughter, the great Margaret, first as regent for her only and early lost son, Olaf, and later as sole monarch, ruled, not only Denmark, but, in course of time, also Sweden and Norway, with such consummate tact, and with so light yet firm a hand, that, for once in the course of their history, the three rival Scandinavian kingdoms were content to act in harmony. Margaret's successor, Erick, the son of her niece, for whose sake she had blended the three sovereignties into one, undid her glorious work with fatal rapidity, and after an inglorious war of twenty-five years with his vassals, the Counts-dukes of Schleswick-Holstein, he lost the allegiance and the crowns of his triple kingdom, and ended his disastrous existence in misery and obscurity. After the short reign of his nephew, Christopher of Bavaria, the Danes, on the death of the latter in 1448, again exercised their long-dormant right of election to the throne, and chose for their king Christian of Oldenburg, a descendant of the old royal family through his maternal ancestress, Rikissa, the great-granddaughter of Valdemar II. Christian I., the father of the Oldenburg line, which continued unbroken till the death of the late King of Denmark, Frederick VII., in 1863, laid the foundation of the Schleswick-Holstein troubles, which, after maturing for centuries, have ended in our own day in dismembering the Danish monarchy. The insane tyranny of the otherwise able and enlightened Christian II. cost him his throne. Christian III., in whose reign the Reformation was established, united the Schleswick-Holstein, duchies in perpetuity to the Crown in 1533. Frederick II., who increased the embarrassments connected with the crown appanages, by making additional partitions in favor of his brother (the founder of the Holstein-Sonderburg family), was succeeded by Christian IV., 1588, who was the ablest of Danish rulers. His liberal policy was, however, cramped by the nobles, by whose supineness Denmark lost all the possessions she had hitherto retained in Sweden. The national abasement which followed led, in 1660, under Christian's son, Frederick III., to the rising of the people against the nobles, and their surrender into the hands of the king of the supreme power. For the next 100 years the peasantry were kept in serfage and the middle classes depressed. The abolition of serfage was begun by Christian VII. in 1767; it was extended to the duchies in 1804. The reign of Christian's son, Frederick VI., brought the country to the verge of ruin. On the accession of Frederick VII. half his subjects were in open rebellion against him. The liberal constitution granted by the king fully satisfied his

subjects in Denmark proper, but the disaffection still smoldered in the duchies. On the death, in 1863, of Frederick VII., Prince Christian of Schleswig-Holstein-Glücksborg ascended the throne under the title of Christian IX. In 1906, on the death of the latter, King Frederick VIII. succeeded his father.

Deposed Kings of England. (1) *Before the Conquest:* Sigebert of Wessex, A. D. 755; Alred of Northumbria, 774; Ethelred I., 779; Eardwulf and Ethelwulf, 857; Edwy, 957; Ethelred II., 1013; Hardicanute, son of Canute, 1037. (2) *Since the Conquest:* Edward II., 1327; Richard II., 1399; Henry VI., 1460; James II., 1688. Euphemistically called his "abdication." Charles I. was not only deposed but tried for treason against his parliament and beheaded; Charles II. was not exactly deposed, but he was kept from the crown during the Commonwealth. The most absolute and tyrannical of British sovereigns have been the Welsh and Scotch dynasties, but Wales and Scotland are eminently democratic. The Stuarts claimed the "right divine" of kings; but James I. and Charles II. did no honor to the claim.

Deposed Kings of France. Louis XVI., like Charles I., was not only deposed but executed, 1793; Napoleon I. (emperor) was twice deposed, 1814, 1815; Charles X. (1830), like James II., is said to have "abdicated"; Louis-Philippe (1848), also said to have "abdicated"; Napoleon III., 1872.

Dictator (*dīk-tā'tūr*). A magistrate appointed in times of exigency and peril, and invested with extraordinary powers. They acted as generals-in-chief of the army, and could declare war or make peace at their pleasure. They were originally selected from the patrician order, the first having been Titus Laertius, B. C. 501. In B. C. 356, however, the office of dictator was thrown open to the plebeians, and Marcus Rutilius, one of that class, received the appointment. For the space of 400 years this office was regarded with veneration, till Sylla and Cæsar, by becoming perpetual dictators, converted it into an engine of tyranny, and rendered the very name odious. Hence, it became extinguished by decree of Mark Antony, B. C. 44.

Directory, The. "Le Directoire," the executive of the Constitution of Year III. (October 27, 1795—November 9, 1799). The legislature consisted of two houses, the Council of Elders and the Council of 500. The number of the directors was five, named by the two councils, and they were elected for five years, without power of reelection. They appointed the ministers and les généraux-en-chef. Abolished by Napoleon in November, 1799.

The military glory of France was never greater than in the Directory. It had for its commanders, Bonaparte, Kléber, Desaix, Masséna, and Moreau.

District of Columbia. The region of the Potomac River was originally a favorite camping and fishing ground of several Indian tribes who lived in its vicinity, and was called by them the "River of Swans." As early as 1660, a portion of the tract was purchased by an Englishman named Pope, who named the

whole tract Rome, a stream running through it the Tiber, and the principal eminence, on which the capitol now stands, Capitoline Hill, and signed all his letters and documents "The Pope of Rome." Some thirty years prior to this, the Potomac had been explored as far as Little Falls, beyond the limits of the District of Columbia, by an Indian trader named William Fleet, with whom Leonard Calvert treated, 1634. The Colonial Congress, for a number of years following its organization, had no permanent seat. The session of 1783 was begun in Philadelphia, but, being disturbed by a riotous demand of the soldiers for their overdue pay, Congress adjourned first to Princeton, thence to Annapolis, and, subsequently, to New York. The question of a permanent seat of government, to be entirely under federal authority, which had been broached several times, was then considered to be urgent; and when the proposed Federal Constitution was being drafted (1787) a clause was inserted in Art. I, Sec. 8, establishing the power of Congress to exercise exclusive legislation over such a district as might subsequently be ceded to the government by particular States for a seat of the Government of the United States. As soon as the intention of Congress to select a site was known, the State of Maryland ceded sixty square miles on one side of the river, and the State of Virginia forty square miles on the other, to constitute the federal district. The site of the national capital was selected in 1790, and the first stone to mark the boundaries of the District of Columbia was set at Jones' Point, below Alexandria, April 15, 1791. The commissioners appointed to lay out the district agreed that it should be called "The Territory of Columbia," and the federal city "The City of Washington." The city was laid out in accordance with the plans of Major L'Enfant, a French officer and engineer who had been wounded at Savannah, and who was one of Washington's favorite officers. Public buildings were erected, and official possession was taken, 1800, when Congress removed from Philadelphia and began holding its sessions there. Subsequently, the whole territory was styled the District of Columbia, in memory of Christopher Columbus. In 1846, the area of 100 square miles was reduced to sixty-four square miles by retrocession to Virginia of the section previously included within the bounds of that State. Previous to 1871, legislative power was exercised directly by Congress. An act adopted that year established a territorial form of government, and gave the citizens representation in Congress for the first time. The charters of Georgetown, incorporated December 25, 1789, and Washington, incorporated May 3, 1802, were repealed by the act, though both were allowed to bear the name of "city," and the corporations of the cities as well as that of Washington County, were merged into the new government. Alexander R. Shepherd became president of the Citizens' Reform Association, 1870, vice-president of the Board of Public Works under the new government, 1871, and governor of the district, 1873. In 1874, the territorial government was abolished, and since then all the public affairs of the district have been managed by a

board of three commissioners acting directly under the legislation of Congress.

Divine Right of Kings, The. A Seventeenth Century dogma, implying the belief that kings hold their office by divine appointment, and are the earthly representatives of Deity. "So they are in a theocracy like Judæa and the popedom. The dogma was sanctioned in the book of the Canons of Convocation, 1604; but in the Bill of Rights, 1689, the right of the people to depose the monarch, to change the order of succession, and to confer the throne on whom they think proper is distinctly set forth.

Dominican Republic, or Santo Domingo. A state formed by the Spanish, or eastern section of Hayti. Spain, in 1697, surrendered to France, by the Treaty of Ryswick, the western part of the island, retaining the remainder down to 1795. In the year last mentioned, however, the Spanish portion became nominally French. In 1814, the West having vindicated its independence, France formally relinquished, in favor of Spain, all claim to the East. In 1822, the colony, in imitation of the continental possessions, threw off the yoke of the mother-country, to link itself, more or less closely, with its African neighbors. But in or about 1843, it assumed a separate standing as the Dominican Republic, the anarchy of which it exchanged in 1861 for the despotism of its former masters. In 1863, it again revolted, and Spain gave up the possession, and the republic has since maintained a troubled existence. In 1907, a treaty between the Dominican Republic and the United States was ratified, under which the latter will collect the customs revenues, assist the Dominican Government to maintain peace, and act as intermediary between the republic and its foreign creditors.

Dorr Rebellion. In 1840, Connecticut and Rhode Island were the only States that were still governed by their colonial charters. The charter of the latter State, imposing, as it did, a property qualification so high as to disfranchise two-thirds of the citizens, was extremely unpopular. A proposition of Thomas W. Dorr, of Providence, to extend the franchise was voted down. Dorr then took to agitation, and finally a convention prepared a constitution and submitted it to a popular vote. Its supporters claimed a majority for it, which its opponents, known as the law and order party, denied. Nevertheless, in 1842, the constitution was proclaimed to be in force. An election was held under it, only the suffrage party participating. Dorr was elected governor. The suffrage legislature assembled at Providence with Thomas W. Dorr as governor; the charter legislature at Newport, with Samuel W. King as governor. After transacting some business the suffrage legislature adjourned. The charter legislature authorized the governor to take energetic steps, and an appeal for aid was made to the National Government. The suffragists attempted armed resistance, but were dispersed. Dorr fled, but soon returned and gave himself up. He was convicted of high treason in 1844, and sentenced to imprisonment for life, but was pardoned in 1847, and in 1852 was restored to his

civil rights. The charter party soon after the rebellion proposed a new constitution, largely extending the suffrage, which was carried and went into effect in May, 1843.

Druids. The priests of the Celts of Gaul and Britain. According to Julius Cæsar, they possessed the greatest authority among the Celtic nations. They had some knowledge of geometry, natural philosophy, etc., superintended the affairs of religion and morality, and performed the office of judges. They had a common superior, who was elected by a majority of votes from their own number, and who enjoyed his dignity for life. They took unusual care to fence themselves round with mysteries, and it is probable that they cherished doctrines unknown to the common people; but that they had a great secret philosophy which was handed down by oral tradition is very unlikely. Of their religious doctrines little is known. Human sacrifice was one of their characteristic rites, the victims being usually prisoners of war.

Eastern Empire. Commenced under Valens, A. D. 364, and ended in the defeat and death of Constantine XIII., the last Christian emperor, in 1453. Mahomet II. resolved to dethrone him and possess himself of Constantinople; he laid siege to that city both by sea and land, and took it by assault after it had held out fifty-eight days. The unfortunate emperor, seeing the Turks enter by the breaches, threw himself into the midst of the enemy, and was cut to pieces; the children of the imperial house were massacred by the soldiers, and the women reserved to gratify the lust of the conqueror; and thus terminated the dynasty of the Constantines, and commenced the present empire of Turkey, May 29, 1453.

Ecuador. After the conquest of the Inca dominions, the Kingdom of Quito was made a presidency of the viceroyalty of Peru, and remained under Spanish rule from 1533 to 1822. In 1809, it revolted, and after many fruitless struggles achieved its independence by the battle of Pichincha, May 22, 1822. The territory was incorporated into the Republic of Colombia, on the disruption of which, in 1831, it became an independent republic under the name of Ecuador. But a series of civil wars ensued, lasting almost without intermission for more than twenty years. From 1852 to 1858, desultory hostilities existed with Peru. War was declared against New Granada, November 20, 1863, and the Ecuadorian army was routed. In August, 1868, a very destructive earthquake occurred. In 1869, Garcia Moreno, the head of the clerical party, overthrew the government. He was assassinated in 1875, and Dr. Antonio Borrero, the candidate of the non-official party, was elected president. A constitution was adopted and a president elected, and until 1884 the republic enjoyed a reasonably peaceable government. In 1884, another constitution was formed, which, with modifications, in 1887 and 1897, has since been in force.

Edict of Nantes (*nānts*, *Fr. nōnt*). This was the celebrated edict by which Henry IV. of France granted toleration to his Protestant subjects, in 1598. It was revoked by Louis XIV., October 24, 1685. This bad and unjust policy lost to

France 800,000 Protestants, and gave to England (part of these) 50,000 industrious artisans. Some thousands, who brought with them the art of manufacturing silks, settled in Spitalfields, where their descendants yet remain: others planted themselves in Soho and St. Giles's, and pursued the art of making crystal glasses, and various fine works in which they excelled; among these, jewelry, then little understood in England.

Egypt. The Egyptians are the earliest people known to us as a nation. When Abraham entered the Delta from Canaan, they had been long enjoying the advantages of a settled government. They had built cities, invented hieroglyphic signs, and improved them into syllabic writing, and almost into an alphabet. They had invented records, and wrote their kings' names and actions on the massive temples which they raised. The arrangement of Egyptian chronology is still a much-disputed point amongst scholars. A list of the kings of Egypt, arranged in thirty dynasties, was given by the Priest Manetho (about 250 B. C.), and this division is still used. His list, however, is in a very corrupt condition and his method is not strictly chronological. Hence, in the various systems of chronology adopted by Egyptologists the dates assigned to Mena (or Menes) vary from 5702 to 2440 B. C. According to tradition, Mena formed the old Empire of Egypt and founded its capital Memphis. The Fourth Dynasty is distinguished as the "Pyramid Dynasty." Three of its kings, Khufu, Khafra, and Menkaura (according to Herodotus, *Cheops*, *Chephren*, and *Mykerinos*), built the largest pyramids. The date assigned to these kings in the chronology of Lepsius is 2800–2700. About 2400 the government of the empire seems to have been transferred from Memphis to Thebes, and with the beginning of Dynasty Twelve, the Theban line was firmly established. The chief princes of this dynasty are Amenemhat I. (2380), who seems to have extended the power of Egypt over a part of Nubia; Usurtasan I., who made further conquests in this direction; and Amenemhat III. (2179), who constructed Lake Meri (Moeris), a large reservoir for regulating the water supply of the Nile. About 2100, Egypt was conquered by the Hyksos, or shepherd kings, who invaded Egypt from the east and established their capital at Tanis (Zoan). The Theban princes seem, however, to have preserved a state of semi-independence, and at last a revolt commenced which ended by the shepherd kings being completely driven out of Egypt by King Aahmes (Amasis) of Thebes (about 1600), the first of the Eighteenth Dynasty. With Aahmes and the expulsion of the shepherd kings began the reigns of those great Theban kings who built the magnificent temples and palaces at Thebes. The kings of the other parts of Egypt sank to the rank of sovereign priests. Thutmes (or Thothmosis II.) added Memphis to his dominions by his marriage with Queen Nitocris. Under Thutmes III. and his successors there were successful expeditions against the Syrians and the Ethiopians. Amenhotep III. set up his two gigantic statues in the plain of Thebes, one of which the Greeks called the musical statue of Memnon. The Rames-

sides form the Nineteenth Dynasty. They commence with Ramses I., who seems to have been of Lower Egyptian extraction. His grandson, the great Ramses II., or Sesostris, was successful against the neighboring Arabs, and covered Egypt with magnificent buildings. Ramses II. was probably the Pharaoh who oppressed the Hebrews, and the exodus may have occurred under his successor, Meneptah, or Merenptah. Under the later Ramesides the Egyptian Empire began to decay. A new dynasty, Twenty-first, came to the throne with King Hirhor. The seat of their power was Tanis in the Delta. During this period a great number of foreigners, Libyans as well as Asiatics, established themselves in Egypt. About 961, Sheshenk I., the Shishak of the Bible, of a Shemite family from Bubastis, established a new dynasty (Twenty-second). He attempted to restore Egyptian rule in the East, and conquered and plundered Jerusalem. After his death, Egypt was torn by civil wars, and eventually the Ethiopians under Shabak (Sabako) conquered it (Twenty-fifth Dynasty). For a time it was subject alternately to Ethiopian and Assyrian princes, but in the Seventh Century the kings of Sais once more restored its independence and prosperity to Egypt. Psamethik I. (Psammetichus) warred successfully in Syria and Palestine. King Nekho (610–594) defeated Josiah, King of Judah, but his further progress was checked by Nebuchadnezzar. His sailors circumnavigated Africa. Uahbra (the Greek Apries, the Hophrah of the Bible); and Aahmes II. (Greek Amasis) followed. About 523, Cambyses, King of Persia, overran Egypt and made it a Persian province. During the reign of Cambyses the Egyptians suffered much oppression. After the Persian defeat at Marathon, the Egyptians rose and recovered their independence for a short time, but were again subdued, and, in spite of two other revolts, Egypt remained a Persian province till Persia itself was conquered by Alexander the Great, B. C. 332. Egypt now became a Greek state, many Greeks having been already settled in the country, and the Egyptians were treated as an inferior race. Alexandria was founded as the new Greek capital. On Alexander's death, his general, Ptolemy, took possession of the throne and became the first of a Greek Dynasty that for three hundred years made Egypt one of the chief kingdoms of the world. The Ptolemies were magnificent patrons of letters and arts. Theocritus, Callimachus, Euclid the geometrician, the astronomers Eratosthenes and Aratus, etc., flourished under their rule. But while the Alexandrian Greeks managed to keep down the native Egyptians, they were themselves sinking under the Romans. Ptolemy Auletes went to Rome to ask help against his subjects, and the famous Cleopatra maintained her power only through her personal influence with Julius Caesar and Mark Antony. On the defeat of Mark Antony by Augustus, B. C. 30, Egypt became a province of Rome. It was still a Greek state, and Alexandria was the chief seat of Greek learning and science. On the spread of Christianity the old Egyptian doctrines lost their sway. Now arose in Alexandria the Christian catechetical school, which produced Clemens and

Origen. The sects of Gnostics united astrology and magic with religion. The school of Alexandrian Platonics produced Plotinus and Proclus. Monasteries were built all over Egypt; Christian monks took the place of the pagan hermits, and the Bible was translated into Coptic.

On the division of the great Roman Empire (A. D. 364), in the time of Theodosius, into the Western and Eastern Empires, Egypt became a province of the latter, and sank deeper and deeper in barbarism and weakness. It was conquered in 640 A. D. by the Saracens under Caliph Omar. As a province of the caliphs it was under the government of the celebrated Abbasides — Harun-al-Rashid and Al-Mamun — and that of the heroic Sultan Saladin. The last dynasty was, however, overthrown by the Mamelukes (1250); and the Mamelukes in their turn were conquered by the Turks (1516-17). The Mamelukes made repeated attempts to cast off the Turkish yoke, and had virtually done so by the end of last century, when the French conquered Egypt and held it till 1801, when they were driven out by the British under Abercromby and Hutchinson.

On the expulsion of the French a Turkish force under Mehemet Ali Bey took possession of the country. Mehemet Ali was made pasha, and being a man of great ability, administered the country vigorously and greatly extended the Egyptian territories. At length he broke with the Porte, and after gaining a decisive victory over the Ottoman troops in Syria, in 1839, he was acknowledged by the sultan as viceroy of Egypt, with the right of succession in his family. Mehemet Ali died in 1849, having survived his son Ibrahim, who died in 1848. He was succeeded by his grandson, Abbas, who, dying in 1854, was succeeded by his uncle, Saïd, son of Mehemet. Under his rule railways were opened, and the cutting of the Suez Canal commenced. After Saïd's death, Ismail Pasha, a grandson of Mehemet Ali, obtained the government in 1863. His administration was vigorous but exceedingly extravagant, and brought the finances of the country into disorder. In 1866, he obtained a firman from the sultan, granting him the title of khedive. In 1879 he was forced to abdicate under pressure of the British and French governments, and was replaced by his son, Tewfik. In 1882 the "national party" under Arabi Pasha revolted and forced the khedive to flee. On July 11th, a British fleet bombarded Alexandria and restored the khedive, and at Tel-el-Kebir Arabi's forces were totally crushed on September 13th. A rebellion in the Soudan, under the leadership of Mohammed Ahmed, the so-called mahdi, now gave the government trouble. In 1883 the mahdi's forces annihilated an Egyptian force under Hicks Pasha in Kordofan. British troops were now despatched to Suakin and inflicted two severe defeats on the mahdi's followers there. But the British cabinet had resolved to abandon the Soudan; and General Gordon, already famous for his work in this district, was sent to effect the safe withdrawal of the garrisons (1884). By this time, however, the mahdi's forces were strong enough to shut the general up in Khartoum. For nearly a year he held the town, but perished

(January, 1885) before the relief expedition under Sir Garnet Wolseley could reach him. Since then the Anglo-Egyptian troops have reoccupied it. Prince Abbas succeeded as khedive in 1892 — the British still retaining control. The predominant position of Great Britain in Egypt was formally recognized by France under the Anglo-French Agreement of 1904.

El Caney (*el-cá'-nā*), a fortified town of Cuba; on the main road, four miles northeast of Santiago. During the Spanish-American war it was the scene of a decided American victory. At 6 A. M. on July 1, 1898, Captain Capron's battery of four guns opened fire on El Caney from an elevation about a mile and a half distant. The guns were not heavy enough to destroy the enemy's works, and at eight o'clock General Lawton's infantry of Chaffee's brigade, consisting of the 7th, 12th, and 17th United States Infantry, assaulted and captured the hill with many prisoners. In 1901 the United States Government purchased the battlefield and approaches for a public reservation.

Electors, The, or Kurfürsts, of Germany, German princes who enjoyed the privilege of disposing of the imperial crown, ranked next the emperor, and were originally six in number, but grew to eight, and finally nine; three were ecclesiastical — the Archbishops of Mayence, Cologne, and Treves, and three secular — the Electors of Saxony, the Palatinate, and Bohemia, to which were added at successive periods the Electors of Brandenburg, of Bavaria, and Hanover.

Emancipation Proclamation, a proclamation providing for the emancipation of the slaves in certain parts of the Confederate States, issued as a war measure by President Lincoln, January 1, 1863. The number of slaves emancipated by this proclamation was, taking the census of 1860 as a basis, as follows:

Alabama,	435,080
Arkansas,	111,115
Florida,	61,745
Georgia,	462,198
Louisiana,	247,715
Mississippi,	436,631
North Carolina,	331,059
South Carolina,	402,046
Texas,	182,566
Virginia,	450,000

Total, 3,120,515

The number of slaves not affected by its provisions was about 832,000. The full text of the proclamation is as follows:

Whereas, on the twenty-second day of September, one thousand eight hundred and sixty-two, a proclamation was issued by the President of the United States, containing, among other things, the following, to-wit:

That on the first day of January, in the year of our Lord one thousand eight hundred and sixty-three, all persons held as slaves within any State, or designated part of State, the people whereof shall be in rebellion against the United States, shall be then, thenceforth and forever free, and the Executive Government of the United States including the military and naval officers thereof, will recognize and maintain the freedom of such persons, and will do no act or acts to repress such persons, or any of them, in any efforts they may make for their actual freedom.

That the Executive will, on the first day of January aforesaid, by proclamation, designate the States and parts of States, if any, in which the people thereof shall

be in rebellion against the United States, and the fact that any State, or the people thereof, shall, on that day, be, in good faith, represented in the Congress of the United States, by members chosen thereto at elections wherein a majority of the qualified voters of such State shall have participated, shall, in the absence of strong countervailing testimony be deemed conclusive evidence that such State and the people thereof are not then in rebellion against the United States.

Now, therefore, I, Abraham Lincoln, President of the United States, by virtue of the power in me vested as Commander-in-chief of the Army and Navy of the United States in time of actual armed rebellion against the authority and Government of the United States, and as a fit and necessary war measure for suppressing said rebellion, do on this first day of January, in the year of our Lord one thousand eight hundred and sixty-three, and in accordance with my purpose so to do, publicly proclaim for the full period of one hundred days from the day of the first above-mentioned order, and designate, as the States and parts of States wherein the people thereof respectively are this day in rebellion against the United States, the following, to-wit: Arkansas, Texas, Louisiana (except the parishes of St. Bernard, Plaquemines, Jefferson, St. John, St. Charles, St. James, Ascension, Assumption, Terre Bonne, Lafourche, St. Mary, St. Martin, and Orleans, including the City of New Orleans), Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia (except the forty-eight counties designated as West Virginia, and also the counties of Berkeley, Accomac, Northampton, Elizabeth City, York, Princess Anne, and Norfolk, including the cities of Norfolk and Portsmouth), and which excepted parts are, for the present, left precisely as if this proclamation were not issued.

And by virtue of the power and for the purpose aforesaid, I do order and declare that all persons held as slaves within said designated States and parts of States are, and henceforth shall be, free; and that the Executive Government of the United States, including the military and naval authorities thereof, will recognize and maintain the freedom of said persons.

And I hereby enjoin upon the people so declared to be free to abstain from all violence, unless in necessary self-defense, and I recommend to them that, in all cases, when allowed, they labor faithfully for reasonable wages.

And I further declare and make known, that such persons, of suitable condition, will be received into the armed service of the United States, to garrison forts, positions, stations, and other places, and to man vessels of all sorts in said service.

And upon this act, sincerely believed to be an act of justice, warranted by the Constitution, upon military necessity, I invoke the considerate judgment of mankind and the gracious favor of Almighty God.

In testimony whereof, I have hereunto set my name, and caused the seal of the United States to be affixed.

[L. S.] Done at the City of Washington, this first day of January, in the year of our Lord one thousand eight hundred and sixty-three, and of the Independence of the United States the eighty-seventh.

By the President. ABRAHAM LINCOLN.

WILLIAM H. SEWARD,
Secretary of State.

England. The history of England proper begins when it ceased to be a Roman possession. On the withdrawal of the Roman forces, about the beginning of the Fifth Century A. D., the South Britons, or inhabitants of what is now called England, were no longer able to withstand the attacks of their ferocious northern neighbors, the Scots and Picts. They applied for assistance to Aëtius, but the Roman general was too much occupied in the struggle with Attila to attend to their petition. In their distress they appear to have sought the aid of the Saxons; and according to the Anglo-Saxon narratives three ships, containing 1,600 men, were dispatched to their help under the command of the brothers Hengest and Horsa. Vortigern, a duke or prince of the Britons, assigned them the isle of Thanet for habitation, and, marching against the northern foe, they obtained a complete victory. The date assigned to these events by the later Anglo-Saxon chronicles is 449 A. D., the narratives asserting further that the Saxons, finding the

land desirable, turned their arms against the Britons, and, reinforced by new bands, conquered first Kent and ultimately the larger part of the island. Whatever the credibility of the story of Vortigern, it is certain that in the middle of the Fifth Century the occasional Teutonic incursions gave place to persistent invasion with a view to settlement. These Teutonic invaders were Low German tribes from the country about the mouths of the Elbe and the Weser, the three most prominent being the Angles, the Saxons, and the Jutes. Of these, the Jutes were the first to form a settlement, taking possession of part of Kent, the Isle of Wight, etc.; but the larger conquests of the Saxons in the south and the Angles in the north gave to these tribes the leading place in the kingdom. The struggle continued 150 years, and at the end of that period the whole southern part of Britain, with the exception of Strathclyde, Wales, and West Wales (Cornwall), was in the hands of the Teutonic tribes. This conquered territory was divided among a number of small states or petty chieftaincies, seven of the most conspicuous of which are often spoken of as the *Heptarchy*. These were: (1) The Kingdom of Kent; founded by Hengest in 455; ended in 823. (2) Kingdom of South Saxons, containing Sussex and Surrey; founded by Ella in 477; ended in 689. (3) Kingdom of East Angles, containing Norfolk, Suffolk, Cambridge, Ely (Isle of); founded by Uffa in 571 or 575; ended in 792. (4) Kingdom of West Saxons, containing Devon, Dorset, Somerset, Wilts, Hants, Berks, and part of Cornwall; founded by Cerdic 519; swallowed up the rest in 827. (5) Kingdom of Northumbria, containing York, Durham, Cumberland, Westmoreland, Northumberland, and the east coast of Scotland to the Firth of Forth; founded by Ida 547; absorbed by Wessex in 827. (6) Kingdom of East Saxons, containing Essex, Middlesex, Hertford (part); founded by Erchew in 527; ended in 823. (7) Kingdom of Mercia, containing Gloucester, Hereford, Worcester, Warwick, Leicester, Rutland, Northampton, Lincoln, Huntingdon, Bedford, Buckingham, Oxford, Stafford, Derby, Salop, Nottingham, Chester, Hertford (part); founded by Crida about 584; absorbed by Wessex in 827. Each state was, in its turn, annexed to more powerful neighbors; and at length, in 827, Egbert, by his valor and superior capacity, united in his own person the sovereignty of what had formerly been seven kingdoms, and the whole came to be called England, that is Angle-land.

While this work of conquest and of intertribal strife had been in progress towards the establishment of a united kingdom, certain important changes had occurred. The conquest had been the slow expulsion of a Christian race by a purely heathen race, and the country had returned to something of its old isolation with regard to the rest of Europe. But before the close of the Sixth Century Christianity had secured a footing in the southeast of the island. Ethelberht, king of Kent and suzerain over the kingdoms south of the Humber, married a Christian wife, Bertha, daughter of Charibert of Soissons, and this event indirectly led to the coming of St. Augustine. The conversion of Kent, Essex, and East Anglia was followed by that of Northumberland and

then by that of Mercia, of Wessex, of Sussex, and lastly of Wight, the contest between the two religions being at its height in the Seventh Century. The legal and political changes immediately consequent upon the adoption of Christianity were not great, but there resulted a more intimate relation with Europe and the older civilizations, the introduction of new learning and culture, the formation of a written literature, and the fusion of the tribes and petty kingdoms into a closer and more lasting unity than that which could have been otherwise secured.

The kingdom, however, was still kept in a state of disturbance by the attacks of the Danes, who had made repeated incursions during the whole of the Saxon period, and about half a century after the unification of the kingdom became for the moment masters of nearly the whole of England. But the genius of Alfred the Great, who had ascended the throne in 871, speedily reversed matters by the defeat of the Danes at Ethandune (878). Guthrum, their king, embraced Christianity, became the vassal of the Saxon king, and retired to a strip of land on the east coast including Northumbria and called the Danelagh. The two immediate successors of Alfred, Edward (901-925) and Athelstan (925-940), the son and grandson of Alfred, both vigorous and able rulers, had each in turn to direct his arms against these settlers of the Danelagh. The reigns of the next five kings, Edmund, Edred, Edwy, Edgar, and Edward the Martyr, are chiefly remarkable on account of the conspicuous place occupied in them by Dunstan, who was counsellor to Edmund, minister of Edred, treasurer under Edwy, and supreme during the reigns of Edgar and his successor. It was possibly due to his policy that from the time of Athelstan till after the death of Edward the Martyr (978 or 979) the country had comparative rest from the Danes. During the Tenth Century many changes had taken place in the Teutonic constitution. Feudalism was already taking root; the king's authority had increased; the folkland was being taken over as the king's personal property; the nobles by birth, or ealdormen, were becoming of less importance in administration than the nobility of thegns, the officers of the king's court. Ethelred (978-1016), who succeeded Edward, was a minor, the government was feebly conducted, and no united action being taken against the Danes, their incursions became more frequent and destructive. Animosities between the English and the Danes who had settled among them became daily more violent, and a general massacre of the latter took place in 1002. The following year Sweyn invaded the kingdom with a powerful army and assumed the crown of England. Ethelred was compelled to take refuge in Normandy; and though he afterwards returned, he found in Canute an adversary no less formidable than Sweyn. Ethelred left his kingdom in 1016 to his son Edmund, who displayed great valor, but was compelled to divide his kingdom with Canute; and when he was assassinated in 1017, the Danes succeeded to the sovereignty of the whole.

Canute (Knut), who espoused the widow of

Ethelred, that he might reconcile his new subjects, obtained the name of Great, not only on account of his personal qualities, but from the extent of his dominions, being master of Denmark and Norway as well as England. In 1035 he died, and in England was followed by two other Danish kings, Harold and Hardicanute, whose joint reigns lasted till 1042, after which the English line was again restored in the person of Edward the Confessor. Edward was a weak prince, and in the latter years of his reign had far less real power than his brother-in-law Harold, son of the great earl Godwin. On Edward's death in 1066 Harold accordingly obtained the crown. He found, however, a formidable opponent in the second-cousin of Edward, William of Normandy, who instigated the Danes to invade the northern counties, while he, with 60,000 men, landed in the south. Harold vanquished the Danes, and hastening southward met the Normans near Hastings, at Senlac, afterwards called Battle. Harold and his two brothers fell (October 14, 1066), and William (1066-87) immediately claimed the government as lawful King of England, being subsequently known as William I., the Conqueror. For some time he conducted the government with great moderation; but being obliged to reward those who had assisted him, he bestowed the chief offices of the government upon Normans, and divided among them a great part of the country. The revolts of the native English which followed were quickly crushed, continental feudalism in a modified form was established, and the English Church reorganized under Lanfranc as Archbishop of Canterbury.

At his death, in 1087, William II., commonly known by the name of Rufus, the conqueror's second son, obtained the crown, Robert, the eldest son, receiving the duchy of Normandy. In 1100, when William II. was accidentally killed in the New Forest, Robert was again cheated of his throne by his younger brother Henry (Henry I.), who in 1106 even wrested from him the duchy of Normandy. Henry's power being secured, he entered into a dispute with Anselm the primate, and with the pope, concerning the right of granting investiture to the clergy. He supported his quarrel with firmness, and brought it to a not unfavorable issue. His reign was also marked by the suppression of the greater Norman nobles in England, whose power (like that of many continental feudatories) threatened to overshadow that of the king, and by the substitution of a class of lesser nobles. In 1135 he died in Normandy, leaving behind him only a daughter, Matilda.

By the will of Henry I. his daughter Maud or Matilda, wife of Geoffrey Plantagenet, Count of Anjou, and frequently styled the Empress Matilda, because she had first been married to Henry V., Emperor of Germany, was declared his successor. But Stephen, son of the Count of Blois, and of Adela, daughter of William the Conqueror, raised an army in Normandy, landed in England, and declared himself king. After years of civil war and bloodshed an amicable arrangement was brought about, by which it was agreed that Stephen should continue to reign during the remainder of his life, but that

he should be succeeded by Henry, son of Matilda and the Count of Anjou. Stephen died in 1154, and Henry Plantagenet ascended the throne with the title of Henry II., being the first of the Plantagenet or Angevin kings. A larger dominion was united under his sway than had been held by any previous sovereign of England, for at the time when he became King of England he was already in the possession of Anjou, Normandy, and Aquitaine.

Henry II. found far less difficulty in restraining the license of his barons than in abridging the exorbitant privileges of the clergy, who claimed exemption not only from the taxes of the state, but also from its penal enactments, and who were supported in their demands by the primate Becket. The king's wishes were formulated in the Constitutions of Clarendon (1164), which were first accepted and then repudiated by the primate. The assassination of Becket, however, placed the king at a disadvantage in the struggle, and after his conquest of Ireland (1171) he submitted to the Church, and did penance at Becket's tomb. Henry was the first who placed the common people of England in a situation which led to their having a share in the government. The system of frank-pledge was revived, trial by jury was instituted by the Assize of Clarendon, and the Eyre courts were made permanent by the Assize of Nottingham. To curb the power of the nobles he granted charters to towns, freeing them from all subjection to any but himself, thus laying the foundation of a new order in society.

Richard I., called *Cœur de Lion*, who in 1189 succeeded to his father, Henry II., spent most of his reign away from England. Having gone to Palestine to join in the third crusade he proved himself an intrepid soldier. Returning homewards in disguise through Germany, he was made prisoner by Leopold, duke of Austria, but was ransomed by his subjects. In the meantime John, his brother, had aspired to the crown, and hoped, by the assistance of the French, to exclude Richard from his right. Richard's presence for a time restored matters to some appearance of order; but having undertaken an expedition against France, he received a mortal wound at the siege of Chalons, in 1199.

John was at once recognized as King of England, and secured possession of Normandy; but Anjou, Maine, and Touraine acknowledged the claim of Arthur, son of Geoffrey, second son of Henry II. On the death of Arthur, while in John's power, these four French provinces were at once lost to England. John's opposition to the pope in electing a successor to the See of Canterbury in 1205 led to the kingdom being placed under an interdict; and the nation being in a disturbed condition, he was at last compelled to receive Stephen Langton as archbishop, and to accept his kingdom as a fief of the papacy (1213). His exactions and misgovernment had equally embroiled him with the nobles. In 1213 they refused to follow him to France, and on his return, defeated, they at once took measures to secure their own privileges and abridge the prerogatives of the crown. King and barons met at Runnymede, and on June 15, 1215, the Great Charter (*Magna Charta*) was signed. It was speedily de-

clared null and void by the pope, and war broke out between John and the barons, who were aided by the French king. In 1216, however, John died, and his turbulent reign was succeeded by the almost equally turbulent reign of Henry III.

During the first years of the reign of Henry III. the abilities of the Earl of Pembroke, who was regent until 1219, retained the kingdom in tranquillity; but when, in 1227, Henry assumed the reins of government he showed himself incapable of managing them. The Charter was three times reissued in a modified form, and new privileges were added to it, but the king took no pains to observe its provisions. The struggle, long maintained in the great council (henceforward called Parliament) over money grants and other grievances reached an acute stage in 1263, when civil war broke out. Simon de Montfort who had laid the foundations of the house of Commons by summoning representatives of the shire communities to the Mad Parliament of 1258, had by this time engrossed the sole power. He defeated the king and his son Edward at Lewes in 1264, and in his famous parliament of 1265 still further widened the privileges of the people by summoning to it burgesses as well as knights of the shire. The escape of Prince Edward, however, was followed by the battle of Evesham (1265), at which Earl Simon was defeated and slain, and the rest of the reign was undisturbed.

On the death of Henry III., in 1272, Edward I. succeeded without opposition. From 1276 to 1284 he was largely occupied in the conquest and annexation of Wales, which had become practically independent during the barons' wars. In 1292 Balliol, whom Edward had decided to be rightful heir to the Scottish throne, did homage for the fief to the English king; but when, in 1294, war broke out with France, Scotland also declared war. The Scots were defeated at Dunbar (1296), and the country placed under an English regent; but the revolt under Wallace (1297) was followed by that of Bruce (1306), and the Scots remained unsubdued. The reign of Edward was distinguished by many legal and legislative reforms, such as the separation of the old king's court into the Court of Exchequer, Court of King's Bench, and Court of Common Pleas, the passage of the Statute of Mortmain, etc. In 1295 the first perfect parliament was summoned, the clergy and barons by special writ, the commons by writ to the sheriffs directing the election of two knights from each shire, two citizens from each city, two burghers from each borough. Two years later the imposition of taxation without consent of parliament was forbidden by a special act (*De Tallagio non Concedendo*). The great aim of Edward, however, to include England, Scotland, and Wales in one kingdom proved a failure, and he died in 1307 marching against Robert Bruce.

The reign of his son, Edward II., was unfortunate to himself and to his kingdom. He made a feeble attempt to carry out his father's last and earnest request to prosecute the war with Scotland, but the English were almost constantly unfortunate; and at length, at Bannockburn (1314), they received a defeat from Robert Bruce which ensured the independence of Scot-

land. The king soon proved incapable of regulating the lawless conduct of his barons; and his wife, a woman of bold, intriguing disposition, joined in the confederacy against him, which resulted in his imprisonment and death in 1327.

The reign of Edward III. was as brilliant as that of his father had been the reverse. The main projects of the third Edward were directed against France, the crown of which he claimed in 1328 in virtue of his mother, the daughter of King Philip. The victory won by the Black Prince at Crecy (1346), the capture of Calais (1347), and the victory of Poitiers (1356), ultimately led to the Peace of Brétigny in 1360, by which Edward III. received all the west of France on condition of renouncing his claim to the French throne. Before the close of his reign, however, these advantages were all lost again, save a few principal towns on the coast.

Edward III. was succeeded in 1377 by his grandson Richard II., son of Edward the Black Prince. The people of England now began to show, though in a turbulent manner, that they had acquired just notions of government. In 1380 an unjust and oppressive poll-tax brought their grievances to a head, and 100,000 men under Wat Tyler, marched toward London (1381). Wat Tyler was killed while conferring with the king, and the prudence and courage of Richard appeased the insurgents. Despite his conduct on this occasion Richard was deficient in the vigor necessary to curb the lawlessness of the nobles. In 1398 he banished his cousin, Henry Bolingbroke; and on the death of the latter's father, the Duke of Lancaster, unjustly appropriated his cousin's patrimony. To avenge the injustice Bolingbroke landed in England during the king's absence in Ireland, and at the head of 60,000 malcontents compelled Richard to surrender. He was confined in the Tower, and despite the superior claims of Edmund Mortimer, Earl of March, Henry was appointed king (1399), the first of the House of Lancaster. Richard was, in all probability, murdered early in 1400.

The manner in which the Duke of Lancaster, now Henry IV., acquired the crown rendered his reign extremely turbulent, but the vigor of his administration quelled every insurrection. The most important—that of the Percies of Northumberland, Owen Glendower, and Douglas of Scotland—was crushed by the battle of Shrewsbury (1403). During the reign of Henry IV. the clergy of England first began the practice of burning heretics under the act *de hæretico comburendo*, passed in the second year of his reign. The act was chiefly directed against the Lollards, as the followers of Wickliffe now came to be called. Henry died in 1413, leaving his crown to his son, Henry V., who revived the claim of Edward III. to the throne of France in 1415, and invaded that country at the head of 30,000 men. The disjointed councils of the French rendered their country an easy prey; the victory of Agincourt was gained in 1415; and after a second campaign a peace was concluded at Troyes in 1420, by which Henry received the hand of Katherine, daughter of Charles VI., was appointed regent of France during the reign of his father-in-law, and declared heir to his throne on

his death. The two kings, however, died within a few weeks of each other in 1422, and the infant son of Henry thus became King of England (as Henry VI.) and France at the age of nine months.

England during the reign of Henry VI. was subjected, in the first place, to all the confusion incident to a long minority, and afterwards to all the misery of a civil war. Henry allowed himself to be managed by anyone who had the courage to assume the conduct of his affairs, and the influence of his wife, Margaret of Anjou, a woman of uncommon capacity, was of no advantage either to himself or the realm. In France (1422–1453) the English forces lost ground, and were finally expelled by the celebrated Joan of Arc, Calais alone being retained. The rebellion of Jack Cade in 1450 was suppressed, only to be succeeded by more serious trouble. In that year Richard, duke of York, the father of Edward, afterwards Edward IV., began to advance his pretensions to the throne which had been so long usurped by the house of Lancaster. His claim was founded on his descent from the third son of Edward III., Lionel, duke of Clarence, who was his great-great-grandfather on the mother's side, while Henry was the great-grandson on the father's side of John of Gaunt, duke of Lancaster, the fourth son of Edward III. Richard of York was also grandson on the father's side of Edmund, fifth son of Edward III. The wars which resulted, called the Wars of the Roses, from the fact that a red rose was the badge of the house of Lancaster and a white one that of the house of York, lasted for thirty years, from the first battle of St. Albans, May 22, 1455, to the battle of Bosworth, August 22, 1485. Henry VI. was twice driven from the throne (in 1461 and 1471) by Edward of York, whose father had previously been killed in battle in 1460. Edward of York reigned as Edward IV. from 1461 till his death in 1483, with a brief interval in 1471; and was succeeded by two other sovereigns of the house of York, first his son Edward V., who reigned for eleven weeks in 1483; and then by his brother Richard III., who reigned from 1483 till 1485, when he was defeated and slain on Bosworth field by Henry Tudor, of the house of Lancaster, who then became Henry VII.

Henry VII. was at this time the representative of the house of Lancaster, and in order at once to strengthen his own title, and to put an end to the rivalry between the houses of York and Lancaster, he married, in 1486, Elizabeth, the sister of Edward V. and heiress of the house of York. His reign was disturbed by insurrections attending the impostures of Lambert Simnel (1487), who pretended to be a son of the Duke of Clarence, brother of Edward IV., and of Perkin Warbeck (1488), who affirmed that he was the Duke of York, younger brother of Edward V.; but neither of these attained any magnitude. The king's worst fault was the avarice which led him to employ in schemes of extortion such instruments as Empson and Dudley. His administration throughout did much to increase the royal power and to establish order and prosperity. He died in 1509.

The authority of the English crown, which had been so much extended by Henry VII.,

was by his son Henry VIII. exerted in a tyrannical and capricious manner. The most important event of the reign was undoubtedly the Reformation; though it had its origin rather in Henry's caprice and in the casual situation of his private affairs than in his conviction of the necessity of a reformation in religion, or in the solidity of reasoning employed by the reformers. Henry had been espoused to Catharine of Spain, who was first married to his elder brother Arthur, a prince who died young. Henry became disgusted with his queen, and enamored of one of her maids of honor, Anne Boleyn. He had recourse, therefore, to the pope to dissolve a marriage which had at first been rendered legal only by a dispensation from the pontiff; but failing in his desires he broke away entirely from the Holy See, and in 1534 got himself recognized by act of parliament as the head of the English Church. He died in 1547. He was married six times, and left three children, each of whom reigned in turn. These were: Mary, by his first wife, Catharine of Aragon; Elizabeth, by his second wife, Anne Boleyn; and Edward, by his third wife, Jane Seymour. Edward, who reigned first, with the title of Edward VI., was nine years of age at the time of his succession, and died in 1553, when he was only sixteen. His short reign, or rather the reign of the Earl of Hertford, afterwards Duke of Somerset, who was appointed regent, was distinguished chiefly by the success which attended the measures of the reformers, who acquired great part of the power formerly engrossed by the Catholics. The intrigues of Dudley, Duke of Northumberland, during the reign of Edward, caused Lady Jane Grey to be declared his successor; but her reign, if it could be called such, lasted only a few days. Mary, daughter of Henry VIII., was placed upon the throne, and Lady Jane Grey and her husband were both executed. Mary, a zealous Catholic, seems to have wished for the crown chiefly to aid in reestablishing the Roman Catholic faith. Political motives had induced Philip of Spain to accept of her as a spouse; but she could never prevail on her subjects to allow him any share of power. She died in 1558.

Elizabeth, who succeeded her sister Mary, was attached to the Protestant faith, and found little difficulty in establishing it in England. Having concluded peace with France (1559), Elizabeth set herself to promote the confusion which prevailed in Scotland, to which her cousin Mary had returned from France as queen in 1561. In this she was so far successful that Mary placed herself in her power (1568), and after many years imprisonment was sent to the scaffold (1587). As the most powerful Protestant nation, and as a rival to Spain in the New World, it was natural that England should become involved in difficulties with that country. The dispersion of the Armada by the English fleet under Howard, Drake, and Hawkins was the most brilliant event of a struggle which abounded in minor feats of valor. In Elizabeth's reign London became the center of the world's trade, the extension of British commercial enterprise being coincident with the ruin of Antwerp in 1585. The parliament was

increased by the creation of sixty-two new boroughs, and its members were exempted from arrest. In literature not less than in politics and in commerce the same full life displayed itself, and England began definitely to assume the characteristics which distinguish her from the other European nations of to-day.

To Elizabeth succeeded (in 1603) James VI. of Scotland and I. of England, son of Mary Queen of Scots and Darnley. His accession to the crown of England in addition to that of Scotland did much to unite the two nations, though a certain smoldering animosity still lingered. His dissimulation, however, ended in his satisfying neither of the contending ecclesiastical parties—the Puritans or the Catholics; and his absurd insistence on his divine right made his reign a continuous struggle between the prerogative of the crown and the freedom of the people. His extravagance kept him in constant disputes with the parliament, who would not grant him the sums he demanded, and compelled him to resort to monopolies, loans, benevolences, and other illegal methods. The nation at large, however, continued to prosper through the whole of this inglorious reign. His son, Charles I., who succeeded him in 1625, inherited the same exalted ideas of royal prerogative, and his marriage with a Catholic, his arbitrary rule, and illegal methods of raising money, provoked bitter hostility. Under the guidance of Laud and Strafford things went from bad to worse. Civil war broke out in 1642 between the king's party and that of the parliament, and, the latter proving victorious, in 1649 the king was beheaded.

A commonwealth or republican government was now established, in which the most prominent figure was Oliver Cromwell. Mutinies in the army among Fifth-monarchists and Levellers were subdued by Cromwell and Fairfax, and Cromwell in a series of masterly movements subjugated Ireland and gained the important battles of Dunbar and Worcester. At sea Blake had destroyed the Royalist fleet under Rupert, and was engaged in an honorable struggle with the Dutch under Van Tromp. But within the governing body matters had come to a deadlock. A dissolution was necessary, yet parliament shrank from dissolving itself, and in the meantime the reform of the law, a settlement with regard to the Church, and other important matters remained untouched. In April, 1653, Cromwell cut the knot by forcibly ejecting the members and putting the keys of the house in his pocket. From this time he was practically head of the government, which was vested in a council of thirteen. A parliament—the Little or Barebones Parliament—was summoned and in December of the same year Cromwell was installed Lord Protector of the Commonwealth of England, Scotland, and Ireland. With more than the power of a king, he succeeded in dominating the confusion at home and made the country feared throughout the whole of Europe. Cromwell died in 1658, and the brief and feeble protectorate of his son Richard followed.

There was now a widespread feeling that the country would be better under the old form of government, and Charles II., son of Charles I., was called to the throne by the Restoration of

1660. He took complete advantage of the popular reaction from the narrowness and intolerance of Puritanism, and even latterly endeavored to carry it to the extreme of establishing the Catholic religion. The promises of religious freedom made by him before the Restoration in the Declaration of Breda were broken by the Test and Corporation Acts, and by the Act of Uniformity, which drove two thousand clergymen from the Church and created the great dissenting movement of modern times. The Conventicle and Five-mile Acts followed, and the "Drunken Parliament" restored Episcopacy in Scotland. At one time even civil war seemed again imminent. The abolition of the censorship of the press (1679) and the reaffirmation of the *habeas corpus* principle are the most praiseworthy incidents of the reign.

As Charles II. left no legitimate issue, his brother, the Duke of York, succeeded him as James II. (1685-88). An invasion by an illegitimate son of Charles, the Duke of Monmouth, who claimed the throne, was suppressed, and the king's arbitrary rule was supported by the wholesale butcheries of such instruments as Kirke and Jeffreys. The king's zealous countenance of Roman Catholicism and his attempts to force the Church and the universities to submission provoked a storm of opposition. Seven prelates were brought to trial for seditious libel, but were acquitted amidst general rejoicings. The whole nation was prepared to welcome any deliverance, and in 1688 William of Orange, husband of James's daughter Mary, landed in Torbay. James fled to France, and a convention summoned by William settled the crown upon him, he thus becoming William III. Annexed to this settlement was a Declaration of Rights circumscribing the royal prerogative by depriving him of the right to exercise dispensing power, or to exact money, or maintain an army without the assent of parliament. This placed henceforward the right of the British sovereign to the throne upon a purely statutory basis. A toleration act, passed in 1689, released dissent from many penalties. An armed opposition to William lasted for a short time in Scotland, but ceased with the fall of Viscount Dundee, the leader of James's adherents; and though the struggle was prolonged in Ireland, it was brought to a close before the end of 1691. The following year saw the origination of the national debt, the exchequer having been drained by the heavy military expenditure. A bill for triennial parliaments was passed in 1694, the year in which Queen Mary died. For a moment after her death William's popularity was in danger, but his successes at Namur and elsewhere, and the obvious exhaustion of France, once more confirmed his power. The treaty of Ryswick followed in 1697, and the death of James II. in exile in 1701 removed a not unimportant source of danger. Early in the following year William also died, and by the act of settlement Anne succeeded him.

The closing act of William's reign had been the formation of the grand alliance between England, Holland, and the German Empire, and the new queen's rule opened with the brilliant successes of Marlborough at Blenheim (1704) and Ramillies (1706). Throughout the earlier part of her

reign the Marlboroughs practically ruled the kingdom, the duke's wife, Sarah Jennings, being the queen's most intimate friend and adviser. In 1707 the history of England becomes the history of Britain, the Act of Union passed in that year binding the parliaments and realms of England and Scotland into a single and more powerful whole.

The measure which declared the parliaments of England and Scotland united, and the two countries one kingdom, known as the United Kingdom of Great Britain, was passed, after violent opposition, in the reign of Queen Anne, 1st of May, 1707. This union, however, much it was opposed by the prejudices and interest of particular men or classes at the time, has contributed very much to the prosperity of both countries. The Grand Alliance, which it had been the aim of William's later years to form between Holland, Austria, and England against the threatening growth of French power, now held the field against the armies of France, and the victories of Marlborough at Blenheim and Ramillies, and the taking of Gibraltar and Barcelona, ended in the Treaty of Utrecht in 1713, by which the British right of sovereignty over Hudson's Bay, Newfoundland, Nova Scotia, Minorca, and Gibraltar was acknowledged, and the foundation of Britain's imperial and colonial power securely laid. The remainder of Anne's reign was distracted by the never-ending altercations of domestic parties. She died on the 1st of August, 1714; and with her ended the line of the Stuarts, who had held the scepter of England 112, and that of Scotland 343 years.

At her death, George I., elector of Hanover, maternally descended from Elizabeth, daughter of James I., according to the Act of Settlement, ascended the throne of Britain. The Whigs under this prince regained that superiority in the national councils of which they had long been deprived, and this, along with the suspension of the *Habeas Corpus* Act and some other extreme precautionary measures, increased the irritation of the Tory and Stuart party. In 1715 the Earl of Mar in Scotland and the Earl of Derwentwater in England raised the standard of rebellion and proclaimed the Chevalier St. George (the Old Pretender) king. But the insurrection, feebly supported by the people, was soon suppressed. In 1716 the Septennial Act was passed, making parliament of seven instead of three years duration. In 1720 occurred the extraordinary growth and collapse of the South Sea Company. From this date till 1742 the government was virtually in the hands of Sir Robert Walpole, the first, we might say, of modern premiers, governing the cabinet and chiefly responsible for its doings. Walpole had great sagacity, prudence, and business ability, and could manage dexterously the king, the parliament, and the people alike. It is true that in the case of the parliament he achieved this by undue influence in elections and a scandalous use of bribery. But the power he thus acquired was generally wisely used. The failure of the war with Spain into which he had reluctantly entered drove him from office, and in 1742 his long ministry came to an end. In 1743, George II., frightened at the dangers to Hanover,

dragged Britain into the wars between France, Prussia, and Austria, regarding the succession of the Emperor Charles. George himself fought at the head of his troops at Dettingen (1743), where he obtained a complete victory over the French, which was balanced, however, later on by the defeat at Fontenoy (1745).

A fresh attempt was now made to restore the Stuart family to the throne of Britain. Charles Edward, son of the Old Pretender, having been furnished by France with a small supply of money and arms, landed on the coast of Lochaber, in the Western Highlands, in 1745, and was joined by a considerable number of the people. Marching southwards with 1,500 Highlanders, his forces increasing as he advanced, he entered Edinburgh without opposition; and having defeated Sir John Cope near Prestonpans he marched into England. He now took Carlisle, and advanced through Lancaster, Preston, and Manchester, to Derby, within 100 miles of London; but finding himself disappointed of expected succors from France, and the English Tories, contrary to his expectations, keeping aloof, he commenced his retreat into Scotland, closely pursued by the king's troops, whom he again defeated at Falkirk. With this victory his good fortune terminated. The Duke of Cumberland having arrived from the continent put himself at the head of the forces which were destined to check the rebels; and the armies having met at Culloden, near Inverness, Charles was completely defeated. After lurking for six months amidst the wilds of Invernesshire, he at length, with much difficulty, escaped to France.

The war of the Austrian succession, which still continued and which was the cause of the hostilities between the French and British in India as well as elsewhere, was terminated by the treaty of Aix-la-Chapelle in 1748. During most of this period Pelham and his brother, the Duke of Newcastle, had been the ruling ministers, and in their hands the art of government had reached a low level both as regards morality and ability. In 1752, the *New Style* of reckoning time was introduced, and the *Old Style* being eleven days behind, the 3d of September, 1752, was called the 14th. At the same time the 1st of January was fixed as the opening day of the year, instead of the 25th of March.

Soon after, the French, uneasy at the growing colonial power of Britain, made a determined effort against the British Colonies and possessions in North America and the East Indies, and at first the British met with several disasters in America. In 1756 the Seven Years' War broke out, Austria and France being allied on the one side, and Prussia and England on the other, and ill success attended the British arms in Europe also. Fortunately, a great war minister, William Pitt, now took the helm of the state. In 1758 the British made themselves masters of several French settlements in North America, while the attack made by Wolfe on Quebec in 1759 was completely successful, and gave Britain the whole of Canada. The same year the British and their allies defeated the French at Minden in Prussia. In the East Indies the French were even less successful than in America. Clive's victory at Plassey (1757) and Coote's at Wandewash

(1760) secured the British empire in the east, and together with the naval feats of Hawke and Boscawen made England the greatest of maritime and colonial powers.

On the accession of George III. in 1760 hostilities were still carried on, generally to the advantage of the French as far as the theater of war in Germany was concerned, but still more to their loss in the other quarters of the world where they were engaged with the British in a struggle for supremacy, and this notwithstanding that Spain had now joined her forces to those of France. At length the success of the British arms induced France and Spain to accede to terms, and the war ended by the Treaty of Paris in 1763. The French relinquished nearly all their possessions in North America; Minorca was restored to Britain; in the East Indies they got back their factories and settlements, on condition that they should maintain neither forts nor troops in Bengal; Cuba and Manila were resigned to the Spaniards. In Europe everything was restored to the *status quo*.

The expenses of this war, which had been undertaken partly for the defense of the American Colonies, had added upwards of £72,000,000 to the national debt. It seemed to the British people to be just that the Americans should be taxed to assist in the payment of the interest. The Americans did not deny the justice, but replied that if they were to be taxed they had a right to be represented in parliament, in order that, like other British subjects, they might be taxed only in consequence of their own consent. Grenville, then the prime-minister, stood to his purpose, however, and introduced a bill for imposing certain stamp duties on the American Colonies. The Americans protested and resisted, and partly by the influence of the great Pitt, who had steadily opposed the measure, the bill was withdrawn. On the illness of Pitt, now Lord Chatham, in 1767, Townshend became premier, and again revived the project of taxing the Americans by imposing duties on tea; and in 1770, Lord North, as his successor, set himself to carry it out. The result was that in 1775 the Colonies were declared in a state of rebellion and a war began, in which both France and Spain joined the revolted Colonies, and of which the result was the recognition of the independence of the United States. On the American side of this struggle the great name is that of George Washington. On the British side the war was unskillfully conducted, and though they gained some successes these were more than counterbalanced by such blows as the capitulation of Burgoyne with nearly 6,000 men at Saratoga (1777), and of Cornwallis at Yorktown with 7,000 (1781). Against their European foes the British could show such successes as that of Admiral Rodney off Cape St. Vincent (1780); the brilliant defense of Gibraltar by General Eliott (1779-82); and Admiral Rodney's victory over the French fleet in the West Indies (1782). The war closed with the Peace of Versailles in 1783. Britain finally acquired several West Indian Islands; Spain got Florida and Minorca, France Pondicherry and Chandernagore in India. The struggle had added over £100,000,000 to the British national debt.

From 1783 to 1801 the government of Britain was directed by William Pitt, the younger son of Lord Chatham, who when only twenty-four years of age was placed as first lord of the treasury and chancellor of the exchequer. The affairs of Ireland and India, and the impeachment of Warren Hastings, were among the first subjects which occupied the attention of Pitt's ministry. In 1782, the Irish had been able to extort from Britain, then engaged in her struggle with the American Colonies, the right to establish an independent parliament, so that from this year there were two independent governments in the British Isles till 1800, when Pitt, who had in the interval had experienced some of the difficulties arising out of two coördinate legislatures, contrived once more to unite them.

In 1789, the French Revolution was begun. For a time there was considerable sympathy in England with this movement; but as the revolutionaries proceeded to extreme measures there was a reaction in English feeling, of which Edmund Burke became the great exponent, and the execution of Louis XVI. gave rise to diplomatic measures, which finally terminated in the National Convention declaring war against Britain, on the 1st of February, 1793. At first Britain coöperated with Prussia, Austria, etc., against France, and successes were gained both by sea and land; but latterly on the Continent the armies of the French Republic were everywhere triumphant, and in 1797 Britain stood alone in the conflict, and indeed soon found an European coalition formed against her. The war was now largely maritime, and the naval successes of Jervis off St. Vincent and Duncan off Camperdown were followed (when Bonaparte led an expedition to Egypt, having India as its ultimate object) by the victories of Nelson in Aboukir Bay, and Abercromby at Alexandria. In 1798, a rebellion in Ireland had to be crushed. Peace was made in 1802 by the Treaty of Amiens, only to be broken by another declaration of war in 1803, as the ambitious projects of Napoleon became evident. In spite of the efforts of Pitt (who died in 1806) in the way of forming and supporting with funds a new coalition against France, the military genius of Napoleon swept away all opposition on land, though the naval victory of Trafalgar (1805) established England's supremacy on the seas. Napoleon, who had assumed the title of Emperor of the French in 1805, and was now virtually the ruler of Europe, put forth his Berlin decrees (1807), prohibiting all commerce with Great Britain wherever his power reached, set his brother Joseph on the throne of Spain, and occupied Portugal. But the spirit of resistance had now taken deep root in the British people, and in 1808 troops were sent into Spain under Sir John Moore, and a year later Wellington, then General Wellesley, landed in Portugal. Then began that famous series of successful operations (the Peninsular War) which drove back the French into their own country, and powerfully contributed to undermine the immense fabric of Napoleon's conquests. The other chief European powers having united, Paris was occupied in 1814, Napoleon was deposed and exiled to Elba, and Louis XVIII. placed on the throne of France. Escaping in

1815, Napoleon appeared once more in the field with a large army. Wellington and Blücher hastened to oppose him, and at Waterloo Napoleon's long career of conquest ended in a crushing defeat. The restoration of Louis followed, and Napoleon was sent to the island of St. Helena. Of her conquests Britain retained Tobago, St. Lucia, Mauritius, the Cape of Good Hope, Demerara, Essequibo, Berbice, Heligoland, and Malta. Ceylon and Trinidad had been gained in 1802, and Britain emerged from this long struggle with a very great increase of territorial possessions and political importance.

After the termination of the wars with Napoleon many things concurred to make a troublous era in the home administration. The new burden of debt which the wars had left on the nation, the bad harvests of 1816 and 1817, a succession of governments which had no idea but that of absolute resistance to all reforms, etc.; all these contributed to increase discontent. The result was a strong Radical agitation, accompanied often by serious riots throughout the country, more especially in the large towns, and loud demands for reform in parliament and the system of representation. The death of George III. and accession of George IV. in 1820 made little change in this respect. From 1822 a succession of able statesmen, Canning, Peel, and Lord Grey, gave the government a more liberal turn, and did much to satisfy the popular demands. The Catholics were admitted to parliament; the severity of the old restrictions on commerce was relaxed; and in the face of a determined opposition Earl Grey carried the Reform Bill of 1832 (two years after the accession of William IV.), which gave large manufacturing towns a voting power in some proportion to their importance, and practically transferred the center of political power from the aristocratic to the middle classes. The next great public measure was the abolition of negro slavery in every British possession in 1834.

William IV. died June 20, 1837, and was succeeded by Victoria. The year following is notable as that in which the Chartists began their movement for reform, which continued more or less active, with popular assemblies, presentations of monster petitions, and occasional tumults, till 1848, when it was without much trouble suppressed. The same years saw the struggle of the Anti-Corn-law League, of which Cobden and Bright were the chiefs, and which were finally successful; Sir Robert Peel, the leader of the Tory party, himself proposing the repeal of the corn duties (1846). The principle of free-trade had further victories in the repeal of the navigation laws, and in the large abolition of duties made during Lord Aberdeen's ministry (1853).

In 1852-53, dissension arose between Russia and Turkey regarding the rights of the Latin and Greek Churches to preferable access to the "holy places" in Palestine. The Emperor of Russia, resenting concessions made to French devotees, sent Prince Menschikoff to Constantinople to demand redress, and not being satisfied, war was declared, June 26, 1853. On the plea that it was impossible to leave Russia a free hand

in dealing with Turkey, France and Great Britain formed an alliance against Russia, March 28, 1854. The invasion of the Crimea followed; several important battles (Alma, Balaclava, Inkerman) took place, resulting in favor of the allies, till at length Sebastopol fell (1855), and peace was signed the following year at Paris. Russia ceded a part of Bessarabia to Turkey, and consented to the free navigation of the Danube and the neutrality of the Black Sea.

Scarcely was the Crimean war over when Britain was threatened with the loss of her possessions in India through the mutiny of the Sepoys. For a time the authority of government was entirely suspended throughout the greater part of Bengal, the whole of Oude, and a large portion of Central India; but in a comparatively short time 70,000 British troops poured in from Burmah, Mauritius, the Cape, and elsewhere, and entirely suppressed the rebellion. One result of the mutiny was that, by a bill passed August 2, 1858, the sovereignty hitherto exercised over the British possessions in India by the East India Company was transferred to the British crown.

Two wars with China (1858 and 1860), during which Canton was bombarded and Peking taken by united forces of Britain and France, opened up five new Chinese ports to trade, with other advantages. The great Civil War in America occurred between 1861 and 1866, and had for a time a disastrous effect on the cotton-trade in Lancashire, causing widespread distress. Between 1861 and 1867 the Fenian movement, which had for its object the separation of Ireland from the United Kingdom, occasioned some excitement.

Parliamentary reform was attempted by several governments without success, until the government of the Earl of Derby in 1867 passed a measure establishing the principle of household suffrage. This year also saw the passing of the act by which the Dominion of Canada was constituted. In 1867, the Abyssinian expedition set out, and effected its object—the relief of English captives—in the spring of 1868. In the same year Lord Derby was succeeded by Mr. Disraeli as leader of the Conservative party, then in office. Before the end of the year a general election put the Liberals in power. In 1869, Mr. Gladstone's administration passed a bill for the disestablishment of the Irish Church. In 1870, an Irish Land Law Bill, having for its object the regulation of the relations between landlord and tenant, became law; and during the same session the act of parliament establishing a national system of education for England was passed. In 1871, the purchase of commissions in the army was abolished. Next followed the Ballot Act and the Scotch Education Act. Early in 1874, Mr. Gladstone dissolved Parliament, and a large Conservative majority being returned, Mr. Disraeli (afterwards Earl of Beaconsfield) again became premier. The Ashantee War, begun the previous year, was brought to a successful termination early in 1874. In 1876, the title of Empress of India was added to the titles of the queen. During the Russo-Turkish War of 1877-78 Britain remained neutral, but took an important part in the settlement effected by the Berlin

Congress, and acquired from Turkey the right to occupy and administer Cyprus. Then followed a war in Afghanistan, a war with the Kaffirs of Zululand, and a brief war with the Boers of the Transvaal.

A new parliament was returned in 1880 with a large Liberal majority, and Mr. Gladstone once more became premier. This parliament passed a land-act for Ireland (1881), an act for putting down crime in Ireland (1882), a reform act equalizing the borough and county franchise (1884), and a redistribution of seats act (1885)—all important acts. The intervention of Britain in Egyptian affairs led to the bombardment of Alexandria by the British fleet (July, 1882) and the sending of an army into Egypt to quell the rebellion headed by Arabi Pasha, which was soon accomplished; while the rising under the Mahdi in the Soudan caused British troops to be despatched to Suakim, and another force to be sent by way of the Nile (in the autumn of 1884) to relieve General Gordon at Khartoum, an object which it was too late to accomplish. A new parliament was elected in the end of 1885, and for a brief period Lord Salisbury was premier as he had latterly been in the preceding parliament, but in February, 1886, he made way for Mr. Gladstone. On 29th March, Mr. Gladstone gave notice of his intention to introduce a bill which, among other things, would establish a separate Irish legislative body, and withdraw the Irish members from the Imperial Parliament. A determined opposition was organized, and a section of the Liberal party, headed by men mostly old colleagues of Mr. Gladstone, operated with the Conservatives and succeeded in throwing out the bill on its second reading. The result was the resignation of the Gladstone ministry, and a general election, in which the Unionists, or those opposed to the bill, had a great majority. The Conservative party assumed office, with the Marquis of Salisbury as head. A criminal law amendment act for Ireland (1887), and a local government act for England (1888), were passed. In 1887 the jubilee of the Queen was celebrated. The elections in 1892 resulted in a Liberal victory and Mr. Gladstone became again premier. In 1893, Lord Salisbury was returned to power. October 11, 1899, war was declared by the Boers of the Transvaal and Orange Free State, the aim being the destruction of the British paramountcy in South Africa, this led to the annexation of those states by the British, after a fierce contest, in 1900. In 1900, a new parliament was elected, which again supported the Conservative ministry, with a slightly increased majority. Victoria died January 22, 1901, and was succeeded by Edward VII.

In 1902 a new ministry was formed with A. J. Balfour as premier. The Balfour ministry was succeeded in 1905 by that of Sir Henry Campbell-Bannerman. The visit of King Edward to Germany in 1906, and of Emperor William to England in the latter part of 1907, did much to secure an amicable understanding between those two powers. The chief event in Great Britain's colonial relations during the year last named was the recognition of the complete autonomy of Australia.

EVENTS OF HUMAN PROGRESS

I. FROM THE CREATION TO THE BIRTH OF CHRIST—B. C.

II. FROM THE BIRTH OF CHRIST TO THE PRESENT TIME—A. D.

Dates and events at the dawn of history are involved in much doubt. At best they are mere approximations and must be interpreted in that light. The Samaritan Pentateuch places the Creation B. C. 4700; the Septuagint, 5872; Josephus, 4658; the Talmudists, 5344; Scaliger, 3950; Petavius, 3984; and Dr. Hales, 5411. The Hebrew account is followed by Usher, and is here followed as the most generally accepted standard.

B. C. FROM THE CREATION TO THE DELUGE—1656 YEARS				
4004	Creation of the World. Fall of Man. Birth of Cain.			
3875	Death of Abel, the first subject of death.	Cain builds a city, which he calls Enoch.	According to Usher, the antediluvian period was almost as long as that since the birth of Christ. Of the progress of knowledge and the arts during that period nothing is known beyond what is recited in the adjacent column, except that ship-building, caulking, and the use of pitch, or paint, simple measures, and of doors and windows, were known. They imply, in their adaptation to the use of man, other arts, and a considerable advance in science and mechanics.	
3874	Seth born, third son of Adam.	He introduces use of weights and measures.		
3769	Enos born.	Polygamy introduced.		
3679	Cainan born.	Jabal, the first to build a tent for habitation, and to use cattle for purposes of husbandry.		
3609	Mahalaleel born.	Jubal invented the harp and the organ, first stringed and wind instruments.		
3544	Jared born.	Tubal-Cain discovered the mode of preparing and using iron, brass, and other metals.		
3382	Enoch born.	Naamah introduced the arts of spinning and weaving.		
3317	Methuselah born.			
3130	Lamech born.			
3074	Death of Adam at age of 930 years.			
3017	Enoch translated.			
2948	Noah born.			
2468	Building of the Ark begun.			
2348	The Deluge.			
FROM THE DELUGE TO TIME OF MOSES				
Arts of Civilization		The Hebrews	Asia	Africa and Europe
2347	Wine made by Noah from the grape.	2347. Dispersion of the descendants of Noah. Those of Shem probably in Asia, of Ham in Africa, and of Japhet in Europe.	2356. Yaou extends the Empire of China.	
2247	Bricks made, and cement used to unite them.	2247. Building of the Tower of Babel.		
2234	Astronomical observations begun at Babylon.	2245. Babylon founded by Nimrod, son of Cush and grandson of Ham. Nineveh founded by Ashur, son of Shem.	2207. China. First imperial dynasty of Hia begins. Fohi (probably Noah) is mentioned as the first Chinese Monarch.	2188. Misraim (Menes), the son of Ham, builds Memphis, in Egypt, and begins the Egyptian monarchy.
2122	Athotes, son of Menes, invents hieroglyphics.		2124. Belus reigns in Babylon.	2111. Thebes founded by Busiris.
2100	Sculpture and painting employed to commemorate the exploits of Osymandyas.			2100. Osymandyas, the first warlike king, passes into Asia and conquers Bactria.
2095	Pyramids and canals in Egypt. Geometry used.			2089. Sicyon, the first Kingdom of Greece, founded by Egialus, or Inachus.
			2069. Ninus, son of Belus, reigns in Nineveh.	2085. Egypt conquered by the shepherd kings of Phenicia, who hold it 260 years.
			2059. Ninus establishes the Assyrian Empire.	2048. Colony of Phenicians land in Ireland (?)
1998	Ching Hong teaches the Chinese the art of husbandry, and how to make bread from wheat and wine from rice.	1996. Abraham born.	2017. Semiramis enlarges and embellishes Babylon, and makes it the seat of empire.	2042. Uramus arrives in Greece.
			1975. Semiramis invades Lybia, Ethiopia, and India.	

FROM THE DELUGE TO TIME OF MOSES—B. C.				
B. C.	Arts of Civilization	The Hebrews	Asia	Africa and Europe
1920	Gold and silver first mentioned as money.	1921. The call of Abraham. 1897. Sodom and Gomorrah destroyed. 1896. Isaac born.	1937. The Arabs seize Nineveh.	1938. Lake Moeris constructed.
1891	Letters first used in Egypt by Syphaos.	1836. Jacob and Esau born. 1824. Abraham dies, aged 172.		1856. Inachus plants a colony in Argos.
1822	Memnon invents the Egyptian alphabet.	1729. Joseph sold into Egypt. 1715. Is made governor under Pharaoh.	1766. The second Chinese Imperial dynasty begins.	1710. Colony of Arcadians emigrate into Italy.
1588	Atlas, the astronomer.	1699. Death of Jacob.		1618. Sesostris reigns in Egypt.
1582	The chronology of the Arundelian marbles begins.	1635. Death of Joseph.		
1580	The cymbal used at the feasts of Cybele.	1577. Israelites persecuted in Egypt. 1574. Aaron born. 1571. Moses born.		1556. Rameses-Miamun, reigns in Egypt. 1556. Athens founded by Ccerops. 1520. Corinth founded. 1516. Sparta founded. 1507. Areopagus established in Athens.
1506	The flute invented by Hyagnis, a Phrygian.		1546. Troy founded by Scamander. The Chinese. Dark Ages.	
1494	Erichoneus teaches the Athenians husbandry.	1491. God sends Moses to Egypt to deliver the Israelites. The Ten Plagues in Egypt. The Exodus of the Israelites from Egypt.	1500. Northern India invaded and conquered by the Aryans between this date and 1000.	1493. Thebes, in Boeotia, founded by Cadmus, a Phœnician, who introduces the alphabet into Greece.
FROM TIME OF MOSES TO TIME OF CYRUS—B. C.				
	Arts of Civilization	The Hebrews	Asia and Africa	Europe
1490	Crockery made by Egyptians and Greeks.	1491. Moses gives the law at Mt. Sinai.	1491. Pharaoh and his army drowned in the Red Sea.	
1486	Erichoneus introduces first chariot.	1453. Death of Aaron. 1451. Death of Moses. Joshua conquers Canaan.	1485. Egyptus reigns and gives name to the country.	1457. Kingdom of Mycene founded. 1453. First Olympic games at Elis.
			1440. Erichoneus reigns in Troy.	1400. Minos reigns in Crete.
			1376. Sethos reigns in Egypt.	1397. Corinth becomes a kingdom under Sisyphus.
1370	Bucklers used in single combat. Music and poetry cultivated in Greece.	1343. Eglon, King of Moab, enslaves Israel.	1374. Troas, King of Troy.	1356. Eleusinian mysteries instituted by Eunolpus.
		1305. Israel subdued by King of Canaan.	1322. Rameses II. (Sesostris) conquers Ethiopia.	
		1285. Deborah and Barak defeat the Canaanites.	1314. Ilus, son of Troas, founds Ilium.	1266. Œdipus, King of Thebes.
1263	Temple of Apollo at Delphi built. Jason leads first naval expedition on record.	1249. Gideon conquers the Midianites.	1252. Second Assyrian dynasty.	1263. Argonautic Expedition of Jason.

FROM TIME OF MOSES TO TIME OF CYRUS—B. C.				
B. C.	Arts of Civilization	The Hebrews	Asia and Africa	Europe
1240	The axe, wedge, wimble, and lever, also masts and sails for ships, invented by Daedalus of Athens.		1240. Troy taken by the Argonauts.	1239. Latinus reigns in Italy.
			1233. Carthage founded by the Tyrians.	1235. Theseus reigns in Athens for 30 years.
1224	Game of backgammon invented by Palamedes of Greece.		1220. Priam, King of Troy.	1225. First Theban War.
		1161. Israel enslaved by the Philistines. Samson born.	1194. The Trojan War begins.	1216. Second Theban War.
		1136. Samson slays 1,000 Philistines.	1140. Tiglath-Pileser real founder of the Assyrian Empire	1213. Helen of Troy carried off by Theseus, marries Menelaus.
			1124. Troy taken.	1152. Alba Longa built by Ascanius.
			1123. Chow dynasty begins in China.	1124. Æolian migration.
1115	Mariner's compass known in China.	1116. Samuel, last Judge of Israel.		Thebes, capital of Bœotia, founded.
1100	Dictionary of Chinese completed by Pao-tou-she.	1095. Saul becomes King of Israel.		1104. Return of the Heraclidæ.
		1085. David born.		End of Kingdom of Mycene.
				1070. Heremon, of Gallicia, conquers Ireland.
		1055. Death of Saul; accession of David.		1060. Athens governed by Archons.
		1048. David King of all Israel.	1044. Ionian emigrants settle in Asia Minor.	
		1042. The Ark removed to Jerusalem.		
		1036. Revolt of Absalom.		
		1023. Solomon born.		
		1016. Death of David.		
1015	Minos gives Crete his code of laws.	1015. Solomon anointed King.		
		1012. Solomon begins the Temple.		
		1004. Dedication of Temple.		
1000	Solomon extends his commerce to India, via Red Sea, and to the shores of the Atlantic, via Straits of Gibraltar; builds Palmyra, Baalbec, and other cities.		1000. Solomon and Hiram, King of Tyre, form an alliance; also Solomon and Pharaoh.	
			986. Utica built. Samos built.	
		975. Death of Solomon. Revolt of the Ten Tribes. Two kingdoms formed.		976. Capys reigns in Alba Longa.
		Judah	Israel	
		971. Shishak, King of Egypt, takes Jerusalem.	975. Jeroboam establishes idolatry.	
			918. Ahab and Jezebel.	
			901. The Syrians besiege Samaria.	
			896. Elijah translated to heaven.	
916	The Rhodians begin navigation laws.			971. Shishak (Sesostus of Egypt) plunders Jerusalem. Homer born (?).
886	Homer's poems brought into Greece.	888. Philistines plunder Jerusalem.		895. Tiberinus, King of Alba, drowned in the river Albula, which is thence called the Tiber.
884	Lycurgus reforms the constitution of Sparta.	884. Usurpation and death of Athaliah.	884. Jehu, King.	
869	Gold and silver coined by Phidon, ruler of Argos.		840. Jehoash defeats King Benhadad of Syria.	864. Romulus, King of Alba Longa.
			825. Dynasty of the Tanites in Egypt.	
			820. Arbaces, King of Assyria.	

FROM TIME OF MOSES TO TIME OF CYRUS—B. C.					
B. C.	Arts of Civilization	Judah	Israel	Asia and Africa	Europe
786	Corinthians employ triremes or vessels with three banks of oars.			797. Ardysus, first King of Lydia.	814. The Kingdom of Macedon founded by Caramus.
772	Sculpture first mentioned among the Egyptian arts.		770. Pul invades Israel, and is bribed to depart.	767. Sardanapalus, King of Nineveh. Media subjected to Assyria.	769. Syracuse founded by Archias of Corinth.
		741. Pekah, King of Israel, besieges Jerusalem, 120,000 of his men slain.		747. Era of Nabonazzar, Assyrian Empire destroyed.	753. Building of Rome.
		726. Hezekiah abolishes idolatry.		737. Sebacon invades Egypt.	750. Sabine War.
721	First eclipse of the moon observed by the Chaldeans at Babylon.	717. Hezekiah, King.	721. Samaria taken by the Assyrians; Tribes carried into captivity.	736. Tiglath-pileser conquers Syria and part of Israel.	747. Union of Romans and Sabines.
	Religion of Buddha introduced in India.			721. Shalmanezar, King of Nineveh, takes Samaria and carries the Ten Tribes into captivity.	743. First Messinian War.
		Hebrews	717. Sennacharib, King of Nineveh.		
		712. Sennacharib invades Judah.	710. Media becomes a kingdom.		
710	Roman Calendar reformed; year divided into 12 months instead of 10 as before.	711. His army (185,000) destroyed by pestilence.			
685	Iambic verse introduced.	696. Manasseh, King.	680. Babylon and Nineveh are united under Esarhaddon.		685. Second Messinian War.
680	Chess invented.				678. Argæus, first King of Macedon.
660	Attempt to discover the primitive language of mankind.	677. Manasseh, carried to Babylon, is afterward restored.	Babylonia	Egypt	672. Tullius Hostilius, King of Rome.
640	Spherical form of the earth and true cause of lunar eclipses taught by Thales, who also discovered the electricity of amber.		648. Saracus, King of Babylon and Nineveh.	660. Psammeticus, King of Egypt. Memphis becomes the capital.	664. First sea-fight on record—between the Corinthians and Coreyreans.
621	Draconian code formulated.		612. Nineveh a second time destroyed.		658. Byzantium founded.
610	Pharaoh-Necho begins a canal between the Mediterranean and Red Sea. Many lives lost in the attempt. He also sent out a Phœnician fleet which circumnavigated Africa.	606. Conquest of Jerusalem by Nebuchadnezzar.	606. Nebuchadnezzar defeats Necho of Egypt, invades Judea and takes Jerusalem.	610. Pharaoh-Necho, King of Egypt.	640. Latins conquered by the Romans.
			604. Nebuchadnezzar, King of Babylon.	600. Psammis, King of Egypt.	Philip I., King of Macedon.
601	Thales prediction of a solar eclipse proves true.	591. Ezekiel prophesies in Chaldea.	599. Birth of Cyrus.		616. Tarquinius Priscus, King of Rome.
594	Solon's code supersedes that of Draco in Athens.	588. Captivity of Judah completed. Jerusalem destroyed and the Temple burnt.	589. Invades Phœnicia.	594. Pharaoh-Hophra, King of Egypt.	602. Illyria conquered by Macedon.
		579. Jews carried to Babylon.		581. Egypt invaded by Nebuchadnezzar.	594. Solon, Archon of Athens.
578	Money coined at Rome by Servius Tullius.				578. Servius Tullius, King of Rome.

FROM TIME OF MOSES TO TIME OF CYRUS—B. C.					
B. C.	Arts of Civilization	Persia	Babylonia	Egypt	Europe
568	School of sculpture opened at Athens.		572. Takes Tyre.	569. Amasis, King of Egypt, makes alliance with Greece.	567. Conquest of the Etrurians by Rome.
562	First comedy acted at Athens.	560. Cyrus, King of Persia.	562. Croesus, King of Lydia, subjects Asia Minor.	536. Pythagorus visits Egypt.	565. First census of Rome; 84,700 citizens.
540	Dials invented by Anaximander of Miletus.	548. Cyrus conquers Lydia.	538. Babylon taken by Cyrus, the Persian.		539. The Phocians emigrate to Gaul and build Massilia (now Marseilles).
535	Corinthian order of architecture invented by Calimachus.	538. Takes Babylon.		535. Made tributary by Cyrus.	
	Thespis performs first tragedy at Athens.	536. Persian Empire founded by Cyrus, composed of Assyria, Media, and Persia.			528. Thrace comes into view.
		535. Temple rebuilt at Jerusalem.			
		529. Death of Cyrus; Cambyes, King of Persia.			
FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.					
	Arts of Civilization	Persia	Greece	Macedonia	Rome, Etc.
527	First public library founded at Athens.	525. Cambyes conquers Egypt and makes it a Persian province.	527. Pisistratus dies, after seizing Athens.		530. Cadiz built by the Carthaginians.
522	Confucius, the Chinese philosopher.	522. Darius I., King of Persia.			
509	Abolition of regal government at Rome, and establishment of a Republic at Rome.	508. Darius conquers India.	510. Followers of Pisistratus expelled; Democracy established at Athens.		509. The Tarquins expelled from Rome.
500	Phenician letters carried to Ireland from Spain.	500. The Ionians revolt and burn Sardis.			Brutus and Collatinus first Consuls.
	The Temple of Minerva built.	490. Darius sends an army of 500,000 into Greece.	490. Battle of Marathon.	497. Alexander I., King.	507. The Capitol finished.
483	Etrurians excel in music, drama, and architecture.	487. Egypt revolts — is subdued by Xerxes.	483. Aristides banished.		494. Tribunes of the people chosen.
		486. Xerxes, King of Persia.			491. Coriolanus banished.
		481. Expedition of Xerxes into Greece; destroys Athens.	480. Battle of Thermopylae.		
		479. Returns defeated.	480. Battle of Salamis and defeat of Persians.		480. Carthaginians defeated.
			479. Battle of Plataea; Persian fleet destroyed at Mycale.		Hamilcar killed in battle.
			476. Themistocles rebuilds Athens.		
		465. Xerxes assassinated. Artaxerxes I., King.	465. Third Messinian War.		
460	Voyage of the Carthaginians to Britain for tin.	456. Esther.	461. Pericles impresses himself upon Greek affairs.		460. Cincinnatus, Consul.
		449. Persians defeated at Salamis.			

FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.					
B. C.	Arts of Civilization	Persia	Greece	Macedonia	Rome, Etc.
441	The battering ram invented.	445. Jerusalem rebuilt by Nehemiah. 440. Siege of Samos by Pericles.	457. Long walls of Athens begun. 431. Peloponnesian War. 429. Death of Pericles, having governed Athens 40 years. 416. War with Sicily. 411. Athens governed by the "400." Alliance of Sparta with Persia. 408. Capture of Byzantium.	413. Archelaus, "Patron of Learning," seizes the throne.	456. Cincinnatus, Dictator. 451. Laws of the 12 tables. 413. Egypt regains independence. 411. Roman famine.
399	Catapults invented by Dionysius.	401. Cyrus the Younger defeated. Retreat of the 10,000 under Xenophon. 400. Delhi founded.	400. Return of the 10,000.	399. Archelaus murdered. 392. The Illyrians invade Macedonia, and possess the throne.	407. Carthaginians War on Sicily.
380	Treatise on conic sections by Aristæus.	387. Greek cities of Asia made tributary to Persia.			390. Rome destroyed by the Gauls. 376. War between patricians and plebians. Lucius Sextus first plebian consul.
368	A celestial globe brought into Greece from Egypt.		370. Predominance of Thebes.		371. Curule magistrates appointed.
360	Philippicus of Demosthenes delivered.		360. War of the Allies against Athens. Decline of Grecian republics.	360. Philip II., King; he institutes the Macedonian phalanx; defeats the Athenians.	369. Military tribunes abolished.
			356. Second Sacred War.	356. Philip II. conquers Thrace and Illyria. Birth of Alexander the Great.	
343	Aristotle writes his philosophical works.	344. Aristotle visits Mitylene.	344. Philip subdues Sparta.	341. War against the Athenians. Siege of Byzantium.	343. Samnian War, continued 53 years.
		338. Royal family destroyed with poison.	339. War with Macedonia.	338. Philip master of Greece.	340. War with the Latins.
336	Eclipses calculated by Calippus, the Athenian.	336. Darius III., King.	336. Philip slain.	338. Athenians and Thebans defeated at Charonea. 336. Philip assassinated by Pausanias; Alexander III., surnamed the Great, succeeds to the throne.	337. First plebian prætor.

FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.					
B. C.	Arts of Civilization	Persia	Greece	Macedonia	Rome, Etc.
335	Caustic art invented.	334. Alexander the Great invades Persia. (See under Macedonia.) 331. Darius III. murdered. Alexander founds the Grecian or Macedonian monarchy. Battle of Arbela.	335. Greeks conquered by Alexander the Great. Thebes destroyed. 332. Egypt conquered by Alexander, and Alexandria built.	335. Enters Greece, conquers Greeks, and succeeds to head of army against Persians. 334. Invades Persia. Defeats Darius at Granicus. 333. Battle of Issus.	332. Caledonian monarchy (Scotland) founded by Fergus I. Roman treaty with Alexander the Great.
328	Voyage of Nearchus from the Indies to the Euphrates.	330. Eschines, the orator, banished. 327. Alexander invades India. 325. Demosthenes banished. 323. Ptolemy I. restores the independence of Egypt. Alexander the Great dies in Babylon. The Grecian cities revolt from Macedonia, and in 321 Antipater becomes Regent of Greece. Persia was reconquered from the Greeks, and remained tributary to Parthia till about A. D. 250.			327. Second Samnite War.
FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.					
	Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea
320	First work on mechanics written by Aristotle.	321. Roman army surrenders to the Samnites. 320. Samnites defeated at Luceria.		319. Poly-sperchon succeeds Antipater, and proclaims liberty to the Grecian cities.	320. Ptolemy I. carries 100,000 Jews into Egypt.
317	Commerce of Macedon with India, through Egypt.	317. Syracuse and Sicily usurped by Agathocles.	317. Cassander assumes the throne of Macedon.	317. Demetrius Phalerius governs Athens. 315. Cassander rebuilds Thebes.	
312	The Appian Way constructed.	312. War with the Etruscans.		312. Pyrrhus II., greatest hero of his time.	312. Seleucus I. retakes Babylon.
310	Aqueducts and baths in Rome.			306. Democracy established at Athens by Demetrius.	
300	Euclid, the celebrated mathematician. The great Chinese Wall.		296. Philip IV.	294. Demetrius murders Alexander and seizes throne of Macedon.	301. Battle of Ipsus, Alexander's empire divided anew into four parts: Syria, Macedon, Greece, Egypt.
293	Sun-dial erected at Rome, and time divided into hours.				301. Phenicia united to Egypt. 300. Golden Age of the Ptolemies.
290	Fabius introduces painting at Rome. The Colossus of Rhodes built by Chares.	286. Law of Hortensius, by which the decrees of the people had the force of those of the senate.	286. Lysimachus, King of Thrace, subjects Macedonia.		291. Seleucus founds Antioch, Edessa, and Laodicea. 283. Death of Soter.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.						
B. C.	Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea	Egypt, Carthage
285	Dionysius founds the solar year, to consist of 365 days, 5 hours, and 49 minutes.		287. Lysimachus reigns.		285. The Scythians invade Bosphorus.	283. Ptolemy Philadelphus, King of Egypt.
284	The Septuagint begun at Alexandria.			284. The Achæan Republic.		
283	The Pharos built at Alexandria first light-house on record.	281. The Tarentine War.	279. Irruption of the Gauls. 277. Reign of Antigonus. 274. Pyrolus invades Macedonia, defeats Antigonus, and is proclaimed King. 272. Antigonus restored.		281. Antiochus Soter succeeds Seleucus.	
267	Ptolemy makes a canal from the Nile to the Red Sea.	266 Rome mistress of all Italy.	268. Second incursion of the Gauls.	268. Athens taken by Antigonus.	262. Invasion of the Gauls.	269. Egypt first sends ambassadors to Rome.
266	Silver money first coined.	264. First Punic War.	250. Parthia revolts from Macedon.	255. Athens joins the Achæan League.	246. Antiochus II. poisoned by his wife. 226. Seleucus III., King of Syria.	246. Ptolemy Eurgetes subdues Syria.
224	Archimedes makes known his discoveries in mechanics.	241. End of first Punic War. 225. The Gauls repulsed in Italy.				221. Ptolemy Philopater, King.
219	Art of surgery introduced.	219. Hannibal takes Saguntum, and crosses the Alps. 218. Second Punic War. Hannibal defeats the Romans at Ticinus and Trebia. 216. Varro at Cannæ totally defeated by Hannibal.	220. Philip assists the Achæans.	220. The Social War begins.	219. War with Ptolemy.	
206	Gold coined at Rome.	206. Carthaginians driven out of Spain. 204. Scipio carries the war into Africa.	211. Alliance of Philip and Hannibal.	206. Spartans defeated at Mantinea.	211. Antiochus the Great, King of Syria. 203. Judea conquered by Antiochus.	205. Ptolemy Epiphenes, King. 204. Roman general Scipio defeats Asdoubal and Syphax of Carthage.
202	Art of printing known in China.	202. Hannibal defeated at battle of Zama. End of war.				202. End of Second Punic War.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.							
B. C.	Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea		Egypt, Carthage
198	Books, with leaves of vellum, introduced by Attalus, King of Pergamus.	200. Second Macedonian War. 188. Syria is made a Roman province.	199. Second War with Rome. 179. Reign of Perseus. 171. Third War with Rome.	198. Achæans and Spartans join the Romans against Macedon.	198. Jews assist Antiochus in expelling the Egyptian troops from Jerusalem. 196. Hannibal joins Antiochus. 190. Scipio Asiaticus defeats Antiochus at Magnesia. 187. Antiochus killed. Syria becomes temporarily a Roman province.		198. Egypt loses her Syrian possessions.
170	Paper invented in China.	170. Tiberius and Caius Gracchus.	168. Macedonia becomes a Roman province.		Syria 185. Seleucus IV., King. 172. Antiochus IV., King. Greatly hated by the Jews.	Judea 170. Jerusalem plundered by Antiochus Epiphanes.	180. Ptolemy Philomater, King. 174. Cato's embassy to Carthage.
167	First library opened in Rome.	167. Census of Rome, 327,000 citizens.					
162	Hipparchus fixes the first degree of longitude and latitude; founds trigonometry.			165. Romans enter Achaia.		165. Judas Maccabeus expels the Syrians.	
159	Clepsydra invented by Scipio Nasica.	155. Romans unsuccessful in Spain.				161. Treaty with Romans.	152. Massinissa defeats the Carthaginians.
146	Alexandria the center of commerce.	149. Third Punic War. Conquest of Carthage and Corinth. Greece annexed to the Roman Empire.		146. Corinth destroyed by the Romans. Greece becomes a Roman province under the name Achaia.	142. Antiochus VI., King. 134. Invasion of Judea.		151. Joint reign of Philomater and Physcon in Egypt. 146. Carthage taken and destroyed by the Romans. 145. Ptolemy Physcon becomes sole King of Egypt.
140	Clock wheels invented by Ctesibius.						
133	Equestrian order a distinct class.	133. Spain becomes a Roman province.					
130	Revival of learning in China.				130. Conquered by Parthia. 129. Regained by Demetrius II.	130. John Hyrcanus delivers Judea from Syria.	129. Physcon driven from his throne for cruelty.
120	Theory of eclipses known to Chinese.	123. Caius Gracchus, Tribune.					128. Pestilence in Egypt. 123. Carthage rebuilt. 116. Ptolemy Lathyrus, King of Egypt.
		113. First great migration of the German nations.					

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.					
B. C.	Arts of Civilization	Rome, Etc.	Syria	Judea	Egypt, Carthage
110	First sumptuary law at Rome.	104. Teutoni defeat 80,000 Romans on banks of the Rhone.			107. Alexander I., King of Egypt.
98	Roman schools of oratory on Greek models instituted.	99. Birth of Julius Cæsar.	97. Mithridates conquers Capodocio.	105. War with Egypt.	
86	Libraries of Athens sent to Rome by Sylla.	91. Social War in Italy.	86. Takes Bythinia.		82. Revolt in Upper Egypt. Thebes destroyed.
79	Posidonius calculates the height of the atmosphere.	88. War with Pontus.		79. Alexandra, Queen of Janneus, governs Judea.	81. Alexander II., King of Egypt.
74	The Romans possess gold mines in Asia Minor, Macedonia, Sardinia, and Gaul; and silver mines in Spain.	75. Bythinia a Roman province.			
62	Magnificent houses for Roman nobles erected. Also marble theater of Scæurus to hold 30,000 spectators.	65. Syria becomes a Roman province. Cicero, Consul.	66. Defeated by Pompey, Syria passes under Rome.	63. Judea a Roman province.	65. Ptolemy Auletes, King.
55	Iron chain cables used by the Venetians.	63. Cataline's conspiracy detected and suppressed by Cicero.			55. Auletes restored.
50	A water mill erected on the Tiber at Rome.	60. First triumvirate — Pompey, Crassus, and Cæsar.			46. The African War.
47	The Alexandrian library burnt — 400,000 volumes.	55. Cæsar passes the Rhine, defeats the Germans and Gauls, and invades Britain.			45. Cæsar rebuilds Carthage.
45	Cæsar reforms the calendar by introducing the solar for the lunar year.	53. Crassus defeated and killed in Parthia.			43. Cleopatra poisons her brother and rules alone.
30	Direct trade of Rome with India. Silk and linen factories in the Empire.	51. Cæsar completes conquest of Gaul, which becomes a Roman province.			36. Cleopatra obtains from Antony a grant of Phenicia, Cyrene, and Cyprus.
27	Treasures of Egyptian art brought to Rome. The Pantheon built.	49. Civil War between Cæsar and Pompey. Pompey defeated; Cæsar, Dictator.			31. Defeat at Actium.
22	Pantomimic dances introduced on the Roman stage.	48. Battle of Pharsalia — Pompey defeated by Cæsar. Death of Pompey in Egypt.			30. Suicide of Antony and Cleopatra.
19	Aqueducts constructed by Agrippa.	47. Cæsar takes Alexandria and conquers Egypt.			30. Egypt passes to Rome.
		44. Cæsar assassinated in Roman Senate. Antony master of Rome.			
		43. Second triumvirate — Octavius Cæsar, Marc Antony, and Lepidus.			
		42. Battle of Philippi; defeat and death of Brutus and Cassius.			
		32-31. War between Antony and Octavius. By the battle of Actium (31), Octavius acquires the Empire.			
		30. Republic of Rome becomes a monarchy. Population of Rome, 4,100,000 citizens.			
		27. Titles of Augustus and Emperor conferred on Octavius for ten years.			
		23. Agrippa subdues all Spain. 21. Athens finally subjected to Rome.			
		19. Death of Virgil. 18. Parthians defeated.			

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.			
B. C.	Arts of Civilization	Rome, Etc.	
12	Roman legions distributed over the provinces in fixed camps which soon grew into cities—among them were Bonn and Mayence.	15. Cantabria, Austria, and other territory conquered by Drusus, is added to the Empire. 13. Augustus assumes the title of Pontifex Maximus.	
8	Calendar corrected by Augustus.	11. Germany subdued by Germanicus. 5. Varrus appointed Governor of Syria, and Cyrenius Governor of Judea.	
4	Birth of Jesus, at Bethlehem, in Judea. (According to the chronology of Usher.)	10. Egyptian religion displaces national religion.	
B. C.		4. Cymbelene, King of Britain. Advent of Christ, four years before the so-called Christian Era. 3. Death of Herod. 2. Cæsar confirms the will of Herod.	
FROM THE CHRISTIAN ERA TO THE FALL OF ROME—A. D. 1-476			
A. D.	Arts of Civilization	Development of Christianity	The Roman Empire
9	Celsus advances the science of medicine.	8. Jesus reasons with the doctors.	1. Caius Cæsar makes peace with the Parthians. Tiberius returns to Rome. 6. Varrus, encamped on the Weser, governs lower Germany like a Roman province.
26	The Druids in Germany.	25. Pontius Pilate, Governor of Judea. 26. John the Baptist begins his ministry. 27. Jesus baptized by John. 29. Twelve Apostles sent abroad. 30. Crucifixion of the Saviour, Friday, April 3, at 3 P. M. 34. St. Paul converted to Christianity.	14. Augustus dies at Nola; is succeeded by Tiberius as Emperor. 19. The Jews are banished from Rome.
37	Appion of Alexandria writes on grammar.	40. Disciples first called Christians at Antioch.	26. Thrace becomes a Roman province.
50	Columella, born in Spain, writes on husbandry.	41. Herod's persecutions. 50. Paul preaches at Athens.	37. Tiberius succeeded by Caligula, noted for his profligacy.
64	Nero's golden palace built—of great extent.	59. Paul appeals to Cæsar. 60. Paul imprisoned in Rome. 64. First persecution of Christians by Nero. Paul visits Jerusalem. 66. Jews at war with Romans; Paul beheaded. 70. Destruction of Jerusalem, by Titus.	48. Census of the city, 6,900,000. 54. Nero, Emperor; a profligate and tyrant.
78	The Capitol at Rome rebuilt.		61. Revolt of the Britons under Queen Boadicea.
80	Circumnavigation of Scotland.		64. Nero sets fire to Rome; accuses Christians.
	Paintings executed for the baths of Titus; the group of the Laocoon.	95. Second persecution of the Christians by Domitian.	77. A great plague at Rome, 10,000 dying in one day. 79. Pompeii and Herculaneum destroyed by Vesuvius. 80. Agricola governs Britain, reduces Wales and enters Caledonia.

FROM THE CHRISTIAN ERA TO THE FALL OF ROME—A. D.			
	Arts of Civilization	Development of Christianity	The Roman Empire
98	The Ulpian library. Jurisprudence flourishes. Forum built.		98. Trajan, Emperor; Roman Empire at its greatest extent.
	Pillar of Trojan, and Baths.	107. Third persecution by Trajan.	100. The Huns migrate westward.
	Bridge built over the Danube.	118. Fourth persecution by Adrian.	117. Adrian, Emperor; makes a journey through the provinces; visits Britain and builds there a wall from the Tyne to Solway Firth; builds a wall from the Rhine to the Danube.
120	Great buildings of Palmyra.		
132	The Roman mosaics. Ptolemy, celebrated Egyptian astronomer and geographer.	134. Heresy of Marcion.	138. Antoninus, Emperor; 145-152, defeats the Moors, Germans, and Dacians; stops the persecution of the Christians.
		150. Canon of Scriptures fixed about this time.	161. Marcus Aurelius, Emperor; 169, war with Marcomanni.
180	Equestrian statue of Marcus Aurelius.		189. The Capitol of Rome destroyed by lightning. The Saracens defeat the Romans.
215	Caracalla grants right of Roman citizenship to all the provinces.	202. Fifth persecution under Severus.	193. Septimus Severus, Emperor. A vigorous ruler.
235	Alexandrian School of Philosophy founded.	235. Sixth persecution under Maximinus.	194, besieges Byzantium; 202, persecutes the Christians; builds the wall of Severus in Britain; 211, dies at York, in Britain.
		250. Seventh persecution of the Christians.	223. Artaxerxes begins the new kingdom of Persia.
			232. Persian War.
			241. The Franks first mentioned in history.
			251. Confederacy of the Franks established between the Rhine and Elbe.
			The Persians victorious in Asia Minor.
			256-69. Goths conduct expeditions into Asia Minor and Greece.
			261. Sapor, the Persian, takes Antioch, Tarsus, and Caesarea.
		262. Paul, bishop of Samosata, denies the divinity of Jesus Christ.	264. Alliance with Odenatus, King of Palmyra, who is succeeded by his wife Zenobia, who reigns with the titles of "Augusta" and "Queen of the East."
			268. Claudius II. defeats an army of 320,000 Goths.
			270. Aurelian, a great warrior, becomes Emperor;
			271, defeats the Goths and Alemanni; 273, reduces Palmyra, and takes Queen Zenobia prisoner; 274, Franks, Spain, and Britain reduced to obedience; 275, Aurelian killed near Byzantium.
274	Rome surrounded with a wall.	272. Persecution of Christians under Aurelian.	277. Probus, Emperor; 280, defeats the Persians.
			284. Diocletian, Emperor. Sends ambassadors to China, 296.
284	Diocletian's Oriental form of government. Diocletian's Baths.	283. The Jewish Talmud composed.	
		Religious ceremonies multiplied.	
290	The Gregorian Code.	Pagan rites imitated by the Christians.	291. The Franks master Batavia and Flanders.
		296. Monks in Spain and Egypt.	
		303. Persecution under Diocletian.	304. Diocletian and Maximian resign the empire to Constantius and Galerius.
		306. Persecution of Christians stopped by Constantius.	306. Constantine the Great, first Christian Emperor, defeats the Franks.
323	Church of St. Sophia erected at Constantinople.	325. Council of Nice.	
330	Constantinople a seat of art and literature.		331. Constantine orders all the heathen temples to be destroyed.
		337. Eleventh persecution.	337. Death of Constantine, and the accession of his three sons to the empire.
			364. Death of Jovian, and the accession of Valentinian and Valens, under whom the empire is divided.
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FROM THE CHRISTIAN ERA TO THE FALL OF ROME—A. D.				
A. D.	Arts of Civilization	Development of Christianity	Western Empire	Eastern Empire
392	Impulse given to the development of mathematics at Alexandria.	<p>379. Prerogatives of the Roman See much enlarged.</p> <p>381. Second general Council of Constantinople.</p> <p>384. Symachus pleads in the Roman Senate for Paganism against St. Ambrose.</p> <p>392. St. Chrysostom, Patriarch of Constantinople.</p> <p>416. The Pelagian heresy condemned.</p>	<p>379. The Lombards first leave Scandinavia, and defeat the Vandals.</p> <p>392. Theodosius becomes sole Emperor of the East and West.</p> <p>Complete downfall of Paganism.</p> <p>394. Final division of empire between the sons of Theodosius.</p> <p>401. Europe overrun by the Visigoths.</p> <p>406. Vandals allowed to settle in Spain and Gaul.</p> <p>410. The Goths under Alaric sack and burn Rome.</p> <p>412. Rise of the Vandal power in Spain.</p> <p>413. Burgundian Kingdom begun in Alsace.</p> <p>420. The Franks form a kingdom, under Pharamond, on the lower Rhine.</p> <p>424. Valentinian III., Emperor.</p> <p>426. Britain evacuated by the Romans.</p> <p>428. Romans defeated by the Franks and Goths. Franks, under Clodion, extend their conquests.</p> <p>433. Attila forms an immense Empire from China to the Atlantic.</p> <p>439. The Vandals, under Genserich, form Kingdom of Africa, take Carthage and plunder Italy.</p> <p>441. Roman territories invaded by the Huns, Persians, and Saxons.</p> <p>445. Famous embassy from Britain soliciting aid against the Picts.</p> <p>448. Meroveus I., first King of the Merovingians.</p> <p>451. Arrival of Saxons in Britain under Hengist and Horsa.</p> <p>452. City of Venice founded.</p> <p>458. Franks, under Childeric I., conquer as far as the Loire and take Paris.</p> <p>468. The Visigoths under Eric establish their kingdom in Spain.</p> <p>476. Odoacer, King of the Heruli, takes Rome, and the Western Empire ends 1228 years after the founding of the city. Commencement of the Kingdom of Italy under Odoacer.</p>	<p>379. Theodosius the Great becomes a zealous supporter of Christianity.</p> <p>388. Theodosius defeats Maximus, the Tyrant of the Western Empire.</p> <p>408. Theodosius II., a child, Emperor.</p> <p>414. Regency of the Emperor's sister, Pulcheria.</p> <p>420. Persian War.</p> <p>431. Armenia divided by the Persians and Romans.</p> <p>433. A great part of Constantinople destroyed by fire.</p> <p>437. Pannonia, Dalmatia, and Noricum gained from the Western Empire.</p> <p>450. Marcian, Emperor, refuses to pay tribute to the Huns.</p> <p>457. War with the Goths.</p> <p>461. Peace with the Goths.</p> <p>474. Zeno, Emperor; a turbulent reign marked by debauchery and conspiracies.</p> <p>475. Theodoric becomes chief of the Ostrogoths and invades the empire.</p>
425	Theodosius establishes public schools and attempts the restoration of learning.	<p>431. Third general Council at Ephesus.</p> <p>432. St. Patrick preaches the gospel in Ireland.</p> <p>435. Nestorianism prevails in the East.</p> <p>443. The Manichæan books burned in Rome.</p> <p>447. Eutyches asserts the existence of only one nature in Jesus Christ.</p> <p>451. Fourth general Council at Chalcedon.</p>		
435	Theodosian Code published.			
468	The principle of law established that the accused shall be tried by his peers, or equals.	<p>465-476. Oligarchy of the bishops of Rome, Constantinople, Alexandria, Antioch, and Jerusalem.</p> <p>The Church now begins to assume a political aspect.</p>		
476	Odoacer's sack of Rome changed the course of events in Europe. The form of the old Roman government remained, but Italy, ravaged by a succession of wars, plagues, famines, and every form of public tyranny, was almost a desert.			

A. D.	FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE—A. D. 476-841				
	Arts of Civilization	The Eastern Empire	Great Britain and Ireland	Italy and the Church	France
486	Rise of the feudal system in France, under Clovis.	480. An earthquake destroys greater part of Constantinople.		484. Christians persecuted by the Vandals.	481. Clovis I., founder of the French monarchy. 485. Battle of Soissons gained by Clovis.
493	Theodoric introduces Greek architecture into Italy.	491. The Green and Blue factions.	487. The Saxons defeated by Prince Arthur. 490. Sussex becomes a kingdom.	493. Italy conquered by Theodoric. Odoacer put to death. 494. The Roman Pontiff asserts his supremacy. 496. Christianity introduced into France.	491. Clovis subduces Thuringia.
511	The Salic law in France.	502. Invasions by the Persians. 511. Great insurrection in Constantinople.			510. Clovis makes Paris his capital.
514	Use of the burning glass in warfare.	514. Constantinople besieged by Vitalianus, whose fleet is consumed by the burning glass of Proclus.			
516	The Christian Era proposed and introduced by Dionysius, a monk.	518. Justinian I. begins a brilliant reign over the Eastern or Byzantine Empire. 527. Celebrated Justinian code of laws.	519. Prince Arthur defeated by Cerdic, who begins the third Saxon Kingdom of Wessex.		
529	The schools of Athens suppressed.	529. Belisarius, the famous general, defeats the Persians. 534. Defeats the Vandals in Africa. 535. Subdues Sicily. 536. Takes Naples. 537. Takes Rome.	530. Kingdom of Essex.	529. Order of the Benedictine Monks instituted at Monte Cassino, near Naples.	532. Burgundy conquered by Childebert.
551	Manufacture of silk introduced from China into Europe by monks	540. North Africa, Corsica, and Sardinia annexed to the Eastern Empire. 548. The Turkish monarchy founded in Asia. 554. Italy governed by Greek Exarchs.	542. Prince Arthur murdered in Cornwall.	537. Italy conquered by Belisarius, for Justinian. 539. War, famine, and pestilence. Milan ravaged by the Goths.	536. Ostrogoths surrender their possessions in Gaul to the French King.
550	The Saxon laws promulgated. The king's authority limited by the Wittenagemot. Three orders: the noble, the free, and the servile.	558. A plague extends over Europe and Asia and lasts about 50 years.	550. Saxon Heptarchy begins.		557. Church of St. Germain de Pres built at Paris. 558. Clotaire I., King.
568	The feudal system established in Italy by the Lombards. Written laws compiled by the Visigoths in Spain.	569. The Turks first mentioned in history. They send an embassy to Justin II. and form an alliance.		568. Italy conquered by the Lombards.	

FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE—A. D. 476-841					
A. D.	Arts of Civilization	The Eastern Empire	Great Britain and Ireland	Italy and the Church	France
580	Latin language ceases to be spoken in Italy, and supersedes the Gothic in Spain.		575. East Anglia formed into a kingdom, whence the origin of the name England.	575. First monastery built in Bavaria.	583. Clotaire II., King.
597	England relapses into semi-barbarism, after Saxon conquest. The aristocracy acquire great power in France. Rites and superstitions increase all over Europe.	600. Eastern Empire spread over Hungary, Poland, and Prussia, under Tiberius II. 602. Invasion of the Persians.	591. Ethelbert, King of Kent, gains the ascendancy. 604. St. Paul's Church founded by Ethelbert of Kent.	590. Mass introduced. 598. St. Augustine, first archbishop of Canterbury, introduces Christianity into Britain.	
617	Ethelbert publishes the first code of laws in England.	610. Heraclius takes Constantinople, kills Phocas, the Emperor, and makes himself King. 612. Mahomet publishes the Koran. Syria ravaged by the Arabs.	607. Supremacy of the Pope acknowledged.	607. The Pantheon of Rome dedicated to Christianity.	628. Dagobert I. builds the Church of St. Denis, the sepulture of the French kings. 638. Kingdom divided by Clovis II. and Sigebert, the latter King of Austrasia.
632	Islamism and the power of the Caliphs established in the East. In the Caliphs were united the highest spiritual and regal authority.	614. Jerusalem taken by the Persians. 622. The Hegira, or Mahomet's flight from Mecca to Medina. 632. Death of Mahomet. 633. Omar, Caliph, takes Jerusalem, which is held by the Saracens 463 years.	617. St. Peter's (now Westminster Abbey) founded by Sæbert, King of Kent. 633. Bretwold V. embraces Christianity.	625-40. Churches of Jerusalem, Antioch, and Alexandria lost to the Christian world by the sweep of Mohammedanism.	
674	Stone buildings and glass come into use in England. The Anglo-Saxons advance in civilization and power by the introduction of Christianity. In France, the Teutonic language supersedes the Latin. National assemblies established but confined to the aristocracy. In Persia the Magian religion gives place to the Mohammedan.	673. Siege of Constantinople by the Saracens, whose fleet is destroyed by the Greek fire of Callinicus. 680. Kingdom of Bulgaria founded.	690. The name England first used.	680. The Sixth general Council called at Constantinople.	
698	Christianity greatly extended among the German nations in the North of Europe; but almost exterminated in Africa by the progress of Mohammedanism.	698. Carthage destroyed by the Saracens, and the north coast of Africa subjugated. 709. All Africa subdued by the Saracens.	700. Anglo-Saxon Octarchy. 705. Alfred the Wise in Northumbria.	698. Piets adopt Christianity. 704. The first province given to the Pope, John VI.	
716	The art of making paper introduced by the Arabs.	716. Leo III., Emperor. The Saracens invest Constantinople, by land and sea. City saved by Greek fire.	727. Ina, King of Wessex, begins collection of Peter's pence to support a college at Rome.	726. The Emperor Leo forbids image worship	695. Childebert, III., King of Neustria. 700. Aquitaine, Burgundy, and Provence become separate dukedoms. 714. Charles Martel, Duke of Austrasia. 725. Charles Martel subdues Bavaria.

A. D.	FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE—A. D. 476-841				
	Arts of Civilization	The Eastern Empire	Great Britain and Ireland	Italy and the Church	France
740	Saracens encourage learning. Ignorance, profligacy, and misery characterized the age preceding Charlemagne.	746. Saracens defeated by Constantine V.	735. Death of the venerable Bede.	752. The Pope de-thrones Childeric, King of France, by a papal decree. Pope Stephen III. at war with the Lombards. 755. Beginning of the Pope's temporal power.	732. Defeats the Saracens at Tours. 752. End of Merovingian line of French kings. Pepin, the Short, first of the Carolingian line. 764. Extirpates the Huns.
785	Golden period of learning in Arabia under the Caliph Haroun al Raschid.	762. Caliph Almanzor builds Bagdad and makes it his capital. 766. Asia Minor ravaged by the Turks. 785. Empire invaded by Haroun al Raschid, Caliph of Bagdad.	787. First recorded invasion of the Danes—the Sea Kings and Vikings.	787. Seventh general Council of Nice.	
788	Pleadings in courts of justice first practiced.				
793	Foundation of schools in monasteries and cathedrals by Charlemagne.				791-96. Establishes the margravate of Austria.
800	Agriculture and horticulture encouraged by Charlemagne; both flourish in Spain under the Caliphs.			800. The Pope separates from the Eastern Empire and becomes Supreme Bishop of the Western.	800. Charlemagne founds the New Western Empire and is crowned at Rome King of Italy, Germany, and France.
802	Arabian horses introduced into Spain.	803. The Saracens ravage Asia Minor.		Charlemagne reforms the Church. Many bishoprics founded.	802. Receives an embassy from Haroun al Raschid.
813	Transient revival of learning under Charlemagne. The reign of Caliph Mamun the golden epoch of Arabian literature.		813. Egbert, King of Wessex, defeats the Britons.	817. College of Cardinals founded.	806. Charlemagne divides the empire among his sons, only one of whom survived him—Louis I. 817. Louis I. divides the empire.
828	St. Mark's Church at Venice built.	822. Constantinople besieged by the Saracens. The Bulgarians raise the siege. 829. Theophilus, Emperor.	827. The seven kingdoms of Heptarchy united by Egbert under the name of England or the land of the Angles. Invasion of the Danes.	824. Christianity carried to Denmark and Sweden.	
840	Feudal system in its power.		838. Ethelwolf, King. Kenneth, King of the Scots, defeats and extirpates the Picts, and becomes sole monarch of Scotland.		841. Another division of the empire. Charles I., King of France; Louis I., King of Germany; Lothaire, King of Italy.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453			
	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
841	Hereditary nobility and the clergy dominant in matters of state.	844. Ignatius, Patriarch of Constantinople. Persecution of the Christians in Spain. 846. The Saracens destroy the Venetian fleet and besiege Rome.	844. Decline of the Caliphate begins. Frequent wars between the Greeks and the Saracens.	849. Alfred the Great born.
850	Roman and Common Law introduced.	850. Christianity propagated in Denmark and Sweden. 858. Nicholas I. first Pope to be crowned. 860. Schism of the Greeks begins.		
		864. Bible translated into Slavonian. 867. Eighth Council at Constantinople.	867. Basil inaugurates the Macedonian dynasty.	867. The Danes conquer Northumberland.
872	Clocks exported from Venice.		886. Leo VI., Emperor.	872. Alfred the Great defeats the Danes.
890	Oxford University founded by Alfred the Great. Trial by Jury; fairs and markets in England.		890. Southern Italy subject to the Greek Empire.	891. Renewed invasion of the Danes.
900	England divided into counties, hundreds, and tithings. County courts established.		904. Russian expedition under Oleg against Constantinople.	901. Edward the Elder the first to take the title of "Rex Anglorum."
		912. The Normans in France embrace Christianity.		
915	University of Cambridge founded.	921. The Bohemians adopt Christianity. 929. Eudes, monk of Cluni.	917. Constantinople besieged by the Bulgarians. 919. Romanus, general of the fleet, usurps the empire and places his son, Constantine VIII., on the throne.	916. Agriculture at a low ebb.
939	Cordova, in Spain, becomes famous as a center of science, learning, industry, and commerce.		937. Romanus gains a naval victory over the Russians.	934. Athelstan, King.
940	Mints established in England.			
941	The figures of arithmetic brought into Europe by the Saracens. Linens and woolens manufactured in Flanders.	955. Baptism of Olga, and conversion of Russia to Christianity.	945. The Empress Helen usurps the throne.	952. Malcolm I., King of Scotland. 955. Dunstan, Abbot of Glastonbury, rises to great power.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
841	Charles I. (the Bald), King.	841. Louis I., King.	842. Ramiro I. elected King of Oviedo.		846. The Saracens destroy the Venetian fleet and besiege Rome.
858	Invasion of Louis the German, who is defeated.	856. Louis II. establishes his court at Pavia, and rules Italy.	857. Garcia Ximenes founds the Kingdom of Navarre.		860. Gorm united Jutland and the Danish Isles and becomes King of Denmark. 861. Iceland discovered.
868	Lorraine annexed to France.			862. Ruric the Norman, Grand Duke of Novgorod.	
885	Paris besieged by the Normans.	879. Louis III. and Carloman reign jointly. 887. Arnold, Emperor.	873. Sancho Inigo, Count of Navarre.		875. Harold, first King of Norway.
898	Charles III., King.	890. Arnold takes Rome. 899. Invasion of the Hungarians.			889. Arpad lays the foundation of Hungary.
912	The Normans, under Rolla, establish themselves in Normandy.	912. Conrad I., Emperor.	910. Kingdom of Leon founded by Garcia. 912. Arabs build the splendid city and palace of Zehra. 914. Beginning of the heroic age in Spain.	907. Oleg invades the Greek Empire.	901. Republics of Venice and Genoa founded.
923	Civil Wars.				930. Harold VI., first Christian King of Denmark. 933. Eric, King of Norway. His cruelty leads to revolt of people.
936	Louis IV., King.	936. Otho the Great, Emperor.			
954	Lothaire I. confers the dukedoms of Burgundy and Aquitaine on Hugh the Great.	950. Bohemia annexed.	940. Ramiro, King of Leon, defeats the Moors at Simancas. 955. Sancho I., King of Leon.	945. Swatoslav, King of Russia.	

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453			
	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
		959. St. Dunstan, archbishop of Canterbury, attempts to reform the Church.	959. Emperor Romanus II.	
982	Dublin a trade center.			985. Danish invasion under Sweyn.
		989. Greek Christianity propagated in Russia by Waldimir. 993. First canonization of saints.		
997	Venice and Genoa rise to great importance in commerce.	999. Hungary becomes a fief of the Church.	996. War with Bulgaria.	
1002	Paper made of cotton rags. Churches first built in the Gothic style of architecture. The French language begins to be written. Faint impulse given to art in Italy.			1002. Massacre of the Danes in England. 1003. Scotland ruled by Malcolm II. 1013. Danes, under Sweyn, become masters of England. 1016. Edmund II. fights six battles with Canute, King of the Danes, with whom he divides the kingdom.
1024	Musical scale of six notes invented by Guido Aretius.	1024. John XIX., Pope.	1018. Bulgaria again reduced to a Grecian province.	1027. Brian Boru, sole Monarch of Ireland. 1031. Canute subdues Scotland. 1034. Duncan, King of Scotland.
1040	Firdusi, the Persian Homer.			1039. Macbeth murders Duncan, and usurps the throne. 1042. The Saxon line restored under Edward the Confessor.
1055	First age of scholastic philosophy.	1048. Leo IX., the first Pope to keep an army. 1054. Excommunication of the Patriarch of Constantinople and the Greeks. 1059. Quarrel between the Popes and the German Emperors.	1042. First invasion of the Seljuk Turks. 1043. The Russians invade Thrace with 100,000 men and are repulsed by the Greeks. 1054. Theodora, last of the Macedonian dynasty.	1051. William, Duke of Normandy, visits England.
1062	Surnames first used among the English nobility.			
1068	Shoeing horses introduced into England.	1066. Pope Alexander II. deposes Harold, and gives England to William the Conqueror. The papacy at the height of its power.	1067. Emperor Romanus III. defeated and taken prisoner by the Turks.	1066. Harold II., King, killed at the battle of Hastings. William the Conqueror, King. End of the Anglo-Saxon line.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
960	Hugh Capet, Duke of France.	964. Italy united to the Empire of Germany. Tuscany becomes a Dukedom.	976. Hixem, Caliph of Cordova.		973. St. Stephen, first hereditary King of Hungary. Gives it written laws.
		979. Otho at war with Lothaire.		981. Vladimir the Great, the first Christian ruler.	
986	Louis V., last of the Carolingians.				
988	Hugh Capet, King, and founder of the Capetian line of French kings.				985. Sweyn I., of Denmark, invades England.
996	Robert II. succeeds his father on the throne.		998. Division of the Moham-medan King-dom of Cor-dova.		
			1000. Sancho the Great, King of Navarre, takes the title of Emperor.		
1010	Notre Dame, Paris, rebuilt.	1002. Henry II., Emperor.			
				1015. Russia di-vided among the 12 sons of Vladimir.	1016. Canute II., King of Den-mark.
		1024. Conrad II., first of the Franconian line.			1019. Norway con-quered by Ca-nute. Danish as-cendancy.
1031	Henry I., King.				
1032	Burgundy annexed.	1039. Henry III. defeats the Bo-hemians and Hungarians.	1035. Ramiro I., King of Ar-agon.	1036. Russia re-united by Jaroslav.	
1046	Dispute between William the Con-queror and Wil-liam of Arques for the Duchy of Normandy.	1053. Henry causes his son, Henry, to be pro-claimed King of the Romans. This title was applied for sev-eral centuries to the Emper-or's eldest son.		1054. Russia di-vided a sec-ond time. Civil wars and great distress.	1055. The Turks re-duce Bagdad and overturn the Em-pire of the Ca-liphs.
					1059. Ingo I., first Christian King of Sweden.
			1065. Alphonso, King of Cas-tile and Leon.		1060. Robert Guis-card, Duke of Apulia.
					1065. Jerusalem taken by the Saracens.
1066	William, Duke of Normandy, claims the crown of England and wars on Harold to obtain it.		1068. Flight of Alphonso to Toledo.		1067. Polish con-quests in Russia.
					1068. Olaf III., King of Norway.

FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
A. D.	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
		1070. Lanfranc, Archbishop of Canterbury.		1070. Feudal system introduced.
1073	London Bridge built. Booksellers first heard of.	1073. Quarrel of Pope Gregory VII. (Hildebrand) with the Emperor Henry IV. 1075. The Pope sends legates to the various courts of Europe. 1076. Submission of Henry IV. to the Pope.	1074. Syria and Palestine subdued by Melek Shah.	
1084	Rigid police system established in England.	1084. Triumph of Henry IV. over Gregory. The order of the Carthusians instituted by Bruno.	1081. Alexius I. (Comnenus), Emperor. Robert Guiscard invades the empire and defeats Alexius. After the capture of Jerusalem by the Turks, the Christian pilgrims are insulted and oppressed, which gives rise to the Crusades—the great struggle between Christianity and Mohammedanism. Order, learning, and commerce revive in the last quarter of this century, and the empire is feared or respected by the nations of Europe and Asia.	1087. William invades France and is killed at Nantes.
1090	Fortresses at New Castle and Carlisle built.	1095. Peter the Hermit preaches against the Turks. 1096. The First Crusade.	1099. Invasion by the Crusaders. 1104. Battle of Acre.	1093. Malcolm III., of Scotland, invades England, and is slain near Alnwick Castle.
1100	William of Poitou, first troubadour of note.	1100. Study of theology receives new impulse.	1109. Tripolis taken by Crusaders.	1100. Henry I., King of England, unites the Normans and Saxons. 1107. Henry quarrels with Anselm.
1118	Knights Templar instituted.	1123. First Lateran, or ninth General Council.	1118. John I. reforms the manners of his people. Tyre taken by Crusaders.	
1120	Scholastic philosophy reaches a high point under Abelard. Aristotle's logic comes into repute.	1127. Pope Honorius II. makes war against Roger, King of Sicily. 1139. Second Lateran, or tenth General Council.		1124. David I. promotes civilization in Scotland.
1140	Gratian collects the canon law.	1147. The Second Crusade.	1143. Manuel Comnenus, Emperor.	
1150	Magnetic needle known in Italy.	1154. Pope Adrian IV., an Englishman.	1156. Manuel forms the design of conquering Italy and the West, but fails.	1154. Henry II., King of England.
1158	Bank of Venice established. Colleges of theology, philosophy, and law at Paris. Woolen manufactures established in England.	1160. Waldenses and Albigenses begin to appear.		1158-64. Ascendancy of Thomas à Becket, Archbishop of Canterbury.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
1070	Rise of the troubadours in Provence.	1072. Henry IV. summoned before the Pope for selling the investiture of bishops; treats the mandate with contempt. 1073. Summoned again. 1076. Henry sends an ambassador to depose the Pope, and is excommunicated. Undergoes penance and submission.	1076. Time of the Cid.		1070. Bergen, Norway, built.
1079	Birth of Abelard.	1080. Henry degrades the Pope and triumphs.	1085. Toledo taken from the Moors by the Cid.		1084. Bohemia made a kingdom by Henry IV. of Germany.
1087	War with England. Robert, Duke of Normandy, opposes William Rufus.	1093. The Popes continue their struggle against the empire.	1086. Battle of Zalacca. 1094. Pedro I., King of Navarre and Aragon.		1090. Sicily taken from the Saracens by Roger the Norman.
1096	Many French noblemen take part in the First Crusade.				
1108	Abbe Sugar, minister to Louis VI. of France.	1109. Henry V. enters Italy, takes the Pope prisoner, and compels him to crown him. 1114. Henry V. marries Matilda, of England.	1104. Alphonzo I., King of Navarre and Aragon.		1105. War between Norway and the Wends.
1120	Rivalry between England and France begins.	1125. Lothaire II. opposed by Frederick, and Conrad, Duke of Suabia.	1118. Alphonzo captures Saragossa.	1128. Riga on the Baltic founded.	1119. War between Pisa and Genoa.
1147	Louis VII. joins the Second Crusade.	1141. Dissensions of the Guelphs and Ghibelines. 1152. Frederick I., Emperor of Germany and Italy.	1139. Portugal becomes a Kingdom under Henry of Besancon.	1147. Moscow founded.	1150. Eric X., King of Sweden.
1159	War with the English.	1158. The Emperor Frederick receives the title of King of Bohemia.	1157. Castile and Leon divided.		1158. Venice a great maritime power.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453			
	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
1168	Colleges of law, philosophy, and theology at Paris.	1167. Rome taken by Frederick Barbarossa. 1178. Renewed activity of the Waldenses, forerunners of Protestantism. 1179. Third Lateran, or eleventh General Council.		1172. Henry conquers Ireland. 1189. Richard I. engages in the Third Crusade.
1190	The Jews become the principal bankers of the world.	1190. Third Crusade. 1198. Power of the Pope supreme over temporal matters.	1190. Iconium taken by Frederick Barbarossa, but afterwards restored.	1193. John attempts to seize the crown in the absence of Richard.
1200	University of Bologna has 10,000 students.	1202. The Fourth Crusade. Constantinople taken.	1204. The Crusaders plunder Constantinople.	1200. John, King of England.
1206	University of Paris founded.			
1209	Period of the troubadours in France; the minstrels in England; minnesingers in Germany.	1215. Fourth Lateran Council, against the Albigenses. 1217. Fifth Crusade.		1215. Magna Charta signed at Runnymede. 1216. Henry III., King.
1222	University of Padua founded.		1228. John of Brienne, King of Jerusalem, Emperor.	
1247	First war fleet in Spain.	1243. Struggle of Pope Innocent IV. with the Emperor Frederick.		1246. Henry marries Eleanor of Provence. 1258. Famous parliament at Oxford.
1261	Parliament in England.	1265. Dominion of Italy passes to the Pope.	1260. Emperor Michael Palæologus recovers Constantinople.	1265. First regular parliament. Civil War.
1273	First patent of nobility granted in France. Literature and science flourish in Spain under Alphonso the Learned.	1274. Fourteenth general Council at Lyons.	1268. The Mongols invade Asia Minor and take Antioch.	1276. War between England and Wales. 1283. England and Wales united. Robert Bruce and John Balliol contend for the crown of Scotland.
1285	Institution of the three great courts of law in England. Cimabue, the first of modern painters at Florence.	1296. Struggle of the Church with France.	1281. Othman establishes an independent rule in the north of Asia Minor. 1299. Othman invades Nicomedia, and establishes the Ottoman Empire.	1296. Scotland submits to England. 1297. Scotland rebels. War between England and Scotland follows.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
1170	Rise of the Waldenses.	1167. Rome taken by Frederick. 1174. Frederick's fourth expedition into Italy. 1176. Defeated at the Battle of Legnano.			1167. League of the Italian cities. 1171. Saladin, Sultan of Egypt, extends his dominions. Conquers Syria, Assyria, and Arabia.
1183	The peace of Constance reestablishes the independence of the Italian republics.	1183. Italy independent by treaty of Constance.	1188. Alphonzo IX., King of Leon.	1186. Incursion of Huns and Poles into Russia.	1186. Directs all his efforts against the Crusaders.
1190	Philip Augustus one of the leaders of the Third Crusade.	1190. Henry VI., Emperor and King of Italy.			1193. Battle of Ascalon. Saladin defeated. Death of Saladin.
1204	Normandy reunited to France.				1206. Genghis Khan subdues the North of China.
		1212. Frederick II., Emperor.	1212. The Christians gain the Battle of Navas de Tolosa.	1213. Jurje II.	1216. Tartary overrun by Genghis Khan.
1223	Louis VIII. conducts crusade against the Albigenses.		1217. Ferdinand, King of Castile.	1224. Mongolian invasion, known as the "Golden Horde."	1222. Hungarian liberty assured by Charter of Andrew II.
1226	Louis IX., King.				
			1230. Castile and Leon united by Ferdinand III., who takes large territory from the Moors.	1236. Second Mongolian invasion. Moscow burned.	1236. Mongolian invasion of Europe under Batu Khan.
		1243. The Hanseatic League.		1238. Russian independence overthrown by the Tartars. Khan of Kiptchak, Grand Duke.	
1248	Louis IX. leads the Seventh Crusade.	1250. Conrad IV., Emperor.	1253. The Alhambra founded.		1259. Kublai Khan builds Pekin and makes it his capital.
1267	Burgundy falls to the crown.		1266. Henry of Castile a Roman senator.		
1270	Louis IX. sets out on the last Crusade.	1273. Rudolph, Emperor, founds House of Habsburg.	1274. Crown of Navarre passes to France.		
1276	France at war with Castile.				
			1291. James II., King of Aragon.	1290. Khan of Kiptchak wields strong rule in Russia.	1290. Wenceslas, King of Bohemia, takes Cracow.
1297	Invasion of Flanders.	1298. Adolphus, Emperor, deposed, and Albert I. enthroned.			1299. Foundation of the Ottoman Empire.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453			
	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
1300	Rapid advances in civilization — revival of ancient learning — improvements in the arts and sciences — and general expansion of liberty.			1300. Silverplate used in England.
1302	Mariners' compass invented at Naples.			
1303	University Avignon.	1303. Papal power declines.	1303. Genoese control trade of Black Sea.	
1305	University Orleans.	1309. Seat of the Popes transferred to Avignon.		1306. Robert Bruce proclaimed King of Scotland. War with England continued.
1307	University Perugia.			
1308	University Coimbra.			
1311	Governmental reforms extorted from Edward II. in England.	1311. General Council at Vienna.	1320. Civil War in the Eastern Empire between the Emperor and his son.	
1326	Clocks constructed on mathematical principles.		1326. Orkhan, Sultan of the Turks, makes Prusa his capital.	1327. Peace. Independence of Scotland.
1340	Gunpowder used at battle of Cressy.	1339. Struggle in Rome between the Colonna and the Ursini.		1338. Struggle for the French crown begins; lasts 120 years.
1347	Manufactures and commerce improve in England.	1347. Democracy in Rome under Rienzi, last of the Tribunes. 1354. Rienzi killed; papal dominion restored.	1355. John Palæologus, Emperor.	1346. Battle of Cressy.
1361	Parliament in England.	1378. Schism of the West; Pope Urban VI. acknowledged in England; Clement VII. in France, Spain, and Scotland.	1373. Treaty with Murad, the Ottoman Emperor.	1356. Edward, the Black Prince, wins the battle of Poitiers.
1386	Jan Van Eyck invented oil painting.		1389. Bajazet, Sultan of the Turks.	1376. Death of the Black Prince.
1409	University of Leipsic founded.	1409. The Council of Pisa.	1402. Bajazet defeated and made prisoner by Tamerlane, at the battle of Angora. 1403. Solymon I., Sultan of the Turks.	1384. The Scots, assisted by France, invade England.
1425	Arts promoted in Italy.	1414. Council of Constance. 1416. Huss and Jerome burnt for heresy.	1425. Emperor John VII. visits Italy to obtain help against the Turks.	1399. Henry IV., King. House of Lancaster begins.
				1406. James I., King of Scotland.
				1414. Henry V. claims the French crown.
				1415. Gains the battle of Agincourt.
				1422. Death of Henry V. Accession of Henry VI. War with France.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
			1300. Dissensions in the Moorish state.	1300. Moscow made the capital.	
1302	First convocation of the States-general in France.				
1304	War with Flanders.	1304. Rise of the Swiss towns. 1306. Rudolf of Austria, Emperor. 1308. Henry of Luxemburg, Emperor. General insurrection in Switzerland.	1312. Alphonzo XI., King of Castile and Leon.		1307. Swiss Republic founded.
1315	Edict for the enfranchisement of slaves.	1314. Louis of Bavaria and Frederick of Austria contend for the crown.		1318. Finland invaded by Russians.	1319. The Oligarchy of Venice established.
1316	Philip V. succeeds by virtue of the Salic law, now first established.	1322. Frederick of Austria defeated.	1327. Arrival of 200,000 Moors to assist Granada.		1326. Tamerlane born at Kesh, Tartary.
1332	Revolt of the Flemings.		1340. Moors defeated at Tarifa.		
1338	War with England.	1355. Promulgation of the Golden Bull.			1353. Establishment of the Ottomans in Europe.
1346	Normandy overrun by Edward of England.				1359. Hungarian conquests on the Danube.
1356	King John defeated and taken prisoner at Poitiers. Charles, the Dauphin, Regent.		1365. War between Navarre and France.		
1360	John regains his liberty. Cedes much territory to England.	1378. Wenceslas (King of Bohemia), Emperor.		1380. Tartar War. Dimitri Ivanovitch checks them at the Don.	1369. Tamerlane makes Samarcand the capital of his new Empire.
1380	Charles VI., King. Defeat of the Flemings at Rosbecq.			1382. Moscow burned.	
1386	Fruitless attempt to invade England.	1394. The Emperor imprisoned at Prague.		1395. Tamerlane invades Russia.	1385. War between Austria and Switzerland.
-		1400. Robert, Count of Palatine, Emperor.		Russia under the Mongol Tartars until 1462.	1399. Invasion of India by Tamerlane.
1410	Civil War between Orleans and Burgundy.	1411. Sigismund (King of Hungary), Emperor.	1407. John II., King of Castile.		
1415	Defeat by the English at Agincourt.				
1422	Henry VI. proclaimed at Paris King of France and England.		1416. Alphonzo V., King of Aragon and Sicily.		1419. The Hussite War in Bohemia.
1427	Orleans besieged by the English.				

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453			
	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
1434	Invention of printing at Mayence.	1429. Schism of the West ended.		
1447	Library of the Vatican founded.		1444. Vladislav, King of Poland, defeated and killed by the Turks.	1444. Truce with France. Marriage of Henry to Margaret of Anjou.
1450	Flourishing period of trade in Western Europe — particularly in Flanders, or modern Belgium.	1448. Concordat of Aschaffenberg, by which the liberties of the German Church are compromised.	1448. Constantine XII., last of the Greek Emperors. 1453. Siege and capture of Constantinople by the Turks, ending the Eastern Empire.	1450. Insurrection of Jack Cade. Wars of the Roses. Richard, Duke of York, claims the throne.
FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON—1453-1815				
	Arts of Civilization	Italy and the Church	Great Britain	Spain and Portugal
1460	Wood engraving invented.	1454. Struggle between Cosmo de Medici and the aristocracy. 1458. The French rule in Genoa.	1455. Wars of the Roses begin. 1460. James III., King of Scotland. 1461. Edward VI., King. House of York.	1454. Henry IV. of Castile, King of Spain.
1464	Post-offices in France and England.	1463. War of Venice with the Turks.		
1470	Beerhard invents the pedal to the organ.	1469. Lorenzo de Medici succeeds Pietro at Florence.	1470. Henry VI. restored by Warwick.	1469. Marriage of Ferdinand of Aragon with Isabella of Castile.
1473	Printed musical notes. Large library founded at Ofen.	1471. Increase of the power of the Medici. Rise of learning.	1471. Return of Edward IV. Deaths of Warwick and Henry VI.	
1477	Watches made at Nuremberg.	Sixtus IV., Pope.	1475. Edward IV. invades France.	1477. Marriage of Maximilian and Maria of Burgundy.
1493	Printing press at Copenhagen. Era of discovery in the New World begins.	1492. Alexander VI., Pope.	1480. War between England and Scotland. 1492. Henry VII. invades France.	1479. Union of Castile and Aragon. 1492. Conquest of Granada. Discovery of America by Columbus.
1502	St. Peter's and other great churches built.	1500. Partition of Naples between France and Spain. 1503. Naples annexed to the Spanish crown. Julius II., Pope. 1511. Council of Pisa. 1513. Pope Leo X. patron of literature and the arts.	1509. Henry VIII., King. 1512. War with France. 1513. Battle of Flodden; James IV. killed. 1515. Wolsey, chancellor and cardinal.	1498. Vasco de Gama reaches India via Cape of Good Hope. 1506. Columbus dies at Valladolid. 1516. Charles, King of all Spain and the Netherlands.
1517	Luther and the Protestant Reformation. Hans Sachs founds the German drama.		1517. Beginning of the Reformation.	

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
1429	Saved by Joan of Arc.				
1431	Charles VII. crowned at Rheims. Joan of Arc burned.		1430. War between Castile and Granada.		
		1438. House of Austria established. Albert II. (King of Bohemia and Hungary), Emperor.		1441. Kiptchak Mongols divide Russia.	1437-38. Rise of Portugal.
		1446. War with Hungary.			1450. Kingdom of Delhi enlarged.
1453	End of the French and English wars.	1453. Austria made an hereditary Duchy by Emperor Frederick III.	1452. Civil War in Navarre, in which Castile and Aragon join.		1453. Poland's independence confirmed by Diet of Petrekin.
FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON—1453-1815					
	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
1461	Louis XI., King.	1462. Ivan the Great takes the title of Czar.		1458. Greece subjected to the Turks. 1464. War with Hungary.	1454. Poland at war with the Teutonic Order. 1458. Hungary vigorous under Mathias Corvin. 1466. Prussia a fief of Poland. 1468. Uzun Hassan, master of Persia.
1475	War between France and Burgundy.	1472. Ivan marries Sophia, niece of the Greek Emperor.	1470. Sten Sture, Regent of Sweden.		
1477	Artois and Burgundy united to France.	1479. Great invasion of the Tartars.		1480. Otranto taken.	
1491	Bretagne united to the crown.	1481. Power of the Tartars annihilated.	1481. John, King of Denmark, partially acknowledged in Sweden.	1481. Bajazet II., Sultan.	
1499	Conquest of Milan.			1493. War with Egypt, Hungary, and Venice.	1485. Mathias of Hungary takes Vienna. 1492. America discovered by Columbus. 1499. Voyage of Amerigo Vespucci.
1510	Council of Tours.	1510. Renewed Tartar invasions.		1505. War with Persia.	1502. Soufi, sole Sovereign of Persia.
				1512. Selim I. de-throned and puts to death his father.	1506. Poland under Sigismund the Great.
1515	Francis I. invades Italy.		1513. Christian II., King of Norway and Denmark.	1514. Persians defeated; Kurdistan added to the empire.	1511. Cuba conquered.
				1516. Cairo taken.	1512. Florida discovered. 1513. Discoveries of Balboa. 1517. First patent granted by Spain for the importation of negroes into America.

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON—1453-1815					
A. D.	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
				1519. Charles V., King of Spain. 1521. Diet of Worms.	1519. Conquest of Mexico by Cortez.
1522	Circumnavigation of the globe by Magellan. Xavier plants Christianity in India.	1525. Spanish as- cendancy by the victory of Pavia.		1529. Turks invade Germany.	
1530	Jorgens invents the spinning wheel for flax.	1540. Order of Jesuits founded by Loyola.	1532. The King mar- ries Anne Boleyn. 1535. Henry excom- municated by the Pope. 1543. Invasion of France. 1547. Formal estab- lishment of Prot- estantism. Edward VI., King.	1543. Alliance with England against France.	1540. Lisbon, the market of the world.
1545	Vasalius makes im- portant contribu- tions to study of anatomy.	1545. Council of Trent.			
1548	Orange trees intro- duced into Eu- rope.	1550. Julius III., Pope.	1553. Mary, Queen of England. 1554. Lady Jane Grey executed. 1555. Persecution of the Protestants. 1558. Elizabeth, Queen. Rise of the Pu- ritans.	1551. Treaty of Passau secures religious liberty to the Protest- ants. 1556. Charles V. ab- dicates.	
1559	Carriages intro- duced into Paris.	1559. Termina- tion of French wars in Italy.		1564. Maximilian II., Emperor.	1564. Acquisi- tion of the Philippines.
1560	Knives first made in England.		1568. Mary, Queen of Scots, takes ref- uge in England.		1567. Duke of Alva Govern- or of the Nether- lands. 1570. War with Turkey. Battle of Lepanto.
1573	Titian, colorist painter.	1585. Pope Six- tus V. re- stores the Vatican li- brary.	1584. Raleigh's col- ony in Virginia. 1585. War with Spain.	1576. Rudolph II., King of Bohe- mia and Hun- gary, Emperor.	1580. Portugal passes under Spanish do- minion.
1586	Tobacco introduced into Europe.	1592. The Rialto and Piazza di San Marco built at Ven- ice.	1588. Spanish Arma- da destroyed.		1588. Defeat of the Spanish Armada.
1588	First newspaper in England.		1599. Troubles with Ireland. 1600. English East India Company chartered. 1603. Union of Eng- land and Scot- land. 1607. English settle- ment at James- town.	1594. Union of Protestants at Heilbronn.	
1590	Telescopes invent- ed by Jansen, a German. Napier invents lo- garithms.			1608. Protestant union under Frederick the Elector.	1609. Expulsion of the Moors.
1602	English East India Company found- ed.	1609. Leghorn becomes the emporium of the Levant trade.	1617. Sir Francis Ba- con, lord chan- cellor.	1618. Thirty Years' War begins.	
1606	Gilbert's electrical discoveries.	1618. Conspiracy of Bedmar to subject Ven- ice to Spain.	1620. Pilgrims sail in Mayflower.	1620. Massacre of Prague.	1621. Dutch War.
1615	Coffee in Venice.		1625. Charles I., King. 1627. War with France.	1628. Victories of Wallenstein.	1625. Naval War with Eng- land.
1618	Harvey discovers the circulation of the blood.	1626. St. Peter's dedicated. 1628. War fol- lowing death of the Duke Mantua.			
1620	Thermometers in- vented by Drebel. Negro slavery be- gins in Virginia.				
1626	Kepler's laws dis- covered.				

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON—1453-1815				
	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
1521	First War with Charles V. Francis defeated and taken prisoner at Pavia. Second War with Charles V. Struggle for possession of Italy.	1533. Ivan the Terrible, Czar.	1520. Christian, King of Sweden.	1520. Soliman the Magnificent, Sultan.	1519. Spaniards, under Cortez, conquer Mexico.
1525			1521. Gustavus Vasa throws off the Danish yoke.	1521. Belgrade taken.	
1527			1523. Gustavus Vasa, King of Sweden.	1526. Invasion of Hungary.	1533. Cortez conquers Peru.
1532-44			Union of Calmar dissolved.	1529. Invasion of Germany. Siege of Vienna.	
			1532. Union of Norway and Denmark.	1535. Barbarossa siezes Tunis.	
1547	Henry II., King; Catherine de Medici, Queen.	1554. Siberia discovered.	1543. First standing army in Sweden.	1547. Turks invade Persia.	1545. Mines at Potosi discovered.
				1551. Tripoli taken.	
1552	Fifth War with Charles V.			1552. Invasion of Hungary.	1556. Akbar raises the Indian Empire to its greatest splendor.
1562	Religious liberty granted to the Huguenots. Huguenot Wars.	1571. Russia devastated by the Tartars and Moscow burned.	1560. Eric XIV., King of Sweden.	1559. Military power of the Turks at its greatest height under Soliman.	1564. Coligny sends a colony of Huguenots to Florida.
			War between Sweden and Denmark.		
1572	Massacre of St. Bartholomew.	1578. Alliance of Sweden and Poland against Russia.	1570. Peace of Stettin.	1570. War with Venice.	1579. Beginning of the Republic of Holland.
1576	The Catholic League.			1571. Battle of Lepanto.	
1577	Sixth Religious War.		1578. Alliance with Poland.		
1588	Revolt of Paris.	1598. Boris Godunov begins a new dynasty.	1588. Christian IV., King of Denmark.	1589. Revolt of the Janizaries.	1585. Persia acquires great power under Abbas the Great.
1589	House of Bourbon begins with Henry IV.				
1590	Siege of Paris raised by the Spaniards.			1595. Power in Hungary declines; revolt of Wallachia.	1603. Jehangir, Mogul of India.
1598	Edict of Nantes—toleration granted to the Protestants.		1604. Charles IX., King of Sweden.	1605. Revolt in Syria.	
			1609. Gustavus Adolphus, King of Sweden.	1606. Commercial treaty with France and Holland.	1609. First English envoy of the East India Company sent to India.
1610	Assassination of Henry IV.	1613. Michael Fedorovitz, Czar, founds the house of Romanoff.	1611. War between Sweden and Denmark.		
1614	Last assembly of the States-general.		1616. Sweden dominates the North.	1618. Great Persian victory at Shibli.	1620. War with Poland.
		1617. Finland ceded to Sweden.			
1624	Ministry of Cardinal Richelieu.				
1627	War with England over the Huguenots.				

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
1630	Gazettes first published in Venice.	1631. Influence of France increases.		1629. Gustavus Adolphus lands in Germany.	
1639	Printing in America.			1632. Battle of Lutzen.	1639. Loss of the Japanese trade.
1640	Manufacturing in Sweden.		1642. Civil War and revolution.	1640. Frederick William of Prussia.	1640. Portugal regains independence.
1643	Conde and Turenne the greatest generals of the time.	1646. Revolt of Naples under Massaniello.	1649. Commonwealth under Cromwell.	1648. Treaty of Westphalia.	
			1652. War with Holland.		
1654	Airpumps invented.		1653. Cromwell, Lord Protector.		1654. Brazil recovered from the Dutch.
				1657. Leopold I., Emperor.	1655. War with England.
1666	Canal of Languedoc built.		1660. Charles II., King. Stuarts restored.		1661. Invasion of Portugal.
1667	Gobelin tapestry manufactured in Paris.	1669. Candia taken from Venice.	1666. Great fire in London.	1665. Tyrol united to Austria.	
		1670. War between Genoa and Savoy.	1668. Triple alliance of England, Sweden, and Holland against France.		
1671	Foundation of the Academy of Architecture at Paris.	1676. Messina blockaded by the Dutch and Spanish fleets.		1673. War of Austria and France.	1673. War with France to protect Holland.
			1679. Habeas Corpus act passed.	1676. General revolt of the Hungarians.	
1681	Museum of Natural History founded in London.			1680. Greater part of Alsace seized by France.	
1681	Jardin des Plantes founded at Paris.		1685. James II., King. Rise of the Whigs and Tories.	1683. Siege of Vienna by the Turks.	
				1686. Buda taken after being held by the Turks 145 years.	
1687	Telegraph invented.	1689. Alexander VIII., Pope.	1688. Revolution.	1687. Joseph I., King of Hungary.	1689. Revolt in Catalonia in favor of France.
			1689. William III., King, and Mary II., Queen. War with France.		
1690	White paper first made in England.		1690. Battle of the Boyne. James defeated, returns to France.	1690. Joseph I., elected King of the Romans.	1691. Incursion of the French into Aragon.
1692	First opera in London.				
1693	Bank of England founded.	1693. Battle of Marsaglia.	1697. General peace.	1697. Victories of Prince Eugene over the Sultan Mustapha at Zenta.	
				1701. Hague alliance.	1701. Philip V., King.
		1702. French victory of Luzazce over the imperialists.	1701. War of the Spanish succession.		
			1702. Queen Anne. War against France and Spain.		
1703	Russian newspaper established at St. Petersburg. Flourishing period of French literature.	1706. French driven from Italy by Prince Eugene.	1704. Gibraltar taken by English.		1705. Barcelona taken by the Allies.

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
1638	Invasion of Spain.	1632. War with Poland. Poles advance to Moscow.	1632. Christina, Queen of Sweden; Oxenstiern, Regent.	1634. Murad invades Persia. 1637. Troubles on the Tartar frontier. Bagdad taken by the Turks. 1645. War with Venice.	1639. Great naval victory of Van Tromp, of Holland, over the Spanish fleet at the Downs. 1640. Madras, India, founded.
1640	Turin taken by the French.				
1643	Louis XIV., King.				
1648	Wars of the Fronde.				
1649	Siege of Paris.		1645. Peace between Sweden and Denmark.		
1653	Mazarin enters Paris in triumph.	1654. Russian victories in Poland.	1657. War between Denmark and Sweden. 1660. Arts and sciences flourish.	1657. Alliance with Sweden against Poland. 1661. War with Austria. 1662. Invasion of Hungary.	1653. John de Witt, Grand Pensionary of Holland. 1660. Sobieski, Polish general, wins great victory over the Tartars.
1659	Peace of the Pyrenees.				
1667	War with Spain.				
1672	War with Holland.	1671. The Cossacks subjugated.		1672. Invasion of Poland. 1678. First War with Russia.	1674. Sobieski, King of Poland.
1678	Peace with Holland and Spain restores tranquillity to Europe.				
1680	France the most formidable power in Europe.	1682. Ivan and Peter, Czars.	1680. Diet of Stockholm.	1682. War with Austria. 1683. Defeat at Vienna. 1686. Russia declares war. 1687. Revolution in Constantinople, Solyman II., Sultan. 1690. Recovery of Belgrade from the Austrians.	1686. Dekkin, India, conquered.
1685	Revocation of the Edict of Nantes.				
1688	War of the Allies against France.	1689. Peter the Great, Czar. 1692. First trade with China.	1693. The King of Sweden declared absolute. 1699. Charles XII. begins to reign. Denmark, Poland, and Russia form an alliance against Sweden.	1699. Peace of Carlowitz. The Ottoman power broken.	1692. Mogul power at its height in India. Jesuits gain large influence in China. 1695. Brussels bombarded by the French.
1697	General peace of Ryswick between France and the Allies.				
		1700. Peter the Great wars with the Northern Powers.	1700. Defeat of the Allies at Narva.		
1702	Invasion of Holland. Revolt of the Huguenots.	1703. St. Petersburg founded.	1702-6. Charles XII. sweeps Poland and Russia.	1703. Mustapha II. deposed by the Janizaries.	1704. Stanislaus I., King of Poland.
1704	Defeat at Blenheim.				

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815					
A. D.	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
		1707. All Spanish possessions in Italy abandoned.	1707. Act of union of England and Scotland. First united parliament of Great Britain meets.		
1709	Prussic acid discovered.		1713. Peace of Utrecht. England acquires large American possessions.	1711. Charles VI., Emperor.	
1714	Rise of commerce in Austria.	1715. Siege of Corfu raised.	1718. War with Spain.	1718. Quadruple alliance against Spain.	
		1719. Sicily invaded by the Spanish.			
1721	Inoculation for small pox introduced.		1727. George II., King of England.	1725. Alliance of Vienna, Spain, and Austria.	1725. Alliance with Austria.
			1739. War with Spain.		
1728	Behring Strait discovered.	1730. Clement XII., Pope.		1733. War of the Polish succession.	1734. Conquest of Sicily and Naples by Don Carlos.
1740	Irish linen manufactures and English steel and cutlery factories flourish.	1744. Italy invaded by the French and Spaniards.		1740. War of the Austrian succession. Maria Theresa succeeds to the hereditary States.	
		1746. French and Spaniards driven from Lombardy.	1745. Troubles in Scotland.	1745. Francis I., husband of Maria Theresa, Emperor.	1746. Ferdinand VI., King.
1750	Franklin's discoveries in electricity.		1756. Alliance with Prussia.	1756. Seven years' war — Austria and Prussia.	
1761	Potatoes first planted in France.		1762. War with Spain.	1772. Dismemberment of Poland.	
1767	First spinning machine in England.		1763. Peace of Paris.		1767. Jesuits expelled from Spain.
1774	Spinning-jenny invented by Arkwright. Steam engines improved by Watt and Bolton.	1773. Jesuits expelled from Rome.	1775. War with the American Colonies.		
			1776. British army takes possession of New York. Hessians hired for service in America.	1778. War of the Bavarian succession. Bavaria seized by Germany.	
1784	First American vessel in China. Institution for the deaf and dumb at Paris.	1782. Pontine Marshes drained.	1781. Surrender of Cornwallis at Yorktown.		
1786	Stenography invented by Taylor.		1783. Treaty of Versailles. Independence of the United States acknowledged.	1788. The Emperor tries to control the universities.	1788. Charles IV., King.
			1786. Impeachment of Warren Hastings.	1792. War with France.	
			1793. First coalition against France directed by England.	1793. First coalition against France.	
		1796-7. Napoleon's Italian campaign.	1797. Nelson destroys French fleet near Alexandria.	1797. Napoleon's Austrian campaign.	
		1798. Roman Republic proclaimed by the French.	1798. Second coalition against France.		
			1800. Union of England and Ireland.		

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
		1707. Revolt of the Cossack Mazeppa.			
		1708. Charles XII. of Sweden invades Russia.			
1713	Peace of Utrecht — perpetual separation of the crown of France and Spain.	1709. Is defeated at Pultowa.			
1715	Louis XV., King.	1714. Finland conquered.			
1718	The Quadruple Alliance against Spain.		1715. Charles returns to Sweden.	1717. Turks lose Belgrade.	1715. Treaty of Antwerp with Austria.
			1718. Invades Norway and is killed at the siege of Fredericshall.		
1724	Congress of Cambray.	1721. Peter assumes the title "Emperor of all the Russians."	1720. Peace of Stockholm.	1723. Turks and Russians attempt to dismember Persia.	1723. Christians expelled from China.
		1725. Catherine I., Queen.			
		1726. Alliance with Austria.			
		1727. Treaty with China.			
1733	The Polish succession involves France in war.	1730. Peter II., last of the Romanoffs.	1730. Christian VI., King of Denmark.	1734. Turks driven from Persia by Nadir Shah.	1733. Frederick Augustus II., King of Poland
1740	The Austrian succession.		1741. Swedes driven out of Finland.	1740. Renewed invasion of Turkey.	1739. India invaded by Nadir Shah, who takes Delhi.
1744	War with England and Austria.			1745. Defeat of Turks at Kars.	1744. Hostilities between the French and English in India.
1747	War with Holland.				1756. Calcutta taken by the Nabob of Bengal.
1760	Loss of all Canada.	1762. Catherine II. reigns.			1765. Establishment of the English in India.
1770	Marriage of the dauphin to Marie Antoinette.	1768. War with the Ottoman Empire.	1772. Despotism re-established in Sweden by Gustavus III.		1766. Power of the Mamelukes revived in Egypt under Rodvan and Ali Bey.
1774	Louis XVI., King.	1774. Revolts of the Cossacks.		1784. The Crimea ceded to Russia.	1774. Warren Hastings first governor-general of India.
1776	Franklin in Paris.			1787. Disastrous war with Austria and Russia.	1776. Lord Pigot governor-general of the East Indies.
1778	Alliance with America.				
1780	Rochambeau sent to aid the Americans.	1787. War with the Turks.			
1789	French Revolution begins.				
	Lafayette commander of the national guards.				
1792	War with Germany. France declared a republic.		1792. Gustavus III. assassinated.		1794. Polish revolt at Cracow.
1793	King and Queen beheaded.		Gustavus IV., King.		
1795	Reign of Terror. Napoleon Bonaparte commands the army.				
1796	War in Italy.	1796. Unsuccessful war with Persia.			
1797	Napoleon in Austria.				
1798	Expedition to Egypt.			1798. War with the French in Egypt.	1797. Swiss revolution. Helvetic Republic declared.
1799	Swiss campaign.				
1800	Battle of Marengo.				

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON - 1453-1815				
	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
1801	Iron railways in England.	1802. Napoleon President of the Italian Republic. 1805. Napoleon crowned King of Italy.	1803. Successful war in India. 1805. Napoleon defeated at Trafalgar. 1806. Fourth coalition against France.	1804. The Emperor of Germany assumes the title of Emperor of Austria. Battle of Austerlitz. Confederation of the Rhine. 1809. Peace of Vienna.	1805. Battle of Trafalgar.
1807	Fulton invents the steamboat.	1808. Rome annexed by Napoleon to the Kingdom of Italy.	1810. War with Sweden. 1812. War with the United States.	1812. Austria in alliance with France against Russia. 1813. War of German independence.	1808. Madrid taken by the French. Joseph Bonaparte, King. 1812. Battle of Salamanca.
1808	Lithography invented.				
1810	First steamboat built in Europe.				
1814	Steam carriages in England. Gas used for lighting the streets in London.	1814. Fall of Napoleon. Kingdom ceases.			
1815	Safety lamp invented by Davy.		1815. British defeated at New Orleans. Wellington victorious at Waterloo. The Allies enter Paris, and Napoleon is banished to St. Helena.	1815. German League. Congress of Vienna.	1814. Ferdinand VII. restored.
FROM THE FALL OF NAPOLEON TO THE PRESENT TIME					
	Arts of Civilization	United States	Great Britain	Prussia	Austria
1815	The abolition of the slave trade by the Congress of Vienna.	1816. U. S. Bank incorporated.	1816. Bombardment of Algiers. The Dey compelled to abolish slavery.		1817. Population, 28,000,000.
1817	Public schools established in Russia.	1817. James Monroe, President.	1823. The Canning ministry. The Ashantees in Africa defeated.	1818. The Zollverein formed. 1819. Death of Marshal Blücher. 1821. Congress of monarchs at Laybach. Insurrection in Moldavia and Wallachia.	1818. Napoleon's son made Duke of Reichstadt.
1819	The steamship "Savannah" makes the first trip across the Atlantic.	1821. Monroe reelected. Missouri compromise bill passed.			
1822	Hieroglyphics deciphered by Champollion.	1824. Visit of Lafayette. 1825. Erie Canal opened. Protective tariff enacted.			
1824	Inland navigation stimulated in the United States.	1825. J. Q. Adams, President. 1829. Andrew Jackson, President.	1828. Wellington ministry. Irish disturbances. 1830. William IV. King. Difficulties with China.		
1825	Steam navigation on the Rhine. Vast increase in periodical literature in England, France, Germany, United States, etc.	1831. Northeastern boundary between the U. S. and British provinces established. 1833. President Jackson reelected. Bank deposits removed from the U. S. Bank.			1831. Austria interferes in Italian affairs.
1832	Trades unions in Europe.				
1835	Slavery abolished in British Colonies.		1834. Robert Peel, Premier. Difficulties in Canada.	1834. Zollverein includes most of the German States.	1836. Visit of the Emperor of Russia. Ferdinand I., Emperor.
1836	Founding of the Smithsonian Institution. Luxor obelisk erected in Paris.				

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
1802	Napoleon President of the Italian Republic.	1801. Alexander, Czar.	1801. Denmark and Sweden accede to the alliance between England and Russia.	1803. Insurrection of Mamelukes at Cairo.	
1804	War with England. Napoleon I., Emperor of the French.	1804. War with Persia.			
1805	Battle of Austerlitz.	1805. Russia joins the coalition against France.			1806. Louis Napoleon, King of Holland.
1807	War with Russia. Invasion of Portugal.	1807. Treaty of Tilsit.	1808. Finland invaded by the Russians.	1807. War against Russia and England.	
1809	Battle of Wagram.		1809. Charles XIII., King of Sweden.	1809. Russians defeated at Silistria.	
1810	Continental peace except with Spain.				
1812	Russian campaign.	1812. Invasion of Napoleon. Moscow burned.		1813. Servia invaded by Turkish army.	1812. The Poles declared a nation by Napoleon. Diet of Warsaw.
1814	Allies enter Paris. House of Bourbon restored.		1814. Union of Sweden and Norway as two kingdoms under one monarch.	1814. Malta falls to England.	American war with England.
1815	Napoleon returns from Elba. Hundred days' war. Battle of Waterloo and defeat of Napoleon. Abdication of Napoleon.	1815. The Holy Alliance formed.			1815. William I., King of the Netherlands.
FROM THE FALL OF NAPOLEON TO THE PRESENT TIME					
	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
1818	France joins in Holy Alliance.	1815. Union of Portugal and Brazil under John VI. 1817. Slave trade abolished.	1815. Kingdom of Two Sicilies restored.	1815. Poland united to Russia.	1816. Lord Amherst's unsuccessful mission to China. 1817. The Mahratta power completely overthrown in India by the British.
1821	Death of Napoleon at St. Helena.		1821. Austrian invasion of Italy.	1819. Establishment of military colonies. Liberty of the press in Poland nullified.	1819. Bolivar, President of Colombia, South America. Peru and Guatemala independent. Brazil independent.
1824	Charles X., Emperor.		1822. Greek revolution. Declaration of Independence.		1822. Iturbide, Emperor of Mexico.
1830	Algiers taken by the French. Revolution and abdication of Charles X. Louis Philippe, King.		1825. Death of Ferdinand, after reign of sixty-six years. 1827. Treaty between Russia and Turkey respecting Greece.	1826. Nicholas I. crowned at Moscow. War against Persia.	1826. Missolonghi taken by the Turks.
1831	Abolition of hereditary peerage in France.	1830. Salic law abolished. 1833. Isabella II., Queen of Spain. Don Carlos claims the throne.	1832. Kingdom of Greece founded.	1830. War against Poland. 1832. Poland made part of empire.	1829. Venezuela independent. 1830. Polish struggles for nationality. 1831. Leopold I., King of the Belgians.
1834	Death of Lafayette.	Portugal a constitutional monarchy.			1833. Santa Ana, President of Mexico.
1836	Insurrection attempted by Louis Napoleon at Strasburg.	1834. The Carlist War.			1836. Decree to expel all British and other foreigners from China.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	United States	Great Britain	Prussia	Austria
1837	Morse patents the telegraph invented by him in 1832.	1837. Independence of Texas acknowledged.	1837. Victoria, Queen.		
1840	Wheatstone's telegraph patented in England.	Martin Van Buren, President.	1840. War with China over the opium trade. War in Syria; Great Britain an ally of Austria and Turkey.	1840. Frederick William, King.	1838. Commercial treaty with England.
		1841. W. H. Harrison, President. Death of Harrison and succession of John Tyler.	1841. Chinese War ended.		
1845	Lord Rosse's telescope completed. Gutta serena used.	1845. Texas annexed to the U. S. 1845. Treaty with China. James K. Polk, President.	1844. Daniel O'Connell's trial. Sentence reversed by the House of Lords.		
1847	Great canal from Durand to Marseilles completed. Railroad building in Germany. Sewing machine invented and patented.	1846. War with Mexico. 1846. The Oregon Treaty with Great Britain, settling the Northwestern boundary of the United States.	1846. Repeal of the English corn-laws. 1847. Severe famine in Ireland.		1847. Austria takes possession of Cracow.
1848	Girard College opened.	1848. Treaty of Guadalupe, Hidalgo, ends Mexican war. Gold discovered in California. 300,000 emigrants arrive this year.	1848. Civil War in Ireland. Habeas Corpus Act suspended.	1848. Insurrection in Berlin.	1848. Revolution in Hungary. Francis Joseph, Emperor. Kossuth withdraws his army from Vienna.
1849	Tubular bridge in Anglesea, England. Magnetic clock invented by Dr. Locke of Cincinnati.	1849. Zachary Taylor, President. Railroad from Boston to New York.	1849. Moulton in India taken.	1849. The King declines the imperial crown. Armistice between Prussia and Denmark.	1849. New Constitution promulgated.
1850	Great agitation on slavery in United States. The Pekin "Monitor," a new paper, printed in China. Woman's Rights convention at Worcester, Mass.	1850. Attempted invasion of Cuba by filibusters. Death of President Taylor; Millard Fillmore, President. Texas boundary settled. Fugitive Slave Law passed.	1850. The war in Lahore ended. The Punjab annexed to the British Crown. Death of Sir Robert Peel. English forces defeated in South Africa by the Kafirs.	1850. Hanover withdraws from the Prussian alliance. Hesse-Darmstadt withdraws. Treaty of peace with Denmark. New Constitution for Prussia.	
1851	Daguerre makes important contributions to photography. Railway between Moscow and St. Petersburg opened.	1851. Erie Railway opened. Charleston Convention. Vigilance committee organized in California.	1851. Continuance of the Kafir War. Kossuth visits England.		1851. Louis Kossuth sentenced to death at Pesth.
1852	Telegraphs across the English Channel.	Kossuth arrives in New York.			1852. Emperor of Austria visits Emperor of Prussia at Berlin.
1853	First Norwegian railway opened. Perry's expedition to Japan.	1853. Franklin Pierce, President. Gadsden Purchase.	1853. Kafir War ended. Queen Victoria visits Ireland.	1853. Plot to overthrow the government.	

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
1838	Death of Talleyrand.	1837. The monasteries in Spain dissolved.		1838. Smuggling carried on extensively.	1839. Turkey at war with Egypt. 1840. William I. abdicates as King of Holland.
1844	War with Morocco.	1842. Insurrection in Barcelona.	1843. King Otho of Greece compelled to accept a constitution.	1845. Emperor visits England.	1842. Insurrection in India.
1848	Abdication of Louis Philippe, and a republic proclaimed. Louis Napoleon, President. Bloody insurrection in Paris.	1846. Marriage of Isabella to the Duke of Cadiz. Civil War in Portugal.	1848. Rising of the great Italian cities in revolution. Italian revolution. Roman republic overthrown.	1849. Aids Austria in subduing Hungary.	1848. Holland receives a constitution. Insurrection in Ceylon. Hungary declared independent.
1850	Jerome Bonaparte, Field-Marshal.	1849. Catania, Syracuse, and Palermo taken by assault. Mazzini's proclamation of provisional government. Victor Emmanuel, King. Rome surrenders to the French; Garibaldi leaves city. Bourbon rule begins.	1849. Catania, Syracuse, and Palermo taken by assault. Mazzini's proclamation of provisional government. Victor Emmanuel, King. Rome surrenders to the French; Garibaldi leaves city. Bourbon rule begins.	1850. Harbor of Sebastopol completed.	1850. Death of Emperor Tau-Kwang of China. Battle of Idstedt, Denmark.
1852	Louis Napoleon declared Emperor.	1851. Death of Godoy, "Prince of Peace."		1853. War declared against Turkey.	1851. Discovery of gold in Australia. 1851. Disturbances in south of China. 1852. Buenos Ayres taken by the liberating army. War between the Turks and Montenegro. 1853. Turkish-Russian War.

FROM THE FALL OF NAPOLEON TO THE PRESENT TIME					
A. D.	Arts of Civilization	United States	Great Britain	Prussia	Austria
1854	Commercial treaty between United States and Japan. First railway in Brazil.	1854. Treaty with Japan. Kansas-Nebraska bill passed. Ostend Manifesto issued.	1854. Crimean War. Treaty of alliance with France.	1854. Treaty with Austria, offensive and defensive.	1854. Alliance with England and France.
1855	Panama railway completed. Bessemer's steel process patented.	1855. Panama railroad completed. Troubles in Kansas.	1855. British fleet bombards and partially destroys Canton, China.		
1856	Submarine telegraph laid from Cape Breton to Newfoundland. Dudley Observatory inaugurated at Albany, N. Y.				1856. Hungarians granted amnesty.
1857	Peabody Institute founded at Baltimore.	1857. Dred Scott decision. James Buchanan, President. Great financial panic.	1857. Rebellion in India begins. King of Delhi proclaimed Sovereign of India.		
1858	Great Eastern launched at London. Laying of the Atlantic telegraph. Boston Public Library opened.		1858. Completion of the Atlantic telegraph cable.		
1859	Telegraph communication between India and England.	1859. John Brown captures Harpers Ferry.			1859. War with France and Sardinia. Austrians defeated at Montebella. Peace after Battle of Solferino. Death of Prince Metternich.
1861	International exhibition at London.	1861. Secession of Southern States, and establishment of the Confederate States under Jefferson Davis. Opening of the Civil War, 1861-65. Abraham Lincoln, President.	1860. Rebellion in India subdued. Neutrality proclaimed during the American Civil War.	1861. William I., King.	1861. New Constitution for the Austrian monarchy. Civil and political rights granted Protestants.
1863	Abolition of slavery in the United States.			1862. Bismarck, Premier. 1863. King resolves to govern without parliament.	1862. Amnesty to political offenders in Hungary.
1864	Convention between France, Brazil, Italy, Portugal, and Spain for telegraph to America.	1865. Assassination of President Lincoln; Andrew Johnson, President.	1865. Fenian outbreaks in Ireland. British and French governments rescind their recognition of the Confederate States of America.	1864. War with Denmark.	1864. Alliance with Prussia against Denmark.
1866	Atlantic telegraph successfully completed.	1866. Civil Rights bill passed. Atlantic telegraph completed.		1866. Prussia prepares for war with Austria. Battle of Sadowa. Hanover annexed. First parliament of the German Confederation.	1866. War with Prussia and Italy.
1867	Great Exposition at Paris.	1867. General amnesty proclaimed.		1867. North German constitution accepted.	1867. Autonomy for Hungary announced. Emperor crowned King of Hungary.
1868	Suez Canal formally opened.	1868. Burlingame Treaty with China.			

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
1854	War declared against Russia.	1854. Military insurrection under O'Donnell.		1854. War with France and England. Siege of Sebastopol. Battle of Balaklava.	
			1855. Important concordat between Italy and Austria.	1855. Death of Nicholas I. Alexander II., Emperor.	1855. Santa Ana abdicates the presidency of Mexico.
1856	Peace with Russia.			1856. Destruction of Sebastopol docks. Evacuation of Crimea.	
					1857. Mexican constitution promulgated.
				1858. Partial emancipation of the serfs.	1858. Massacre of Christians in Turkey. Suez Railroad completed.
1859	War with Austria.	1859. War with Morocco.	1859. War with Austria.		
1860	Commercial treaty with England.	1860. Defeat of the Moors.	1860. Garibaldi lands in Sicily, and assumes dictatorship. Sicily and Naples annexed to Sardinia.		
		1861. Annexation of St. Domingo. Intervention in Mexico.	1861. Victor Emmanuel, King of Italy.		1861. Canton restored to the Chinese by the French and English.
1862	Great distress caused by American Civil War.		1862. Garibaldi establishes a provisional government. Insurrection in Greece	1862. Nesselrode, Chancellor.	
1863	The French occupy Mexico.		1864. Florence made the capital of Italy. Ionian Isles made over to Greece.	1863. Termination of Serfdom.	
1864	Maximilian accepts Mexican crown.	1864. Rupture with Peru.	1864. Florence made the capital of Italy. Ionian Isles made over to Greece.	1864. Emigration of Caucasian tribes into Turkey.	1864. Nankin, China, taken by Gordon for the Imperialists. Valparaiso bombarded by Spanish fleet.
1865	Death of Proudhon.	1865. Dispute with Chile.	1866. Austrian War. Venetia proclaimed a part of Italy.	1866. Inauguration of trial by jury. War with Bokhara.	
		1866. Military insurrection headed by General Prim.			
1867	Great Exposition in Paris.	1867. Death of Marshal O'Donnell.	1867. Garibaldi and the Papal States.	1867. Russian America sold to the United States.	1867. City of Mexico evacuated by French troops. Egypt declared by the Sultan to be a separate sovereignty. Execution of Maximilian in Mexico.
		1868. Queen deposed.			

FROM THE FALL OF NAPOLEON TO THE PRESENT TIME					
A. D.	Arts of Civilization	United States	Great Britain	Prussia	Austria
1869	French Atlantic telegraph completed.	1869. U. S. Grant, President.			
1870	Railway from Calcutta to Bombay. Mount Cenis tunnel completed.	Union Pacific Railway opened for traffic.	1870. Irish Land Act passed.	1870. War with France. Battle of Sedan.	1870. Concordat with Rome suspended.
				1871. King of Prussia proclaimed Emperor of Germany.	1871. New German Empire recognized.
				Germany	
				1871. William I., Emperor.	
1873	European calendar introduced into Japan.		1873. Payment of Alabama claims to the United States.		
1876	Railway open between Quebec and Halifax. Centennial Exposition at Philadelphia.		1876. Queen Victoria proclaimed Empress of India.		
1877	Telephone invented by Bell.	1877. R. B. Hayes, President.		1877. Attempted assassination of Emperor.	1878. Occupation of Bosnia.
1883	First electric street railway in United States at Baltimore.	1881. James A. Garfield, President. President Garfield assassinated, July 2d; Chester A. Arthur, President.	1882. Attempt on life of Queen Victoria.		1882. 600th anniversary of the House of Habsburg.
1885	Revised version of the Old Testament published.	1885. Grover Cleveland, President. Apache Indian War.			1886. Army put on war footing of 1,500,000 men.
1887	Great railway bridge at Lachine, Canada, completed.		1887. Queen's Jubilee.		
1888	Typesetting machines perfected.	1889. Benjamin Harrison, President. Johnstown flood.	1889. Great labor strikes.	1888. Accession and death of Frederick III. William II., Emperor.	
1888	Pasteur discovers cure for hydrophobia.			1890. Resignation of Bismarck as chancellor.	
1890	Polygamy abolished in Utah.	1890. McKinley Tariff bill passed.	1890. Stanley returns from Africa.	1891. Triple Alliance renewed.	1891. Renewal of Triple Alliance.
1891	Canadian Pacific railway completed.			1893. Anti-Jesuit law repealed.	
1893	World's parliament of religions at Chicago. Electrical measurements established.	1893. Grover Cleveland, President. Chinese Exclusion bill approved. World's Columbian Exposition at Chicago.	1893. Behring Sea arbitration.	1894. Commercial treaty with Russia. New parliament house opened.	1894. Commercial treaty with Russia ratified.
1895	Largest refracting telescope in the world made by Clark for Lick Observatory. Discovery of Roentgen Rays.		1894. Manchester ship-canal opened.	1895. North Sea and Baltic Canal opened. Restrictions imposed on American insurance companies.	1895. Anti-Semitic agitation.
1897	Universal Postal Congress at Washington.	1897. William McKinley, President. Hawaii annexed.	1897. Blackwell tunnel opened. The Queen's Diamond Jubilee celebrated.	1896. New civil code for the empire completed.	1896. Archduke Karl Ludwig, heir to the throne, dies. Millennial Exposition at Buda Pesth.
1898	Reform edict issued in China.	1898. Destruction of the "Maine" at Havana. War with Spain.	1898. Death of Gladstone. Irish local government bill passed. Imperial penny-postage goes into effect.	1898. Death of Bismarck. Emperor visits Constantinople and Jerusalem.	1898. Assassination of the Empress by an anarchist at Geneva.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
1869	New Constitution promulgated.		1869. Vatican Council opened at Rome.		
1870	War declared against Prussia. Battle of Sedan. Surrender of Metz.	1870. Isabella II. abdicates. Amadeus, King.	1870. Rome is annexed to Italy.		1870. Fenian raid in Canada.
1871	Capitulation of Paris. Peace ratified.	1871. Sagasta, Prime Minister.	Declared the Capital of Italy.	1871. Electric telegraph between Russia and Japan.	1871. Military revolt in City of Mexico suppressed.
1873	Marshal MacMahon, President.			1873. Khiva captured.	1872. Attempt to assassinate the Mikado of Japan.
1874	Death of Guizot.	1874. Alfonso XII., King.		1877. War against Turkey.	1874. Insurrection at Nagasaki, Japan.
1879	Jules Grevy, President.	1875. Civil War.	1878. Death of Victor Emmanuel II. Humbert, King.	1878. Spread of Nihilism in the empire.	1878. Montenegro, Servia, and Roumania independent.
			Death of Pius IX. Leo XIII., Pope.	1880. Many Nihilists imprisoned and executed.	
			1882. Death of Garibaldi.	1881. Alexander II. assassinated.	
		1883. Sagasta again minister.		Alexander III., Emperor.	1883. Opening of the St. Gothard Railway from Milan to Lucerne.
			1885. War with Abyssinia.	1885. Ship canal from St. Petersburg to Cronstadt opened.	1886. Upper Burmah annexed to British India.
				Trouble with the Afghans.	
1887	Sadi-Carnot, President.	1889. Trial by jury first put in force.	1887. Alliance with Austria-Hungary and Germany signed.	1886. Russia interferes in Bulgaria.	1889. New constitution promulgated in Japan.
1890	War with Dahomey.	1890. Castileo, Premier.	Crispien, Prime Minister.	1888. Central Asian railway opened.	1890. First Japanese parliament opened.
1892	Panama scandals.		1891. Treaty with Great Britain relative to East Africa.	1890-92. Famine through the empire.	
1894	President Carnot assassinated at Lyons. M. Casimir-Perier, President.	1893. War with Morocco.	Triple Alliance renewed.	1894. Death of Alexander III.	1893. Kruger, President of the Transvaal.
	Capt. Dreyfus tried and imprisoned.		1893. Pope's Jubilee at Rome.	Nicholas II., Czar.	1894. War between China and Japan.
1895	President Casimir-Perier resigns. M. Felix Faure, President.				1895. Cecil Rhodes a power in South Africa.
	Death of Pasteur.				Federation of Australia approved.
			1896. Peace with Abyssinia.	1895. Diplomatic relations with Abyssinia.	Congo State annexed to Belgium.
			1898. Pope offers to mediate in the Cuban question.	Persecution of the Jews.	1896. Jamieson raid in South Africa.
1897	Ten-hour law for railway employees passed.	1897. Assassination of Premier Canovas del Castileo. Scheme of Cuban Autonomy approved.		1897. First official census of the empire.	
				1897. Judicial reform in Siberia.	1897. Turko-Grecian War.
1898	Review of Dreyfus case granted.	1898. Spanish-American War. Treaty of Paris.		1898. Port Arthur leased from China.	1898. Hawaii annexed to the United States.
					Switzerland votes to take over all railways within her borders.
					Wilhelmina, Queen of Holland.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	United States	Great Britain	Germany	Austria
1899	The "Open-door" policy for China agreed to.	1899. Cuba passes into American possession.	1899. The Boer War in South Africa.		
	Jubilee of the year 1900 proclaimed by the Pope.	Philippines and Porto Rico acquired.			
1900	Opening of the Elbe and Trove Canal, Germany.	1900. Civil government established in the Philippines.	1900. Field-Marshal Roberts takes command in South Africa.	1900. Abolition of the Roman Law throughout Germany.	1900. Marriage of the heir apparent Francis Ferdinand.
		Chinese troubles.			
		1901. The Platt Amendment affecting Cuban independence.	1901. Census of the India Empire taken.	1901. Bicentenary of the coronation of the first King of Prussia.	
		Capture of Aguinaldo.	Death of Queen Victoria and accession of Edward VII.		
		Death of ex-President Harrison.			
1902	Marconi wireless system established on Italian warships.	1902. Cuban independence under Platt Amendment.	1902. The British-Japanese Alliance signed.	1902. Prince Henry of Prussia visits the United States.	1902. Triple Alliance renewed.
		President Roosevelt recommends the purchase of the Panama Canal Company.	Boer War ended.	England and Germany press their Venezuelan claims.	The language question between Germany and Czechs.
1903	Completion of the Pacific Cable.	1903. Panama Canal treaty signed with Colombia.	1903. King Edward visits the King of Italy.		1903. New tariff bill.
	Message sent around the world in twelve minutes.	Commercial Treaty with China signed.	Irish Land Bill passed the House of Parliament.		Visit of the Czar of Russia.
1904	New York subway opened.	1904. Great Baltimore fire.	1904. Col. Young-husband enters Tibet.	1904. German troops defeated in Africa.	1904. Ultimatum to the Sultan issued.
		U. S. Senator Burton convicted.			Great railway strike.
		St. Louis Exposition opened.			
1905	Gigantic power plants erected at Niagara Falls.	1905. Protocol with Santo Domingo.	1905. Resignation of Lord Curzon as Viceroy of India.	1905. Intervention of Germany in Moroccan affairs.	1905. Treaty with Germany ratified.
				The new commercial treaties.	Universal suffrage on an educational basis advocated by Minister of the Interior.
				Marriage of the Crown Prince.	
1906	The Simplon Tunnel opened.	1906. Riot at Brownsville, Texas.	1906. King Edward visits Paris.	1906. Propaganda against Socialism.	1906. Prince Schillingfurst succeeds Baron Gauth.
	Pan-American conference meets at Rio de Janeiro.	The President visited Panama.			
	Moroccan conference at Algiciras.	Great earthquake at San Francisco.			
	Wireless telegraphy conference at Berlin.				
1907	The "Lusitania" makes her first voyage.	1907. Philippine Assembly opened.	1907. King Edward and Emperor Franz Joseph meet at Ischl.	1907. German Emperor visited London.	1907. Universal Suffrage Bill passed.
1908	Discoveries in the transmutation of metals.	1908. Voyage of the Pacific fleet to Asiatic waters.			

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
1901	Diplomatic relations with Turkey suspended.	1899. Death of Premier Canovas of Spain.	1900. Assassination of King Humbert. Victor Emmanuel III., King.	1899. Czar proposes universal peace.	1899. Venezuela-Guiana boundary line established.
1902	M. Combes forms a new French ministry.	1902. Alfonso XIII., King.		1901. Count Tolstoi excommunicated.	1900. Outbreak of the Boxers in China.
1903	Dreyfus case reopened. President Loubet visits King Edward.		1903. Death of Pope Leo XIII. Pope Pius X.		1901. Submission of China to the allied powers. Inauguration of the federal government of the Commonwealth of Australia.
1904	Arbitration treaties with Holland, Spain, Sweden, Norway, and the United States. Bill for separation of church and state introduced.	1904. Death of Ex-Queen Isabella at Paris.	1904. King and Queen of Italy visit England.	1904. War with Japan over Manchuria begun.	1903. Peter I., King of Servia.
1905	The Moroccan situation grows in complexity.	1905. Attempted assassination of the King in Paris.	1905. The railway bills passed in Italy.	1905. Fall of Port Arthur and end of war. Great railway strike at St. Petersburg, Warsaw, and Moscow. Constitution granted by Czar, and the Duma authorized.	1904. President Diaz of Mexico reflected. Death of Paul Kruger, in Switzerland.
1906	M. Fallieres, President. The Church controversy. The Pope's encyclical. M. Sareien, Premier.	1906. King Alfonso married to Princess Victoria of England.	1906. The railway bills passed in Italy.	1906. The Czar opened the first Russian Duma. Premier Stolypin killed by explosion of bomb.	1906. Death of King Christian of Denmark. Norway and Sweden independent kingdoms. Emperor of China promises constitutional government. President Palma of Cuba resigns. The Shah opened the first Persian parliament.
1907	Wine grower's agitation. French occupation of Morocco.	1907. King and Queen visit England.	1906. Sonnino, Premier. International Exhibition at Milan.	1907. Third Russian Duma convened.	1907. Abdication of Korean Emperor. Death of Oscar II. of Sweden.

HISTORICAL OUTLINE OF THE NEW WORLD

I. SEMI-HISTORICAL PERIOD—500 TO 1400 A. D.

II. PERIOD OF AUTHENTIC HISTORY—1400 A. D. TO THE PRESENT TIME

A. D.		
500	Pre-Toltec period.	1002. Thorwald, Leif's brother, visits Vinland.
503	Mexican history begins.	1004. Thorwald killed in a skirmish with the natives.
600	Toltecs established throughout Mexico.	1005. Thornfinn Karlsefne lands in Rhode Island.
861	The Norseman, Nadodd, discovers Iceland.	1050. End of Toltec power in Mexico.
982	Eric the Red discovers and names Greenland.	1090. Aztecs begin their journey toward Mexico.
985	Bjarni sights land at Cape Cod or Nantucket.	1325. Aztecs found the City of Mexico.
1000	Leif Ericson sails for Western lands.	1349. Esquimaux appear in Greenland.
		1400. Communication with Greenland ceases.
DISCOVERY, EXPLORATION, AND CONQUEST FROM 1492 TO 1600 A. D.		
1492	Columbus sails from Palos, Spain, and discovers Cuba.	1521. Cortez captures the City of Mexico; Mexico constituted a Kingdom.
1493	Columbus sails on his second expedition. Cattle first brought to America.	1524. Verrazzano enters the Bay of New York.
1494	Columbus discovers Jamaica.	1528. Spaniards land in Florida.
1497	John Cabot discovers the North American continent.	1534. Jacques Cartier enters Gulf of St. Lawrence.
1498	Columbus sails on his third voyage.	1535. Grijalva's expedition discovers California.
1499	First voyage of Amerigo Vespucci.	1540. De Soto conquers Louisiana.
1500	Gaspar Cortereal discovers Labrador.	1562. Jean Ribault explores coast of Florida.
1502	Columbus sails on his fourth voyage.	1565. St. Augustine, Florida, founded by Menendez.
1504	Cape Breton discovered by French fishermen.	1583. Sir Humphrey Gilbert takes possession of Newfoundland.
1511	Velasquez subjugates Cuba; Havana founded.	1584. Raleigh's first expedition lands in Virginia.
1512	Florida discovered by Juan Ponce de Leon.	1585. John Davis discovers Davis Straits.
1513	The Pacific Ocean discovered by Vasco de Balboa.	1586. Sir Francis Drake visits Roanoke Inlet.
1517	Fernando de Cordova discovers Mexico.	1587. Virginia Dare, first English child born in America.
1519	Hernando Cortez lands in Mexico; Panama settled.	1602. Bartholomew Gosnold discovers Cape Cod.
		1605. De Monts takes possession of Maine.
FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE—1607-1776		
	British America	French America
1607	English settlement at Jamestown. Captain John Smith rescued by Pocahontas.	1607. Poutrincourt establishes first permanent French settlement in America at Port Royal.
1614	New Amsterdam settled by the Dutch.	1608. Champlain settles Quebec.
		1611. French Jesuits settle at Port Royal.
1618	Death of Powhatan, Indian chief.	
1619	First slaves brought to Virginia by the Dutch.	
1620	Mayflower lands at Plymouth, Mass. Peregrine White, first white child born in New England.	1620. Champlain Governor of Canada.
1621	Death of John Carver, first Governor of Plymouth Colony; succeeded by William Bradford.	
	Miles Standish, Captain.	
	Treaty between Plymouth Colony and Massasoit.	
	Cotton-seed planted in Virginia.	
1623	New Hampshire settled.	
	Lord Baltimore founds a colony at Ferryland, Newfoundland.	
1627	Swedes and Finns settle at Cape Henlopen.	
1628	John Endicott Governor of Massachusetts.	1628. Port Royal taken by the English.
1629	John Winthrop Governor of Massachusetts.	1629. Sir David Kirke captures Quebec.
1632	Lord Baltimore receives the grant of Maryland.	1632. Richelieu obtains restoration of territory.
1633	Connecticut settled by the English. Wouter Van Twiller Governor of New Amsterdam.	
1634	English Catholics settle at St. Mary's, Maryland.	
1636	Roger Williams settles Rhode Island. Pequot War begins in Massachusetts.	
	Swedes settle Delaware.	
1638	John Harvard bequeaths his library to found a college.	
	New Haven settled.	
1639	Printing press established by Stephen Daye at Cambridge, Mass.	1639. Ursuline Convent established at Quebec.
	First constitution of Connecticut.	1640. The French attempt a settlement at Green Bay, Wisconsin.
		1640. Spanish fleet of 90 vessels arrives off coast of Brazil.
		1610. Leon, Central America, founded.
		1611. Talamanca Indians, of Central America, massacred by the Spanish.
		1620. Buenos Ayres separated from Asuncion.
		1630. Spaniards expel the Dutch from Brazil. Alvarado subdues Central American Indians. Hayti seized by French buccaneers.
		1635-8. French, English, and Dutch make numerous settlements in the West Indies.

A. D.	FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE — 1607-1776		
	British America	French America	Spanish America
1642	Sir William Berkeley Governor of Virginia.	1641. Montreal founded.	
1643	Swedes settle in Pennsylvania.		
1645	Free schools established at Roxbury, Mass.		
1647	Peter Stuyvesant, Governor of New Amsterdam.		
1652	Mint established in Boston, John Hull mintmaster.		
1653	North Carolina settled.		
1655	Delaware brought under Dutch rule.		
1656	Quakers arrive in Boston.		
1664	Fort Amsterdam surrendered to the English.	1659. Laval, first Bishop of Quebec. French fur traders explore Lake Superior.	1661. Dutch give up Brazil. 1663. Spain denies the right of England to the Province of Carolina.
1665	Provincial government established in Maine.	1668. Marquette establishes mission at Sault Ste. Marie. 1669. La Salle sails down the Ohio to the Mississippi.	1665. St. Augustine pillaged by English buccaneers.
1670	South Carolina settled.	1670. Maine, east of the Penobscot, occupied by the French.	
1671	French settle in Michigan.	1672. Count de Frontenac Governor of Canada. 1673. Marquette and Joliet in Iowa. Fort Frontenac (Kingston, Ont.) built. 1679. French at Niagara Falls.	1671. Danes occupy St. Thomas.
1673	New York and New Jersey surrendered to the Dutch.		
1675	King Philip's War in Massachusetts.		
1676	Nathaniel Bacon's rebellion in Virginia.		
1681	William Penn receives charter for Pennsylvania.		
1683	First assembly in New York under English rule.	1682. La Salle descends the Mississippi to the Arkansas, and names the valley Louisiana. 1685. French in Texas under La Salle.	1685. Dampier, English buccaneer, sacks Leon.
1690	Colonial Congress called in New York.	1689. French occupy Hudson Bay territory. Iroquois capture Montreal and Lachine. 1691. Acadia retaken by the French.	
1700	Williamstown made capital of Virginia.		1693. Gold mining begins in Brazil.
1701	Philadelphia incorporated as a city.	1702. Settlement in Alabama on Mobile River. 1710. Port Royal captured by English fleet. 1718. New Orleans founded.	1710. French capture Rio de Janeiro.
1719	Scotch-Irish settle in New Hampshire.		1719. French capture Pensacola. 1722. Pensacola restored to Spain. Treaty between Chilians and Spanish.
1720	British Government formally recognizes colony of Newfoundland.	1729. Massacre of French at Natches by Indians.	1729. Spaniards establish themselves at Montevideo.
1732	First stage between Boston and New York.		
1730	Richmond, Va., founded by William Byrd.		1740. Governor Oglethorpe attacks Florida.
1744	Hostilities with the Six Indian Nations.		
1745	Louisburg captured by New England troops.	1745. Louisburg captured by the British. 1749. Fort Rouille (Toronto) built. 1752. Marquis Duquesne, Governor of Canada.	
1752	Franklin experiments with electricity.		
1753	First theater opened in New York.		
1754	Convention at New York to consider a Colonial Confederacy. French and Indian War.	1755. French defeat Braddock.	
1755	Braddock defeated at Ft. Duquesne. Battle of Lake George.		
1758	Fort Frontenac surrendered to the English.		
1759	Battle of Quebec — Wolfe and Montcalm killed.	1759. Quebec surrenders to the English.	1758. Jesuits expelled from Brazil.
1760	Montreal surrendered to the British. France cedes Canada to the English.	1760. Marquis de Vaudreuil, last French Governor of Canada. 1762. Louisiana ceded to Spain.	1762. Spain acquires Louisiana from France.
1762	English settle in New Brunswick.		1763. Florida ceded to Great Britain. French Guiana colonized.
1763	Pontiac's War. Massacre of Wyoming.	1763. Acadia permanently ceded to the British.	

A. D.	FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE — 1607-1776			
	British America	Canada	Spanish America	
1765	Delegates of the Colonies assemble in New York to resist the Stamp Act.	1764. Population of Canada, about 60,000.	1766. Large colony of Acadians arrive in Louisiana. 1768. Revolt of the French against Spanish rule in Louisiana.	
1770	Boston Massacre.			
1773	Tea thrown overboard in Boston Harbor.		1773. Santiago, Guatemala, destroyed by an earthquake.	
1774	The Colonial Congress adopts a Declaration of Rights.			
1775	Beginning of the Revolutionary War with the Battle of Lexington. Articles of Union and Confederation adopted. Washington appointed commander-in-chief of the American forces.	1775. Gen. Montgomery captures Montreal and St. John. Death of Montgomery at Quebec and failure of American campaign.	1776. Paraguay placed under the jurisdiction of Buenos Ayres. Buenos Ayres made capital of the viceroyalty.	
1776	First Union flag unfurled at Cambridge, Mass. British evacuate Boston. Declaration of Independence at Philadelphia.			
FROM THE DECLARATION OF INDEPENDENCE TO THE ADOPTION OF THE CONSTITUTION — 1776-1789, A. D.				
	United States	Canada	Spanish North America	Spanish South America
1777	Landing of Lafayette at Charleston. Battle of Princeton. Battle of Brandywine. British Army occupies Philadelphia. Surrender of Burgoyne. Articles of Confederation adopted by the Thirteen Colonies.			
1778	Treaty of Alliance with France. Evacuation of Philadelphia by the British. Seventh Continental Congress meets at Philadelphia.	1778. Frederick Haldinand, Governor of Canada.		
1779	Battle of Monmouth. British driven from South Carolina. Stony Point captured by Wayne. Paul Jones gains naval victory over the British off the coast of Scotland.	1779. Library founded at Quebec.	1779. Baton Rouge captured from the British.	
1780	Major André hanged as a spy. Battle of Kings Mountain, S. C. Benedict Arnold turns traitor.	1780. Coteau du Sack Canal built.		1780. Insurrection of Peruvians under Amaru.
1781	Americans victorious at Cowpens. Cornwallis surrenders at Yorktown. Bank of North America established at Philadelphia.			1781. The English Admiral Rodney takes possession of Guiana.
1782	Holland recognizes the independence of the United States. British evacuate Charleston. French army embarks from Boston. Preliminary articles of peace signed at Paris.			
1783	Denmark, Sweden, Spain, and Russia recognize the independence of the United States. Treaty of peace signed with Great Britain. Eighth Continental Congress meets at Princeton, N. J.	1783. St. John, N. B., founded. Kingston founded.	1783. Limits of Belize defined.	1783. Dutch colonies restored to Holland.
1784	Congress adopts decimal currency system. Tenth Continental Congress meets at Trenton, N. J.	1784. N. E. Loyalists settle in Upper Canada. Liberty of conscience proclaimed in Newfoundland.	1784. Island of St. Bartholomew transferred to Sweden.	
1785	Thomas Jefferson appointed Minister to France; John Adams to Great Britain.			
1786	Daniel Shay's rebellion in Massachusetts. United States Mint authorized.			1786. Pacifications of the negroes and tribes in Dutch Guiana.
1787	Constitutional convention assembles at Philadelphia.			
1788	Last Continental Congress adjourns.	1788. King's College, Windsor, Nova Scotia, founded.		

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1789	George Washington , President; John Adams, Vice-President. First Congress meets in New York. First Tariff bill passed. Cabinet departments and United States Supreme Court organized.		1789. Settlers from North Carolina arrive in Louisiana.	1789. Malaspina explores the coast of South America.
1790	Indian War in Northwest Territory. Death of Benjamin Franklin. First mechanical patent issued. Census enumeration ordered.			
1791	Anthracite coal discovered in Pennsylvania.	1791. Canada divided into Upper and Lower.	1791. Negroes of Hayti revolt against France.	
1792	Vermont admitted as a State. Corner stone of White House laid. Kentucky admitted.			
1793	Whitney patents the cotton-gin. Washington receives all the electoral votes for reelection. Corner stone of United States Capitol laid by Washington. Political parties assume names of Republican and Federalist. Third Congress opens at Philadelphia.	1793. "Toronto founded. Slavery abolished in Upper Canada.		
1794	Foundations of United States Navy authorized. Whisky insurrection in Pennsylvania.	1794. Jay's Treaty relative to commerce, navigation, and boundary.		
1795	Anti-rent troubles in New York.		1795. Maroon War in Jamaica.	
1796	Tennessee admitted. Washington issues his "Farewell Address."		Sugar first produced from cane in Louisiana.	1796. Guiana again in British possession.
1797	John Adams , President; Thomas Jefferson Vice-President. Special session of Congress to consider relations with France.	1797. Sault Ste. Marie Canal begun.		
1798	Alien and sedition laws passed. Commercial intercourse with France suspended.			
1799	General post-office established. Death of George Washington.			
1800	French spoliation claims adjusted. Capital removed from Philadelphia to Washington.	1800. The Sault Ste. Marie Canal in Canada completed.	1800. Louisiana transferred to France by Spain.	
1801	Thomas Jefferson , President; Aaron Burr, Vice-President. Congress establishes the District of Columbia. Tripoli declares war against the United States.		1801. Toussaint l'Ouverture founds republic in San Domingo.	1802. The Dutch resume possession of British Guiana.
1803	Louisiana purchased for \$15,000,000. Ohio admitted.	1803. Slavery illegal in Lower Canada.	1803. French quit Hayti.	1803. British Guiana finally acquired.
1804	Vice-President Burr kills Hamilton in a duel.			
1805	Jefferson re-elected ; George Clinton, Vice-President.			
1807	Embargo Act passed. Fulton's steamboat, "Clermont," steams from New York to Albany.			1807. Slave trade abolished in Dutch Guiana.
1809	James Madison , President; George Clinton, Vice-President. Embargo Act repealed.	1809. Steamer "Accommodation" arrived at Quebec from Montreal.		1808. Royal family of Portugal arrived in Brazil.
1811	Trading posts first established among the Indians. Battle of Tippecanoe with Indians. First steamboat on the Ohio.			1809. Ecuador attempts to throw off the Spanish yoke.
1812	Louisiana admitted. War declared against Great Britain. American vessel "Constitution" captures the British "Guerriere." American vessel "Wasp" captures the British "Frolic." American vessel "United States" captures the British "Macedonian." American vessel "Constitution" captures the British "Java." Canada invaded.	1812. Sir George Prevost, Governor.	1812. Spanish constitution promulgated in Costa Rica.	1810. Independence of Argentine Republic begins. Independence of Chile.
				1811. Paraguay declares its independence of Spain. Venezuela proclaims its independence; war ensues for ten years.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1813	Commodore Perry captures the English fleet on Lake Erie. Madison re-elected; Elbridge Gerry, Vice-President. Toronto, Canada, captured. Battle of the Thames.			1813. Chile reconquered by Spain.
1814	Battle of Lundy's Lane. British capture and burn Washington. Hartford Convention to oppose war meets. Stonington, Conn., bombarded by British fleet.			1814. Montevideo captured by the revolutionary army of Buenos Ayres.
1815	Jackson defeats the British at New Orleans. Treaty of Peace with Great Britain ratified. Algerian War.			1815. Brazil becomes a kingdom.
1816	U. S. Bank chartered by Congress. The "Ontario" first steamboat on Great Lakes. Indiana admitted. American Colonization Society formed; founds Liberia.			1816. Argentine declares its separation from Spain.
1817	James Monroe , President; Daniel D. Tompkins, Vice-President. Mississippi admitted. First instruction of deaf mutes in America by T. H. Gallaudet, at Hartford, Conn. Seminole War.	1817. Ottawa founded. First bank note issued at Montreal.	1817. Unsuccessful insurrection in Mexico.	1817. Chileans defeat Spanish and gain their independence.
1818	Illinois admitted. Pensions granted Revolutionary soldiers.			
1819	The "Savannah," the first transatlantic steamship. W. T. G. Morton discovers the use of ether as an anæsthetic. Alabama admitted. Florida purchased by the United States. Maine separated from Massachusetts.			
1820	Maine admitted.	1820. Earl of Dalhousie, Governor.	1821. Mexico becomes independent of Spain. Costa Rica independent.	
1821	Missouri Compromise Bill passed. Missouri admitted. Liberia purchased. Andrew Jackson appointed Governor of Florida.		1822. Mexico an empire under Iturbide. Costa Rica united to Mexico.	1822. Brazil declares its independence. Pedro 1., Emperor. Ecuador independent.
1822	Independence of Spanish South American States recognized. Gaslight introduced into Boston.		1823. Federal Republic proclaimed for Mexico. Federation of Central American States.	1824. Bolivar, Dictator of Peru. 1825. Argentine constitution decreed. Upper Peru independent, takes the name of Bolivia. Republic of Central America.
1823	President Monroe proclaims the "Monroe Doctrine."			
1824	Gen. Lafayette arrives in New York.			
1825	John Quincy Adams , President; John C. Calhoun, Vice-President. Treaty with Russia ratified. Erie Canal finished.		1826. First survey for Nicaraguan ship canal.	1826. Gen. Sucre, President of Bolivia; succeeded by Bolivar. War between Buenos Ayres and Brazil.
1827	First railroad in United States built in Massachusetts.			1828. Ecuador invaded by Peru. Uruguay independent.
1828	Protective Tariff bill passed.			
1829	Andrew Jackson , President; John C. Calhoun, Vice-President.	1829. Welland Canal from Port Dalhousie to Port Robinson completed.	1829. Expulsion of Spaniards from Mexico decreed.	1829. Venezuela separates from New Grenada.
1830	Great speeches of Webster and Hayne delivered in the U. S. Senate.			1830. Death of Bolivar, Gen. Flores first President of Ecuador.

FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME				
A. D.	United States of America	Canada	Spanish North America	Spanish South America
1831	First locomotive built in United States. Chloroform discovered by Samuel Guthrie.			1831. Revolution in Brazil. Abdication of Don Pedro.
1832	First Democratic National Convention. Black Hawk War. Nullification in South Carolina. United States Bank bill vetoed by the President.	1832. Newfoundland obtains a colonial legislature.		1832. Patagonia visited by Charles Darwin, the scientist.
1833	Jackson re-elected; Martin Van Buren, Vice-President. Bank deposits removed from the National Bank.	1833. Constitutional government in Newfoundland.	1833. Santa Ana, President of Mexico.	1833. Chilean constitution formed.
1834	National debt extinguished. Whig party first takes its name.			
1835	Attempted assassination of President Jackson. Seminole War begins.		1835. Texas declares her independence.	
1836	Massacre at Alamo, Texas. Arkansas admitted. Sam Houston, first president of Texas.	1836. First railway in Canada opened.	1836. First Congress meets in Costa Rica.	
1837	Martin Van Buren , President; Richard M. Johnson, Vice-President. Great commercial panic. Morse system of telegraphy invented.	1837. Papineau and Mackenzie rebellion.		
1838	"Great Western" and "Sirius" cross the Atlantic.	1838. Canadian rebellion suppressed.	1838. Mexico declares war against France. Slavery abolished in British West Indies.	1838. Buenos Ayres blockaded by French fleet.
1839	Vulcanized rubber patented by Goodyear.		1839. Termination of the Mexican-French War.	
1840	Lieut. Wilkes discovers Antarctic continent.	1840. Upper and Lower Canada reunited.		
1841	William H. Harrison , President; John Tyler, Vice-President. Harrison dies April 4th; John Tyler , President. Elias Howe patents the sewing machine.			
1842	Failure of the United States Bank. Dorr's Rebellion in Rhode Island. Ashburton Treaty with England signed.			
1843	Bunker Hill Monument dedicated.	1843. McGill University, Montreal, opened.		1845. England and France blockade Buenos Ayres, pending Civil War.
1844	Texas annexed to the United States. Morse telegraph completed from Baltimore to Washington.		1844. Dominican Republic proclaimed in Hayti.	Venezuela's independence recognized by Spain.
1845	James K. Polk , President; George M. Dallas, Vice-President. Florida admitted. United States Naval Academy established at Annapolis. Texas admitted. Petroleum discovered near Pittsburg.			
1846	Mexican War begins. First application of ether by Drs. Jackson and Morton. Wilmot Proviso. Smithsonian Institution established in Washington. Iowa admitted.	1846. Earl of Cathcart, Governor.	1846. Gen. Mejia of Mexico issues proclamation of hostility to the United States. War with United States.	
1847	Salt Lake City founded by the Mormons.		1847. Mexico sequesters church property to raise war funds. Gen. Quitman, Military Governor of City of Mexico.	
1848	Gold discovered near Colonia, Cal. Peace signed with Mexico. Acquisition of New Mexico and California. Wisconsin admitted. Corner stone of Washington Monument laid.		1848. Peace between United States and Mexico.	

FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME				
A. D.	United States of America	Canada	Spanish North America	Spanish South America
1849	Zachary Taylor , President; Millard Fillmore, Vice-President. Rush of gold hunters to California begins.			
1850	Death of President Taylor, July 9th; Millard Fillmore , President. California admitted. Bulwer Clayton Treaty with Great Britain signed. Fugitive Slave Bill passed. Clay Compromise Bill passed.	1850. Riots in Montreal; Parliament House burned. Canadian clergy reserves abolished.	1850. Cuba invaded by American filibusters under Lopez.	1850. Steamship line from Brazil to Europe inaugurated.
1851	Great fire in library of Congress.		1851. Second invasion of Cuba; Lopez shot. Hayti an Empire under Solouque.	1852. Slave trade suppressed in Brazil.
1852	United States Mint established at San Francisco. Deaths of Henry Clay and Daniel Webster.			1853. Civil War in Argentine.
1853	Franklin Pierce , President; Rufus King, Vice-President. Walker's filibustering expedition. Gadsden purchase.	1853. The "Genova," first transatlantic steamer, arrives at Quebec.		
1854	Treaty between United States and Japan. Kansas-Nebraska Bill approved. Ostend Manifesto issued.	1854. First petroleum wells bored.	1854-60. Central America invaded by American filibusters under Walker.	
1855	Completion of Panama Railroad. Troubles in Kansas. First agricultural college in United States established at Cleveland.	1855. Suspension Bridge at Niagara Falls opened.		
1856	Civil strife in Kansas. First Republican National Convention.	1856. Grand Trunk Railroad opened. Allan Steamship Line established.		1856. Ecuador adopts French system of coinage, weights, and measures.
1857	James Buchanan , President; J. C. Breckenridge, Vice-President. Dred Scott decision. Great financial panic in United States. First attempt to lay transatlantic cable.		1857. New Mexican constitution established.	
1858	Minnesota admitted. Second treaty with China signed. First message over Atlantic cable.	1858. Ottawa made the capital. Decimal system of coinage adopted.	1858. Mexican constitution annulled by Church party. Civil War in Mexico. Hayti a Republic.	
1859	Oregon admitted. John Brown's raid.		1859. Juarez of Mexico confiscates Church property.	
1860	Morrill high tariff bill approved. South Carolina passes ordinance of secession from the Union. Abraham Lincoln , President; Hannibal Hamlin, Vice-President.	1860. Prince of Wales visits Canada. Victoria railroad bridge at Montreal opened.	1860. Civil War in Mexico between Zuloaga and Miramon.	1860. Revolutions and insurrections prevail in Uruguay for next thirty years.
1861	Secession of Mississippi, Florida, Alabama, Georgia, Louisiana, Texas, Virginia, North Carolina, Arkansas, and Tennessee. Attack on Fort Sumter. Kansas admitted. Southern States form a confederacy. McClellan appointed commander-in-chief. Mason and Slidell taken from British vessel.	1861. Gold found in Nova Scotia.	1861. Juarez, Dictator of Mexico. Mexican troubles with England, France, and Spain. Reunion of St. Domingo with Spain.	
	Confederate States of America 1861. Jefferson Davis, President; A. H. Stephens, Vice-President. Battles of Bull Run.			
1862	Fight between the "Merrimac" and "Monitor." Slavery abolished in District of Columbia.	1862. Capture of Ft. Henry. Grant takes Ft. Donelson.	1862. Macdonald, Premier.	1862. England and Spain disapprove Mexican Monarchy for Maximilian.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME				
	United States of America		Canada	Spanish North America	Spanish South America
1862	Treaty with Great Britain for suppression of slave trade. Congress passes act to prevent polygamy in the Territories. Gen. Jackson captures Harpers Ferry. Battle of South Mountain. Battle of Antietam. Greenbacks first issued.	Confederate States of America 1862. Battle of Shiloh. Capture of New Orleans by Farragut and Butler. Battle of Fair Oaks. Robert E. Lee in command of Confederate armies. Battles before Richmond. Battle of Murfreesboro.			
1863	Emancipation proclamation. West Virginia admitted. Gen. Meade commander of the Army of the Potomac. Battle of Gettysburg.	1863. Battle of Chancellorsville. Siege of Vicksburg. Battle of Chickamauga. Battle of Lookout Mountain.		1863. Mexico occupied by the French under Bazaine.	
1864	U. S. Grant, Lieutenant General. Fight between "Kearse" and "Alabama." Fugitive Slave Law repealed. Battle of Monocacy. Premium on gold, 285 per cent. Nevada admitted. President calls for 500,000 volunteers. Grade of Vice-Admiral established. Additional call for 300,000 volunteers.	1864. Grant's Virginia campaign. Battle of Wilderness. Battle of Spotsylvania C. H. Battle of Cold Harbor. Atlanta campaign. Capture of Mobile. Battle of Winchester. Sherman's march to the sea. Thomas defeats Hood at Nashville.	1864. Confederates in Canada plan raids.	1864. Maximilian, Emperor of Mexico.	1864. Hostilities between Paraguay and Brazil. American Congress at Lima, Peru.
1865	Lincoln re-elected; Andrew Johnson, Vice-President. Peace conference at Hampton Roads. President Lincoln shot at Ford's Theater, Washington, April 14th. Andrew Johnson, President; April 15th. General amnesty proclamation. Habeas Corpus restored in Northern States.	1865. Confederate Congress adjourns <i>sine die</i> . Richmond evacuated by Confederates. Lee surrenders at Appomattox, April 9th. Johnston, Morgan, Taylor, and Kirby-Smith surrender. Jefferson Davis captured.	1865. Confederation rejected by New Brunswick.	1865. Maximilian proclaims Mexican-French War ended. United States protests against French occupation of Mexico. Insurrection in Jamaica.	1865. Argentine invaded by Paraguayans under Lopez. War between Brazil and Uruguay. Treaty between Brazil, Uruguay, and Argentine against Paraguay. Four years' war results. Religious toleration enacted in Chile.
1866	Civil Rights Bill passed over President's veto. Fenian raid into Canada. Atlantic telegraph completed.		1866. Invasion of Canada threatened by Fenians. Canadian Parliament first meets at Ottawa.	1866. Napoleon III. agrees with United States to withdraw French troops from Mexico.	
1867	Nebraska admitted. Alaska transferred by Russia to the United States.		1867. Dominion of Canada formed by union of Upper and Lower Canada, Nova Scotia, and New Brunswick. Lord Monck, Viceroy of Canada. New Parliament at Ottawa.	1867. Maximilian, Miramon, and Mejia tried in Mexico and shot. Republic re-established in Mexico.	1866. Spaniards bombard Valparaiso, Chile. Peru joins Chile in war against Spain.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1868	President Johnson impeached, tried, and acquitted. Southern States readmitted to representation in Congress. Burlingame treaty with China signed. XIV Amendment adopted.	1868. Agitation against confederation in Nova Scotia. Fenian raid repelled. Sir John Young, Governor-General.	1868. Insurrection of creoles in Cuba under Cespedes.	
1869	U. S. Grant , President; Schuyler Colfax, Vice-President. Union Pacific Railroad opened for traffic. Financial panic in New York. Soldier's monument at Gettysburg dedicated.	1869. Newfoundland refuses to join the Dominion. Hudson Bay territory purchased by the Dominion.	1869. Filibusters again attack Cuba.	1869. Revolution in Ecuador.
1870	Northern Pacific Railroad begun. XV Amendment ratified.	1870. Rupert's Land made the Province of Manitoba.	1870. Continual insurrections in Cuba.	
1871	Legal Tender Act decided constitutional. "Tweed Ring" in New York exposed. Great fire in Chicago. District of Columbia a territorial government.	1871. British Columbia united to the Dominion. Departure of last battalion of Royal troops. Uniformity of currency established.	1871. Civil War and insurrections in Mexico.	
1872	Geneva award of \$15,500,000 made to the United States. Great fire in Boston; loss \$80,000,000.	1872 Lord Dufferin, Governor-General.		
1872	Modoc War in California. Grant re-elected ; Henry Wilson, Vice-President.			
1873	Credit Mobilier investigation by Congress. One cent postal cards issued. Financial panic in New York. Territorial government in District of Columbia abolished.	1873. Prince Edward Island joins the Dominion.	1873. Slavery abolished in Porto Rico. 1874. Religious orders suppressed in Mexico.	1873. Treaty between Argentine and Brazil.
1875	Act authorizing the resumption of specie payments.	1875. Icelanders settle in Northwest Territories.		
1876	Massacre of Custer's troops by Sitting Bull. Centennial Exposition at Philadelphia. Colorado admitted.	1876. Intercolonial railroad opened from Quebec to Halifax.		1876. Venezuela renounces papal authority.
1877	Electoral Commission appointed. Rutherford B. Hayes , President; William A. Wheeler, Vice-President. Great railroad strike. "Molly Maguires" hanged in Pennsylvania. War with the Nez Percis Indians. Edison announces his phonograph.	1877. Great fire at St. John, New Brunswick.		
1878	Bland Silver Bill passed over President's veto. Electric lighting introduced by Edison.	1878. Marquis of Lorne, Governor-General.	1878. Surrender of insurgent government in Cuba.	
1879	United States Government resumes specie payment. Women permitted to practice before United States Courts. French Atlantic cable laid.	1879. Industrial Exhibition at Ottawa.		1879. War between Chile and Peru and Bolivia.
1880	The Kearney agitation in California.	1880. Royal Canadian Academy of Arts founded.		1880. Buenos Ayres made the capital of Argentine.
1881	James A. Garfield , President; Chester A. Arthur, Vice-President. President Garfield shot, July 2d; Chester A. Arthur , President, September 20th. International Cotton Exposition at Atlanta, Ga.	1881. Contract for new Pacific railway ratified.		1881. Lima occupied by the Chileans. Patagonia divided by Chile and Argentine.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1882	Star Route trials begin. War with the Apache Indians.	1882. Northwest Territory beyond Manitoba divided into Assiniboia, Saskatchewan, Alberta, and Athabaska. First colony of Russians settle in Northwest Territory.		
1883	Northern Pacific Railroad completed. Opening of the Brooklyn Bridge.	1883. Conflicts between Catholics and Orangemen in Newfoundland. Standard time adopted.	1883. Ancient city discovered in Sonora, Mexico.	1883. Peruvians defeated with great loss by Chile.
1884	Great floods in the Ohio Valley. Financial crises in New York.	1884. Marquis of Lansdowne, Governor-General.	1884. Porfirio Diaz, President of Mexico.	
1885	Grover Cleveland , President; Thomas A. Hendricks, Vice-President. Apache War in New Mexico. World's Industrial Exposition at New Orleans.	1885. The Riel insurrection in Northwest.	1885. Concessions to the Nicaragua Canal Company granted by Nicaragua.	
1886	Railroad strikes and anarchistic riots. Silver certificates authorized. Bartholdi's Statue of Liberty unveiled.	1886. Fisheries dispute with United States. Vancouver City founded. 1887. Great railway bridge at Lachine completed. Anthracite coal first mined in Canada.	1886. Slavery abolished in Cuba.	
1888	Chinese immigration prohibited.	1888. Lord Stanley, Governor-General.		1888. Slavery totally abolished in Brazil.
1889	Benjamin Harrison , President; Levi P. Morton, Vice-President. Johnstown flood. Pan-American Congress meets in Washington. North and South Dakotas, Washington, and Montana admitted. Oklahoma opened for settlement. Idaho and Wyoming admitted. People's Party convenes at Topeka, Kan. McKinley Tariff goes into effect. Sioux War: Sitting Bull killed.			1889. Revolution at Rio de Janeiro; emperor banished; republic declared. First Brazilian Congress meets.
1890	Massacre of Italians in New Orleans.	1890. Dominion Commons passed a resolution of loyalty to Great Britain.	1890. Union of Central American States formed.	1890. Great financial crisis in Argentine.
1891		1891. Canadian Pacific Railway completed. First Pacific mail steamer arrives at Vancouver from Yokohama. St. Clair tunnel connecting Canadian and United States railways opened.		1891. Civil War in Chile. Mob at Valparaíso assaults United States sailors.
1892	Behring Sea dispute referred to arbitration.	1892. Dominion discriminates against United States in use of Welland Canal.		1892. Revolutions and insurrections in Brazil.
1893	Grover Cleveland , President; Adlai E. Stevenson, Vice-President. Columbian Exposition opened at Chicago. World's Parliament of Religions meets at Chicago. Chinese Exclusion bill approved. Great financial depression. Silver bill approved.	1893. Canal tolls arranged with United States. Commercial treaty between France and Canada. Earl of Aberdeen, Governor-General.		1893. Insurrections in Argentine. Naval revolt in Brazil, led by Admiral de Mello.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1894	Wilson Tariff bill passed. Great railroad strike from Ohio to Pacific coast. Coal strike. Republic of Hawaii recognized. New treaty with Japan.	1894. Intercolonial Congress opened at Ottawa.		1894. Naval scrimmage between Admiral da Gama, Brazilian insurgent, and Admiral Benham, United States Navy.
1895	Free silver movement an important issue. Special message of the President on the Venezuelan question.	1895. First Exhibition in North-west opened at Regina.	1895. Renewed insurrections in Cuba against Spanish rule. Cuba demands autonomy from Spain.	1895. Chile adopts the gold standard. Construction of Panama Canal in progress by the French.
1896	Treaty with the Choctaw Indians.	1896. Sir Charles Tupper, Premier. Newfoundland Government purchases railway system.	1896. Weyler issues his famous reconcentrado order in Cuba. Uniform education system in Mexico.	1896. Revolt of "Fanatics" in Brazil. Chile signs treaty of amity with Bolivia. Gold mines of great value discovered in Peru.
1897	William McKinley , President; Garret A. Hobart, Vice-President. Universal Postal Congress meets in Washington. Treaty for annexation of Hawaii signed. Extensive strikes among coal and iron miners. Dingley Tariff bill goes into effect.	1897. School question settled in Manitoba. Commission for Yukon gold region appointed. British Science Association meets at Toronto. Joint commission appointed to settle difficulties with United States.	1897. Weyler recalled from Cuba and Blanco appointed captain-general. Attempt to assassinate President Diaz of Mexico. United States of Central America formed.	1897. Venezuela ratifies boundary treaty with Great Britain.
1898	City government of Greater New York inaugurated. Destruction of the "Maine" in Havana Harbor. War with Spain; Congress orders forcible intervention in Cuba. Admiral Dewey destroys the Spanish fleet at Manila. Naval battle at Santiago; destruction of Cervera's fleet. Miles invades Porto Rico. Treaty of Paris: United States acquires sovereignty over Cuba, Porto Rico, and the Philippines.	1898. Great influx of miners to Yukon gold region. Earl of Minto, Governor-General.	1898. Hostile demonstrations in Havana against Americans. Battleship "Maine" blown up at Havana. Invasion of Cuba and Porto Rico by United States. Completion of great Mexican drainage canal.	1898. Argentine provides for a complete network of railways.
1899	Aguinaldo foments the Philippine War. Appointment of the First Philippine Commission. General Wood, Governor of Cuba.	1899. Adjournment of the Joint High Commission.	1899. Cuba and Porto Rico pass to United States by Treaty of Paris. Spanish power in America ceases.	1899. Venezuelan boundary tribunal meets in Paris.
1900	Civil government established in the Philippines under act of Congress. Galveston flood and hurricane. Civil government in Alaska. American forces sent to China under General Chaffee.	1900. Great fire in Ottawa. Parliamentary elections sustain the Liberal ministry in power.	1900. Cuba constitutional convention meets.	
1901	McKinley re-elected ; Theodore Roosevelt, Vice-President. Platt Amendment relating to Cuban independence passed. President McKinley shot at Buffalo, N. Y., September 6th; Theodore Roosevelt , President, September 14th. Cuban autonomy granted.	1901. Population of Canada, 5,338,883. Toronto Exhibition opened.		1901. War declared between Venezuela and Colombia.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	Canada	Spanish North America	Spanish South America
1902	President recommended purchase of the rights of the Panama Canal Company for \$40,000,000. Civil government established in the Philippines and amnesty granted political prisoners. Decision of United States Supreme Court in Northern Securities case.	1902. Canadian-Australian cable laid. Reciprocity treaty between Newfoundland and United States.	1902. Revolution in San Domingo.	1902. Gen. Uribe, Colombian insurgent leader surrenders. End of revolution in Venezuela
1903	Department of Commerce and Labor created. Pacific cable completed. Capal treaty with Panama. Cuban Reciprocity Treaty ratified by U. S. Senate. Lieutenant-General Miles retired from head of the U. S. Army. Alaskan boundary tribunal in London decided in favor of the United States.	1903. University of Ottawa founded.	1903. West Indian hurricane destroyed \$15,000,000 in values and many lives.	1903. The republic of Panama proclaimed. Canal treaty with United States ratified. Colombian Senate rejected Panama Canal Treaty.
1904	Commercial treaty with China. Arbitration treaty with France signed.	1904. Earl Grey, Governor-General.		1904. Venezuelan diplomatic difficulties with United States.
1905	Theodore Roosevelt , President; Charles W. Fairbanks, Vice-President. President advocates control of railways and corporate wealth. Arbitration treaties concluded with Great Britain, Germany, Italy, and other powers.	1905. Decennial census act. Fire in Toronto destroyed \$10,000,000 worth of property. Movement to secure the confederation of the British West Indies.		
1906	Anthracite coal strike in Pennsylvania. Destruction of San Francisco by earthquake and fire. Riot at Brownsville, Texas. President Roosevelt visits Panama.	1906. British preferential tariff debated. Commission appointed to investigate life insurance in Canada.	1906. Revolutions in Central America. President Palma appeals to United States for intervention in Cuba. Palma resigns presidency of Cuba.	1906. Pan-American conference at Rio de Janeiro. Earthquake at Valparaiso, Chile.
1907	Pure Food Law became effective. Great floods at Pittsburg. Jamestown Exposition opened by President Roosevelt. Standard Oil Company fined \$29,240,000. Financial stringency in New York, and many bank failures. Oklahoma admitted as a State.	1907. Riotous demonstrations against Japanese at Vancouver, British Columbia. Physical and military training introduced into schools and colleges.	1907. Tehuantepec National Railway opened by President Diaz of Mexico. A series of revolutions and interstate wars in Central America. Large part of Kingston, Jamaica, destroyed by earthquake.	1907. Notable impulse given to South American trade and progress.
1908	The Aldrich Currency bill introduced in the U. S. Senate.	1908. Industry and education strongly accentuated throughout the Dominion.	1908. Preliminary plans for Central American Federation formed.	1908. Labor riot at Chilean mines. Vast Municipal improvements in Rio de Janeiro.

Feudal System. The name generally given to the system of land tenure and social arrangements which prevailed in Europe during the period commonly known as the Middle Ages. Its essence lay in the close connection which existed under it between social status and the ownership of land. The man who held land from another was looked upon as the dependant and subordinate of the latter. In England the system was not unknown under the Anglo-Saxon kings, but it received its complete development only at the Norman Conquest. The death of Harold left William in possession of vast crown lands, which he bestowed upon his principal officers. What the king did for his great lords they did for their captains, and these, again, for their vassals. Counties were divided into manors, and manors into farms; and in the most commanding part of every manor a strong castle arose, in which the baron ruled all but supreme, surrounded by armed retainers, and having always at his call the franklins, or free-tenants, who held the lands which constituted his estate. Under the Feudal System both spear and plough helped to pay the rent. *Knight Service* and *Socage* were required from every tenant—the former obliging him to serve, at the call of his landlord, for so many days each year in the field of battle; the latter to give occasional days of labor on the castle grounds, or to send fixed supplies of such things as beef or poultry, meal or honey, to the castle larder. Numbers of serfs, called *Villeins*, tilled little patches of ground under certain conditions, and these were held nominally to be freemen; but the lowest class of serfs took rank with the oxen and the swine which they tended, being, like them, the property of the master. Under this system, *Aids* had to be given to the crown; and also various *Reliefs*, or *Fines*, which were paid by an incoming heir before he could take possession of his estate, or when a tenant sold or gave any part of his lands to a stranger. The Feudal System, though it has so long ceased to exist as a system of political and social relations, still survives as the basis of most of the laws relating to land; and the laws both of escheat and copyhold, as they at present exist, are direct outgrowths of the Feudal System.

Fifth-monarchy Men. A clique of political fanatics who sided with Cromwell during the Protectorate. They derived this epithet from their entertaining a belief that Cromwell's accession to supreme power was a manifestation of the advent of the fifth monarchy, in which the Saviour should reign with the saints on earth for the period of one thousand years.

Florida. The name Florida, derived from a Spanish word meaning "flowery," or perhaps because it was first visited on "Pascua Florida," or Easter Sunday, was originally applied to a much larger region than the present State, its boundaries extending to the Mississippi, and on the north indefinitely. It was first discovered by Ponce de Leon in 1512, who landed near St. Augustine. It was subsequently visited by other Spanish adventurers, but it was not till 1528 that an actual attempt at colonization was made by Panfilo de Narvaez, who had received a large land grant from Charles V. He and his

colonists were exterminated by the Indians. In 1539, Fernando de Soto explored the State, and a few years later many French Huguenots sought refuge here. They were massacred by the Spaniards. Spain had no permanent footing till 1565, when the fort was built at St. Augustine. Pensacola was settled in 1696. In 1763, Florida was ceded to the English in exchange for Cuba, but by the treaty of 1783 it was retroceded to Spain. A portion of Florida was seized by the United States in 1803, and in 1819, Spain formally ceded the whole province. Florida was admitted as a State in 1845, seceded January 10, 1861, and resumed federal relations, 1868.

Forum (*fō'rūm*). In Roman cities, a public place where causes were judicially tried, and orations made to the people. It was a large, open parallelogram, surrounded by porticos. There were six of these forums, viz: the *Romanum*, *Julianum*, *Augustum*, *Palladium*, *Trajanum*, and *Sallustii forums*. The chief was the *Romanum*, called, by way of eminence, the forum. In it was the rostrum, or pulpit, where the Roman orators pleaded before or harangued the people. These forums were styled *fora civilia*, in distinction from another description of forum serving as markets, which were known as *fora venalia*.

France. Gallia was the name under which France was designated by the Romans, who knew little of the country till the time of Cæsar, when it was occupied by the Aquitani, Celtæ, and Belgæ. Under Augustus, Gaul was divided into four provinces, which, under subsequent emperors, were dismembered, and subdivided into seventeen. In the Fifth Century it fell completely under the power of the Visigoths, Burgundians, and Franks. In 486 A. D., Clovis, a chief of the Salian Franks, raised himself to supreme power in the North. His dynasty, known as the Merovingian, ended in the person of Childeric III., who was deposed 752 A. D. The accession of Pepin gave new vigor to the monarchy, which, under his son and successor, Charlemagne, crowned Emperor of the West in 800 (768-814), rose to the rank of the most powerful empire of the West. With him, however, this vast fabric of power crumbled to pieces, and his weak descendants completed the ruin of the Frankish Empire by the dismemberment of its various parts among the younger branches of the Carolingian family. On the death of Louis V. the Carolingian Dynasty was replaced by that of Hugues, Count of Paris, whose son, Hugh Capet, was elected king by the army, and consecrated at Rheims, 987 A. D. At this period the greater part of France was held by almost independent lords. Louis le Gros (1108-37) was the first ruler who succeeded in combining the whole under his scepter. He promoted the establishment of the feudal system, abolished serfdom on his own estates, secured corporate rights to the cities under his jurisdiction, gave efficiency to the central authority of the crown, carried on a war against Henry I. of England; and when the latter allied himself with the Emperor Henry V. of Germany against France he brought into the field an army of 200,000 men. The *oriflamme* is said to have

been borne aloft for the first time on this occasion as the national standard. Louis VII. (1137-80) was almost incessantly engaged in war with Henry II. of England. His son and successor, Philippe Auguste (1180-1223), recovered Normandy, Maine, Touraine, and Poitou from John of England. He took an active personal share in the Crusades. Philippe was the first to levy a tax for the maintenance of the standing army. Many noble institutions date their origin from this reign, as the University of Paris, the Louvre, etc. St. Louis IX. effected many modifications in the fiscal department, and, before his departure for the Crusades, secured the rights of the Gallican Church by special statute, in order to counteract the constantly increasing assumptions of the papal power. Philippe IV. (1285-1314), surnamed *Le Bel*, acquired Navarre, Champagne, and Brie by marriage. Charles IV. (*Le Bel*) (1321-28) was the last direct descendant of the Capetian line. Philippe VI., the first of the House of Valois (1328-50), succeeded in right of the Salic law. His reign, and those of his successors, Jean (1350-64) and Charles V. (*Le Sage*) (1364-80), were disturbed by constant wars with Edward III. of England. Hostilities began in 1339; in 1346 the battle of Crécy was fought; at the battle of Poitiers (1356) Jean was made captive; and before the final close, after the death of Edward (1377), the state was reduced to bankruptcy. During the regency for the minor, Charles VI. (*Le Bien Aime*) (1380-1422), the war was renewed with increased vigor on the part of the English nation. The signal victory won by the English at Agincourt in 1415 aided Henry in his attempts upon the throne. But the extraordinary influence exercised over her countrymen by the Maid of Orleans aided in bringing about a thorough reaction, and, after a period of murder, rapine, and anarchy, Charles VII. (*Le Victorieux*) (1422-61) was crowned at Rheims. His successor, Louis XI. (1461-83), succeeded in recovering for the crown the territories of Maine, Anjou, and Provence, while he made himself master of some portions of the territories of Charles the Bold, Duke of Burgundy. Charles VIII. (1483-98), by his marriage with Anne of Brittany, secured that powerful state. With him ended the direct male succession of the House of Valois. Louis XII. (1498-1515) (*Le Père du Peuple*) was the only representative of the *Valois-Orleans* family; his successor, Francis I. (1547), was of the *Valois-Angoulême* branch. The defeat of Francis at the battle of Pavia, in 1525, and his subsequent imprisonment at Madrid, threw the affairs of the nation into the greatest disorder. In the reign of Henri II. began the persecutions of the Protestants. Henri III. (1574-89) was the last of this branch of the Valois. The massacre of St. Bartholomew (1572) was perpetrated under the direction of the queen-mother, Catharine de' Medici, and the confederation of the League, at the head of which were the Guises. The wars of the League, which were carried on by the latter against the Bourbon branches of the princes of the blood-royal, involved the whole nation in their vortex. The succession of Henri IV. of Navarre (1589-1610), a Bourbon

prince, descended from a younger son of St. Louis, allayed the fury of these religious wars, but his recantation of Protestantism in favor of Catholicism disappointed his own party. During the minority of his son, Louis XIII. (1610-43), Cardinal Richelieu, under the nominal regency of Marie de' Medici, the queen-mother, ruled with a firm hand. Cardinal Mazarin, under the regency of the queen-mother, Anne of Austria, exerted nearly equal power for some time during the minority of Louis XIV. (1643-1715). The wars of the Fronde, the misconduct of the parliament, and the humbling of the nobility gave rise to another civil war, but with the assumption of power by young Louis a new era commenced, and till near the close of his long reign the military successes of the French were most brilliant. Louis XV. (1715-75) succeeded to a heritage whose glory was tarnished, and whose stability was shaken to its very foundations during his reign. The Peace of Paris, 1763, by which the greater portion of the colonial possessions of France were given up to England, terminated an inglorious war, in which the French had expended 1,350 millions of francs. In 1774 Louis XVI., a well-meaning, weak prince, succeeded to the throne. The American war of freedom had disseminated republican ideas among the lower orders, while the Assembly of the Notables had discussed and made known to all classes the incapacity of the government and the wanton prodigality of the court. The nobles and the *tiers état* were alike clamorous for a meeting of the states, the former wishing to impose new taxes on the nation, and the latter determined to inaugurate a thorough and systematic reform. After much opposition on the part of the king and court the *Etats Généraux*, which had not met since 1614, assembled at Versailles on May 25, 1789. The resistance made by Louis and his advisers to the reasonable demands of the deputies on the 17th of June, 1789, led to the constitution of the National Assembly. The consequence was the outbreak of insurrectionary movements at Paris, where blood was shed on the 12th of July. On the following day the national guard was convoked, and on the 14th the people took possession of the Bastille. The royal princes and all the nobles who could escape sought safety in flight. The royal family, having attempted in vain to follow their example, tried to conciliate the people by the feigned assumption of republican sentiment; but on the 5th of October the rabble, followed by numbers of the national guard, attacked Versailles, and compelled the king and his family to remove to Paris, whither the Assembly also moved. A war with Austria was begun in April, 1792; and the defeat of the French was visited on Louis, who was confined in August with his family in the Temple. In December the king was brought to trial. On January 20, 1793, sentence of death was passed upon him, and on the following day he was beheaded. Marie Antoinette, the widowed queen, was guillotined; the dauphin and his surviving relatives suffered every indignity that malignity could devise. A reign of blood and terror succeeded. The brilliant exploits of the young general, Napoleon Bonaparte, in Italy,

turned men's thoughts to other channels. In 1795, a general amnesty was declared, peace was concluded with Prussia and Spain, and the war was carried on with double vigor against Austria. The Revolution had reached a turning-point. A Directory was formed to administer the government, which was now conducted in a spirit of order and conciliation. In 1797, Bonaparte and his brother-commanders were omnipotent in Italy. Austria was compelled to give up Belgium, accede to peace on any terms, and recognize the Cisalpine Republic. Under the pretext of attacking England a fleet of 400 ships and an army of 36,000 picked men were equipped; their destination proved, however, to be Egypt, whither the Directory sent Bonaparte; but the young general resigned the command to Kleber, landed in France in 1799, and at once succeeded in supplanting the Directory, and securing his own nomination as consul. In 1800, a new constitution was promulgated, which vested the sole executive power in Bonaparte. Having resumed his military duties, he marched an army over the Alps, attacked the Austrians unawares, and decided the fate of Italy by his victory at Marengo. In 1804, on an appeal by universal suffrage to the nation, Bonaparte was proclaimed emperor. By his marriage with the Archduchess Maria Louisa, daughter of the Emperor of Germany, Napoleon seemed to have given to his throne the prestige of birth, which alone it had lacked. The disastrous Russian campaign, in which his noble army was lost amid the rigors of a northern winter, was soon followed by the falling away of his allies and feudatories. Napoleon himself was still victorious wherever he appeared in person, but his generals were beaten in numerous engagements; and the great defeat of Leipsic compelled the French to retreat beyond the Rhine. The Swedes brought reinforcements to swell the ranks of his enemies on the eastern frontier, while the English pressed on from the west; Paris, in the absence of the emperor, capitulated after a short resistance, March 30, 1814. Napoleon retired to the island of Elba. On the 3d of May, Louis XVIII. (the brother of Louis XVI.) made his entry into Paris. On March 1, 1815, Napoleon left Elba, and landed in France. Crowds followed him; the soldiers flocked around his standard; the Bourbons fled, and he took possession of their lately deserted palaces. The news of his landing spread terror through Europe; and on the 25th of March a treaty of alliance was signed at Vienna between Austria, Russia, Prussia, and England, and preparations at once made to put down the movement in his favor and restore the Bourbon dynasty. At first the old prestige of success seemed to attend Napoleon; but on the 18th of June he was thoroughly defeated at Waterloo; and, having placed himself under the safeguard of the English, he was sent to the island of St. Helena, where, on May 5, 1821, he breathed his last. In 1824, Louis XVIII. died without direct heirs, and his brother, the Duc d'Artois, succeeded to the throne as Charles X. General ministerial incapacity, want of good faith, general discontent, and excessive clerical influence characterized his reign, which was abruptly

brought to a close by the revolution of 1830, and the election to the throne of Louis Philippe, Duke of Orleans, as king, by the will of the people. Louis Philippe having abdicated (February 24, 1848), a republic was proclaimed, under a provisional government. Louis Napoleon was elected president of the republic in December, 1848; but by the famous *coup d'état* of December 2, 1851, he violently set aside the constitution, and assumed dictatorial powers; and a year after was raised, by the almost unanimous voice of the nation, to the dignity of emperor as Napoleon III. The result of the appeal made to the nation in 1870, on the plea of securing their sanction for his policy, was not what he had anticipated. The course of events in the short but terrible Franco-German War of 1870-71 electrified Europe by its unexpected character. On September 2, 1870, Napoleon, with 90,000 men, surrendered at Sedan. With the concurrence of Prussia, the French nation next elected representatives to provide for the exigency. A republic was proclaimed, and the first National Assembly met at Bordeaux in February, 1871. After receiving the resignation of the Provisional Government of Defense, the Assembly undertook to organize a republican government, and nominated M. Thiers chief of the executive power of the state, with the title of President of the French Republic, but with the condition of responsibility to the National Assembly. The ex-Emperor Napoleon died in 1872, at Chislehurst, England, where he had resided with his family since his liberation in March, 1871. In 1873, M. Thiers resigned the office of President of the French Republic, and was succeeded by Marshal MacMahon, who resigned in 1879, and was succeeded by M. Grévy. In 1887, Sadi-Carnot was chosen president. He was assassinated June 24, 1894. His successor was M. Casimir-Perier, who resigned January 15, 1895, and was succeeded by M. François Félix Faure, January 17, 1895. President Faure was assassinated in 1899, and his successor was M. Loubet, during whose administration the famous Dreyfus case was reopened and disposed of. M. Armand Fallières was elected to the presidency January 17, 1906, in succession to M. Loubet. The most important public act during his incumbency has been the enforcement of the Separation Law, which leaves the administration of the Church of France in its own hands, rather than in the Vatican at Rome. Serious disturbances occurred during the same year (1907) in the wine-growing districts.

French Revolution, The First.

From May 5, 1789, to July 27, 1794. *Chief Leaders of the First French Revolution:* Comte de Mirabeau, 1789-1791; Danton, from the death of Mirabeau to 1793; Robespierre, from June, 1793, to July 27, 1794. Next to these three were St. Just, Couthon, Marat, Carrier, Hébert, Santerre, Camille Desmoulins, Roland, and his wife, Brissot, Bernave, Sieyès, Barras, Tallien, etc.

Great Days of the First French Revolution: June 17, 1789, the *Tiers Etat* constituted itself into the "National Assembly"; June 20th, the day of the *Jeu de Paume*, when the Assembly took an oath not to separate till it had given

France a constitution; July 14th, Storming of the Bastille; October 5th and 6th, the king and National Assembly transferred from Versailles to Paris. This closed the ancient *régime* of the court. June 20, 21, 1791, flight and capture of the king, queen, and royal family. June 20, 1792, attack on the Tuileries by Santerre; August 10th, attack on the Tuileries and downfall of the monarchy; September 2d, 3d, and 4th, massacre of the state prisoners. January 21, 1793, Louis XVI guillotined; May 31st, commencement of the Reign of Terror; June 2d, the Girondists proscribed; October 16th, Marie Antoinette guillotined; October 31st, the Girondists guillotined. April 5th, 1794, downfall of Danton; July 27th, downfall of Robespierre.

Frisians or Frisii (later called Frisones). An ancient Germanic people, who inhabited the extreme northwest of Germany, between the mouths of the Rhine and Ems, and were subjected to the Roman power under Drusus. They were subdued by the Franks, and, on the division of the Carolingian Empire, their country was divided into West Frisian (West Friesland) and East Frisian (East Friesland). The language of the Frisians is intermediate between the Anglo-Saxon and the Old Norse. Our knowledge of the old Frisian is derived from certain collections of laws; as the "Aseabuch," composed about 1200; the "Brockmerbrief," in the Thirteenth Century; the "Epnisger Domen," about 1300, and some others.

Fronde, a name given to a revolt in France opposed to the Court of Anne of Austria and Mazarin during the minority of Louis XIV. The war which arose, and which was due to the despotism of Mazarin, passed through two phases; it was first a war on the part of the people and the parliament, called the Old Fronde, which lasted from 1648 till 1649, and then a war on the part of the nobles, called the New Fronde, which lasted till 1652, when the revolt was crushed by Turenne to the triumph of the royal power. The name is derived from the mimic fights with slings in which the boys of Paris frequently indulged, and which even went so far as to beat back at times the civic guard sent to suppress them.

Garde Nationale, a guard of armed citizens instituted in Paris, July 13, 1789. At first it numbered 48,000 men, but was increased to 300,000 when it was organized throughout the whole country. Marquis de Lafayette was its first commander. It was reorganized by the Directory and by Napoleon, and again under the Bourbons and was dissolved in 1827. Under Louis Philippe it was resuscitated and contributed to his overthrow. In 1851, the national guard was again reorganized, but in 1855 dissolved. In 1870, the national guard of Paris was formed for the defense of the city against the Prussians. The resistance of a section of the guard to the decree of disarmament led to the communal war, at the close of which the guard was declared dissolved by the National Assembly (1871).

Geneva Convention, a convention signed by the chief Europeans continental powers in 1864, providing for the succor of the sick and wounded in war. It has since been ratified by the United States, Great Britain, Japan, and about forty other nations. The chief provisions

are: (1) The neutrality of ambulances and military hospitals. (2) The personnel of such ambulances and hospitals, including sanitary officers and naval and military chaplains, to be benefited by the neutrality. (3) The inhabitants of a country, rendering help to the sick and wounded, are to be respected and free from capture. (4) No distinction to be made between the sick and wounded, on account of nationality. (5) A flag and uniform to be adopted, and an armlet for the personnel of ambulances and hospitals. The flag and armlet to consist of a red Greek cross on a white ground. The Turks use a red crescent in place of the cross. Other provisions have since been added intended to mitigate the severity of naval combat, and cover cases of capture and sinking of vessels. To carry out the terms of this convention, the International Society for the Aid of the Sick and Wounded has been organized, with committees in the chief towns in the United States and in Europe. It first played an important part in the Franco-German War, every nation sending its contingent of ambulances, surgeons, etc. In the Spanish-American War the Cuban Central Relief Committee used the Red Cross Society as an agency in the distribution of relief.

Georgia. Named after King George II. of England. Georgia was the latest settled of the thirteen colonies, which first formed the United States. The country was originally included in the charter of Carolina. In 1732 the territory was granted to a corporation, which sent out the first colony under Sir James Oglethorpe the same year. In 1733 Savannah was founded. General Oglethorpe commanded the forces of Carolina and Georgia in the unsuccessful expedition against St. Augustine in 1739. In 1752, Georgia became a royal government under regulations similar to those of the other colonies. During the Revolution Georgia was overrun by the British, and Savannah captured in 1778. The Constitution of the United States was ratified January 2, 1788. The State seceded January 19, 1861. The principal military events were those about Atlanta, resulting in its evacuation, and Sherman's March to the Sea, all in 1864. Georgia was formally readmitted to the Union July 15, 1870. An International Cotton Exposition was held at Atlanta in 1881, which gave a pronounced impulse to that industry in the South. The State enacted a law in prohibition of the liquor traffic in 1907.

Germany. After the gradual retirement of the Romans from Germany the country became divided into petty states and governments, where the influence of France was soon made apparent on both sides of the Rhine, asserting supremacy over the whole of the west of Germany. Charlemagne, extending his conquests from the North Sea to the Alps, and from the Rhine to Hungary, laid the foundation of that long line of emperors and kings who occupied the German throne for upward of 1,000 years. On the extinction, in 911, of the Carolingian dynasty, the archbishops, bishops, and abbots arrogated to themselves the right of electing their sovereign, who could not, however, assume the imperial title till he was crowned

by the pope. At this period there were in Germany five nations — the Franks, Saxons, Bavarians, Swabians, and Lorrainers. Their choice of a ruler fell upon the Count of Franconia, who, under the title of Conrad I., reigned King of Germany from 911–18. He was succeeded by Henry, Duke of Saxony, who gained conquests over the Danes, Slavs, and Magyars, which was confirmed and extended by his son and successor, Otho I. (936–73), who carried the boundaries of the empire beyond the Elbe and Saale. In 1039–56 Henry III. extended German supremacy over Hungary. In 1125 the male line of the Franconian dynasty became extinct by the death of Henry V.; Lothaire of Saxony occupied the throne till 1138, when the reins of power were assumed by Conrad III., Duke of Franconia, in whose reign the civil wars of the Guelphs and Ghibellines began. He was the first of the Hohenstauffen dynasty. He was succeeded by the famous Frederick I., surnamed Barbarossa, who, with the flower of his chivalry, perished in the Crusades. In 1273 Rudolph I., the first of the Habsburg line, which still reigns in Austria, began his reign, and restored order by destroying the strongholds of the nobles. For the next 200 years, counting from 1292, the period of the accession of Adolphus, the history of the German Empire presents few features of interest. In 1493 Maximilian I., succeeded his father, Frederick III., married Mary, daughter of Charles the Bold of Burgundy, and became, consequently, involved in the general politics of Europe, while his opposition to the reformed faith preached by Luther embittered the religious differences which marked the close of his reign. He was succeeded by Charles V., who, although opposed to the Reformation, left the princes of Germany to settle their religious differences among themselves, and to quell the insurrection of the peasants in 1525, which threatened to undermine society. He abdicated in favor of his brother Ferdinand in 1556, who granted entire toleration to the Protestants. Ferdinand's reign was disturbed by domestic and foreign aggressions. Anarchy, both civil and religious, now obtained in his dominions to such an extent as to culminate in the Thirty Years' War, which closed under Ferdinand III. by the treaty of Westphalia, 1648. This terrible war depopulated the rural districts of Germany, destroyed its commerce, crippled the powers of the emperors, burdened the people with taxes, and cut up the empire into a multitude of petty states, whose rulers exercised almost absolute power. The male line of the Habsburg dynasty expired with Charles VI., 1740. The reign of this potentate and that of his predecessor, Joseph I., was signalized by the victories won by the imperialist general, Prince Eugene, and Marlborough, over the French. During the Seven Years' War Frederick the Great, of Prussia, maintained his character for skillful generalship at the expense of Austria. During the life-time of Maria Theresa she retained her authority over all the Christian states, but on her death her son, Joseph II., was little more than nominal sovereign. In 1792 Francis II. was crowned Emperor of Germany; in 1804 he assumed the title Francis I. Emperor

of Austria; in 1806 he resigned the German crown and assumed the title of Emperor of Austria, having suffered a series of defeats by the armies of the French Republic. From this period till 1814–15 Germany was almost wholly at the mercy of Napoleon, who deposed the established sovereigns, and dismembered the states in the interest of his own favorites. Of the 300 states into which the empire was divided there remained only forty — a number subsequently reduced to thirty-five. The Diet was now reorganized by all the allied states as the legislature and executive organ of the Confederation. The French Revolution of 1830 reacted sufficiently to constrain the rulers of some of the German states to give written constitutions to their subjects. This was insufficient to meet the demands of the people as a whole, so that in 1848, by open insurrectionary movements was compelled the convocation, by a provisional self-constituted assembly, of a national congress of representatives of the people. The Archduke John of Austria was elected vicar of the newly organized government, but his action embarrassed the progressive tendencies of parliament and dampened the hopes of the progressionists. The refusal of the King of Prussia to accept the imperial crown which was offered him by the parliament was followed by a provisional regency of the empire; but as there was no cohesion among the members of the parliament, and as Austria had been shut out from the German Confederation by a majority of one vote, the assembly soon lapsed into anarchy, which led to its dissolution. In 1850 the Diet was restored by Austria and Prussia. In 1859 the whole federal army was mobilized, and the Prussian prince regent made commander-in-chief. There is little doubt that the feeling of the German people, as distinguished from the princes and bureaucracy, has, in recent times at least, been in favor of the purely German Prussia as their leader rather than Austria, the great mass of whose population are Slavs and Magyars. And when the Parliament of Frankfurt, in 1850, offered the imperial crown to the King of Prussia, the unity of Germany might have been secured without bloodshed had the monarch been resolute, or had he had a Bismarck for his adviser. But that opportunity being let slip, and the incubus of the Bund being restored, it became apparent that the knot must be cut by the sword. By the treaty of Gastein, Austria and Prussia agreed to a joint occupation of the Elbe duchies; but to prevent collision it was judged prudent that Austria should occupy Holstein and Prussia Sleswick. Already a difference of policy had begun to show itself; Prussia was believed to have the intention of annexing the duchies, while Austria began to favor the claims of Prince Frederick of Augustenburg, and wished to refer the disposal of the matter to the Bund. At this crisis England, France, and Russia invited the disputants to a conference. Prussia and Italy readily consented; but nothing came of it, through the obstinate pride of Austria, who would not allow her position in Italy to be even taken into consideration. In the sitting of the German Diet, June 1, 1866, Austria, disregarding the Convention of Gastein, placed the whole

matter at the disposal of the Bund, and then proceeded to convoke the states of Holstein "to assist in the settlement of the future destination of the duchy." Prussia protested against this as an insult and a violation of treaty. The Prussians lost no time, war was declared against Austria, and, following the example set by Frederick the Great, the troops immediately began to march into Bohemia, invading it at no less than three several points. This brief war ended in the utter defeat of Austria, and also in the restoration of Venetia to Italy. In 1870 the famous Franco-Prussian War opened, to the utter humiliation of the French arms, and the cession of Alsace and German-Lorraine, 62,000 square miles of territory, to the Germans, together with the payment of 5,000,000,000 francs as additional indemnity for the expense of the war. The Germanic Empire, reconstructed in 1870, as a result of this fierce conflict, grew out of the North German Confederation, established in 1866, by treaties between the King of Prussia and the governments of Bavaria, Württemberg, Baden, and Hesse, ratified by the Diet of north Germany, December 10, 1870. The legislative power of the empire is vested in a Federal Council representing the twenty-five states of which the Confederation is composed. Prussia has seventeen votes, Bavaria six, Württemberg four, Saxony four, Baden three, Hesse three, Mecklenburg-Schwerin two, Brunswick two, and the rest of the states one vote each, the total number being fifty-eight. The executive is intrusted to the emperor and a ministry selected by him and presided over by the chancellor of the empire; ministers are responsible to the emperor only. On January 18, 1871, King William of Prussia proclaimed his assumption of the imperial power for himself and his successors. Whatever spirit of opposition there may have been on the part of the antagonists of the supremacy of Prussia was smothered in the general acclamations of triumph. He died 1888, and was succeeded by his son Frederick William (Frederic III.), who, however, only reigned three months, dying the same year of a throat affection. He was succeeded by his son William, as William II. The early years of the present emperor's reign were marked by the rise of the Social Democrats, the formation of the Triple Alliance (consisting of Germany, Austria-Hungary, and Italy); the acquisition, since 1884, of foreign dependencies and spheres of influence, and the retirement of Bismarck in 1890. In 1908, the emperor acquired a royal residence in the island of Corfu, whose climate it is thought, will alleviate a throat trouble to which his majesty has been subject for some years.

Gettysburg, Battle of, fought July 1-3, 1863, between the Union Army under General Meade, and the Confederates under General Lee. During May the armies lay fronting each other upon the Rappahannock. Early in June Lee began his movement for the invasion of Pennsylvania, crossing the Potomac on the 24th and 25th, and reaching Chambersburg, Pa., on the 27th. General Hooker, then in command of the Army of the Potomac, moved in the same general direction, but on the 28th was relieved,

and the command given to Meade. In order to prevent his communications from being severed, Lee turned back toward Gettysburg to give battle. Meade had intended to give battle at a spot several miles from Gettysburg, near which was, however, a small portion of his army. This came into collision a little before noon, July 1st, with the advance of Lee, and was forced back, taking up a strong position on Cemetery Hill, in the rear of Gettysburg. Hancock, who had been sent forward to examine the position, reported that Gettysburg was the place at which to receive the Confederate attack, and Meade hurried his whole force to that point. The action on the second day, July 2d, began about noon with an attempt made by Lee to seize Round Top, a rocky hill from which the Union position could be enfiladed. When this day's fighting closed Lee was convinced that he had greatly the advantage, and he resolved to press it the next day. On the morning of July 3d, an attempt was made upon the extreme Union right, but repelled. The main attack on the center was preluded by a cannonade from 150 guns, which was replied to by eighty, little injury being inflicted by either side. About noon the Union fire was slackened in order to cool the guns, and Lee, thinking that the batteries were silenced, launched a column of 15,000 or 18,000 against the Union lines. Some of this column actually surmounted the low works, and a brief hand-to-hand fight ensued. But the column was practically annihilated, only a small portion escaping death or capture. The forces on each side were probably about 80,000, though all were not really engaged. No official report of the Confederate loss was ever published; the best estimates put it at about 18,000 killed and wounded, and 13,600 missing, most of them prisoners. The Union loss was 23,187, 16,543 of whom were killed and wounded.

Ghibellines (*gib'el-lin-z*). The name of a celebrated political faction which existed in Italy during the Thirteenth Century and sprung out of the disputed succession to the imperial throne of Germany, vacated in 1137 by the death of Lothaire II. Conrad of Hohenstauffen, his elected successor, found his claim disputed by Henry of Guelf (surnamed the Proud), Duke of Saxony and Bavaria. At the latter's death his pretensions became personified in his son Henry the Lion, Duke of Brunswick, whose adherents called themselves *Guelfs* after his patronymic, in distinction from the *Ghibellines*, who derived their cognomen from Conrad's lordship of *Weiblingen*, 1140. Their feud after a while extended to Italy, over which the German emperors claimed supremacy, against the popes; the *Guelfs* becoming there the supporters of the latter. This strife did not terminate until the French invasion of Charles VIII. in 1495.

Girondists (*ji-ron'dists*), the name given to the moderate Republicans in the first French Revolution. The name was derived from the department of Gironde, which chose for its representatives in the Legislative Assembly five men who greatly distinguished themselves by their oratory, and who, being joined by Condorcet, Brissot, and the moderate Republicans who were the adherents of Roland, formed a powerful

Conservative party. They fell during the Reign of Terror, and most of them perished on the scaffold.

Gladiators, in *Ancient Rome*, professional combatants, who fought in the arena for the amusement of the people. They were at first slaves, prisoners, or convicts; but afterwards freemen fought in the arena, either for hire or from choice. When a gladiator was severely wounded, so as to be unable to fight any longer, his antagonist stood over him with his sword lifted, and looked up to the assembly for its fiat. If the majority turned their thumbs downwards, that was the signal of death. The practice was defended, even by Cicero, as serving to keep up a martial spirit and a contempt of death among the people. Constantine prohibited gladiators' fights by an edict (A. D. 325), but the practice was not wholly extinct till the time of Theodoric (A. D. 500).

God's Truce, or The Truce of God.

A singular institution of the Middle Ages, which originated in a council assembled at Limoges at the end of the Tenth Century, and in the council of Orléans, 1016. It consisted in the suspension for a stated time, and at stated seasons and festivals, of that right of private feud for the redress of wrongs, which, under certain conditions, was recognized by mediæval law or usage. It prevailed chiefly in France and the German Empire; and fell gradually into disuse when the right of private redress was restricted, and at last entirely abolished by laws.

Goths. A powerful German people, who originally dwelt on the Prussian coast of the Baltic, at the mouth of the Vistula, but afterwards migrated south. About the beginning of the Third Century we find them separated into two great divisions, the Ostrogoths or Eastern Goths, and the Visigoths or Western Goths. The former were settled in Mœsia and Pannonia, while the latter remained north of the Danube. At the beginning of the Fifth Century, the Visigoths, under their King Alaric, invaded Italy, and took and plundered Rome (A. D. 410). A few years later they settled in the southwest of Gaul, and thence invaded Spain, where they founded a kingdom which lasted for more than two centuries. Meantime, the Ostrogoths extended their dominion almost up to the gates of Constantinople, and, under their King Theodoric (A. D. 489) obtained possession of the whole of Italy. Their dominion over Italy lasted, however, only till 554, when it was overthrown by Narses, the general of Justinian. From this time, the Goths figure no longer in Western Europe, except in Spain, from which they were finally driven by the Arabs. But their name was perpetuated long after in Scandinavia, where a Kingdom of Gothia existed till 1161, when it was absorbed in that of Sweden. Of Gothic literature, in the Gothic language, we have the translation of the Scriptures by Ulphilas, which belongs to the Fourth Century, and some other religious writings and fragments.

Greece. Prior to the first recorded Olympiad, B. C. 776, little is certain in Greek history. Long anterior to this the country had been inhabited, but fact and fable are so mingled in the accounts that have come down to us that it

is impossible to distinguish the true from the false. Starting, then, from the period above indicated, we shall give a brief *résumé* of the chief historic events up to the conquest of Greece by the Turks in 1456 A. D.—Olympic Games revived at Elis, 884 B. C.; the first Olympiad dates from 776 B. C.; the Messenian Wars occurred from 743–669; the first sea-fight on record, between the Corinthians and the inhabitants of Coreyra, 664; Byzantium built, 657; the seven sages of Greece (Solon, Periander, Pittacus, Chilo, Thales, Cleobulus, and Bias) flourished about 593; Persian conquests in Ionia occurred in 544; Sybaris in Magna Græcia destroyed, and 100,000 Crotonians under Milo defeat 300,000 Sybarites, 508; Sardis burned by the Greeks, which causes an invasion by the Persians, 504; Thrace and Macedonia are conquered, 496; Athens and Sparta defy the Persians, 490; the Persians are defeated at Marathon, 491; Xerxes invades Greece, but is repulsed at Thermopylæ by Leonidas, 480; battle of Salamis occurs, 480; Mardonius is defeated and slain at Plataea, and the Persian fleet is destroyed at Mycale, 479; battle of Eurymedon, which ends the Persian War, 466; Athens attempts to obtain an ascendancy over the rest of Greece, 459; the first "sacred war" begun, 448; Corinth and Coreyra involved in war, 435, which leads to the Peloponnesian War, lasting from 431–404; the Athenian expedition to Syracuse ends disastrously, 415–413; the retreat of the 10,000 under Xenophon occurs, 400; Socrates dies, 399; great sea-fight at Cnidus, 394; the peace of Antalcidas, 387; Thebes arrives at the height of its power in Greece between the years 370–360; the battle of Mantinea, and death of Epaminondas, 362; Philip of Macedon reigns, 353; the sacred war is stopped by Philip, who captures all the towns of the Phocæans, 348; battle of Chæroneia, 338; Alexander enters Greece, conquers the Athenians, and destroys Thebes, 335; he conquers the Persian Empire, 334–331; Greece invaded by the Gauls, 280; they are defeated at Delphi, 279; and finally expelled, 277; internal feuds lead to interference by the Romans, 200; Mummius conquers Greece, and makes it a Roman province, 147–146. Under Augustus and Hadrian Greece was prosperous, 122–133 A. D.; Alaric invades Greece, 396; it is plundered and ravaged by the Normans from Sicily, 1146; conquered by the Latins, 1204; the Turks under Mohammed II. conquer Athens and part of Greece, 1456; thence, till 1822, the country was a province of Turkey. The revolt of the Greeks from Turkish rule took place March 6, 1821, under Alexander Ypsilanti, and on January 1, 1822, they declared their independence. In 1825, the Turks partially reoccupied the country, but were finally forced to evacuate in 1828. At last, on February 3, 1830, a protocol of the allied powers declared the independence of Greece, which was recognized by the Porte on the 25th of April, of this year. The crown was offered to Leopold, Prince of Saxe-Coburg, and when he refused it, to Otho, a young prince of Bavaria, who was proclaimed king of the Hellenes at Nauplia in 1832. But his arbitrary measures, and the preponderance which he gave to Germans in the government, made him unpopular, and, although

after a rebellion in 1843, a constitution was drawn up, he was compelled by another rebellion in 1862 to abdicate. A provisional government was then set up at Athens, and the National Assembly offered the vacant throne in succession to Prince Alfred of England and Prince William George of Denmark. The latter accepted it, and on March 30, 1863, was proclaimed as King George I. In 1864, the Ionian Islands, which had hitherto formed an independent republic under the protection of Britain, were annexed to Greece.

From the first, Greece has sought an opportunity of extending its frontier northwards, so as to include the large Greek population in Thessaly and Epirus. In January, 1878, after the fall of Plevna, Greek troops were moved into Thessaly and Epirus, but were withdrawn on the remonstrance of Britain. The promises held out to Greece by the Berlin Congress were in danger of being withdrawn, but the persistence of Greece led, in 1881, to the cession to her of Thessaly and part of Epirus, or about one-third less than the territory promised at Berlin. The situation, however, always remained somewhat strained. The union of Eastern Rumelia with Bulgaria, in 1885, gave rise to a demand for a rectification of frontiers, and war with Turkey was only prevented by the great powers, who enforced the reduction of the Greek army to a peace footing by blockading the Greek ports. The same occurred in 1896, when war was declared against Turkey on the people of Crete demanding their right to become a portion of Grecian territory. The result was disastrous to their aspirations, Turkey pouring troops into Thessaly and defeating the Greek troops. The incompetency of the Greek generals was notorious in the nation, Prince George of Greece being held as mainly responsible. In 1904, the military service of the kingdom was reorganized, providing for an increased army and new armament.

Gunpowder Plot, The. The name given to a conspiracy projected by Guy Fawkes and some revolutionary associates against James I. and the members of the two Houses of Parliament, with a design to their destruction by undermining the building in which they were expected to assemble, placing there charges of gunpowder, and firing the same, November 5, 1605. The plot, however, proved abortive, and the conspirators met the penalty of their crime.

Hanse Towns. The name given to certain towns in Germany, so called from the Hanseatic League, which was formed in 1241, for the protection of the ports against the piracies of the Swedes and Danes. At first the League consisted only of towns situated on the coast of the Baltic; but it became so powerful, and exercised so many privileges, that ultimately it included many of the principal cities of Europe. The League consisted, in 1370, of sixty-six cities and forty-four confederate towns. The Thirty Years' War in Germany (1618-48) broke up the association, which had already begun to decline in the preceding century. The only towns now known as Hanse Towns are Hamburg, Lübeck, and Bremen; and in their case the name has no significance, except so far as it indicates that they are still free cities.

Habsburg, or Hapsburg (properly Habichtsburg or Habsburg, the hawk's castle). A small place in the Swiss Canton of Aargau, on the right bank of the Aar. The castle was built about 1027 by Bishop Werner of Strassburg. Werner II., who died in 1096, is said to have been the first to assume the title of Count of Habsburg. After the death, about 1232, of Rudolf II., the family divided into two branches the founder of one of which was Albert IV. In 1273, Rudolf, son of Albert IV., was chosen Emperor of Germany, and from him descended the series of Austrian monarchs, all of the Habsburg male line, down to Charles IV. inclusive. After that the dynasty, by the marriage of Maria Theresa to Francis Stephen of Lorraine, became the Habsburg-Lorraine. Francis II., the third of this line, was the last of the so-called "Holy Roman Emperors," this old title being changed by him for that of Emperor of Austria. From the Emperor Rudolf was also descended a Spanish Dynasty which began with the Emperor Charles V. (Charles I. of Spain), and terminated with Charles II. in 1700. The castle of Habsburg is still to be seen on the Wulpelsberg. In 1881 the Austrians proposed to purchase the castle of Habsburg and give it as a wedding gift to the Crown-prince of Austria; but the people of Aargau refused to hear of the sale.

Helvetii. A powerful Celtic people, who dwelt in what is now the west of Switzerland. Their chief town was *Aventicum*. About 58 B. C. they resolved, on the advice of Orgetorix, one of their chiefs, to migrate from their country with their wives and children, and to seek a new home in Gaul. They were, however, defeated by Cæsar, and driven back into their own territories, which became thenceforth a Roman colony. In the commotions that followed the death of Nero (A. D. 63) they were almost extirpated.

Holland. Was an independent country from 863 to 1433; when Philippe of Burgundy united it to his vast estates. In 1477, Mary of Burgundy married Maximilian, and Holland, with many other estates, was united to Austria. After Karl V. it passed into the Spanish branch of the house, and in 1523, under the influence of Luther, it became Protestant. In 1579, Holland united with six other provinces in the "Union of Utrecht," threw off the Spanish yoke, and became a republic, called "The Seven Provinces," with William of Orange as stadtholder. In 1621, Holland was united to France. In 1806, it was erected into the *Kingdom of Holland* by Napoleon I. and given to his brother, Louis Bonaparte. In 1810, it was again united to France, but after the battle of Waterloo (1814) it was united to Belgium and formed "The Kingdom of the Netherlands." In 1830, Holland and Belgium were divided into two kingdoms, called the "Kingdom of Holland" and the "Kingdom of Belgium"; the King of Holland still calls himself the "King of the Netherlands." See "Netherlands."

Holy Alliance. The name given to a treaty between the Emperors of Russia and Austria and the King of Prussia, ratified in Paris after the fall of the Emperor Napoleon (Septem-

ber 26, 1815), the object of which was professedly to pledge the respective monarchs to conduct their relations to each other under the guidance of Christian principles, but really to pledge each other to the maintenance of their respective dynasties. By the terms of this alliance, no member of the family of Napoleon was ever to occupy a European throne.

Holy Roman Empire, The. The western part of the old Roman Empire, which was severed from the eastern part in 800, and was given by the pope to Charlemagne, who was crowned "Emperor of the Romans." When Charlemagne's empire was divided, Ludwig the German became kaiser; but on the death of Karl the Fat the title fell into abeyance for seventy years. In 962, John XII. gave the title to Otto I. the Great, and changed it into "The Holy Roman Empire." Francis II. renounced the titles of King of the Romans and Emperor of the Romans in 1806, and Napoleon added the Italian states to France, May, 1809.

Home Rule League (1870). Projected by Mr. Butt, who stoutly opposed the repeal of the Union, but agitated for an Irish parliament which should have no power to touch upon imperial matters, but should be empowered to deal with matters of Ireland of a purely local character. On the death of Mr. Butt, in 1879, his scheme passed into the hands of the Land League, and their watchword, "Ireland for the Irish," meant separation from Great Britain. The term Home Rule survived the death of Mr. Butt, and in 1866, Mr. Gladstone, then prime minister, brought in a bill to give Ireland Home Rule, and exclude Irish members from Westminster. The measure broke up the great Whig party under the leadership of Lord Hartington, supported by Mr. Chamberlain (a Radical), Mr. Goschen, and others, who called themselves Unionists, and joined the great Tory party under the government of Lord Salisbury.

Huguenots. A name formerly given to the Protestants in France. The story of the persecutions of the Huguenots is one of the saddest in history. In 1561 they took up arms against their persecutors; and the struggle continued till the Edict of Nantes, establishing the rights of the Protestants, was signed by Henry of Navarre, April 13, 1598. The massacre of St. Bartholomew (in which, according to Sully, 70,000 Huguenots, including women and children, were murdered throughout the kingdom by secret orders from Charles IX., at the instigation of his mother, Catherine de Medici) began on the night of the festival, August 24, 1572.

Hundred Years War, The (1336-1431). Between England and France. From Edward III. to Joan of Arc. The origin of this long war was Edward's claim to the Crown of France. Philippe le Bel left three sons, all of whom died without male issue, and the nearest male heirs were Edward III. (who was the nephew of the three sons), and Philippe de Valois (their cousin). The flaw in Edward's claim the Salic law, which passed over women, and Edward owed his blood relationship to his mother. Edward maintained that, though his mother was cut off, being a woman, the Salic law could not apply to him, being a man; but

Philippe answered, if the mother was cut off, the son was cut off also. On this dispute began the war which lasted above a century.

Hungary. The Magyars, an Asiatic people of Turanian race, allied to the Finns and the Turks, dwelt in what is now Southern Russia before they descended under Arpád into the plain of the Danube, towards the end of the Ninth Century, and conquered the whole of Hungary and Transylvania. During the first half of the Tenth Century their invasions and incursions spread terror throughout Germany, France, and Italy; but at length their total defeat by Otho I. of Germany put an end to their maraudings, and under their native dynasty of Arpáds they settled down to learn agriculture and the arts of peace. Stephen I. (997-1030) was the first who was successful in extending Christianity generally amongst the Hungarians, and was rewarded by a crown from Pope Sylvester II. and with the title of *apostolic king* (1000). Stephen encouraged learning and literature, and under him Latin became not only the official language of the government, but the vehicle of Hungarian civilization, which it unfortunately continued to be for the next 800 years. In 1089 King Ladislaus extended the boundaries of Hungary by the conquest of Croatia and Slavonia, and King Coloman by that of Dalmatia in 1102. During the Twelfth Century the Hungarians first attained, through French connections, a certain refinement of life and manners. About the middle of the Thirteenth Century King Bela induced many Germans to settle in the country which had been depopulated by the Mongol invasions. With Andrew III. (1290-1301) the male line of the Arpád Dynasty became extinct, and the royal dignity now became purely elective. Charles Robert of Anjou was the first elected (1309). Louis I. (1342-82) added Poland, Red Russia, Moldavia, and a part of Servia, to his kingdom. The reign of Sigismund (1387-1437), who was elected Emperor of Germany, is interesting from the invasion of Hungary by the Turks (1391), and the war with the Hussites. Sigismund introduced various reforms, and founded an academy at Buda. Matthias Corvinus (1458-90), combining the talents of a diplomatist and general, was equally successful against his enemies at home and abroad, and is even yet remembered by the popular mind as the ideal of a just and firm ruler. He founded a university at Pressburg. During the reigns of Ladislaus II. (1490-1516) and Louis II. (1516-26) the rapacity of the magnates and domestic troubles brought the power of Hungary low, and the battle of Mohacs (1526) made a great part of the country a Turkish province for 160 years. The rest was left in dispute between Ferdinand of Austria and John Zápolya; but eventually, by the help of the Protestants, passed to the former, and has since remained under the scepter of the Habsburgs. In 1866 Leopold I. took Buda and recovered most of Hungary and Transylvania. In 1724 Charles VI. secured by the Pragmatic Sanction the Hungarian Crown to the female descendants of the House of Habsburg, and the loyalty of the Hungarians to his daughter, Maria Theresa, saved the dynasty from ruin. Maria

Theresa did much for the improvement of Hungary by the promulgation of the rural code called *Urbarium*, and by the formation of village schools. On the advent of the French revolution, and during the wars which ensued, the Hungarians once more played a prominent part in support of the Habsburg Crown. Napoleon fell, but the revolution had given an impetus to ideas of national and popular rights which the Hungarians, long stifled under the Germanic traditions and tendencies of their rulers, were amongst the first to feel. For a time Francis I. and Metternich stood stiffly out against all concessions, and tried to govern by pure absolutism, but ended by summoning in 1825 a new diet. The diet distinguished itself by adopting the Magyar language in its debates instead of the Latin to which it had been accustomed. Succeeding diets in 1830 and 1832 made new demands in the direction of religious equality, a popular suffrage, and abrogation of the privileges of the nobles. The Austrian Government attempted to repress the Hungarian national movement by imprisoning Deák, Kossuth, and others of the leaders. The struggle continued till 1848, when the French Revolution of that year gave the impulse for a similar rising in Vienna. Prince Metternich fled to London, and the Viennese court made a formal concession of all important demands; but these had no sooner been granted than the government began secretly to work against their being put in operation. The dependencies of the Hungarian Crown, the Croats and the Wallachians of Transylvania, were privately encouraged to revolt, and in December of the same year an Austrian army took the field with the avowed object of annihilating the independence of Hungary; but a series of pitched battles resulted on the whole so much in favor of the Hungarians that Austria was obliged to call in the aid of Russia, which was at once granted. After a heroic struggle the Hungarians had to succumb. The nation was reduced to the position of a province, and some of the greatest statesmen and soldiers of Hungary perished on the scaffold. But the struggle was continued by the Hungarians in the form of a constitutional agitation, and at last, when the battle of Sadowa, in 1866, separated Austria from Germany, Austria, left face to face with a nation almost as powerful and numerous as itself, felt compelled to submit. In 1867 a separate constitution and administration for Hungary was decreed, and on June 8th the emperor and empress were crowned king and queen of Hungary with the utmost pomp, according to the ancient ceremonies of a Hungarian coronation. The dualism of the Austrian Empire was thus finally constituted. It was indeed but the partial recognition of the fact that the empire was a heterogeneous assemblage of communities differing widely in race, language, social habits and customs, and bound together only by the accident of having fallen to the House of Habsburg.

Huns. The name given to several nomadic Scythian tribes, which devastated the Roman Empire in the Fifth Century. They inhabited the plains of Tartary, near the boundaries of China, many centuries before the Christian era;

and they were known to the Chinese by the name of Hiongün, and also Han. It was in order to put a stop to the continual aggressions of the Huns that the great wall of China was built; and after this the Huns split up into two separate nations, named respectively the Northern and the Southern Huns. The first-mentioned of these gradually went west to the Volga, where they encountered the Alanni, whom they defeated. Here the Huns remained for about two centuries; but, under the Emperor Valens, they crossed the Bosphorus; afterward invading Rome, under their leader Attila. After the death of Attila the Huns broke up into separate tribes, and were driven back by the Goths beyond the Tanais. The Hungarians of the present day are the descendants of Huns, who once more immigrated into Europe.

Hussites (*hūs'itz*). The followers of John Huss (*q. v.*), who avenged his death by one of the fiercest and most sanguinary civil wars ever known. They took the field under Ziska, 1418, gained the battle of Prague, July 14, 1420, and nearly annihilated the Imperialists at Deutschbrod, January 8, 1422. After occupying the whole of Bohemia and Moravia, they threatened Vienna, and in 1426 gained the victories of Aussig and Mies. The Emperor Sigismund was at length too glad to come to terms with the Hussites, and the Treaty of Iglau, in 1436, terminated hostilities between Catholic and Protestant for the time being.

Hyksos, The, or Shepherd Kings of Lower Egypt. A race of Arabs which invaded ancient Egypt, and continued dominant, according to Manetho, for 500 years, but according to others about half that time (B. C. 1842-1591). They formed or were contemporary with the Fifteenth, Sixteenth, and Seventeenth Dynasties of Upper Egypt. Amosis drove them out and established the Eighteenth Dynasty in Thebais, contemporary with the Nineteenth and Twentieth. They were driven from the Thebais by Thotmosis or Thotmosis, but continued to hold certain cantons of Egypt long afterwards. It is supposed that Abraham went to Egypt in B. C. 1806, while the Sixteenth Dynasty was regnant; and that Joseph was viceroy about B. C. 1713, in the same dynasty.

Idaho. The region within the present limits of the State was included in the Louisiana Purchase of 1803. Idaho was included first in Oregon and subsequently in Washington. The first settlement of consequence was the Cœur d'Alene Mission, which was established in 1842. The permanent settlement of the territory did not begin until the discovery of gold in 1860. Idaho was created a Territory by an act of Congress March 3, 1863, and then embraced the present State of Montana and nearly all of Wyoming. It was admitted to statehood July 3, 1890.

Illinois. The name is derived from that of an Indian tribe, Illini, signifying superior men. First explored in 1673 by Marquette, and in 1679 by La Salle. French settlements were formed at Crevecœur, Kaskaskia, and Cahokia in 1682. With the subjugation of Canada, in 1763, the French dominion east of the Mississippi became English. In 1783 Illinois was

ceded to the United States by England and became part of the Northwest Territory in 1787. After the successive severance of Ohio in 1800, of Indiana in 1805, and of Michigan in 1809, the remainder of the Northwest Territory was reconstituted as Illinois Territory, then embracing Wisconsin and part of Minnesota. On December 13, 1818, Illinois with its present limits was admitted as a State, being the eighth adopted under the Federal Constitution. The early history was an unbroken contest with the savages, the most notable incidents being the Fort Dearborn Massacre, August 15, 1812, and the Black Hawk War, 1832 to 1844. During the last half century Illinois has had a phenomenal record in growth and progress.

Incas. A Peruvian Dynasty (1130-1571) which succeeded the Aymara Dynasty, and was reigning when (in 1533) Pizarro conquered Peru. The Incas called themselves descendants of the Sun. The first Inca was Manco-Capac, 1130, and his successors were Sinchi-Roca, Lloqui-Yupanqui, Mayta-Capac, Capac-Yupanqui, Roca Yahuar-Huacac, Viracocha, Pachacutec, Yapanqui, Tupac-Yupanqui, Huayna-Capac, Huascar, and Atahualpa (taken prisoners by the Spaniards and put to death in 1533). Tupac-Amaru was beheaded in 1571.

India. The country was entered and partly subdued by Alexander the Great. About 126 B. C. it was also invaded by the Tartars, or Scythians of the Greeks, and Sakas of the Hindus. From the Tenth to the Twelfth Century of the Christian era the Mohammedans overran and conquered considerable portions of Hindustan, and subsequently the Mogul Empire was formed. In 1498, India was first visited by Vasco de Gama, and later the Portuguese and Dutch established settlements on the peninsula, but the former never acquired more than a paltry territory on the west coast, and the latter a few commercial factories. The French influence in India, at one time considerable, also yielded to the superior enterprise of the British, and finally the French relinquished the field. In 1625, the first English settlement was made by a company of merchants in a small spot of the Coromandel coast, of five square miles, transferred in 1653 to Madras. A short time previous a settlement had also been obtained at Hooghly, which afterward became the Calcutta station. In 1687, Bombay was erected into a presidency. In 1773, by act of the British Legislature, the three provinces were placed under the administration of a governor-general, and Calcutta was made the seat of a supreme court of judicature, the presidencies of Madras and Bombay being made subordinate to that of Bengal. Hitherto the affairs of India had been managed by the East India Company, but in 1784 a board of control was appointed by the government, the president of which became secretary of state for India. From the year 1750, when the warlike acquisition of territory commenced under Lord Clive, a succession of conquests, almost forced upon the British contrary to their inclinations, have now placed nearly all India under their sway. The Court of Directors of the East India Company have the power of electing the governor-general, subject to the approval

of the government, and they have also the power of his recall. The company also held the patronage of other appointments till the expiry of the act in 1854; but in 1833 their exclusive right to trade was abolished in favor of free trade.

In 1858, the direct sovereignty of India, and the powers of government hitherto vested in the East Indian Company, were vested in the British Crown. Lord Canning returned to England early in 1862, and was succeeded by the Earl of Elgin, who died in 1863. Sir John (afterwards Lord) Lawrence was governor-general from 1863 to 1868, when he was succeeded by the Earl of Mayo, who did much to develop the material resources of the country by removing the restrictions upon trade between the different provinces, and constructing roads, canals, and railways. He was assassinated by a Mohammedan fanatic in the Andaman Islands, February 8, 1872. Lord Northbrook became viceroy in 1872. During his administration a famine in Lower Bengal, successfully obviated by a vast organization of state relief (1874), the dethronement of the Gaekwár of Baroda for disloyalty (1875), and the tour of the Prince of Wales through India (1875-76), were the chief events. In 1876, Lord Lytton was appointed viceroy, and on January 1, 1877, Queen Victoria was proclaimed Empress of India at Delhi. In 1877-78, another disastrous famine occurred, and despite the most strenuous efforts of the government over five million persons are said to have perished. In 1878, the intrigues of Shir Ali, amir of Afghanistan, with Russia, led to a declaration of war on the part of the British. After two campaigns Abdurrahman Khan was established on the Afghan throne by British arms. In 1880, Lord Ripon succeeded as viceroy; being followed in 1884 by Lord Dufferin, who annexed Upper Burmah, 1888. Marquis of Lansdowne, 1888. Hon. Geo. N. Curzon, of Salisbury's Cabinet, was appointed Viceroy, 1898, and in August, 1905, was succeeded by Lord Minto. In 1906, the twenty-second Indian National Congress was held at Calcutta for the purpose of discussing the political wants of all races, religions, and provinces of India.

Indiana. Originally settled by the French at Vincennes in 1702, but little is known of its early history. In 1763, it became a British possession, and in 1783, by treaty with Great Britain, it became part of the United States. In 1789, it was made part of the Northwest Territory, this term being applied to all the public domain north of the Ohio River. This region was much devastated from 1788 to 1791 by the Indians, but their defeat in the latter year gave the settlers peace for a time. Indiana was organized territorially July 4, 1800. In 1811, an Indian war, instigated by Tecumseh, broke out, but the power of the savages was broken at Tippecanoe. Hostilities did not entirely cease till 1815. The State was admitted December 11, 1816. In 1827, the Erie Canal opened an outlet for the produce of the West, and the national road was commenced. These stimulated immigration, and the new State grew rapidly. A new constitution was adopted in 1851, calculated especially to promote great

public works. A free banking law was passed by the legislature the same year.

Iowa. The name of the State, originally applied to the river so called, is derived from the Indian, and signifies "beautiful land." It was a part of the Louisiana Purchase, acquired in 1803. It was first visited by a Frenchman, who gave his name, Dubuque, to the place where he settled in 1788. In 1834, the territory now included in Iowa was placed under the jurisdiction of Michigan, and in 1836 under that of Wisconsin. In 1838 Iowa became a separate territory, including also the greater part of Minnesota and the whole of Dakota. The delimitation of the State occurred when it was admitted as such in 1846. The State capital was moved from Iowa City to Des Moines in 1857. It was the sixteenth State admitted under the Federal Constitution.

Ireland. According to ancient native legends, Ireland was in remote times peopled by tribes styled Firbolgs and Danauns, eventually subdued by Milesians or Gaels, who acquired supremacy in the island. The primitive inhabitants of Ireland are now believed to have been of the same Indo-European race with the original population of Britain. Although Ireland, styled *Iernis*, is mentioned in a Greek poem five centuries B. C., and by the names of *Hibernia* and *Juvena* by various foreign pagan writers, little is known with certainty of her inhabitants before the Fourth Century after Christ, when, under the appellation of *Scoti*, or inhabitants of *Scotia*, they became formidable by their descents upon the Roman Province of Britain. These expeditions were continued and extended to the coasts of Gaul till the time of Laogaire McNeill, monarch of Ireland, 430 A. D., in whose reign St. Patrick attempted the conversion of the natives. From the earliest period each province of Ireland appears to have had its own king, subject to the *Ard-Righ*, or monarch, to whom the central district called Meath was allotted and who usually resided at Tara. Each clan was governed by a chief selected from its most important family, and who was required to be of mature age, capable of taking the field efficiently when occasion required. The laws were peculiar in their nature, dispensed by professional jurists styled *Brehons*, who, as well as the poets and men of learning, received high consideration, and were endowed with lands and important privileges. Cromlechs, or stone tombs and structures, composed of large uncemented stones, ascribed to the pagan Irish, still exist in various parts of Ireland; lacustrine habitations, or stockaded islands, styled *Crannogs* or *Crannoges*, in inland lakes, also appear to have been in use there from early ages. It is remarkable that a greater number and variety of antique golden articles of remote ages have been found in Ireland than in any other part of northern Europe; and the majority of the gold antiquities illustrative of British history now preserved in the British Museum are Irish. In the Sixth Century extensive monasteries were founded in Ireland, in which religion and learning were zealously cultivated. From these establishments numerous missionaries issued during the succeeding century, carrying the doctrines of Christianity under

great difficulties into the still pagan countries of Europe, whose inhabitants they surprised and impressed by their self-devotion and asceticism. Among the eminent native Irish of these times were Columba, or Colum Cille, founder of the celebrated monastery of Iona; Comgall, who established the convent of Bangor, in the County of Down; Ciaran of Clonmacnoise; and Adamnan, Abbot of Iona and biographer of Columba. Of the Irish missionaries to the continent the more distinguished were Columbanus, founder of Bobio; Gallus of St. Gall, in Switzerland; Dichuill, patronized by Clotaire; and Ferghal, or Virgilius, the evangelizer of Carinthia. The progress of Irish civilization was checked by the incursions of the Scandinavians, commencing towards the close of the Eighth Century, and continued for upward of 300 years. From the close of the Eighth to the Twelfth Century Ireland, although harassed by the Scandinavians, produced many writers of merit, among whom were Ængus, the hagiographer; Cormac McCullenan, King of Munster and Bishop of Cashel, the reputed author of *Cormac's Glossary*; Cuan O'Lochain; Gilla Moduda; Flan of Monasterboice; and Tighernach, the annalist. Of the Irish architecture of the period examples survive at Cashel. The well-known round towers of Ireland are believed to have been erected about this era as belfries, and to serve as places of security for ecclesiastics during disturbances. But this is mere surmise, the date of their erection having never been established nor their use satisfactorily explained. The skill of the Irish musicians in the Twelfth Century is attested by the enthusiastic encomiums bestowed by Giraldus Cambrensis upon their performances. The first step toward an Anglo-Norman descent upon Ireland was made by Henry II. in 1155. The chief Anglo-Norman adventurers, Fitz Gislebert, Le Gros, De Cogan, De Lacy, and De Curoi, encountered formidable opposition before they succeeded in establishing themselves on the lands which they thus invaded. The government was committed to a viceroy, and the Norman legal system was introduced into such parts of the island as were reduced to obedience to England. The youthful Prince John was sent by King Henry into Ireland in 1184, but the injudicious conduct of his council having excited disturbances he was soon recalled to England. The country was wholly subdued in 1210; in 1315, it was invaded by Edward Bruce, who was crowned king 1316, and slain 1318. In 1361, the heiress of Ulster, Elizabeth de Burgh, married the English Duke of Clarence. In 1394, Richard II. landed at Waterford with a large army, and gained the adherence of the people by his munificence. In 1494 was passed Poyning's Law, making the Irish Parliament subject to the English Council. In 1542, Henry VIII. assumed the title of *king*, instead of *lord* of Ireland. In 1534 Thomas Fitzgerald, son of the viceroy of Henry VIII., revolted, but not meeting with adequate support from his Anglo-Irish connections he was, after a short time, suppressed and executed. Henry received the title of "King of Ireland" in 1541, by an act passed by the Anglo-Irish Parliament

in Dublin; and about the same period some of the native princes were induced to acknowledge him as their sovereign, and to accept peerages. The doctrines of the Reformation met little favor either with the descendants of the old English settlers or with the native Irish. The attempts of the English Government in Ireland to introduce the Reformed faith and English institutions stirred up great dissensions in Ireland. The country was divided into shires in 1569; printing in Irish characters introduced by Walsh, Chancellor of St. Patrick's, Dublin, 1571; in 1601-02 occurred the famous insurrection of Tyrone, who invited the Spaniards to assist him, but they were all defeated by the Lord Deputy Mountjoy in the latter year. In consequence of repeated rebellions 511,465 acres of land in the Province of Ulster became forfeited to the English Crown, and James I. divided his land among such of his English and Scottish subjects as chose to settle there. In 1641 occurred More and Maguire's Rebellion, which was an endeavor to expel the Protestant settlers in Ulster, many of whom are believed to have been massacred. Between the years 1649-56, Cromwell and his son-in-law, General Ireton, reduced the whole island to subjection, and Ireland was comparatively tranquil until the Revolution. At the Revolution the native Irish generally took the part of James II., the English and Scotch "colonists" of William and Mary; and the war was kept up for four years (1688-92). From this time till 1778 history records little beyond the passing of penal statutes against the Roman Catholics. In 1778, Parliament relaxed the stringent pressure of these acts; but the widely-spread disaffection which they caused gave birth to numerous societies, resulting in the rebellion of 1798, which was not suppressed till 1800. On January 1, 1801, the legislative union of Great Britain with Ireland was consummated, and from this period the history of the country merges in that of Great Britain. In 1879, Ireland suffered severely from famine, and since 1880 from agrarian and "home rule" disturbances. The latest home rule bill—known as the Birell Bill—was defeated in 1907.

Ironsides, Cromwell's troopers, a thousand strong, and raised by him in the Eastern counties of England, so-called at first from the invincibility displayed by them at Marston Moor; were selected by Cromwell "as men," he says "that had the fear of God before them, and made conscience of what they did. . . . They were never beaten," he adds, "and wherever they were engaged against the enemy, they beat continually."

Israelites (Hebrew *Yisre'eli*), the descendants of Jacob, "the chosen people." The twelve tribes descended from Jacob's children were called "Israel" in Egypt, and throughout the Pentateuch, the books of Joshua, Judges, Samuel, and Kings. The name was afterward given to the larger portion, or ten northern tribes, after the death of Saul, a distinction that obtained even in David's time. But more definitely was the name applied to the schismatical portion of the nation, including all the tribes save Judah, Simeon, and Benjamin, which set up a separate monarchy in Samaria after the

death of Solomon. After the exile the two branches became blended, and are again called by the old name by Ezra and Nehemiah. But by degrees the name "Jews" (*q. v.*) supplanted this appellation, especially among foreigners. The history of the Israelites, especially during the early periods, is inseparably bound up with that of their rulers, patriarchs, etc., as Abraham, Jacob, Moses, Joshua, the Judges, David, Solomon, etc., to all of which the reader is referred. The following is a short summary of the leading points in the history of the Israelites: Abraham called, B. C. 1921; Isaac born, 1896; Esau and Jacob born, 1837; death of Abraham, 1822; Joseph sold into Egypt, 1729; Moses born, 1571; institution of the Passover and the Exodus, 1491; promulgation of the Law from Sinai, 1491; the tabernacle set up, 1490; Joshua leads the Israelites into Canaan, 1451; the first bondage, 1413; the second, 1343; the third, 1304; the fourth, 1252; the fifth, 1206; the sixth, 1157; Sampson slays the Philistines, 1136; Samuel governs as Judge, about 1120; Samson pulls down the temple of Dagon, 1117; Saul made king, 1095; David kills Goliath, about 1063; death of Saul and accession of David, 1055; David captures Jerusalem and makes it his capital, 1048; Solomon lays the foundations of the temple, 1012; it is dedicated, 1004; death of Solomon and division of the kingdom, 975.

In the reign of Solomon the prophet Ahijah was intrusted with the announcement to Jeroboam that, in punishment for the many acts of disobedience to the divine law, and particularly of the idolatry so extensively practiced by Solomon, the greater part of the kingdom would be transferred to him. This breach was never healed. A spirit of disaffection had long been rife, even in the reigns of David and Solomon, fostered by various causes, not the least among which was the burdensome taxes imposed by the latter monarch for the support of his luxurious court and for the erection of his numerous buildings. But however much these causes may have operated to create a breach between the North and South districts of Palestine, certain it is that God Himself expressly forbade all attempts on the part of Rehoboam or his successors to subdue the revolted provinces, and, with slight exceptions, the subsequent history of the two nations still more widely separated them. The precise amount of territory contained in the Kingdom of Israel cannot be accurately ascertained; it was approximately as nine to four compared with the sister Kingdom of Judah; the ten tribes included in Israel, it is supposed, were Ephraim and Manasseh (East and West), Issachar, Zebulun, Asher, Naphtali, Gad, Reuben, and part of Dan; the population was probably, at the separation, about 4,000,000. It was not long before the new kingdom showed signs of weakness. It developed no new power, which is not surprising when we consider that it was but a section of David's Kingdom shorn of many sources of strength. "The history of the Kingdom of Israel is, therefore, the history of its decay and dissolution." The first symptom of decline was shown in the emigration of many families who adhered to the old religion of the Israelites back to Judah; and to check

this Jeroboam set up rival sanctuaries with visible idols, 975 B. C., but which only increased the evil he wished to check. As soon as the golden calves were set up the priests and Levites flocked back to Judah, where they were warmly received. Jeroboam's whole policy aimed singly at his own aggrandizement. To supply the want of a priesthood, divine in its origin, a line of prophets was raised up remarkable for their purity and austerity. Jeroboam reigned twenty-two years; his son Nadab was violently cut off after a brief reign of two years, with all his house, and so ended the line of Jeroboam. The fate of this dynasty was but a type of those that followed. Domestic famine, the sword of the foreigner, and internal dissensions helped the tottering kingdom on its downward way, and only one brief era of prosperity occurred, under the sway of Jeroboam II., who reigned forty-two years. The Syrian invasion, under Phul, 771 B. C., compelled Menahem, the King of Israel, to pay heavy tribute, and in the reign of Pekah we find them leading many of the Israelites into captivity. In 721 Samaria was taken by Shalmaneser, the ten tribes were carried into captivity, and an end was put to the Kingdom of Israel. See *Jews* for the subsequent history of the chosen people.

Italy. The ancient history of Italy is more conveniently treated under *Rome*. We, therefore, glance at more modern times, after the Western Empire had fallen before a mixed horde of barbarous mercenaries, chiefly composed of the Heruli. Under the Hohenstaufen dynasty, Italy enjoyed an interregnum from foreign rule of about sixty years, which, however, was wasted in suicidal conflicts between the two factions of the Guelphs and Ghibellines. The most terrible incident of this period was the massacre of the Sicilian Vespers. Notwithstanding the inveterate internecine feuds of Italy, it was a period of great splendor and prosperity. The free cities or republics of Italy rivaled kingdoms in the extent and importance of their commerce and manufactures, the advancement of art and science, the magnificence of their public edifices and monuments, and the prodigious individual and national wealth to which they attained. Unhappily, a spirit of rivalry and intolerance grew up during this period of mediæval splendor, and in the arbitrary attempts of these states to secure supremacy over each other they gradually worked their own destruction. After the battle of Waterloo the final reconstitution of Italy was decreed by the Congress of Vienna. The accession of Pius IX., in 1846, seemed the inauguration of a new era for Italy. A general amnesty was followed by wise, liberal measures, which were also adopted by Tuscany and Piedmont, in emulation of Rome. By a simultaneous outbreak in Sicily and Milan in January, the great revolution of 1848 was inaugurated in Italy. The revolution of France in February imparted a strong impulse to that of Italy, and speedily Naples, Piedmont, and Rome conceded constitutional rights to the popular demands. The Milanese unanimously revolted against Austrian rule on the 17th of March, and after five days of heroic fighting the Austrians were

expelled from the city, and Radetsky, with 70,000 troops, compelled to retreat from its walls. On the 29th, Charles Albert entered Lombardy, the avowed champion of Italian independence and the leader of the national struggle. In the Congress of Paris, at the close of the Russian War (1856), Cavour forcibly exposed the unavoidable dangers of a continuance of Austrian and papal misrule. He strongly urged the expediency of a withdrawal of French and Austrian troops from Rome and the legations. In the beginning of 1859, Victor Emmanuel proclaimed from the Sardinian Parliament his intention of actively aiding in the deliverance of the oppressed Italian population from the yoke of Austria. The victories of Magenta and Solferino were quickly followed by the abrupt and inconclusive Peace of Villafranca, July 11, 1859. On the 18th of March, Parma, Modena, and the Emilian provinces were incorporated with Sardinia, and the grand-duchy of Tuscany on the 22d. On the 17th of March, the law by which Victor Emmanuel assumed the title of King of Italy was promulgated amid universal rejoicing. On the 6th of the ensuing May, Garibaldi, with about 1,000 volunteers, set sail from Genoa for Sicily, where a revolutionary outbreak had taken place. His swift and comparatively bloodless conquests of the two Sicilies is one of the most extraordinary incidents in modern history. At the close of the German-Italian War, Venetia, on the 3d of October, 1866, became part of the Kingdom of Italy by treaty with Austria. Turin, the chief town of Piedmont, was the capital from 1859 till 1865; the court was transferred to Florence during the latter year. In 1867, the French army was withdrawn from Rome. The last detachment left the pontifical territory on the 8th of August, 1870; and on the 20th of the following month the Italian troops, under General Cadrona, entered Rome after a short resistance by the pontifical troops, who ceased firing at the request of the pope. On the 2d of October, 1870, the Kingdom of Italy assumed the last of its extensive limits, when the whole of the papal states were absorbed by it, and Rome was its recognized capital. The last seven years of Victor Emmanuel's reign were uneventful, but were marked by the further consolidation and progress of the kingdom. In 1878, Victor Emmanuel died, and was succeeded by his son Humbert I., under whom the general history of the country has been uneventful. Bank scandals drove the Giolitti ministry from office in 1893, and Signor Crispi was invited by King Humbert to form a new cabinet. In 1896, attempting to establish a protectorate over Abyssinia, the Italians were defeated with great loss, and Crispi was succeeded by Marquis di Rudini. Humbert was assassinated July 29, 1900; succeeded by Victor Emmanuel III. In 1907, the King and Queen of England were received by King Victor Emmanuel at Rome. The centenary of Garibaldi was celebrated throughout the kingdom on July 4th of the same year.

Jacobins, the members of a political club which exercised a very great influence during the French Revolution. It was originally called the *Club Breton*, and was formed at Versailles, when the States General assembled there

in 1789. It then consisted exclusively of the members of the States General, all more or less liberal or revolutionary, but of very different shades of opinion. On the removal of the court and national assembly to Paris this club began to acquire importance. It now met in a hall of the former Jacobin Convent in Paris, whence it received the name of the Jacobin Club, which was first given to it by its enemies, the name which it adopted being that of the *Society of Friends of the Constitution*. It now also admitted members who were not members of the National Assembly, and held regular and public sittings. It exercised a great influence over the agitation, of which the chief seat and focus was in the capital, and this influence was extended over the whole country by affiliated societies. Its power increased, until it became greater than that of the National Assembly. It reached the zenith of its power when the National Convention met in September, 1792. The agitation for the death of the king, the storm which destroyed the Girondists, the excitement of the lowest classes against the *bourgeoisie* or middle classes, and the reign of terror over all France were the work of the Jacobins. But the overthrow of Robespierre on the 9th Thermidor, 1794, gave also the death blow to the Jacobin Club; and on November 9, 1794, the Jacobin Club closed. The term Jacobin is often employed to designate persons of extreme revolutionary sentiments.

Janizaries (Turkish, *Jeni-tcheri*, new soldiers), an Ottoman infantry force, somewhat analogous to the Roman prætorians, part of them forming the guard of the sultan. They were originally organized about 1330, and subsequently obtained special privileges, which in time became dangerously great. The regular janizaries once amounted to 60,000, but their numbers were afterwards reduced to 25,000. The irregular troops amounted to 300,000 or 400,000. Their power became so dangerous and their insurrections so frequent that several unsuccessful attempts were made to reform or disband them. At various times sultans had been deposed, insulted, and murdered by the insurgent janizaries. At last, in June, 1826, they rebelled on account of a proposal to form a new militia, when the sultan, Mahmoud II., having displayed the flag of the prophet, and being supported by their aga or commander-in-chief, defeated the rebels and burned their barracks, when 8,000 of them perished in the flames. The corps was abolished, and a curse laid upon the name. As many as 15,000 were executed, and fully 20,000 were banished.

Japan. Although Japan has passed through the successive eras of tribal government, pure monarchy, feudalism, anarchy, and modern empire, its ruling dynasty boasts of forty-six centuries of unbroken succession, and claims descent from Jimmu Tenno, first mikado, a fabulous warrior, whose descent from the sun goddess is a matter of faith with the Japanese, who base upon it their claim of the mikado's divinity. The empire claims to have had a previous existence of 2,479 years; but its history dates from Jimmu 667 B. C., and from his death until 571 A. D. thirty-one mikados ruled; the

famous Yamato Daké and Sujin the Civilizer belong to this period. Jingu Kogo, Empress of Japan, 270 A. D., conquered Corea in person. In 552 A. D. Buddhism was introduced into Japan, and thenceforth became a potent influence in the formation of character. About this time a succession of infant mikados contributed to loss of power in the mikadoate, and to the formation of noble families, who, one by one, gained ascendancy, and ruled the mikados; the feudal system began its existence, and feuds between the rival families were constant. The Fujiwarra family were opposed by the Sugawara, and succeeded by the Tairas and Minamotos. In 1184, Yoritomo became first shogun, (a term meaning general), the dual system of government, which ended only in 1867, began, and the shogunate monopolized the real power of the nation, of which the mikado was nominal and spiritual head. From 1199 to 1333 both the mikadoate and the shogunate were under the power of the Hojo family, who set up and removed rulers at their own pleasure; but they promoted the arts, and defeated an invasion of the Mongol Tartars. The Ashi-Kaga family next came into power, and occasioned a fifty-six years' war between the northern and southern dynasties, and strengthened feudalism at the time when all Europe was throwing off its chains. In 1536, Hideyoshi conquered the Coreans, and brought marine architecture to a higher state of perfection; he became taiko, and this period is called the age of taiko. In 1542, Europeans landed on Tanigashima; firearms were introduced, Portuguese merchants were attracted, and in 1549, Francis Xavier landed, and with an interpreter preached Christianity in various parts of the empire; he paved the way for the success of others, and priests and Jesuits flocked to Japan, when a total of 600,000 converts was recorded. Wabunaga protected the Christians, as the latter persecuted the Buddhists, whom he hated; but by intrigues and quarrels among themselves the priests alienated the support of the shogun, who persecuted the native Christians. The Jesuits stirred them up to resistance, and after a brief battle between Hedéyori, leader of the Christians, and Iyéayü; during which 100,000 men perished, the priests were exiled from Japan, 1615. In 1624 all foreigners except the Dutch and Chinese were banished from Japan, the Japanese were forbidden to leave the country, and all larger vessels were destroyed. In 1637 the great massacre of Christians began, the twenty or less Dutch traders were confined to the island of Deshima, and 100 years' intercourse with Christian nations resulted only in the adoption of gunpowder, fire-arms, and tobacco. For two centuries and a half after Iyéayü, Japan had peace; feudalism and anarchy were perfected, and the Tokugawa was the most prominent of a number of families who divided Japan; the power of the shogun increased, the last four rulers of the shogunate being known to Europeans under the title of "Tycoon." In 1853, Commodore Perry, with a fleet of American vessels, arrived at Yeddo, and the Perry treaty with the United States was concluded by him with the supreme ruler of Japan. This usurpa-

tion of authority added fuel to the flames just ready to burst out and demolish the shogunate, and after a brief revolution feudalism was overthrown, the tycoon retired, the government was changed to its ancient form, the mikado became the only ruler of Japan, and the empire took an important place in the family of nations. This occurred in 1868, since when the work of reform has gone on rapidly, the United States and its customs having served as models for many improvements. The United States opened Japan to the world after the failure of the Portuguese, Spaniards, Dutch, and Russians to do so. Japan has grown more rapidly in one generation than any European nation in a century. The Japanese rapidly became converted to western ideas, both political and social.

In July, 1894, war was declared with China. The Japanese successes brought it to a triumphant end in April, 1895. By the Treaty of Shimonoseki the terms of peace included recognition of Korean independence, which had been the chief cause of the war, the cession to Japan of Formosa and some smaller islands, with the peninsula of Liao-Tung, including Port Arthur, a large war indemnity, and a very great relaxation of restrictions on foreign industry and commerce in China. In deference to the representations of the powers, Japan abandoned her claims on the mainland of China, but increased the indemnity. In 1904, war with Russia was brought about in consequence of the Manchurian situation, and continued until the fall of Port Arthur in 1905. (See Russo-Japanese War.) During 1907-08, Japan was vigorous in rehabilitating her industries and finances, and in extending foreign trade.

Jew (Heb. *Yehuda*). The subjects of the kings of Judah have been sometimes called Jews, as distinct from the seceding ten tribes, who retained the name of Israel. As the term is now used, however, the history of the Jews begins with the return of the remnant of the kingdom of Judah from the Babylonish captivity in consequence of the Edict of Cyrus. Below will be found a brief *résumé* of the chief historical events in the history of the Jews according to the biblical narrative. According to Eusebius, the Scripture history ends in 442 B. C., and thenceforward the Roman historians and Josephus furnish the best accounts. *The Babylonish Captivity*.—Daniel prophesies at Babylon, B. C. 603; Obadiah prophesies, 587; Daniel interprets the handwriting on the wall, 538; he prophesies the speedy return from bondage and the coming of a Messiah, 538. *The Return from Captivity*.—Cyrus, ruler of all Asia, authorizes the return of the Jews and the rebuilding of the Temple at Jerusalem, 536; Haggai and Zechariah flourish, 520; the second Temple finished, 515; Ezra arrives in Jerusalem to correct abuses, 458; beginning of the seventy weeks of years predicted by Daniel, being 490 years prior to the crucifixion of Christ, 457; the walls of Jerusalem rebuilt, 445; Malachi flourishes, 415. *The Jews under the Macedonian Empire*.—Alexander the Great marches against Jerusalem to besiege it, but ultimately goes to the Temple and offers sacrifices to the God of the Jews, 332; Jerusalem taken by Ptolemy Soter 320; the

Scriptures translated (the Septuagint version) by seventy-two Jewish scribes, at the instance of Ptolemy Philadelphus, 277; Antiochus captures Jerusalem, sacks the Temple, and massacres 40,000 of the people, 170; commencement of the government of the Maccabees, 166; a treaty, the first in Jewish history, made with the Romans, 161; Judas Hyrcanus assumes the title of "King of the Jews," 107; Jerusalem captured by Pompey, 63. *The Jews under the Roman Empire*.—Antipater made ruler of Judea by Julius Cæsar, 49; Herod, son of Antipater, marries Miriamne, daughter of the king, 42; Herod decreed king by the Roman Senate, 40; Jerusalem captured by Herod and Sosius, the Roman general, 37; Herod rebuilds the Temple on a scale of greater magnificence than ever before, 18; Jesus Christ, the long-looked-for Messiah, born four years before 1 A. D., 4 B. C.; Pontius Pilate procurator of Judea, A. D. 22; John Baptist commences his ministry, 25; is beheaded, 27; Christ's ministry and miracles, 27-29; his death and resurrection, 29; the Jews are persecuted for refusing to worship Caligula, 38; receive the right of Roman citizenship, 41; Claudius banishes them from Rome, 50; Titus captures Jerusalem, the city and Temple sacked and burned, and 1,000,000 Jews perish, 70; Adrian rebuilds Jerusalem, names it Elia Capitolina, and erects a temple to Jupiter, 130; the rebellion of Bar-cocheba, 135-36; final desolation of Judea, more than 500,000 Jews are slain by the Romans, they are banished from Judea by an edict of the Roman Emperor, and are forbidden to return upon pain of death, 136. From this time the nation has been scattered among all other nations. From the latest estimates (1907) we gather the following figures as to the number of Jews in the world at the present time:

Africa,	392,482
Asia,	347,410
Australia,	17,403
Austria-Hungary,	2,076,277
Belgium,	4,000
Denmark,	3,476
France,	95,000
Germany,	586,948
Great Britain,	220,304
Greece,	8,350
Holland,	103,988
Italy,	35,617
Palestine,	100,000
Russia,	5,082,342
Sweden and Norway,	4,554
Switzerland,	12,264
Turkey,	282,277
United States,	1,777,185

It is estimated that there are enough Jews not enumerated in the above table to swell the total to 11,600,000. This people now scattered over the globe has suffered much even in modern times and especially in Russia at the hands of the oppressor. In America only have the Jews enjoyed at all times perfect freedom and all the rights of citizenship. The Jews born in England stand nearly if not wholly on the same footing as any other of the natives, although this result, like most of the liberties enjoyed in

that country, is the outcome of a series of concessions from the Crown. Full emancipation was granted to the Jews in England in 1858.

Kansas, derived from an Indian name meaning "smoky water," was visited by the Spaniards in 1541; afterward by the French in 1719. It came to the United States through the Louisiana Purchase, and was a portion of the territory which, by the Missouri Compromise of 1820, was always to remain untouched by slavery. When the territory of Kansas was organized, in 1854, it was declared by Congress that the Missouri Compromise was abolished. This led to the Kansas troubles, which lasted till 1859, with various vicissitudes, when a free constitution was adopted, forever prohibiting slavery. This imbroglia played an important part in inflaming the passions of North and South, and ripening the conditions which made our late Civil War inevitable. Kansas was admitted to the Union in 1861. During the Civil War the State was the scene of irregular warfare, known as "jay-hawking," carried on by Confederate raiders from Missouri and Arkansas and the Unionists who opposed them. The only battle of prominence took place at Lawrence on August 21, 1863. In 1880, the constitution was amended, prohibiting the liquor traffic.

Kentucky. The name Kan-tuck-kee signifies "darkened bloody ground," and the country now included in the State was originally the common hunting-ground for the Indian tribes living north and south of it. The first white visit was that of John Finley and others, from North Carolina, in 1767. Daniel Boone made a permanent settlement in 1769. Colonel James Knox planted a Virginian colony in 1770, followed by others in 1773-74, and James Harrod founded Harrodsburg in 1774. The irruption of whites was met by the Indians in a series of fierce and bloody conflicts. In 1775, the Cherokees ceded the country to Boone, who acted as agent for Colonel James Henderson and his company. Kentucky was a part of Virginia till 1790, when it became a separate Territory. It was admitted as a State into the Union in 1792, being the second admitted. A second constitution was adopted in 1800, and the present one in 1850. Kentucky during the Civil War endeavored to hold a position of neutrality. The chief battles fought in the State were Mill Spring, January 19, 1862, and Perryville, October 8, 1862. In 1864, martial law was declared, and civil authority was not restored until October, 1865. In 1900, William Gobel, contesting candidate for governor, was assassinated, and laid the foundation for a series of notable trials.

Khyber Pass, The. Obtained great notoriety because a British army of 16,000 men was here annihilated in the month of January, 1842, during the retreat from Kabul. The only persons who escaped were Dr. Brydon (a regimental surgeon) and a private soldier. In 1838, Lord Auckland, Governor-General of India, declared war against the Afghanists because their ruler, Dost Mohammed, had unlawfully attacked a British ally, and because Dost Mohammed had usurped the throne of Shah Sujah, who was under British protection. On July

21st, Shah Sujah was restored to the throne of Kabul, and the British thought the matter was ended. This was a grand mistake, for at the beginning of winter Akbah Khan, the son of Dost Mohammed, attacked the British army in Kabul, and slew several of the officers. A capitulation was made, and when the British army were in the Khyber Pass on their way home they were cut to pieces. With women, children, and camp followers, 20,000 were slain in the Pass.

Lake Dwellings. The earliest account of lake dwellings is to be found in Herodotus, who describes a Thracian tribe living, in 520 B. C., in a small mountain lake of what is now Rumelia. The custom of constructing these habitations has come down to the present day. The fishermen of Lake Prasias, near Salonica, still inhabit wooden cottages built over the water, as the Thracian tribes did, and in the East Indies the practice of building lake settlements is very common.

The lake dwellings proper of Switzerland came to light during the winter months of 1853-54, when the water of the lakes fell much below its ordinary level. Dr. Keller, who first described these lake dwellings, says that the main platform was made of round timbers, rarely of split boards, covered with a bed of mud; the walls and sides were in great measure of interlaced branches, the interstices filled with moss, and daubed with clay. In his opinion, all the evidence goes to show that they were rectangular in shape. It is probable that the huts were thatched, and the parts used as dormitories strewn with straw or hay.

Also, artificial islands found principally in Ireland, where they served the purpose of strongholds. In this case "the support consisted not of piles only, but of a solid mass of mud, stones, etc., with layers of horizontal and perpendicular stakes, the latter serving less as a support than to bind the mass firmly together." They are of much later date than the lake dwelling proper, some being depicted in Johnson's "Platt of the County Monaghan," a map of the escheated territories made for the English Government in 1591.

Lancaster, the name of a royal English house which flourished in two lines in the Thirteenth, Fourteenth, and Fifteenth Centuries. The first commences with Edmund, son of Henry III. and Eleanor of Provence, and brother of Edward I. Thomas, his son and successor in the earldom, cousin-german to Edward II., headed the confederacy of barons against Piers Gaveston, and finally shared the responsibility of his death with Hereford and Arundel. Henry (previously Earl of Leicester), brother and heir of Thomas, joined the conspiracy of Isabella and Mortimer against Edward II., and received the king into his custody at Kenilworth. Henry, his son (previously Earl of Derby), after vainly endeavoring to make peace with John, King of France, under the mediation of the pope at Avignon, was sent with an army into Normandy, and took part in the victory of Poitiers and the subsequent French wars. The next Duke of Lancaster commences a new lineage, that of the princes opposed to the house of York. The first in the line was John of Gaunt,

or Ghent, fourth son of Edward III. His name is one of the most celebrated in English history and in the chivalry of the Middle Ages. Henry of Hereford, the successor of John of Gaunt in the dukedom, was son to him by his first wife. He claimed the crown by descent, by the mother's side, from Edmund the first earl, who was popularly supposed to be the elder brother of Edward I., and to have been deprived of the succession by his father for personal reasons. He became king by deposing Richard II., 1399, and was a prince of great ability and valor. He reigned as Henry IV. till his death in 1413, and was succeeded by his son, Henry V. The son of the latter also inherited the crown as Henry VI., and in his reign the feuds of York and Lancaster broke out, which ended in the union of the two houses in the person of Henry VII.

Latin Union, The, a combination formed in 1865 by France, Italy, Belgium, and Switzerland. These countries entered into an agreement by which the amount of silver to be coined yearly was fixed for each member of the union. The coinage of all the countries was of like character, and to be received without discount throughout the union on public and private account. Greece joined the union in 1868, Spain in 1871, and subsequently Servia and Rumania also became members. Some of the South American States also used the Latin Union coinage. Spain alone of the countries of the union coins a gold piece not used by the others. The unit of coinage in the Latin Union is the franc; it has different names elsewhere, as, in Italy the lira; in Servia, the dinar; in Spain, the peseta; but the value is always the same. It is the most widely circulated coinage system in Europe, being used by about 148,000,000 people.

Lexington, a town of Massachusetts, ten miles northwest of Boston, noted as the scene of the first fight between the British and Americans in the war of the Revolution, April 19, 1775. On the evening of April 18th, General Gage, the British commander in Boston, sent 800 soldiers, under Major Pitcairn, to destroy the American supplies at Concord. Paul Revere, of Boston, escaping their sentinels, galloped out to Lexington and Concord with the news, so when the British reached Lexington at daybreak, they found about seventy Americans waiting for them on the village common. Captain John Parker, their commander, ordered them not to shoot until the English did. Major Pitcairn rode forward and called out: "Disperse ye rebels!" but though the Americans were outnumbered ten to one, they stood firm. Then Pitcairn ordered his men to fire, and four Americans were killed and nine wounded. Some shots were fired in return, and three English soldiers were wounded; but after that the Americans retreated some being killed as they ran. The British marched on to Concord, but meanwhile the whole country was aroused, and as they came back, hundreds of Americans attacked them from behind the houses and stone walls by the roadside. They were only saved from destruction by the arrival of reinforcements under Lord Percy. Though not a very great battle, this was one of the most important ones that ever was fought. As soon as the Americans found

that the war had really begun, hundreds of men hurried to the army, and not long after the British were driven out of Boston.

Lepanto (anciently Naupactus, now called by the Greeks Epakto), a small town of Greece, and the seat of a bishop; on the north side of the entrance to the Gulf of Corinth. Near Lepanto took place the celebrated naval battle between the Turks on the one side and the papal galleys and those of the Venetians and the Spaniards on the other, on October 7, 1571, in which the Christians, commanded by Don John of Austria, achieved a decisive victory. Of the Turks 30,000 fell or were taken prisoners, while 130 Turkish vessels were captured, and 12,000 Christian slaves liberated; the Christians lost 8,000 men and fifteen galleys. In this battle Cervantes lost an arm. The town became Greek in 1829.

Lollards, The (*lɔl'larɔz*). A sect of early Reformers in Germany and England. The name was given in the first place to a class of persons in Germany and the Low Countries, who, in the Fourteenth Century, undertook spiritual offices in behalf of the sick and the dead, and were greatly beloved by the people. Later, the term was conferred opprobriously upon heretics and schismatics in general, more particularly those who followed the teachings of John Wickliffe.

Lombards. A German people of the Suevic family, not very numerous, but of distinguished valor, who played an important part in the early history of Europe. The name is derived from *Longobardi*, *Langobardi*, a Latinized form in use since the Twelfth Century, and was formerly supposed to have been given with reference to the long beards of this people, but is now derived rather from a word *parta*, or *barte*, which signifies a battle-ax. About the Fourth Century they seem to have begun to leave their original seats (on the Lower Elbe, where the Romans seem first to have come in contact with them about the beginning of the Christian era) and to have fought their way south and east till they came in close contact with the eastern Roman Empire on the Danube; adopted an Arian form of Christianity, and, after having been for some time tributary to the Heruli, raised themselves upon the ruins of their power, and of that of the Gepidæ, shortly after the middle of the Sixth Century, to the position of masters of Pannonia, and became one of the most wealthy and powerful nations in that part of the world. Under their king, Alboin, they invaded and conquered the north and center of Italy (568-569). The conversion of the Arian Lombards to the orthodox faith was brought about by the policy of Gregory the Great and the zeal of Theodolinda, wife of Autharia, and subsequently of his successor, Agilulf (590-615).

Longobardi (*lɔn-go-bār'de*). A German tribe, of supposed Scandinavian extraction, which made their first appearance in history during the reign of Augustus, and in that of Justinian I., settled in Noricum and Pannonia. Led by their chief, Alboin, they successfully invaded Italy in 568, and there founded the Kingdom of Lombardy.

LOST CITIES

* The cities designated by asterisks were afterward rebuilt under the same name.

CITIES	FOUNDED		DESTROYED		
	By Whom	Date	How	By Whom	Date
Abydos , in Asia Minor, on the Hellespont; burned by Darius; conquered by Philip II.; by the Romans 188 B. C.	Milesians.	715 B. C.	War.	Turks.	1330 A. D.
Aegina ,* on the island of the same name, Greece; subjected by Pheidon 748 B. C.; captured by the Athenians 455 B. C.; by Publius Sulpicius 210 B. C.	Dorians.	.....	War.	Turks.	1536 A. D.
Agrirentum , in Sicily, subjected by Phalaris 570 B. C.; destroyed by Carthaginians 406 B. C.; captured by Romans 262 B. C.; again destroyed by Carthaginians 255 B. C.	Colony from Gela.	582 B. C.	War.	Carthaginians.	406 and 205 B. C.
Alexandria ,* in Egypt, scene of a frightful massacre by Ptolemy Physcon 141 B. C.; captured by Julius Cæsar 48 B. C.; 50,000 persons killed by earthquake 365 A. D.; captured by Chosroes II. 616 A. D.; by Amrou 640 A. D.; destroyed by the Turks 868 A. D.	Alexander the Great.	332 B. C.	War.	Turks.	868 A. D.
Antioch ,* in Syria; conquered by Pompey 64 B. C.; destroyed by Chosroes I. 541 A. D.; captured by Chosroes II. 611 A. D.; Saracens 638 A. D.; Turks 1084 A. D.; Crusaders 1098 A. D.; destroyed by Bibars, Sultan of Egypt, 1268 A. D.	Seleucus Nicator.	300 B. C.	War.	Chosroes I. and Bibars.	541 and 1268 A. D.
Argos ,* in Greece, under Phidon about 750 B. C. leading state of the Peloponnesus; lost Cynuria in wars with Sparta 550 B. C.; fell into decay after defeat near Tiryns 524 B. C.	Inachus.	1856 B. C.	War and Decay.	.....	524 B. C.
Arsinoë , in Egypt, not far from Lake Moeris; received its name from Ptolemy Philadelphus in honor of his sister Arsinoë, originally called Crocodopolis by the Greeks; the ruins are near Medinet-el-Fayoom.	Pharaoh in the 12th Dynasty of Manetho.	2300 B. C.	Decay.	.....	.....
Athens ,* in Greece; captured by Xerxes 480 B. C.; burnt by Mardonius 479 B. C.; rebuilt by Themistocles 478 B. C.; 439 B. C. at the height of its prosperity; taken by Lysander 404 B. C.; walls rebuilt by Conon 393 B. C.; submits to Alexander the Great 335 B. C.; conquered by Cassander; surrendered to Antigonus Gonatas 200 B. C.; partly destroyed by Philip of Macedon 200 B. C.; subdued by the Romans 146 B. C.; walls and fortifications destroyed by Sulla 86 B. C.	Cecrops.	1558 B. C.	War.	Sulla.	86 B. C.
Baalbec ,* or Heliopolis, in Asia Minor; sacked by the Moslems 748 A. D.; by Timour Beg 1400 A. D.	.....	.....	War.	Timour Beg.	1400 A. D.
Babylon , in Asia; captured by Tiglath-Pileser I. 1130 B. C.; by Cyrus 538 B. C.; walls destroyed by Darius 518 B. C.; taken by Alexander III. 331 B. C.; by Seleucus Nicator 312 B. C., who destroyed Babylon to build Seleucia. Explored by Rich, Kerr Porter, Layard, Frazer, Chesney, Botta, Loftus, and Rawlinson.	Nimrod.	2247 B. C.	War.	Seleucus Nicator.	312 B. C.
Byzantium , in ancient Thracia (modern Turkey); captured successively by the Medes, Athenians, and Spartans; by the Romans 73 A. D.; destroyed by Severus 196 A. D. It was refounded 324 A. D. and called Constantinople.	Megarius under Byzas.	667 B. C.	War.	Severus.	196 A. D.
Carthage , city in Africa; captured by Scipio after the battle of Zama 201 B. C.; burned by the Romans 146 B. C.; rebuilt as a Roman colony 123 B. C.; captured by Genseric 439 A. D.; by Belisarius 533 A. D.; sacked by the Arabs 647 A. D.; destroyed by Hassan 698 A. D.	Dido.	878 B. C.	War.	Romans and Hassan.	146 B. C. and 698 A. D.
Corinth , in Greece; captured by the Dorians 1074 B. C.; by the Macedonians 338 B. C.; by Aratus 243 B. C.; Antigonus Doson 223 B. C.; destroyed by L. Mummius 146 B. C.; rebuilt by Julius Cæsar 46 B. C.; sacked by Alaric 396 A. D.	Phenicians.	1520 B. C.	War.	L. Mummius and Alaric.	146 B. C. and 396 A. D.

LOST CITIES—Continued

CITIES	FOUNDED		DESTROYED		
	By Whom	Date	How	By Whom	Date
Ctesiphon , in Assyria; captured by Trajan 116 A. D.; by Severus 198 A. D.; destroyed by Omar 637 A. D.			War.	Omar.	637 A. D.
Delphi , in Greece; temple burned 548 B. C., and rebuilt by the Alemaeonidae; plundered by the Phocians 357 B. C.; by Sulla 82 B. C.; by Nero 67 A. D.; temple suppressed by Theodosius I.	Amphietyons.	1263 B. C.	War and Decay.		395 A. D.
Ephesus , in Asia Minor; burned by the Amazons 1141 B. C.; rebuilt by the Ionians 1045 B. C.; captured by Croesus 559 B. C.; by Cyrus 554 B. C.; destroyed by an inundation 322 B. C.; rebuilt 300 B. C.; nearly destroyed by an earthquake 17 A. D.			Inundation and Earthquake.		322 B. C. and 17 A. D.
Herculaneum , in Italy; its foundation ascribed to Hercules; partly ruined by an earthquake 63 A. D.; completely buried by an eruption of Vesuvius 79 A. D.; a second settlement buried by Vesuvius 472 A. D. Fragments of statues were discovered 1709 A. D.; theater discovered 1738 A. D.	Hercules.		Vesuvius.		79 and 472 A. D.
Jerusalem ,* in Palestine; captured by David 1049 B. C.; sacked by the Philistines and Arabs 887 B. C.; by Nebuchadnezzar 586 B. C.; by Antiochus Epiphanes 170 B. C.; captured by Pompey 63 B. C.; by Herod 37 B. C.; destroyed by Titus 70 A. D.		About 1913 B. C.	War.	Titus.	70 A. D.
Memphis , in Egypt; partly destroyed by the Persians 525 B. C.; captured by Antiochus Epiphanes 171 B. C.; restored by Septimus Severus 202 A. D.; decayed under the Arabs in the Seventh Century, and Cairo built from its ruins.	Menes or Misraim.	3890 B. C. or 2188 B. C.	War and Decay.		600 to 700 A. D.
Mycenæ , in Greece; destroyed by Dr. Schliemann, who discovered tombs with immense treasures in 1877 A. D.	Perseus.	1431, 1313 or 1282 B. C.		Argives.	468 B. C.
Nineveh , in Assyria; received its name from Ninus 2182 B. C.; destroyed by Cyaxares and Nabopolassar from 625 to 606 B. C. Layard began exploring the ruins 1840 A. D.	Ashur.	About 2245 B. C.	War.	Cyaxares and Nabopolassar.	625 to 606 B. C.
Numantia , in Spain, destroyed by Scipio the Younger 134 B. C.			War.	Scipio.	134 B. C.
Palmyra , Syria; submitted to Hadrian 130 A. D.; destroyed by Aurelian 274 A. D.; restored by Justinian I. 527 A. D.; again destroyed by the Saracens 744 A. D.; ruins discovered 1691 A. D.; explored by Wood and Dawkins 1751 A. D.	Solomon.	About 1001 B. C.	War.	Aurelian and Saracens.	274 to 744 A. D.
Persepolis , in Persia; supposed to have been founded by Jemshed; burned by Alexander III. 331 B. C.	Jemshed.		War.	Alexander.	331 B. C.
Petra , in Arabia, captured by the Nabatheans in the Fourth Century B. C.; by Cornelius Palma 106 A. D.; fell into decay and is not mentioned after the Sixth Century A. D.; ruins discovered by Buekhhardt 1812 A. D.			Decay.		After 600 A. D.
Pompell , in Italy; date of its foundation unknown; said to have been conquered by the Samnites 440 B. C.; captured by the Romans 360 B. C.; almost destroyed by an earthquake 63 A. D.; completely buried by an eruption of Vesuvius 79 A. D.; accidentally discovered 1748 A. D.; excavations commenced 1755 A. D.				Earthquake and Vesuvius.	79 A. D.
Saguntum , in Spain; said to have been founded by a colony of Greeks; burned by its citizens before surrendering to Hannibal 218 B. C.	Greeks.		Fire.	Citizens.	218 B. C.
Samaria , in Palestine; captured by Shalmaneser IV. 721 B. C.; by Alexander III. 336-332 B. C.; destroyed by John Hyrcanus 109 B. C.	Omri.	About 925 B. C.	War.	John Hyrcanus.	109 B. C.
Sardis , in Asia Minor; captured by the Cimmerians about 635 B. C.; by the Persians 554 B. C.; burned by the Greeks 499 B. C.; it was rebuilt; captured by Alexander III. 334 B. C.; by					

LOST CITIES—Continued

CITIES	FOUNDED		DESTROYED		
	By Whom	Date	How	By Whom	Date
Seleucus I. 283 B. C.; by Antiochus 214 B. C.; by the Romans 190 B. C.; destroyed by an earthquake 14–37 A.D. under Tiberius, who rebuilt it; captured by the Turks in the Eleventh Century; destroyed by Tamerlane 1402 A. D.			War and Earthquake.	Greeks and Tamerlane.	499 B. C. and 1402 A. D.
Sodom and Gomorrah , cities of Palestine; destroyed, according to the biblical account, by fire from heaven 1897 B. C.			Fire.		1897 B. C.
Susa , in Persia; mentioned on monuments 660 B. C.; captured by Alexander III. 331 B. C.; by Antigonus 315 B. C.; by the Arabs 652 A. D.; after that it decayed; ruins were discovered by Williams and Loftus 1853 A. D.			Decay.		After 652 A. D.
Sybaris , in Greece; destroyed by the Crotoniats 510 B. C. by turning the course of the River Crathis.	Archæaus.	720 B. C.	War.	Crotoniats.	510 B. C.
Thebes , or Luxor, in Egypt; flourished from 1600–800 B. C.; captured by the Persians 525 B. C.; destroyed by Ptolemy Lathyrus 86 B. C.	Menes.	2717 B. C.	War.	Ptolemy. Lathyrus.	86 B. C.
Troy , or Ilium, in Asia Minor; destroyed by the Greeks about 1184 B. C.; Dr. Schliemann discovered ruins, 1872 A. D.; which he considers ancient Troy.			War.	Greeks.	1184 B. C.
Tyre , in Asia Minor; destroyed by Nebuchadnezzar 572 B. C.; rebuilt; captured by Alexander III. 332 B. C.; by Antigonus 315 B. C.; by Antiochus III. 218 B.C.; by the Crusaders 1128 A.D.; by Chalid 1291 A. D.; destroyed by the Turks 1516 A. D.		About 2750 B. C.	War.	Nebuchadnezzar and Turks.	572 B. C. and 1516 A. D.
Vell , in Italy; destroyed by the Romans after ten years' siege 396 B. C.			War.	Romans.	396 A. D.

Louisiana. In 1541, De Soto discovered the Mississippi and in 1682 La Salle voyaged down this river to its mouth, naming the country Louisiana and taking possession of it in the name of the King of France. In 1716, Bienville established Fort Rosalie in the Natchez country and in 1718 founded New Orleans. In 1717, the Mississippi Company was formed by John Law for colonization purposes, and in 1732 resigned its claim to the territory, and Louisiana became a royal province. In 1733, the first settlement was made at Baton Rouge. In 1750, the cultivation of cotton was begun in the territory. In 1755, Louisiana received a large increase in population from the Acadians, who were driven from their homes in Canada. By a secret treaty in 1762, France ceded Louisiana to Spain, and in 1768 the French drove the first Spanish Governor, Don Antonio de Ulloa, from the colony. In 1800, Louisiana was ceded to Napoleon by Spain, and in 1803, on April 30th, was purchased from France by the United States for 60,000,000 francs. In 1806 and 1807, Aaron Burr's scheme to set up an independent nation in the Mississippi Valley caused much disturbance in New Orleans, and in 1810 residents of eastern Louisiana formed the Republic of West Florida in an attempt to overthrow the Spanish Government there. The district was taken under the control of the United States and made part of Louisiana during the same year after some trouble.

In 1812, Louisiana was admitted to the Union as a State, with boundaries as they are now. That same year the first steam vessels on the

Mississippi arrived from Pittsburg. The battle of New Orleans between the British and Americans was fought January 8, 1815, and it was the last battle of the War of 1812. During the period from 1815 to 1860 there was continual industrial activity and Louisiana soon became one of the leading agricultural States. In 1850, Baton Rouge became the seat of State government. On January 26, 1861, Louisiana passed the Ordinance of Secession. The first gun cast for the Confederate navy was made at Gretna, near New Orleans. Port Hudson, the last Confederate stronghold on the Mississippi, was captured by General Banks July 8, 1863, and on May 26, 1865, the war in Louisiana was ended by the surrender of General Kirby Smith. From 1865 to 1874 a period of carpetbag government caused many disturbances, and on September 14, 1874, it was overthrown and a representative government established. In 1884, the Industrial Cotton Exhibition was opened at New Orleans, celebrating the centennial of the first exportation of cotton from the United States. In 1890, Chief of Police David C. Hennessy, of New Orleans, was killed by an Italian criminal. In 1891, an organized band of citizens killed eleven Italian prisoners in the parish prison at New Orleans.

Lundy's Lane, a locality in the province of Ontario, near the Falls of Niagara. Here, July 25, 1814, an obstinate and undecided engagement was fought between an American force, numbering 3,000 men, under General Brown, and a body of about 2,000 British troops commanded by General Drummond. The loss

of the Americans was 743 men; that of the British 878 men.

Lutzen, a small town in the Prussian province of Saxony, famous for two great battles fought in its vicinity. The first, a brilliant victory of the Swedes in the Thirty Years' War, took place November 16, 1632. The battle on May 2, 1813, was fought somewhat farther to the south, at the village of Grosgoschen. It was the first great conflict of the united Russian and Prussian army with the army of Napoleon in that decisive campaign; and the French were left in possession of the field.

Maine. Various but unsuccessful attempts at colonization in Maine were made between the years 1602 and 1620 by both the French and English. In 1620, Sir Ferdinando Gorges, as head of the Plymouth Company, received a patent of all the region between 40° and 48° north latitude. In consequence of disputes afterward with the Massachusetts Colony, the company was dissolved, and in 1639 Gorges received a formal charter of the region between the Piscataqua and Kennebec, under the title of Maine. Internecine quarrels between the different settlements, on points of jurisdiction, caused the Massachusetts Colony in 1651 to set up a claim to the province under her charter, and parliament sanctioned it. In 1677, all claims of other grantees were purchased. From this time the history of the province was practically merged in that of Massachusetts. The final separation occurred in 1820, when Maine was admitted to the Union, being the tenth under the constitution. In 1842, the boundary dispute between Maine and Great Britain was settled. The "Maine Liquor Law" was passed in 1851. It was repealed in 1856 and passed again in 1858, being made a part of the Constitution in 1884. The death penalty was abolished in 1876, restored in 1883, and again abolished in 1887. The growth of the wood-pulp and paper-mill industry began about 1880, and in 1890 there was a rapid development of the lumber, granite, ice, and fishery trades. In 1879-80 occurred a notable contest for the governorship between the Republicans and Fusionists.

Mamelukes (*mām'a-lookz*). Originally, male slaves imported from Circassia into Egypt by the rulers of that country. They were instructed in military exercises, but soon exhibited a spirit of insubordination, assassinating the Sultan, Turan Shah, and, in 1258, appointing Ibegh, one of their own number, Sultan of Egypt. They were at length conquered by Selim I., and Cairo, their capital, was taken by storm, after they governed Egypt 263 years. During the French invasion of Egypt by Napoleon I., the Mamelukes formed a fine body of cavalry, and for a time seriously annoyed the invaders, though many afterwards joined them. In 1811, Mehemet Ali annihilated their power by treacherously inveigling and destroying 470 of their chief leaders.

Manila Bay, Battle of. A remarkable engagement between the American Asiatic squadron, under command of Commodore George Dewey, and a Spanish naval force, under command of Admiral Montojo, supported by land

batteries, fought on May 1, 1898. When it became evident, in March, 1898, that war between the United States and Spain was inevitable, Commodore Dewey began to mobilize his vessels in the harbor of Hong Kong preparatory to striking a blow at the Philippine Islands on the breaking out of hostilities. By April 1st, he had gathered there his flagship, the "Olympia," a steel protected cruiser; the "Boston," a partially protected steel cruiser; the "Raleigh," protected steel cruiser; the "Concord," steel gunboat; and the "Petrel," steel gunboat. Toward the close of the month, the "Baltimore," a steel protected cruiser the "Hugh McCulloch," revenue cutter, and two newly-purchased ships loaded with coal and other supplies, joined the fleet. Lying in Manila Bay, one of the largest and most important in the world, was a Spanish squadron, comprising, the "Reina Christina," steel cruiser; "Castilla," wood cruiser; "Velasco," iron cruiser; "Don Antonio de Ulloa," iron cruiser; "Don Juan de Austria," iron cruiser; "Isla de Cuba," steel protected cruiser; "Isla de Luzon," steel protected cruiser; "General Lezo," gunboat; "El Cano," gunboat; "Isla de Mindanao," auxiliary cruiser; "Marques del Duero"; and two torpedo boats. It was supposed that the harbor had been planted with mines and torpedoes and supplied with numerous searchlights, and that the forts on the shore had been strengthened in anticipation of an attack.

The United States squadron entered the bay on the night of April 30th, and at 5 o'clock on Sunday morning, May 1st, opened fire on the Spanish squadron and the forts. Two engagements were fought, and during the brief interval the United States squadron drew off to the east side of the bay to enable officers and men to get their breakfast. The entire battle lasted less than two hours. The Spanish flagship, "Reina Christina," was completely burned; the "Castilla" suffered the same fate; the "Don Juan de Austria" was blown up by a shell from one of the United States vessels; one or more ships were burned; and the entire Spanish fleet was destroyed. After his second attack, in which he destroyed the water battery at Cavite, Commodore Dewey anchored off the city of Manila and sent word to the governor-general that if a shot was fired from the city at the fleet, he would lay Manila in ashes. The Spanish loss was about 2,000 officers and men. The United States squadron did not lose a ship or a man. Two vessels were damaged in their upper works, and eight men were variously injured.

Maryland. One of the original thirteen States, it was named after the mother of Charles II. The State was settled by Lord Baltimore in 1632, under a grant from Charles II. Puritan and Virginian colonies disputed the authority of the proprietary governors, and it was not till 1714, after many broils and considerable bloodshed, extending over three-quarters of a century, that the rights of the Calvert family were finally settled. In 1649, the Assembly passed an act allowing Christians of all sects the public exercise of their faith. Baltimore was founded in 1730. The Virginia boundary was adjusted in 1668, that of Delaware and Pennsylvania,

known in our history as "Mason and Dixon's Line," in 1760. A republican constitution was adopted in 1776. The "Maryland Line" was famous in the Revolutionary War for its gallantry. The Federal Constitution was adopted in 1788. In the War of 1812, Maryland suffered much from Admiral Cockburn's fleet; Frenchtown, Havre de Grace, and Frederick were burned, and Fort McHenry unsuccessfully bombarded. The only important battle fought within the State during the late Civil War was that of Antietam, in September, 1862.

Mason and Dixon's Line. This line was originally the parallel of latitude 39 degrees, 43 minutes, 26.3 seconds which separates Pennsylvania from Maryland. It received its name from Charles Mason and Jeremiah Dixon, two English mathematicians and astronomers, who traced the greater part of it between the years 1763 and 1767, though the last thirty-six miles were finished by others. It was practically the dividing line between the free and the slave States in the East. During the discussion in Congress on the Missouri Compromise, John Randolph, of Roanoke, Virginia, made free use of the phrase, and thereafter it became popular as signifying the dividing line between the free and slave territory throughout the country. The boundary, as thus extended by popular usage, followed the Ohio River to the Mississippi, and west of that was the parallel of 36 degrees, 30 minutes, the southern boundary of Missouri, though Missouri itself was a slave State.

Massachusetts was one of the thirteen original States. Though first visited by the English under Bartholomew Gosnold in 1602, the first permanent settlement was made by the Puritan colony, which landed from the "Mayflower" at Plymouth in 1620. The expedition commanded by John Endicott, which arrived in 1628, acting under the auspices of the Massachusetts Bay Company, which had received a royal charter, gradually planted settlements at Charlestown, Boston, Watertown, Dorchester, Roxbury, Salem, Mystic, Saugus (Lynn), and other places. The restoration of the Stuarts threatened the rights of the colonists, but their charter was finally confirmed in 1662. King Philip's War occurred in 1675-76, and put the colonists in great peril. In 1684, the Massachusetts charter was declared forfeited to the Crown under James II., but it was restored at the accession of William and Mary. In 1692, the colonies of Massachusetts Bay and Plymouth were consolidated. The province took active part in the various French and Indian wars, and contributed largely to the expedition which captured Louisburg in 1745. The Boston Massacre in 1770, the destruction of the tea in 1773, and the Port Bill in 1774 were important incidents preceding the Revolution. At Lexington and Concord, in 1775, Massachusetts made the final appeal to arms. At this time the population of the province was 352,000. The State Constitution, still essentially the organic law, was formed in 1780, and the Federal Constitution was ratified in 1788. The total expenditures of the State on account of the late Civil War amounted to \$30,162,200.

Mecklenburg Declaration. This dec-

laration was adopted, it is said, in May, 1775, at a midnight meeting of representatives of the militia of Mecklenburg County, North Carolina. It declares that the people of that county are free and independent of the British Crown, and not only is its general tenor that of the Declaration of Independence, but many phrases are word for word as they appear in that document. The minutes of the midnight meeting are said to have been destroyed by fire in 1800. Whether the Declaration of Independence followed the words of the Mecklenburg Declaration or whether the latter, having probably been replaced from memory, was tinged with the former, is a disputed question.

Mexico. The history of ancient Mexico exhibits two distinct and widely differing periods — that of the Toltecs and that of the Aztecs. The Eighth Century is the traditional date when the Toltecs are related to have come from the North. Their capital was established at Tula, north of the Mexican Valley. Their laws and usages stamp them as a people of mild and peaceful instincts, industrious, active, and enterprising. It is related that a severe famine and pestilence all but destroyed the Toltec people in the Eleventh Century, and near the end of the next century, a fresh migration brought, among other kindred nations, the Aztecs into the land. Within two centuries and a half this last people had become predominant. But their rule was, in a great degree, a reversion to savagery.

The Aztecs founded, about 1325, the city of Tenochtitlan, or Mexico; a hundred years later they had extended their sway beyond their plateau valley, and on the arrival of the Spaniards, their empire was found to stretch from ocean to ocean. Their government was an elective empire, the deceased prince being usually succeeded by a brother or nephew, who must be a tried warrior; but sometimes the successor was chosen from among the powerful nobles. The monarch wielded despotic power, save in the case of his great feudal vassals; these exercised a very similar authority over the peasant class, below whom, again, were the slaves. The Mexicans apparently believed in one supreme invisible creator of all things, the ruler of the universe; but the popular faith was polytheistic. At the head of the Aztec pantheon was the frightful Huitzilopochtli, the Mexican Mars. The victims were borne to the summit of the great pyramidal temples, where the priests, in sight of assembled crowds, bound them to the sacrificial stone, and, slashing open the breast, tore from it the bleeding heart and held it up before the image of the god.

Cortez landed at Vera Cruz in 1519. Before his energy, and the superior civilization of his followers, the power of the native empire crumbled away. In 1540 Mexico was united with other American territories — at one time all the country from Panama to Vancouver's Island — under the name of New Spain, and governed by viceroys appointed by the mother country. The intolerant spirit of the Catholic clergy led to the suppression of almost every trace of the ancient Aztec nationality and civilization, while the commercial system crippled the resources of the colony; for all foreign trade with any coun-

try other than Spain was prohibited on pain of death. Mexico ranked first among all the Spanish colonies in regard to population, material riches, and natural products. In 1810, the discontent, which had been gaining ground against the viceregal power during the war of the mother country with Napoleon, broke into open rebellion, and a guerilla warfare was kept up until, in 1821 the capital was surrendered by O'Donoju, the last of the viceroys. In the following year, General Iturbide, who, in 1821, had issued the plan de Iguala, providing for the independence of Mexico under a prince of the reigning houses, had himself proclaimed emperor; but the guerilla leader Guerrero, his former ally, and General Santa Ana raised the republican standard, and in 1823 he was banished to Italy with a pension. Returning the following year he was taken and shot, and the federal republic of Mexico was finally established.

For more than half a century after this the history of Mexico is a record of nearly chronic disorder and civil war. In 1836, Texas secured its independence, for which it had struggled for several years, and which Mexico was compelled to recognize in 1845. In that year Texas was incorporated with the United States; but its western boundary was not settled, and war ensued between Mexico and the United States. From the fall of Santa Ana in 1855, down to 1867, great confusion prevailed.

In 1853, Benito Juarez became president, but his claims were contested by General Miramon, the head of the reactionary or clerical party, and the country was plunged in civil war. During this period of internal disorder, the Cortes passed an act suspending all payments to foreigners for two years, an act that drew upon the Mexican Government the serious remonstrance of European powers; and the result was the dispatch of a fleet of English, French, and Spanish ships into the Mexican Gulf for the purpose of enforcing satisfaction. In April, 1862, Emperor Napoleon formally declared war against Mexico; but the French never met with the welcome they expected from the people, and finally had to withdraw, without permanent success, in 1867, largely because of the attitude of the United States. Maximilian, who had become Emperor of Mexico under French support, was executed in the same year, and Juarez returned to power. On the death of Juarez in 1872, the chief justice, Lerdo de Tejada, assumed the presidency, in which, after a revolution, he was succeeded in 1876 by General Porfirio Diaz, one of the ablest of Mexican soldiers and administrators, who has been reelected. In November, 1901, the Pan-American Congress, with representatives from all the countries of the Western Hemisphere, convened in the City of Mexico. In 1907, an increase and reorganization of the army was effected.

Michigan. The name is derived from two Chippewa words, meaning "great lake." The State was the thirteenth admitted under the Federal Constitution. Though visited as early as 1610 by French missionaries and fur-traders, the first European settlement was made at Sault Ste. Marie by Father Marquette in 1668. Fort Michilimackinac, now Mackinaw, was estab-

lished three years later. In 1701 Antoine Cadillac founded Detroit. With other French possessions it came into the ownership of England in 1763. This was followed by the conspiracy of Pontiac, and the massacre of the garrison at Michilimackinac. After the Revolutionary War, Michigan did not come into the possession of the United States till 1796, and it was then included in the government of the Northwest Territory. The Territory of Michigan was formed in 1805. In the War of 1812-15 it was the scene of several bloody contests and butcheries perpetrated by the British and their Indian allies. Between 1819 and 1836 the Indians ceded their title to all of the Lower and part of the Upper Peninsula. In 1836, Congress passed a bill admitting Michigan as a State on condition that she gave up a claim made on a strip of Ohio, and accepted the whole region known as the Upper Peninsula instead.

Minnesota. The name is derived from an Indian word, signifying "sky-colored water." Hennepin and La Salle visited the region as early as 1680. Within the present century, Pike, Long, Keating, Nicollet, Schoolcraft, Owen, and others explored it thoroughly, but it was not until 1812 that the United States had any authority within its limits. Fort Snelling was established in 1819, and in 1837 lumbering industries began to attract immigration. The Territory established in 1849 embraced about twice the limits of the present State, the western limit extending to the Missouri and White Earth rivers. In 1851, the Sioux ceded all their lands west of the Mississippi to the Big Sioux River. The State was admitted to the Union May 11, 1858. The portion of the State lying west of the Mississippi originally belonged to the Louisiana Purchase, and the eastern portion was a part of what was known as the "Northwest Territory." Minnesota was the nineteenth State admitted. It was the scene of the Sioux War and massacre in 1862-63.

Mississippi. This region was first traversed by De Soto in 1542, and in 1682 La Salle descended the Mississippi (the name derived from Indian words meaning "great water"), took formal possession, and called the adjacent country Louisiana. Iberville built a fort on the Bay of Biloxi in 1699, and in 1716 Fort Rosalie was erected on the site of Natchez. After the cession of the east portion of Louisiana (including what is now Mississippi) to Great Britain, in 1763, and until the Revolutionary War, immigration proceeded very slowly. The Territory of Mississippi was organized in 1798. In 1804 the boundaries were enlarged, and Mississippi was made to comprise the whole of the present States of Alabama and Mississippi north of the 31st parallel. The region south of that line between the Pearl and Perdido rivers was added in 1812, though claimed by Spain. Alabama was organized as a Territory in 1817, and Mississippi was admitted as a State, the seventh under the Federal Constitution. A new constitution was formed in 1832. The ordinance of secession was passed January 9, 1861. The principal military events within the State during the war of 1861-65 were the battles of Iuka and Corinth and the siege of Vicksburg, which sur-

rendered on July 4, 1863. The State was formally readmitted to the Union in 1870. On January 29, 1903, the Yazoo Canal was opened, restoring to Vicksburg the water front it lost during 1876, when the Federal Government attempted to dredge a canal through six miles of forest, tapping the Yazoo River above that city and diverting the flow of the Mississippi.

Missouri. The name of the State signifies "Mud River." The settlement and progress of Missouri were at first slower than in the lower portions of French Louisiana. Its oldest town, Ste. Genevieve, was founded in 1755. In 1762, France ceded to Spain the portion west of the Mississippi, and to England the section east of the river. Numbers of Canadian French had settled along the whole line of the river, and an active trade had been carried on between upper and lower Louisiana. With liberal grants of lands to colonists, immigrants flocked hither from Spain. In 1775, St. Louis, originally a depot of the fur-trade, contained 800 inhabitants, while Ste. Genevieve had only 460. Spain sided with the colonists during the Revolution, and her arms were successful in lower Louisiana and Florida. In 1780, however, St. Louis was attacked by a force of English and Indians from Michilimackinac, and was only relieved by the arrival of General Clarke from Kaskaskia with American assistance. With the retrocession of Louisiana to France in 1800, and its subsequent sale to the United States by Napoleon three years later, its political ownership became fixed. Missouri was included in the Territory of Louisiana, which had been set off in 1805, with St. Louis as the seat of territorial government. In 1812, with the admission of the present State of Louisiana into the Union, the name of the Territory was changed to Missouri. With rapid immigration the population had swelled in 1817 to 60,000. In 1820, by the celebrated compromise, Missouri was admitted to the Union as a slaveholding State, on condition that slavery should never exist north of latitude 36° 30', in lands farther west, out of which new States should be formed. During the late Civil War repeated efforts were made to force secession on Missouri, but unsuccessfully. Though no great battles were fought within the State limits, it was the field of active military operations and, in many sections, of bloody guerilla-fighting. The battle of Wilson's Creek, on August 10, 1861, where General Lyon, the Federal commander, was killed, and the capture of Lexington by the Confederate general, Sterling Price, on September 20, 1861, were the most important events of the first year of the conflict. Several times General Price held more than half the State in his hands, and it was not till 1864 that the Confederates were finally expelled. In June, 1865, a new constitution was ratified by the people. The fifteenth amendment to the Federal Constitution was adopted by the legislature in 1869. Missouri was the eleventh State admitted under the Federal Constitution.

Montana. In 1743, Chevalier de la Verendrye, with a party of French Canadians, entered Montana and discovered the Rocky Mountains, but made no attempt at settlement. The country came into the possession of the United States

by the Louisiana Purchase of 1803. In 1804 and 1806, Lewis and Clark made exploring expeditions up the Missouri and across the mountains to the Pacific, crossing Montana twice. Alexander Henry, in 1808, led a party of fur-traders into the Yellowstone country, and in 1806-1810, John Colter, of Lewis and Clark's expedition, engaged in hunting and trapping in the territory. Fort Union, the first permanent fort in Montana, was built in 1829 by Kenneth Mackenzie, and in 1832 the first steamer ascended the Missouri into Montana. Fort Benton was built in 1846 by Alexander Culbertson. In 1853-54, Montana was explored by a scientific and military expedition sent out by Governor Isaac J. Stevens, of Washington Territory. The Gold Creek mines were discovered in 1862, and in the same year the development of the mines of Beaverhead Valley and Bighole River began. In 1864, Montana was organized as a Territory and Helena and Butte City were founded. From 1864 to 1879 there was war with the Sioux, Blackfeet, and Cheyennes. In 1874, Helena was made territorial capital. The battle of Little Big Horn, when General Custer and his men were massacred, occurred in 1876. In 1881, the first railroad reached Helena, and in 1883 the Northern Pacific Railroad was completed to this point, relieving the financial distress. In 1889, Montana was admitted as a State. The Montana State University was opened at Helena in 1891.

Nebraska. The name first applied to the river is of Indian origin, and signifies "Shallow Water." When originally organized as a Territory in 1854, it extended from latitude 40° north to the northern national boundary and west to the crest of the Rocky Mountains. The Territory of Colorado was set off from this on February 28, 1861, and that of Dakota a few months later. At the same time Nebraska received from Utah and Washington Territories a tract of 15,378 square miles, lying on the southwest slope of the Rocky Mountains, which, however, was taken from her with an additional portion in 1863 to form the Territory of Idaho. Nebraska was thus cut down to its present limits. Measures to form a State government were made in 1860 and in 1864, but the first was defeated by the popular vote, and the second (being an enabling act of Congress) was not acted on. The Civil War and Indian hostilities checked the growth of the Territory during 1861-65. In 1866, a constitution was framed and ratified by popular vote, and in 1867 Nebraska was admitted as a State, being the twenty-fourth under the Constitution.

Nevada. The region within the limits of Nevada forms part of the Mexican cession of 1848. It was organized by act of Congress as a Territory in 1861, from a portion of Utah, and embraced the region bounded north by the present boundary of the State, east by the 116th meridian, south by the 37th parallel, and west by California. A portion of California which had been included, the latter-named State refused to transfer, and by an additional act of Congress, in 1861, a further portion of Utah was added, extending the east boundary the distance of one degree. Nevada became a

State October 31, 1864. In 1866, a third portion of Utah was added, extending the east boundary to the 114th meridian, and at the same time the portion of the State south of the 37th parallel was added from Arizona. The earliest settlements were made by the Mormons in 1848. Gold was discovered in 1849; but the rapid advance in population dates from the discovery of silver in 1859. Among the earliest discoveries was that of the world-renowned Comstock lode. In 1906-07 rich discoveries of gold were made at Goldfields and other points. The State was the twenty-fifth admitted under the Constitution.

New Hampshire. One of the thirteen original States, the first settlements were made within the limits of New Hampshire at Dover and Portsmouth in 1623. The district was annexed to Massachusetts in 1641, became a royal province in 1679, and was again annexed to Massachusetts in 1689. It became a separate province in 1741 and remained so till the Revolution. Indian atrocities were frequent till the English conquered Canada. It was supposed till 1764 that the present State of Vermont was included in the province. The territory, however, was claimed by New York; the controversy lasted till the independence of Vermont was acknowledged in 1790. In 1776, New Hampshire declared its independence and established a temporary government of its own. It took an active part in the Revolutionary War, and the battle of Bennington was fought within its limits. The Constitution of the United States was ratified in 1788. During the Civil War New Hampshire furnished 34,606 men to the Union cause.

New Jersey. The State of New Jersey, one of the thirteen original States, was originally a part of New York, and was first settled about 1620 by the Dutch. A patent granted by Charles II. of England, to his brother, the Duke of York, in 1664, gave the latter a claim on all the country between the Delaware and Connecticut rivers. An expedition under Colonel Nicolls conquered the whole territory. The portion of the province now named New Jersey received its name from Sir George Carteret, to whom the Duke of York had sold his claim, in memory of the Island of Jersey of which the former had been governor. A constitution was formed for it in 1665 as a separate colony. In 1776, a State constitution was formed, and during the Revolution the battles of Trenton, Princeton, Millstone, Red Bank, and Monmouth were fought within the State limits. The Federal Constitution was ratified December 18, 1787, the State capital established at Trenton in 1790, and the present constitution August 13, 1844. The State furnished 79,511 fully equipped troops to the Union army and navy during the Civil War.

New York. The Bay of New York and the river emptying into it were explored by Hendrik Hudson, a navigator in the employment of the Dutch East India Company, in September, 1609. In 1614, the Dutch made settlements on Manhattan Island, and the name New Netherland was extended to all the unconquered regions lying between Virginia and Can-

ada. Seven years later the Dutch West India Company was incorporated and took possession. In 1623, settlements were made at Albany and on Long Island, and in 1626, Peter Minuit, the Director-General, bought Manhattan Island of the Indians. In 1629, the company passed the act under which the manorial monopolies in land were established. In spite of Indian wars the colony grew so fast that it came in collision with the English on the Connecticut and the Swedes on the Delaware River. The claims made by the English to New Netherland on the score of Cabot's prior discovery were finally enforced in the charter granted by Charles II. to the Duke of York, and the armed expedition of Colonel Nicolls in 1664. The Dutch under Governor Stuyvesant surrendered, and New Netherland became New York, though the Dutch reconquered and held the province for a short period, before English rule became permanent. The tyranny exercised over the province by Francis Nicholson, the lieutenant of Andros, who had been appointed to be governor, caused the revolt in 1689 headed by Jacob Leisler, which was at first successful, though Leisler was two years later executed for treason. In 1687 began the series of French and Indian wars in which the New York colonists bore so important a part. The first of these closed in 1697, with the Peace of Ryswick. The second, or Queen Anne's War, lasted from 1702 to 1713. The most important act in this long conflict between the French and English for the sovereignty of North America, and the end of the historic drama, began in 1754. The contest lasted with varying fortunes until the French were finally driven from their line of fortresses on the lake and the war was ended by General Wolfe's expedition, which resulted in the capture of Quebec and the final overthrow of French power in Canada in 1759. The province of New York entered zealously into the Revolutionary cause, though it contained a large loyalist faction. Many of the most important military operations were conducted within its limits. The two leading battles fought were that of Long Island on August 27, 1776, whereby the British secured and held possession of New York City till the end of the war; and the battle of Saratoga, on October 17, 1777, which occasioned the surrender of General Burgoyne's army. On November 25, 1783, New York was evacuated by the British. In 1790, the conflicting claims of New York and New Hampshire were settled by the erection of the disputed territory into the State of Vermont. In 1797, Albany was made the capital of the State, and slavery was abolished in 1817. During the War of 1812 the more notable incidents within State limits were the battle of Lundy's Lane, on the Niagara frontier, fought by General Winfield Scott, and Commodore McDonough's naval defeat of the British on Lake Champlain, both in 1813. The Erie Canal, originally projected in 1800, was, through DeWitt Clinton's influence, completed in 1825. During the Civil War, the State furnished 455,568 Union troops.

Nonconformists. In English history, those who declined to conform their worship to that by law established. They were of two kinds: First, those who, being religious, wor-

shipped nowhere; second, those who attended the services of some other religious denomination than the Established Church. It was more frequently used of the latter class. The name was first applied to those who declined to conform to the enactment of the Act of Uniformity of Edward VI., passed in 1549. It was revived and applied to the 2,000 clergymen, who had to surrender their livings on account of their inability to conform to the more celebrated Act of Uniformity of Charles II., first enforced on August 24, 1662. Etymologically viewed, a Dissenter and Nonconformist somewhat differ. The former word denotes that he feels differently from Churchmen, that his sympathies go in a different direction; the latter word refers, not to his feelings, but to his action with respect to public worship. The laws formerly existing required him to conform to that of the Established Church by attending the services and partaking of the communion. The two words, dissenter and non-conformist, as generally referring to the same individual, became interchangeable.

Normandy. An ancient northwest province of France, extending along the English channel, from a point south of the mouth of the Somme to the bay of Cancale, now divided into the departments of Seine-Inférieure, Eure, Calvados, Orne, and La Manche. Rouen was the capital and the chief town of Upper Normandy, and Caen the chief town of Lower Normandy. The Romans included the territory in Gallia Lugdunensis Secunda. It formed part of Neustria under the Merovingians, and received the name of Normandy from the Northmen, who occupied it in the beginning of the Tenth Century. In 912, Charles the Simple gave his sanction to their conquests, and Rollo, their chief, received the title of Duke of Normandy. The sixth successor of Rollo, William, became in 1066 the conqueror and first Norman king of England. On his death (1087) England and Normandy were separated, the latter reverting to Robert Courteheuse, while William Rufus seized upon the former. Henry I. ruled over both, but his daughter Matilda was only Duchess of Normandy. Her son, Henry II., accomplished another reunion. From King John Normandy was wrested by Philip Augustus of France; but it was twice again held by the English, first under Edward III., and a second time, from 1417 to 1450, under Henry V. and Henry VI. Charles VII. of France made it an integral portion of his kingdom.

North Carolina. In 1663 eight noblemen received from Charles II. the patent of the province of Carolina, but a few years prior to this settlements had been made by Dissenters from Virginia and from New England. Albemarle, the name given to the portion now North Carolina, was rapidly augmented by settlers from Virginia, New England, and Bermuda. In 1729, Carolina became a royal government, all but one of the proprietors having sold out to the Crown, and North and South Carolina were formally declared distinct provinces. In 1765, North Carolina received large accessions in parties of Irish Presbyterians, Scotch Highlanders, and Moravians. In 1769, the Provincial Assembly declared against the right of taxation

without representation, and in 1774 representatives were sent to the first Continental Congress, which adopted the declaration of colonial rights. Scotch Loyalists, under McLeod and McDonald, were defeated by the Whigs or Patriots at King's Mountain in 1775, the first battle of the Revolution. In 1776, North Carolina united with the other colonies in the Declaration of Independence, and a State constitution was formed the same year. Aside from partisan warfare, the only battle fought in the State was that of Guilford Court-House in 1781, between Generals Green and Cornwallis. The State seceded from the Union May 21, 1861, and the military operations which followed were notable. The most important were the capture of Fort Hatteras in 1861, of Roanoke Island and Fort Macon in 1862, and the combined land and naval assault ending in the capture of Fort Fisher in 1865. The State ratified the 14th Amendment in 1868, and the 15th Amendment in 1869.

North Dakota. The Territory of North Dakota, of which North and South Dakotas were formed, originally constituted part of the Territory of Minnesota, which was organized in 1849 from part of the Louisiana Purchase of 1803. In 1854 the Territory of Nebraska was formed, comprising then the present State of Nebraska and all of Dakota. On March 2, 1861, the Territory of Dakota was organized, comprising then the States of Montana and Wyoming. The first permanent settlements by whites were made in 1859 in Clay, Union, and Yankton counties. On November 2, 1899, the Territory was divided and the States of North and South Dakota formed and admitted to the Union at the same time. The history of the settlement and growth of the country is identical with that of the territories of which it originally formed a part.

North German Confederation, The (1866). After the famous "Seven Weeks' War" and the "Peace of Prague," when Austria was entirely excluded from Germany. The confederation included Hanover, Hesse-Cassel, Nassau and Frankford (all incorporated with Prussia), and the states north of the Main united to Prussia in a bund. Strictly speaking, therefore, the confederation was Prussia and the states north of the Main. In 1870, during the Franco-German War, the "North German Confederation," being joined by Bavaria, Württemberg, Baden, and Hesse-Darmstadt, became the "German Confederation," and two months afterwards (January 18, 1871), the King of Prussia had the title of "German Emperor" given him.

Northmen. A name applied to the ancient inhabitants of Scandinavia, or Norway, Sweden, and Denmark, but more generally restricted to those searovers called Danes by the Saxons, who sailed on piratical expeditions to all parts of the European seas, made their first appearance on the coast of England in 787, and from the year 832 repeated their invasion almost every year, till they became masters of all the country under their King Canute, and reigned in England during the next fifty years, down to 1042, when the Saxon Dynasty was restored in the person of Edward the Confessor. In 885, they laid siege to Paris, but were at length

bought off by Charles the Fat. Rollo, one of the most renowned of the Norman chieftains, after ravaging Friesland and the countries watered by the Scheldt, accepted the hand of a daughter of Charles the Simple, and received with her, under the tie of vassalage, possession of all the land in the valley of the Seine, from the Epte and Eure to the sea, which then went by the name of Normandy. They rapidly adopted the more civilized form of life that prevailed in the Frankish Kingdom — its religion, language, and manners — but inspired everything they borrowed with their own vitality. Their conquest of England, in 1066, gave that country an energetic race of kings and nobles on the whole well-fitted to rule a brave, sturdy, but somewhat torpid people like the Anglo-Saxons.

Norway. The early history of Norway is comprised in that of the other Scandinavian countries, and is, like theirs, for the most part fabulous. It is only towards the close of the Tenth Century, when Christianity was introduced under the rule of Olaf I., that the mythical obscurity in which the annals of the kingdom had been previously plunged begins to give place to the light of historical truth.

The introduction of Christianity, which was the result of the intercourse which the Norwegians had with the more civilized parts of Europe, through their maritime expeditions, destroyed much of the old nationality of the people with the heathenism which they had hitherto cherished, although the sanguinary feuds which had raged among the rival chiefs of the land can scarcely be said to have lost their ferocity under the sway of a milder religion. Olaf II., or the Saint (1015–1030), who zealously prosecuted the conversion of his countrymen, raised himself to supreme power in the land by the subjection of the small kings or chieftains, who in the times of heathenism had subdivided the kingdom among them. The war between Olaf and King Knud the Great of Denmark, which terminated in 1030 with the battle of Sticklestad, in which the former was slain, brought Norway under the sway of the Danish conqueror; but at his death in 1036, Olaf's son, Magnus I., recovered possession of the throne, and henceforth, till 1319, Norway continued to be governed by native kings. The death in that year of Hakon V., without male heirs, threw the election of a new king into the hands of the National Assembly, who, after many discussions, made choice of Magnus VIII., of Sweden, the son of Hakon's daughter. He was in turn succeeded by his son Hakon, and his grandson Olaf IV., who having been elected King of Denmark in 1376 became ruler of the sister Scandinavian kingdoms on the death of his father in 1380. This young king, who exercised only a nominal sway under the guidance of his mother, Queen Margaret, the only child of Valdemar III. of Denmark, died without heirs in 1387. Margaret's love of power and capacity for government brought about her election to the triple throne of the Scandinavian lands, and from this period till 1814, Norway continued united with Denmark; but while it shared in the general fortunes of the latter state, it retained its own constitutional mode of gov-

ernment, and exercised its right of electing to the throne, until, like the sister kingdom, it agreed of its own free will to relinquish this privilege in favor of hereditary succession to the throne. The Napoleonic crisis may be said to have severed this union, which had existed for more than 400 years, for Denmark, after having given unequivocal proofs of adhesion to the cause of Bonaparte, was compelled, after the disastrous War of 1813, to purchase peace at the cost of this long united partner of her state. Crippled in her resources, and almost a bankrupt, she saw herself constrained to sign the treaty of Kiel in 1814, by which it was stipulated by the allied powers that she should resign Norway to Sweden, receiving in return, by way of indemnity, some portion of Swedish Pomerania and the island of Rügen, which were subsequently exchanged with Prussia for Lauenburg on the payment by that state of two million rix dollars. The Norwegians, having refused to admit the validity of the treaty of Kiel, nominated Prince Christian, the heir-presumptive to the throne of Denmark, regent and subsequently King of Norway. This nomination was made by the National Diet, or Storting, which met at Eidsvold, where they drew up a constitution based on the French Constitution of 1791. These measures found, however, neither supporters nor sympathizers among the other nations; and with the sanction of the great allied powers, Charles John Bernadotte, Crown-Prince of Sweden, led an army into Norway, and after taking Frederickstad and Frederickshald, threatened Christiania. Denmark being unable to support the cause of Prince Christian, and Norway being utterly destitute of the means necessary for prosecuting a war, resistance was of no avail, and the Norwegians, in this untoward conjuncture of affairs, were glad to accept the proposals made to them by the Swedish King for a union with Sweden, on the understanding that they should retain the newly promulgated constitution, and enjoy full liberty and independence within their own boundaries. These conditions were agreed to, and strictly maintained; a few unimportant alterations in the constitution, necessitated by the altered conditions of the new union, being the only changes introduced in the machinery of government. Charles XIII. was declared joint King of Sweden and Norway in 1818. After the union, Norway firmly resisted every attempt on the part of the Swedish monarchs to infringe upon the constitutional prerogatives of the nation; and during the reign of the first of the Bernadotte Dynasty, the relations between him and his Norwegian subjects were marked by jealousy and distrust on both sides; but after his death, the people generally became more contented and Norway continued to make rapid progress towards a state of political security and material prosperity far greater than it ever enjoyed under the Danish dominion.

The dissolution of the union with Sweden which had endured since 1814, took place June 7, 1905, following a dispute between the two countries as to their diplomatic representation abroad. Prince Charles of Denmark became King, as Hakon VII.

NOTABLE WARS OF HISTORY

DATES	HISTORIC NAME	LEADING BATTLES	CHIEF LEADERS
B. C.			
1193-1184	Trojan War. Greeks capture Troy.	Siege of Troy.	Hector; Agamemnon.
743-669	Messenian War. Sparta conquers Messenia.		
504-469	Perso-Grecian War. Greece successfully resists Persian invasion.	Marathon; Thermopylæ; Salamis; Platea; Mycale.	Miltiades; Leonidas; Themistocles; Pausanius.
495-586 448-447 357-346 431-404	Sacred Wars of Greece. Largely intestinal, and without results.		
	Peloponnesian War. Athens conquered by Lacedæmonia.	Battles chiefly naval.	Pericles; Alcibiades; Lysander.
334-331	Greco-Persian War. Greece conquers Persia.	Granicus; Issus; Arbela.	Alexander the Great; Darius.
343-290	Samnite War. Romans conquer Samnites.	Caudine Forks; Sentium.	Fabius Maximus; Caius Pontius.
264-146	Punic Wars. Romans destroy Carthage.	Ticinus; Trebia; Thrasy- menus; Carmal; Metau- rus; Zama.	Fabius; Scipio; Hannibal.
200-146	Greco-Roman War. Greece sub- dued by Rome.	Cynocephalæ; Pydna.	Flaminius; Æmilius; Paulus; Mummius; Perseus.
112-106	Jugurthine War. Romans con- quer Numidia.	Muthul; Cirta.	Jugurtha; Metellus; Marius.
90-88	Roman Social War. Right of Ro- man citizenship granted the Socii.		Samnites; Marsians.
88-63	Mithridatic War. Mithridates, King of Parthia, defeated.	Chæronea; Cabira.	Lucullus; Pompey; Sulla.
73-71	Gladiatorial War. Gladiators de- feated.	Petelia.	Spartacus; Crassus.
58-51	Gaulic War. Gauls conquered by Cæsar.		Cæsar.
50-31	Roman Civil War. Roman Em- pire established.	Pharsalia; Thapsus; Mun- da; Phillipi; Actium.	Cæsar; Pompey; Brutus; Cas- sius; Antony; Augustus.
A. D. 70	Jewish-Roman War. Jerusalem taken; temple destroyed.	Siege of Jerusalem.	Titus.
86-100	Dacian War. Country beyond Danube conquered.		Trajan.
410-553	Barbarian Wars. Teutonic hordes capture Rome and ravage Italy.	Sack of Rome.	Alaric; Genserik; Attila.
710-1492	Saracen Conquests. The Saracens occupy Northern Africa and Spain; defeated in France.	Xeres; Tours; Tarifa; Gre- nada.	Musa; Tarik; Charles Martel; Cid Rodrigo.
1095-1291	The Crusades. Christians capture Jerusalem and ports of Spain; but finally repulsed.	Siege of Jerusalem; Acre.	Geoffrey of Bouillon; Conrad III.; Louis VII.; Fred- erick II.; Philip Augustus; Richard the Lion-Hearted; Louis IX.; Edward I.; Sala- din.
1337-1437	Hundred Years' War. England lost all her possessions in France.	Crecy; Calais; Poitiers; Agincourt.	Edward III. of England; Ed- ward the Black Prince; Henry V. of England; Joan of Arc.
1385-1389	Austro-Swiss War. Independence of Switzerland.	Sempach; Näfels.	Arnold Von Winckelried; Leo- pold II.
1419-1436	Hussite War. Religious toleration secured.	Prague.	John Ziska; Sigismund.
1455-1471	War of the Roses. House of York supplants that of Lancaster on English throne.	St. Albans; Blareheath; Wakefield; Towton; Bar- net; Tewksbury.	Richard, Duke of York; Ed- ward, Duke of York; Earl of Warwick; Queen Margaret; Henry VI.
1562-1593	French Civil War. Edict of Nantes Protestant toleration.	Dreux; St. Denis; Jarnac; Moncontour; Ivry.	Duke of Anjou; Henry III.; Henry IV.; Condé.
1567-1609	Spanish-Netherlands War. In- dependence of the Netherlands achieved.	Zutphen; Nieuport; vari- ous sieges and naval con- flicts.	William of Orange; Maurice of Nassau; Duke of Alva; Alex- ander Farnese; Duke of Par- ma.
1618-1648	Thirty Years War. Religious free- dom secured.	Dessau; Leipsic; Sech; Lüt- zen; Nordlingen.	Gustavus Adolphus; Wallen- stein; Tilly; Turenne.

NOTABLE WARS OF HISTORY—Continued

DATES	HISTORIC NAME	LEADING BATTLES	CHIEF LEADERS
A. D. 1642-1660	English Civil War. English Commonwealth established.	Edgehill; Marston Moor; Naseby; Dunbar; Worcester.	Prince Rupert; Fairfax; Charles I., Cromwell.
1701-1714	Spanish Succession. French and Spanish crowns reunited. Protestant succession in England.	Blenheim; Ramillies; Turin; Oudenorde, Malplaquet.	Duke of Marlborough; Prince Eugene; Marshals Tallard and Villars.
1700-1709	Swedish-Russian War. Defeat of Charles XII.	Narva; Pultowa.	Charles XII. of Sweden; Peter the Great.
1740-1748	Austrian Succession. Many previous treaties affirmed; Maria Theresa Empress of Austria.	Dettinger; Fontenoy; Placentia; Laffeldt.	Marshal Saxe; George II. of England; Duke of Cumberland.
1756-1763	Seven Years' War. Prussia gains a high rank.	Prague; Kollin; Rosbach; Lissa; Torgan.	Marshal Dann; Frederick the Great.
1775-1783	American Revolutionary War. United States achieve its independence.	Bunker Hill; Saratoga; Monmouth; Yorktown.	Washington; Greene; Burgoyne; Cornwallis; Clinton; Howe; Lafayette; Gates; Montgomery.
1792-1799	French Revolution. Bourbons defeated.	Valmy; Jemappe; Wattignies; Lonato; Lodi; Arcola; Pyramids.	Kellerman; Dumaouriez; Jourdan; Morcan; Hoche; Bonaparte.
1800-1815	Napoleonic Wars. France advances to the first place in Europe.	Marengo; Trafalgar; Austerlitz; Jena; Eylau; Friedland; Wagram; Borodino; Leipsic; Ligny; Waterloo.	Napoleon; Wellington; Nelson; Blucher; Alexander I.; Francis I.; Frederick William III.; Ney.
1812-1815	War of 1812. United States entirely independent of Great Britain.	Battles chiefly naval; New Orleans; Burning of Washington.	Com. Perry; Admiral Cockburn; Ross; Jackson.
1821-1828	War for Greek Independence. Greece independent of Turkey.	Missolonghi; Navarino.	Admiral Canaris; Byron; Ibrahim; Pacho.
1846-1847	Mexican War. Boundary between United States and Mexico established.	Buena Vista; Cerro Gordo; Capture of Mexico City.	Taylor; Scott; Santa Ana.
1854-1856	Crimean War. Independence of Turkey guaranteed. Peace of Paris.	Alma; Balaklava; Inkerman; Malakoff.	Lord Raglan; St. Armand; Prince Menchikoff; Gen. Canrobert.
1859	Italian War. Papal States and two Sicilies annexed to Italy.	Magenta; Solferino.	Napoleon III.; Victor Emmanuel; Frans Joseph I.
1861-1865	American Civil War. Abolition of slavery.	First and Second Bull Run; Shiloh; Seven Days; Antietam; Murfreesboro; Chancellorville; Vicksburg; Gettysburg; Chickamauga; Chattanooga; Virginia Campaign; Atlanta Campaign.	McClellan; Grant; Sherman; Sheridan; Jackson; Thomas; Lee; Johnston; Meade.
1866	Seven Weeks' War. Prussia defeats Austria and unifies Germany.	Langensalza; Königgrätz or Sadowa.	Marshal Benedek; William I.; Benst.
1870	Franco-Prussian War. Paris taken and Alsace and Lorraine added to German Empire.	Worth; Gravelotte; Sedan; Metz; Capture of Paris.	William I.; Von Moltke; Frederick of Prussia; Prince Frederick Charles; Napoleon III.; MacMahon; Bazaine; Trochu.
1877	Russo-Turkish War. Rumania, Servia, Montenegro, independent of Turkey. Treaty of San Stefano, Berlin.	Plevia; Shipka Pass; Kars.	Good Duke Nicholas; Gourko; Skobeloff; Todleben; Osman Pacha; Muktar Pacha.
1894-1895	China-Japanese War. Indemnity to Japan; independence of Corea.	Occupation of Corea by Japanese; Port Arthur; Wei Hai Wei; Nienchiang.	Oyama; Muktae Arisugawa; Prince Komatsu.
1898	Spanish-American War. End of Spanish rule in America; Cuba, Porto Rico and Philippines pass to United States.	Manila Bay; Santiago; San Juan; El Caney.	Admirals Dewey, Schley, Sampson, Montojo, Cervera; Generals Shafter, Toral.
1904-1905	Russo-Japanese War. Mutual concessions, confirmed by treaty of Portsmouth. Japan a world power.	Destruction of Russian fleet; Liaoyang; Mukden; Siege of Port Arthur; Shako; Telissu; Wafangkank; Yalu.	Admiral Makaroff, Kuropatkin; Linievitch; Stoessel; Oyama; Kuroki; Admiral Togo; Admiral Kamimura; Admiral Rojestvensky; Nogi; Oku; Admiral Uriu.

Ohio. The French made the first explorations in what is now Ohio, La Salle's discoveries dating from about 1680. The English, whose patents covered a portion of the region which the French traders aimed to monopolize, came in hostile contact with the latter. It was in this connection that Washington's name first became notable through the Braddock Expedition. In 1763 Canada, and the whole region West to the Mississippi previously claimed by France, were surrendered to Great Britain. After the Revolutionary War, the United States assumed control over the region afterward known as the Northwest Territory, acknowledging the claim made by Virginia to 3,709,848 acres near the rapids of the Ohio, and a similar claim by Connecticut to 3,666,621 acres near Lake Erie, which became known as the "Western Reserve." These claims were admitted in the sense of ownership, but in no way as question of State jurisdiction. The first permanent settlement was made at Marietta, in 1788. The early years of the Northwest Territory were harassed by Indian warfare, which did not cease till the crushing defeat inflicted on them by General Anthony Wayne in 1794. In 1799, the Northwest Territory was organized, and shortly afterward Ohio (the name being derived from the Indian signifying "beautiful river") was formed into a separate territorial government. In 1803, the Territory was admitted as a State, the fourth under the Federal Constitution. The seat of government was in Chillicothe till 1810, in Zanesville till 1812, and in Chillicothe again till 1816, after which the State capital was fixed at Columbus. In 1818, the first steamboat, the "Walk on the Water," was launched on Lake Erie. In 1836, the first western railroad was opened, from Toledo, Ohio, to Adrian, Michigan, with horse power at first and, in 1837, with steam power. The State began to be noted for wheat growing about 1840, and in 1863 her coal and iron mines began to be developed. Manufacturing became an important industry about 1865, and for a decade grew rapidly. The Standard Oil Company was formed in 1870, and during the next two decades the State's oil fields were rapidly developed. During the Civil War Ohio furnished one-eighth of the federal troops.

Oklahoma. The history of Oklahoma before it was constructed into a separate Territory is identical with that of the region of which Texas and New Mexico formed a part. When Indian Territory was created as a home for all the Indian tribes most of what is now Oklahoma was within its bounds. Some time in the early seventies the name first appeared in political history, the occasion being a bill introduced into Congress to create a Territory out of part of Indian Territory, to be known as Oklahoma. The measure failed of passage and for more than a decade nothing was heard of the country. It was not forgotten, however, as in March, 1889, an amendment was tacked on to the Indian Appropriation Bill providing for the opening to homestead settlers of the little area of land embracing less than 3,000,000 acres and lying in the center of what is now the great State. The land was opened in April, 1889, and the first rush of Oklahoma "boomers" took

place. In June, 1890, the territorial government first came into existence, and by the act which brought this about a strip of land known as "No Man's Land," consisting of 3,681,000 acres, was added as Beaver County. Other sections were added from time to time until the Territory contained 24,933,120 acres. In 1906, Congress provided an enabling act whereby Oklahoma and Indian Territory might be created into a State and admitted into the Union. On November 16, 1907, the conditions of this act having been complied with, the President of the United States signed the Constitution of Oklahoma, and issued a proclamation announcing its admission. The first State legislature convened December 2, 1907.

Oregon. The original region named Oregon was the whole province claimed by the United States on the Pacific Coast, extending from latitude 42° to 54° 40' north. Until 1846 joint possession was held by Great Britain and the United States, and then the latter, by the northwest boundary treaty, abandoned all claim to the country north of the 49th parallel, and the name Oregon was restricted to the region south of that line, which was given up by Great Britain. The first accurate knowledge of the territory was brought back by Captain Robert Gray, an American navigator, who entered the mouth of the Columbia River in 1792, and gave the name of his ship to it. The sale of Louisiana to the United States, in 1803, endowed this country with a title of ownership, and the expedition of Lewis and Clarke, in 1804-1806, strengthened the claim. Though a trading-post was established in 1811, by the Pacific Fur Company, under the Astor régime, at the mouth of the Columbia River, the region was largely inhabited by Indians and the employés of the Hudson Bay Fur Company until the active emigration of Americans, between 1833 and 1850, introduced a new element. The territorial organization took place in 1848. In 1853, Washington Territory was instituted out of the region north of the Columbia River on the west and of the 46th parallel on the east. In 1858, Oregon was admitted as a State, the twentieth under the Constitution. A Lewis and Clarke Centennial Celebration was held at Portland in 1905.

Pennsylvania. Delaware River and Bay were first explored under the auspices of the Dutch East India Company, from 1604 to 1624, and military jurisdiction was established. Till 1664 they continued in possession of both sides of the bay without much colonization, though a Swedish colony settled at Chester, on the west bank of the river, in 1638, where their industry and peacefulness prefigured the characteristics of the Quakers, who were to come later. Under a charter given by Charles II., in 1681, the region west of the Delaware was granted to William Penn, the Quaker, who colonized it and founded Philadelphia in 1682. Under this grant was included Delaware, and the whole region was ruled under the same proprietary until 1699, when a separate legislature, though not a separate governor, was allowed to this section of the province. This union lasted till 1876. The letter of the Penn charter included territory

already covered in the vague grants made to the New England colonies Virginia and Maryland. All the boundary-lines, however, were easily settled, except that separating Pennsylvania and Maryland, which was not defined until the completion of the Mason and Dixon Survey, in 1767. The original Swedish immigrants readily coalesced with the Quaker colonists, and the remarkable thrift of the people, combined with their peaceful Indian policy, soon made Pennsylvania a flourishing region. Large additional bodies of immigrants, Scotch-Irish between 1715 and 1725, and Germans from 1730 onward, rapidly swelled population and wealth. The government instituted by William Penn remained in force until 1776, when the province joined the other colonies in the fight for independence, and a provisional constitution was made by a convention presided over by Benjamin Franklin. Philadelphia was occupied by the British forces from September, 1777, to June, 1778. All the earlier sessions of the Continental Congress were held in this city. The battle of Germantown was fought within the present chartered limits of the city in 1777. From 1790 to 1800 it was the seat of the Government of the United States. In 1790, a new State constitution was formed. In 1794 occurred the disturbance known as the "Whiskey Rebellion" in the western part of the State, growing out of opposition to the excise laws. In 1799, the seat of the State government was removed to Lancaster, and thence in 1812 to Harrisburg, which still remains the capital. In 1862, during the late Civil War, the State was threatened with invasion by the Confederates, but the tide of attack then stopped with invading Maryland. In 1863 General Lee carried out his interrupted purpose, and overran the south portion of the State to within a short distance of Harrisburg. On his retreat General Meade joined battle with him at Gettysburg, near the Maryland line. The battle, beginning July 1st, lasted three days, resulting in the Confederate defeat. This Federal victory was probably the important turning-point of the war. As the seventh in the geographical order of the original States, Pennsylvania has become historically the "Keystone" State. Disastrous riots occurred about Pittsburgh and elsewhere in 1877 and 1892. In 1908, the famous "State House Cases" were brought to trial, as the result of an alleged \$5,000,000 steal by the contractors of the new State capitol, at Harrisburg, and their accomplices.

Persia. The original country of the Persians occupied a small portion of modern Persia on the north of the Persian Gulf. After being under the Assyrians, and next under the Medes, Cyrus (B. C. 559-529), by conquering and uniting Media, Babylonia, Lydia, and all Asia Minor, became the founder of the Persian Empire. The empire was further extended by his son and successor, Cambyses (B. C. 529-522), who conquered Tyre, Cyprus, and Egypt; and by Darius I., who subdued Thrace and Macedonia, and a small part of India. His son Xerxes (486-465 B. C.) reduced Egypt, which had revolted under his father, and also continued the war against the European Greeks, but was defeated at Thermopylæ and at Salamis

(480 B. C.), and obliged to defend himself against their attacks in a disastrous war. Artaxerxes I. (465-425 B. C.) had a long and comparatively peaceful reign. Artaxerxes was followed by Darius II. or Darius Nothus, Artaxerxes II. (Mnemon), Artaxerxes III. (Ochus), and Darius III. (Codomannus, 338-330 B. C.), the last of this dynasty, known as the Achæmenian Dynasty. He was defeated by Alexander the Great in three battles, lost his life, and the empire passed into the hands of his conqueror. On the dissolution of the Macedonian Empire, after the death of Alexander (323), Persia ultimately fell to his general, Seleucus and his successors, the Seleucidæ (312). They reigned over it till 236 B. C., when the last Seleucus was defeated and taken prisoner by Arsaces I., the founder of the dynasty of the Arsacidæ and of the Parthian Empire, of which Persia formed a portion, and which lasted till 226 A. D. The supremacy was then recovered by Persia in the person of Ardishîr Babigân (Artaxerxes), who obtained the sovereignty of all Central Asia, and left it to his descendants, the Sassanidæ, so called from Sassan, the grandfather of Ardishîr. This dynasty continued to reign for about 417 years, under twenty-six sovereigns. The reign of Sapor II., called the Great (310-381), and that of Chosroes I. (Khosru, 531-579), were perhaps the most notable of the whole dynasty. The latter extended the Persian Empire from the Mediterranean to the Indus, from the Jaxartes to Arabia and the confines of Egypt. He waged successful wars with the Indians, Turks, Romans, and Arabs. Chosroes II. (591-628) made extensive conquests, but lost them again in the middle of the reign of the Byzantine Emperor Heraclius. His son, Ardishîr (Artaxerxes) III., but seven years old, succeeded him, but was murdered a few days after his accession. He was the last descendant of the Sanssaidæ in the male line. Numerous revolutions now followed, until Yezdigerd III., a nephew of Chosroes II., ascended the throne in 632, at the age of sixteen. He was attacked and defeated by Caliph Omar in 639-636, and Persia became for more than 150 years a province of the Mohammedan Empire. The Arab conquest had a profound influence on Persian life as well as on the language and religion. The old Persian religion was given up in favor of Mohammedanism, only the Guebres, or Parsees, adhering to the faith of their fathers. About the beginning of the Ninth Century the Persian territories began to be broken up into numerous petty states. The Seljuks, a Turkish Dynasty, who first became powerful about 1037, extended its dominions over several Persian provinces, and Malek-Shah, the most powerful of them, conquered also Georgia, Syria, and Asia Minor. Through Genghis Khan the Tartars and Mongols became dominant in Persia about 1220, and they preserved this ascendancy till the beginning of the Fifteenth Century. Then appeared (1387) Timurlenk (Tamerlane) at the head of a new horde of Mongols, who conquered Persia and filled the world from Hindustan to the extremities of Asia Minor with terror. But the death of this famous conqueror in 1405 was followed not long after by the downfall of the

Mongol dominion in Persia, where the Turkomans thenceforward remained masters for 100 years. The Turkomans were succeeded by the Sufi Dynasty (1501-1736). The first sovereign of this dynasty, Ismail Sufi, pretended to be descended from Ali, the son-in-law of Mohammed. He assumed the title of shah, and introduced the sect of Ali (the Shiite or Shiah sect). The great Shah Abbas (1587-1628) introduced absolute power, and made Ispahan his capital. Under Shah Soliman (1666-94) the empire declined, and entirely sunk under his son Hussein. A period of revolts and anarchy followed until Kuli Khan ascended the throne in 1736 as Nadir Shah, and restored Persia to her former importance by successful wars and a strong government. In 1747 Nadir was murdered by the commanders of his guards, and his death threw the empire again into confusion. Kerim Khan, who had served under Nadir, succeeded, after a long period of anarchy, in making himself master of the whole of Western Iran or modern Persia. He died in 1779. New disturbances arose after his death, and continued till a eunuch, Aga Mohammed, a Turkoman belonging to the noblest family of the tribe of the Kajars, and a man of uncommon qualities, seated himself on the throne, which he left to his nephew, Baba Khan. The latter began to reign in 1796 under the name of Futteh Ali Shah, and fixed his residence at Teheran. This monarch's reign was in great part taken up with disastrous wars with Russia and Turkey. In 1813 he was compelled to cede to Russia all his possessions to the north of Armenia, and in 1828 his share of Armenia. Futteh Ali died in 1834, leaving the crown to his grandson, Mehemet Shah, during whose reign Persia became constantly weaker, and Russian influence in the country constantly greater. He died in 1848, and was succeeded by his son, Nasr-ed-Din, born 1829. He had to suppress a number of insurrections, and in 1851 a serious rebellion of the pure Persian party in Khorassan, who refused obedience to the Kajar Dynasty on religious grounds. In May, 1852, he annexed the Sultanate of Herat, but was compelled to relinquish it by the British, and a second occupation in 1855 resulted in the landing of a British force on the Persian Gulf, the capture of Bushire, and the Peace of Paris (March 3, 1857). Persia has since come into the possession of portions of territory formerly belonging to Oman, Afghanistan, and Beluchistan. On the north-east the boundary between Persia and the Russian territory beyond the Caspian, after remaining long uncertain, was settled in the end of 1881, the lower course of the river Aтрек, and farther east certain mountain ridges north of that river, forming the new boundary. Shah Nassr-ed-Din visited Europe thrice, and his successor, Muzaffer-ed-Din, in 1905. Upon the death of the latter, he was succeeded by the present monarch, Mahomed Ali Mirza, on January 8, 1907.

Philippine War. When the Philippines were taken by the United States an insurgent army was operating against Spain. After assisting the United States troops, Aguinaldo turned upon them, desiring absolute freedom of control.

February 4, 1899, Aguinaldo's army of Filipinos made a night attack near Manila. Although the insurgents were driven back with great loss, the Americans lost forty-nine soldiers, and 148 were wounded. Admiral Dewey's ships could not begin their firing until daylight, their second Sunday morning engagement in Eastern waters. Then they did effective work in shelling the trenches of the insurgent army. About 13,000 men of the Eighth Army Corps, under Major-General E. S. Otis, participated in this initial fight of the new conflict in the Philippines. From this time on with general success the Americans gained ground, though slowly. April 26th the insurgents, using artillery for the first time, were defeated by Colonel Funston, who captured many prisoners. May 23d, Lawton, under orders of General McArthur, arrived with his command at Malolos, having marched 120 miles in twenty days; had twenty-two fights, captured twenty-eight towns, destroyed 300,000 bushels of rice, killed 400 insurgents, wounded double that number, and lost only six men killed and wounded. July 30th, near Calamba, an American detachment suffered a loss of seven killed and twenty-three wounded. In August a treaty-like arrangement was made with the Sultan of the Sulu Islands; a part of the agreement provides for the United States continuing the pension of \$4,000 per annum formerly paid by Spain; the United States flag to be paramount, and the Sultan to repress piracy, being among the stipulations. In this month, also, Aguinaldo, the insurgent chief, was successful in eluding all efforts to capture him, until April, 1901, when he was secured by means of a stratagem by General Funston, of Kansas Volunteers; he was rewarded by being breveted Brigadier-General in the regular army. December 3, 1900, the gallant General Lawton was killed while assisting a wounded soldier. A series of desultory skirmishes have since occurred with the half-civilized natives, which could not be interpreted as actual warfare.

Portugal. The name Portugal is a corrupted form of that of the hill fort, *Portus Cale*, which stood on the south bank of the Douro, and is now one of the suburbs of Oporto ("the harbor"). The Carthaginians under Hamilcar subdued the region, and were followed by the Romans. In the Fifth Century A. D., Lusitania, like the rest of the peninsula, was overrun by the Visigoths, and in the Eighth Century was conquered by the Arabs. The warlike Fernando, King of Leon and Castile, in the course of marauding expeditions conquered and occupied the important city and stronghold of Coimbra, in 1064. His son, Alonso IV., seized his brother's territory of Galicia, which included part of the north of Portugal. Meanwhile the long wars were attracting to the Christian courts and camps of Spain the flower of European chivalry. Two knights of the House of Burgundy, Counts Raymond and Henri, acquired the highest favor with Alonso. Count Raymond received, with the hand of the king's daughter, the government of Galicia and Portugal, but after a terrible defeat near Lisbon, in 1095, he was deemed too weak to hold the outlying viceroyalty, which was given to Count Henri, the husband of

Alonso's natural daughter. Henri was made governor of the whole district between Minho and Tagus, and died in 1114. Alfonso I. defeated a large Saracen army in the plain of Ourique, Alemtejo, in 1139, took the great stronghold of Santarem, and with the aid of a fleet of English, German, and Flemish crusaders carried Lisbon itself by siege in 1147. Before his death, in 1185, he had kindled the fire of patriotic loyalty in the nation, which his sword had extended to the Mediterranean Sea. The Burgundian Dynasty founded by him continued to rule Portugal till 1580. The war with the Infidels was continued by Alfonso's immediate successors, and Alfonso III. was called the Restorer, on account of his reconquest of Algarve. His son, Dinis, the founder of the university at Lisbon, and a liberal patron of learning, laid the foundation of the commercial greatness of Portugal in the next century.

Henrique the Navigator gathered together voyagers and men of science and sent forth the various expeditions which explored the west coast of Africa, and discovered the Azores, Madeiras, Canaries, Cape Verde, and other islands. The prince bore the expense of these expeditions till a national interest was awakened in the West African trade. Maritime discovery and colonization continued during the reign of Alfonso V., and culminated during that of João II., one of the ablest of Portuguese monarchs. In 1486-87 Bartholomeo-Diaz doubled the Cape of Good Hope, and sailed along the Kafir coast as far as the Great Fish River in two small vessels fitted out by João. In 1495 Manoel succeeded João, and in his reign Vasco de Gama made his famous voyage to India, and Cabral discovered Brazil (1500). The great navigator Magalhaens was a Portuguese. The cradle of discovery and home of commerce, Portugal at this period attained its greatest intellectual eminence. Its plate and goldsmith's work had great artistic value, its Burgundian Gothic style in architecture was noted for nobility of proportion and richness of tracery, and, above all, its glory had been sung in the *Lusiads* of Camoens.

When João III. ascended the throne in 1521, Portugal was one of the first kingdoms in Europe, and Lisbon one of the wealthiest cities; but in 1536 the Inquisition was put in force against the Jews, and this was followed by the first admission of the Jesuits. Under their influence João's grandson, Sebastian, a youth of fourteen years, started on a Quixotic expedition to Africa against the Infidels, which ended in the defeat of the Portuguese and the loss of their king at Alcazar, in 1578. Cardinal Henrique, Sebastian's uncle, reigned only till 1580, and his death marks the extinction of the old Burgundian line. The nation clung to the hope that Sebastian was still alive in the hands of the Infidels and would return, but, meantime, numerous aspirants were struggling for the throne, and eventually Philip II. of Spain annexed Portugal to his own dominions. Portugal was now worse ruled than ever, and was burdened with much of the expense and misery of the Spanish wars in Germany and the Netherlands.

Moreover, as a penalty of its identification with Spain, it lost to the Dutch great part of its foreign possessions. But at last, after a shameful union of sixty years, Portugal regained its liberty by a conspiracy which placed João de Bragança, a descendant of the royal family, on the throne in 1640. After a war which lasted till 1668, Spain ceded all claims to Portugal by the Treaty of Lisbon. The Dutch also restored Brazil to the Portuguese, and in 1683 a commercial alliance was entered into with England; but nothing could bring back to Portugal her old prosperity.

In the reign of José I. the minister Pombal effected certain reforms and procured the expulsion of the Jesuits in 1759. But Portugal lapsed into maladministration during the reign of Maria Isabella (1777-89). In the war between France and Spain João VI. was ordered by Napoleon to seize the British merchandise in Portugal, and on his refusal was declared to have forfeited the throne. He solicited the protection of England, and, setting sail with his family, transferred the seat of government to Rio de Janeiro in 1807. The French occupied Portugal, but were forced to withdraw on their defeat at Vimiera by the English and Portuguese allies, under Sir Arthur Wellesley, in 1808. Wellington's defense of the triple lines of Torres Vedras against Marshal Massena (1810) completed the deliverance of Portugal from Napoleon's tyranny. João continuing to reside in Brazil, a revolution took place at Lisbon in 1820, when, without bloodshed, a constitution was proclaimed in place of the old absolute monarchy. In 1821 João returned, but was not allowed to land till he had ratified the acts of the Cortes. Adopting a liberal policy, he accepted the constitution, and in 1825 acknowledged the independence of Brazil, under his brother, Dom Pedro, retaining himself merely the imperial title. João was succeeded in 1826 by Pedro IV., who organized the state and then abdicated in favor of his daughter, Doña Maria de Gloria. In 1828, Miguel the "absolutist," uncle of Doña Maria, usurped the throne, and plunged Portugal into three years of anarchy. In 1832 Dom Pedro landed with a strong force (partly English) and after a feeble resistance Miguel capitulated, and was allowed to leave the country. Pedro died in 1834, and Doña Maria, who had assumed royal authority, married Prince Ferdinand of Saxe-Coburg in 1836. The disorders of her reign were checked, but only for a time, by the armed intervention of the great powers in 1847. As a result of one of many insurrections the Marquis de Saldanah, grandson of Pombal, was appointed minister, but the popular hero succumbed to court influence. Maria died in 1853, and her son ascended the throne as Pedro V. On the death of the latter in 1861, his brother became king as Luis I.

Under constitutional government, Portugal remained tranquil until recently. Some years ago, the country took an honorable part in the work of African exploration, and thereby secured valuable colonial possessions. In 1907, there were numerous riotous outbreaks in Portugal, which culminated in the assassination of King Carlos and the Crown Prince on Feb. 1, 1908.

PRESIDENTS OF THE UNITED STATES

NAME	BORN		PARENTS		PATERNAL ANCESTRY
	WHEN	WHERE	FATHER	MOTHER	
1. George Washington, . . .	1732	Bridge's Creek, Va., . . .	Augustine, . . .	Mary Ball, . . .	English, . . .
2. John Adams, . . .	1735	Braintree, Mass., . . .	John, . . .	Susanna Boylston, . . .	English, . . .
3. Thomas Jefferson, . . .	1743	Shadwell, Va., . . .	Peter, . . .	Jane Randolph, . . .	Welsh, . . .
4. James Madison, . . .	1751	Port Conway, Va., . . .	James, . . .	Nelly Conway, . . .	English, . . .
5. James Monroe, . . .	1758	Westmoreland Co., Va., . . .	Spence, . . .	Eliza Jones, . . .	Scotch, . . .
6. John Quincy Adams, . . .	1767	Quincy, Mass., . . .	John, . . .	Abigail Smith, . . .	English, . . .
7. Andrew Jackson, . . .	1767	Mecklenburg Co., N. C., . . .	Andrew, . . .	Elizabeth Hutchinson, . . .	Scotch-Irish, . . .
8. Martin Van Buren, . . .	1782	Kinderhook, N. Y., . . .	Abraham, . . .	Maria Hoes, . . .	Dutch, . . .
9. William H. Harrison, . . .	1773	Berkeley, Va., . . .	Benjamin, . . .	Elizabeth Bassett, . . .	English, . . .
10. John Tyler, . . .	1790	Charles City Co., Va., . . .	John, . . .	Mary Armisted, . . .	English, . . .
11. James K. Polk, . . .	1795	Mecklenburg Co., N. C., . . .	Samuel, . . .	Jane Knox, . . .	Scotch-Irish, . . .
12. Zachary Taylor, . . .	1784	Orange Co., Va., . . .	Richard, . . .	Sarah Strother, . . .	English, . . .
13. Millard Fillmore, . . .	1800	Summer Hill, N. Y., . . .	Nathaniel, . . .	Phebe Millard, . . .	English, . . .
14. Franklin Pierce, . . .	1804	Hillsborough, N. H., . . .	Benjamin, . . .	Anna Kindreek, . . .	English, . . .
15. James Buchanan, . . .	1791	Stony Batter, Pa., . . .	James, . . .	Elizabeth Speer, . . .	Scotch-Irish, . . .
16. Abraham Lincoln, . . .	1809	Nolin Creek, Ky., . . .	Thomas, . . .	Nancy Hanks, . . .	English, . . .
17. Andrew Johnson, . . .	1808	Raleigh, N. C., . . .	Jacob, . . .	Mary M'Donough, . . .	English, . . .
18. Ulysses S. Grant, . . .	1822	Point Pleasant, Ohio, . . .	Jesse Root, . . .	Harriet Simpson, . . .	Scotch, . . .
19. Rutherford B. Hayes, . . .	1822	Delaware, Ohio, . . .	Rutherford, . . .	Sophia Birchard, . . .	Scotch, . . .
20. James A. Garfield, . . .	1831	Orange, Ohio, . . .	Abram, . . .	Eliza Ballou, . . .	English, . . .
21. Chester A. Arthur, . . .	1830	Fairfield, Vt., . . .	William, . . .	Malvina Stone, . . .	Scotch-Irish, . . .
22. Grover Cleveland, . . .	1837	Caldwell, N. J., . . .	Richard Falley, . . .	Anna Neal, . . .	English, . . .
23. Benjamin Harrison, . . .	1833	North Bend, Ohio, . . .	John Scott, . . .	Elizabeth Irwin, . . .	English, . . .
24. Grover Cleveland, . . .	1837	Caldwell, N. J., . . .	Richard Falley, . . .	Anna Neal, . . .	English, . . .
25. William McKinley, . . .	1843	Niles, Ohio, . . .	William, . . .	Nancy C. Allison, . . .	Scotch-Irish, . . .
26. Theodore Roosevelt, . . .	1858	New York City, N. Y., . . .	Theodore, . . .	Martha Bullock, . . .	Dutch, . . .

PRESIDENTS OF THE UNITED STATES

NAME	MAR-RIED	WIFE'S NAME	CHILDREN		INAUG-URATED	RESIDENCE WHEN ELECTED	AGE WHEN INAUG-URATED
			BOYS	GIRLS			
1. George Washington, . . .	1759	Mrs. Martha Custis, . . .	0	0	1789	Mt. Vernon, Va., . . .	57
2. John Adams, . . .	1764	Abigail Smith, . . .	3	2	1797	Quincy, Mass., . . .	62
3. Thomas Jefferson, . . .	1772	Mrs. Martha Skelton, . . .	0	6	1801	Monticello, Va., . . .	58
4. James Madison, . . .	1794	Mrs. Dorothy Todd, . . .	0	0	1809	Montpelier, Va., . . .	58
5. James Monroe, . . .	1786	Eliza Kortwright, . . .	0	2	1817	Oakhill, Va., . . .	59
6. John Quincy Adams, . . .	1797	Louisa C. Johnson, . . .	3	1	1825	Quincy, Mass., . . .	58
7. Andrew Jackson, . . .	1791	Mrs. Rachel Robards, . . .	3	0	1829	Hermitage, Tenn., . . .	62
8. Martin Van Buren, . . .	1807	Hannah Hoes (Goes), . . .	4	0	1837	Kinderhook, N. Y., . . .	55
9. William H. Harrison, . . .	1795	Anna Symmes, . . .	6	4	1841	North Bend, O., . . .	68
10. John Tyler, . . .	1813 1844	Letitia Christian, . . . Julia Gardiner, . . .	3 4	2 4	1841	Williamsburg, Va., . . .	51
11. James K. Polk, . . .	1824	Sarah Childress, . . .	0	0	1845	Nashville, Tenn., . . .	50
12. Zachary Taylor, . . .	1810	Margaret Smith, . . .	1	3	1849	Baton Rouge, La., . . .	65
13. Millard Fillmore, . . .	1826 1858	Abigail Power, . . . Mrs. Caroline McIntosh, . . .	1 0	1 0	1850 1853	Buffalo, N. Y., . . . Concord, N. H., . . .	50 49
14. Franklin Pierce, . . .	1834	Jean Means Appleton, . . .	3	0	1853	Concord, N. H., . . .	49
15. James Buchanan, . . .	.....	Unmarried, . . .	..	..	1857	Wheatland, Pa., . . .	66
16. Abraham Lincoln, . . .	1842	Mary Todd, . . .	4	0	1861	Springfield, Ill., . . .	52
17. Andrew Johnson, . . .	1827	Eliza McCordle, . . .	3	2	1865	Greenville, Tenn., . . .	57
18. Ulysses S. Grant, . . .	1848	Julia Dent, . . .	3	1	1869	Washington, D. C., . . .	47
19. Rutherford B. Hayes, . . .	1852	Lucy Ware Webb, . . .	7	1	1877	Fremont, Ohio, . . .	54
20. James A. Garfield, . . .	1858	Lucretia Rudolph, . . .	4	1	1881	Mentor, Ohio, . . .	49
21. Chester A. Arthur, . . .	1859	Ellen Lewis Herndon, . . .	1	1	1881	New York City, . . .	51
22. Grover Cleveland, . . .	1886	Frances Folsom, . . .	2	3	1885	Buffalo, N. Y., . . .	48
23. Benjamin Harrison, . . .	1853	Caroline Lavinia Scott, . . .	1	1	1889	Indianapolis, Ind., . . .	55
24. Grover Cleveland, . . .	.....	(See above), . . .	..	..	1893	New York City, . . .	56
25. William McKinley, . . .	1871	Ida Saxton, . . .	0	2	1897	Canton, Ohio, . . .	54
26. Theo. Roosevelt, . . .	1883 1886	Alice Lee, . . . Edith Carow, . . .	0 4	1 1	1901	Oyster Bay, N. Y., . . .	43

STATES—TABLE I

FATHER'S BUSINESS	EDUCATIONAL ADVANTAGE	EARLY VOCATION	POLITICS	PROFESSION	RELIGIOUS CONNECTIONS	NAME
Planter, . . .	Common School,	Surveyor, . . .	Fed., . . .	Planter, . . .	Episcopalian, . . .	Washington.
Farmer, . . .	Harvard College, 1755,	Teacher, . . .	Fed., . . .	Lawyer, . . .	Unitarian, . . .	Adams.
Planter, . . .	College of William and Mary, 1762,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Liberal,	Jefferson.
Planter, . . .	Princeton College, 1771,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Episcopalian, . . .	Madison.
Lawyer, . . .	Entered College, William and Mary,	Lawyer, . . .	Rep., . . .	Politician, . . .	Episcopalian, . . .	Monroe.
Farmer, . . .	Harvard College, 1787,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Unitarian, . . .	Adams, J. Q.
Farmer, . . .	Self Taught,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Presbyterian, . . .	Jackson.
Farmer, . . .	Academy,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Reformed Dutch, . . .	Van Buren.
Statesman, . . .	Entered Hampden-Sidney College,	Medicine, . . .	Whig, . . .	Army, . . .	Episcopalian, . . .	Harrison.
Artist, . . .	College, William and Mary, 1806,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Episcopalian, . . .	Tyler.
Farmer, . . .	University of North Carolina,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Presbyterian, . . .	Polk.
Planter, . . .	Common School,	Soldier, . . .	Whig, . . .	Army, . . .	Episcopalian, . . .	Taylor.
Farmer, . . .	Public School,	Tailor, . . .	Whig, . . .	Lawyer, . . .	Episcopalian, . . .	Fillmore.
Farmer, . . .	Bowdoin College, 1824,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Episcopalian, . . .	Pierce.
Merchant, . . .	Dickinson College, 1809,	Lawyer, . . .	Dem., . . .	Lawyer, . . .	Presbyterian, . . .	Buchanan.
Farmer, . . .	Self Taught,	Farmer, . . .	Rep., . . .	Lawyer, . . .	Liberal,	Lincoln.
Artisan, . . .	Self Taught,	Tailor, . . .	Rep., . . .	Politician, . . .	Liberal,	Johnson.
Farmer, . . .	West Point Military Academy, 1843,	Tanner, . . .	Rep., . . .	Army, . . .	Methodist,	Grant.
Merchant, . . .	Kenyon College, Ohio, 1842,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Methodist,	Hayes.
Farmer, . . .	Williams College, 1856,	Teacher, . . .	Rep., . . .	Lawyer, . . .	Disciples,	Garfield.
Burgessman, . . .	Union College, 1848,	Teacher, . . .	Rep., . . .	Lawyer, . . .	Episcopalian, . . .	Arthur.
Burgessman, . . .	Common School,	Teacher, . . .	Dem., . . .	Lawyer, . . .	Presbyterian, . . .	Cleveland.
Farmer, . . .	Miami University, Ohio, 1851,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Presbyterian, . . .	Harrison.
Burgessman, . . .	Common School,	Teacher, . . .	Dem., . . .	Lawyer, . . .	Presbyterian, . . .	Cleveland.
Iron Manfr., . . .	Entered Allegheny College,	Lawyer, . . .	Rep., . . .	Lawyer, . . .	Methodist,	McKinley.
Merchant, . . .	Harvard,	Publicist, . . .	Rep., . . .	Public Official, . . .	Reformed Dutch, . . .	Roosevelt.

STATES—TABLE II

SERVED AS PRESIDENT	DIED	AGE AT DEATH	CAUSE OF DEATH	PLACE OF DEATH	PLACE OF BURIAL
4 yr., 10 mo., 4 d.,	1799	67	Acute laryngitis,	Mt. Vernon, Va., . . .	Mt. Vernon, Va.
4 yr.,	1826	90	Natural decline,	Quincy, Mass.,	Unitarian Church, Quincy, Mass.
4 yr.,	1826	83	Chronic diarrhoea,	Monticello, Va., . . .	Monticello, Albemarle Co., Va.
4 yr.,	1836	85	Natural decline,	Montpelier, Va., . . .	Montpelier, Hanover Co., Va.
4 yr.,	1831	73	Natural decline,	New York City,	Originally, 2d Avenue Cemetery, N. Y. Transferred, 1858, to Hollywood Cemetery, Richmond, Va.
4 yr.,	1848	80	Paralysis,	Hall of Congress, Washington, D. C., . . .	Unitarian Church, Quincy, Mass.
4 yr.,	1845	78	Dropsy,	Hermitage, near Nashville, Tenn.,	Hermitage, near Nashville, Tenn.
4 yr.,	1862	79	Asthma,	Kinderhook, N. Y., . . .	Village Cemetery, Kinderhook, N. Y.
4 mo.,	1841	68	Pleurisy fever,	White House, Washington, D. C.,	North Bend, Ohio.
3 yr., 11 mo.,	1862	72	Bilious attacks, with bronchitis,	Ballard House, Richmond, Va.,	Hollywood, Richmond, Va.
4 yr.,	1849	53	Chronic diarrhoea,	Nashville, Tenn., . . .	Nashville, Tenn.
4 yr., 4 mo., 5 d.,	1850	65	Cholera morbus and typhoid fever,	White House, Washington, D. C.,	Near Louisville, Kentucky (Springfield).
2 yr., 7 mo., 6 d.,	1874	74	Paralysis,	Buffalo, N. Y.,	Forest Lawn, Buffalo, N. Y.
4 yr.,	1869	64	Dropsy and inflammation of stomach,	Concord, N. H.,	Minot Cemetery, Concord, N. H.
4 yr.,	1868	77	Rheumatic gout,	Lancaster, Pa.,	Woodward Hill Cemetery, Lancaster, Pa.
4 yr., 1 mo., 11d.,	1865	56	Assassinated by Booth,	Washington, D. C., . . .	Oak Ridge Cemetery, Springfield, Ill.
4 yr., 10 mo., 19 d.,	1875	66	Paralysis,	Greenville, Tenn., . . .	Greenville, Tenn.
4 yr.,	1885	63	Cancer of the tongue,	Mt. McGregor, N. Y., . . .	Riverside, New York City.
4 yr.,	1893	71	Neuralgia of the heart,	Fremont, Ohio,	Fremont, Ohio.
4 mo.,	1881	49	Assassinated by Guiteau,	Elberon, Long Branch, N. J.,	Lake View Cemetery, Cleveland, Ohio.
3 yr., 5½ mo.,	1886	56	Bright's disease, culminating in paralysis and apoplexy,	New York, N. Y.,	Rural Cemetery, Albany, N. Y.
4 yr.,	1908	71	Heart failure,	Princeton, N. J.,	Princeton, N. J.
4 yr.,	1901	67	Pneumonia,	Indianapolis, Ind., . . .	Crown Hill Cemetery, Indianapolis, Ind.
4 yr., 6 mo., 10 d.,	1901	58	Assassinated by Czolgosz,	Buffalo, N. Y.,	Cemetery, Canton, Ohio

Rhode Island. Supposed to be identical with the ancient Vinland of the Icelandic Sagas, historians credit the first discovery of Rhode Island to the Norsemen about 1000 A. D. The navigator Verrazzano visited Narragansett Bay and its shores in 1524. The State was settled at Providence in 1636, by Roger Williams and his companions, who had been banished from Massachusetts by religious intolerance. In 1638, the Island of Aquidneck, afterward called Rhode Island, was settled at Newport and Portsmouth. A third settlement was formed at Warwick in 1643. The same year Roger Williams went to England and obtained a patent for the united government of the settlements. In 1663, this patent gave way to a charter by Charles II., incorporating the colony of Rhode Island and Providence Plantations, which remained in force for 180 years. The colony suffered severely in King Philip's War, 1675-76, which resulted in the destruction of the Wampanoag and Narragansett tribes of Indians. In 1687, Sir Edmond Andros, who had been made Governor of New

York, New England, etc., abrogated the charter, but it became again the ruling constitution after his recall. In the wars between France and England, Rhode Island furnished valuable aid by land and sea for the expeditions against Louisburg, Crown Point, Oswego, and Canada. In 1756, she had fifty privateers at sea. During the War of the Revolution the State supplied many ships and sailors for naval operations. Rhode Island was invaded by the British, and vain attempts were made for several years to drive them thence by Count d'Esting's fleet and General Sullivan's army. The State was the last to accept the Federal Constitution, May 29, 1790. Dorr's insurrection occurred in 1842, an imbroglia growing out of the bigoted suffrage laws, an inheritance from colonial times. It was only in 1861 that the boundary line between Rhode Island and Massachusetts was finally settled. In 1901, Massachusetts revoked the edict of banishment against Roger Williams, which had stood for nearly three centuries.

RULERS OF THE WORLD

ROMAN EMPERORS

NAME	LINEAGE	Period of Rule		Birth	Death
		B. C.	A. D.	B. C.	A. D.
THE CÆSARS					
Augustus,	A title conferred by the Senate,	30	14	63	14
Tiberius,	Stepson of Augustus,	A. D. 14	37	42	37
Caligula,	Youngest son of Germanicus, nephew of Tiberius,	37	41	12	41
Claudius,	Grandson of Tiberius,	41	54	10	54
Nero,	Son of Domitius Ahenobarbus,	54	68	A. D. 37	68
Galba,	Was proclaimed Emperor,	68	69	B. C. 3	69
Otho,	Was proclaimed Emperor,	69		A. D. 32	69
Vitellius,	Was proclaimed Emperor,	69	69	15	69
Vespasian,	Was proclaimed Emperor,	70	79	9	79
Titus,	Son of Vespasian,	79	81	41	81
Domitian,	Second son of Vespasian,	81	96	51	96
THE FIVE GOOD EMPERORS					
Nerva,	Was proclaimed Emperor,	96	98	32	98
Trajan,	Adopted son of Nerva,	98	117	53	117
Hadrian,	Nephew of Trajan,	117	138	76	138
Titus Antonius Pius,	Adopted son of Hadrian,	138	161	86	161
Marcus Aurelius Antoninus,	Nephew of Antoninus Pius,	161	180	121	180
THE PERIOD OF MILITARY DESPOTISM					
Commodus,	Son of Marcus Aurelius,	180	193	161	192, Dec. 31
Pertinax,	Was proclaimed Emperor,	193		126	193
Didius Julianus,	Was proclaimed Emperor,	193			193
Septimius Severus,	Was proclaimed Emperor,	193	212?	146	211
Caracalla,	Son of Septimius Severus,	212	217	188	217
Macrinus,	Was proclaimed Emperor,	217	218	164	218
Heliogabalus (Elagabalus),	First cousin of Caracalla,	218	222	205?	222
Alexander Severus,	Cousin of Heliogabalus, by whom he was adopted,	222	235	205	235
Maximin,	Was elevated by soldiers,	235	238	..	238
Pupienus and Balbinus,	Appointed by the Senate,	238	238	..	238
Gordian,	Grandson of Gordianus I.,	238	244	224	244
Phillip,	Murdered Gordian and usurped the throne,	244	249	..	249
Decius,	Proclaimed Emperor by the army,	249	251	..	251
Gallus,	Was elected Emperor by Senate and soldiers,	251	254	..	254
Aemilianus, . . . . .	.. . . .	254	..	208?	254?
Valerian, . . . . .	.. . . .	254	260	..	269
Gallienus, . . . . .	.. . . .	260	268	..	268
Flavius Claudius,	Son of Valerian,	268	270	214	270
Aurelian,	Was designated by Claudius,	270	275	212	275
Tacitus, . . . . .	.. . . .	275	276	200	276
Florian,	Proclaimed Emperor,	276	277	..	?
Probus,	Choice of the army,	277	282	..	282
Carus,	Elevated to throne by soldiers,	282	283	222	283

ROMAN EMPERORS—Continued

NAME	LINEAGE	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
Carinus and Numerian,	Elder son of Carus,	283	284	283	285
Diocletian and Maximian,	Son of Carus,	283	284	245	313
Constantian and Galerius,	Was proclaimed Emperor by the army,	284	305	245	310
Constantine the Great,	Was made Cæsar by Diocletian,	305	306	250	306
Constantius II.,	Was created Cæsar,	306	336	272	311
Julian the Apostate,	Eldest son of Augustus Constantius Chlorus,	336	361	317	361
Jovian,	Third son of Constantine the Great,	361	363	331	363
	Son of Julius Constantine,	363	364	332	364
	Elevated to the throne by the army,				
ROMAN EMPERORS OF THE WEST					
Valentinian I.,	Proclaimed Emperor by the army,	364	375	321	375
Gratian,	Son of Valentinian I.,	375	383	350	383
Maximinus,	Made Emperor by the legions in Britain,	383	383?	?	398
Valentinian II.,	Son of Valentinian I.,	383	388	371	392
Eugenius,	Assumed the purple,	388	394	371	392
Theodosius the Great,	Son of Flavius Theodosia,	394	395	346	395
Honorius,	Second son of Theodosius,	395	423	384	423
Valentinian III.,	Son of Constantius,	423	455	419	455
Maximus,	By force of arms,	455	455	395?	455
Avitus,	Was elected by Ricimer,	457	461	457	457
Marjorian or Majarian,	Raised to imperial dignity by Ricimer,	461	467	465-7?	465-7?
Severus,	Son-in-law of Emperor Marcian,	467	472	467	472
Anthenius,	Made Emperor by Ricimer,	472	473	472	473
Olybrius,	Proclaimed Emperor,	473	475	473	475
Glycerus,	Proclaimed Emperor by order of Leo,	473	475	475	475
Nepos,	Son of Orestes,	475	476	475	476
Romulus Augustulus,	Augustus is deposed and banished by Odoacer, who thus puts an end to the Western Empire of Rome,				

KINGS, EMPERORS, AND PRESIDENTS OF FRANCE

NAME	LINEAGE	Period of Rule		Birth	Death
	THE MEROVINGIANS	A. D.	A. D.	A. D.	A. D.
Pharamond,	Son of Pharamond (obscure),	420	428	....	....
Clodian,	Founder of the Merovingian Dynasty,	428	448	....	....
Meroveus,	Son of Meroveus, King of the Franks,	448	457	411?	457
Childeric,	Son of Childeric,	458	481	....	481
Clovis I.,	Son of Clovis,	481	511	465	511
Childebert I.,	Son of Clovis,	511	558	495	558
Thierry I.,	Son of Clovis, . . . . .	....	....	....	534
Clodomir and Clothaire I.,	Fourth son of Clovis,	558	561	497	561
KINGDOM DIVIDED INTO FOUR PARTS:					
Charibert,	Reigns at Paris,	562	584	....	....
Grothan,	King of Orleans and Burgundy,				
Chilperic I.,	King of Neustria at Soissons,				
Sigebert,	King of Austrasia at Metz,				
Childebert II.,	Son of Sigebert I. of Austrasia,	584	628	570	596
Clothaire II.,	Son of Chilperic I.,	628	638	584	628
Dagobert I.,	Son of Clothaire II.,			602	638
Clovis II. and Dagobert II.,	"The Young" son of Dagobert I.,			633	656
				652	679
Clothaire III.,	Son of Clovis II.,	665	673	652?	670?
Thierry II.,	King of Neustria,	673	691	652?	691
Clovis III.,	King of Neustria,	691	695	681	695
Childebert III.,	King of Neustria,	695	711	....	....
Dagobert III.,	King of Neustria,	711	715	699	715
Chilperic II.,	Son of Dagobert III.,	715	720	?	720
Thierry IV.,	Son of Dagobert III.,	720	747	712	747
Childeric III.,	Son of Childeric II. (obscure),	747	751	?	755
THE CARLOVINGIANS					
Pepin the Little (or Short),	Son of Charles Martel,	751	768	714	768
Charlemagne, or Charles the Great,	Son of Pepin the Short,	768	814	742	814
Louis le Debonnaire,	Son of Charles the Great,	814	840	778	840
CARLOVINGIAN KINGS					
Charles the Bald,	Younger son of Louis le Debonnaire,	843	877	823	877
Louis II.,	Son of Charles the Bald,	877	879	846	879
Louis III., and Carloman,	Sons of Louis II.,	879	884	863	882
Charles the Fat,	Reigns two years,	884	888	830?	888
Count Eudes,	Son of Louis the German,	888	898	?	898
Charles the Simple,	Son of Louis the Stammerer,	898	922	879	920
Raoul (Rudolf of Burgundy),	Son of Louis the Stammerer,	922	936	?	?
Louis IV.,	Son of Charles the Simple,	936	954	921	954
Lothaire,	Son of Louis IV.,	954	986	941	986
Louis V.,	Son of Lothaire,	986	987	966	987

KINGS, EMPERORS, AND PRESIDENTS OF FRANCE—Continued

NAME	LINEAGE	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
HOUSE OF CAPET					
Hugh Capet,	Son of Hugh the Great,	987	996	?	996
Robert II.,	Son of Hugh Capet,	996	1031	971	1031
Henry I.,	Son of Robert II.,	1031	1060	1011?	1060
Phillip I.,	Son of Henry I.,	1060	1108	1052	1108
Louis the Fat,	Son of Phillip I.,	1108	1137	1078	1137
Louis VII.,	Son of Louis VI.,	1137	1180	1120	1180
Phillip Augustus,	Son of Louis VII.,	1180	1223	1165	1223
Louis VIII.,	Son of Phillip Augustus,	1223	1226	1187	1226
Louis IX., or St. Louis,	Son of Louis VIII.,	1226	1270	1215	1270
Phillip the Bold,	Son of Louis IX.,	1270	1285	1245	1285
Phillip the Fair,	Son of Phillip III.,	1285	1314	1268	1314
Louis X.,	Son of Phillip IV.,	1314	1316	1239	1316
Phillip the Hardy,	Second son of Phillip IV.,	1316	1321	1294	1322
Charles the Fair,	Youngest son of Phillip the Fair,	1321	1328	1294	1328
HOUSE OF VALOIS					
Phillip of Valois,	Son of Charles of Valois,	1328	1350	1293	1350
John the Good,	Son of Phillip VI.,	1350	1364	1319?	1364
Charles the Wise,	Son of John II.,	1364	1380	1337	1380
Charles VI.,	Son of Charles V.,	1380	1422	1368	1422
Charles the Victorious,	Son of Charles VI.,	1422	1461	1403	1461
Louis XI.,	Son of Charles VII.,	1461	1483	1423	1483
Charles VIII.,	Son of Louis XI.,	1483	1498	1470	1498
Louis XII.,	A descendant of the younger son of Charles V.,	1498	1515	1462	1515
Francis I.,	Son of Charles, Count of Angouleme,	1515	1547	1494	1547
Henry II.,	Son of Francis I.,	1547	1559	1519	1559
Francis II.,	Eldest son of Henry II.,	1559	1560	1543	1560
Charles IX.,	Second son of Henry II.,	1560	1574	1550	1574
Henry III.,	Third son of Henry II.,	1574	1589	1551	1589
HOUSE OF BOURBON					
Henry IV.,	Son of Antoine de Bourbon, King of Navarre,	1589	1610	1553	1610
Louis XIII.,	Son of Henry IV.,	1610	1643	1601	1643
Louis XIV.,	Son of Louis XIII. and Anne of Austria,	1643	1715	1638	1715
Louis XV.,	Great-grandson of Louis XIV.,	1715	1774	1710	1774
Louis XVI.,	Grandson of Louis XV.,	1774	1793	1754	1793
FROM THE REVOLUTION OF 1792 TO THE FIRST REPUBLIC					
National Convention,	First sat September 21, 1792,	1792	1795		
Directory nominated,	November 1, 1795,	1795	1799		
THE CONSULATE					
Bonaparte,	December 24, 1799,	1799	1804	1769	1821
Cambaceres,				1753	1824
Lebrun,				1739	1824
Bonaparte,	Consul for ten years, May 6, 1802,				
Bonaparte,	Consul for life, August 2, 1802,				
THE EMPIRE					
Napoleon I.,	Decreed Emperor, May 18, 1804,	1804	1814		
Napoleon II.,	Never reigned, . . . . .	....	....	1811	1832
THE RESTORATION					
Louis XVIII.,	Brother of Louis XVI., re-entered Paris May 3, 1814,	1814	1824	1755	1824
Charles X.,	Younger brother of Louis XVIII., deposed July 30, 1830,	1824	1830	1757	1836
HOUSE OF ORLEANS					
Louis Phillipe,	Son of Phillipe Egoite, abdicated February 24, 1848,	1830	1848	1773	1850
THE SECOND REPUBLIC					
Provisional Government formed,		Feb. 22, 1848	Dec. 19, 1848		
Louis Napoleon,	Elected President,	1848	1852	1808	1873
THE SECOND EMPIRE					
Napoleon III.,	Nephew of Napoleon I., elected Emperor. Deposed 1870,	1852	1870	1808	1873
THE THIRD REPUBLIC					
Committee of Public Defense,		1870	1871		
L. A. Thiers,	Elected President,	1871	1873	1797	1877
Marshal McMahon,	Elected President,	1873	1879	1808	1893
Jules Grevy,	Elected President,	1879	1887	1807	1891
Marie F. S. Carnot,	Elected President,	1887	1894	1837	1894
Jean Cassimir Perier,	Elected President,	1894	1895	1847	?
Felix François Faure,	Elected President,	1895	1899	1841	1899
M. Emile Loubet,	Elected President,	1899	1906	1838	....
Armand Clement Fallieres,	Elected President,	1906	....	1841	....

SOVEREIGNS OF RUSSIA

NAME	LINEAGE	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
HOUSE OF RURIC					
Ivan the Great,	Grand Duke of Moscow,	1462	1505	1438	1505
Vasily IV.,	Son of Ivan the Great,	1505	1533	?	?
Ivan the Terrible,	Son of Vasily IV.,	1533	1584	1529	1584
Feodor I.,	Son of Ivan the Terrible,	1584	1598	1557	1598
Boris Godonof,	Was elected to the throne,	1598	1604	1552	1605
Demetrius,	Usurped the throne,	1604	1606	....	1606
Zuiski (Vasily IV.), . . . .	.....	1606	1610	....	....
An Interregnum, . . . .	.....	1610	1613	....	....
HOUSE OF ROMANOFF					
Michael Romanoff,	Unanimously elected Czar,	1613	1645	1598	1645
Alexis,	Son of Michael Feodorovitch,	1645	1676	1629	1676
Feodor II.,	Eldest son of Emperor Alexis,	1676	1682	1656	1682
Ivan V., and Peter,	Half-brother of Peter the Great, in whose favor he resigned,	1682	1689	1666	1696
Peter the Great,	Son of Alexis,	1689	1725	1672	1725
Catharine I.,	Was married to Peter the Great in 1707,	1725	1727	1679?	1727
Peter II.,	Grandson of Peter the Great,	1727	1730	1715	1730
Anna,	Daughter of Ivan V.,	1730	1740	1693	1740
Ivan VI.,	Son of Antoin Ulrich Leopoldovina and Anna,	1740	1741	1740	1764
Elizabeth,	Daughter of Peter the Great,	1741	1762	1709	1762
Peter III.,	Son of Charles Frederick, Duke of Holstein,	1762	....	1728	1762
Catharine II.,	Wife of Peter III.,	1762	1796	1729	1796
Paul,	Son of Peter III.,	1796	1801	1754	1801
Alexander I.,	Son of Paul,	1801	1825	1777	1825
Nicholas,	Third son of Paul I.,	1825	1855	1796	1855
Alexander II.,	Son of Nicholas I.,	1855	1881	1818	1881
Alexander III.,	Son of Alexander II.,	1881	1894	1845	1894
Nicholas II.,	Son of Alexander III.,	1894	....	1868	....

EMPERORS OF GERMANY

NAME	LINEAGE	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
CARLOVINGIAN EMPERORS					
Louis, "The German" and Lothaire,	Son of the Emperor Louis I. He is regarded as the founder of the German Empire,	843	855	804	876
Louis II.,	Son of the Emperor Lothaire I.,	855	875	795	855
Charles the Fat,	Son of Louis, the German,	875	887	822	875
Arnolph,	Illegitimate son of Karlmann,	887	898	839	888
Louis the Child,	Son of the Emperor Arnolph,	898	911	850	899
HOUSE OF FRANCONIA					
Conrad I.,	Duke of Franconia,	911	919	893	911
HOUSE OF SAXONY					
Henry the Fowler,	Son of the King of Saxony,	919	936	876	936
Otho the Great,	Son of Henry I.,	936	973	912	973
Otho II.,	Son of Otho I.,	973	983	935	983
Otho III.,	Son of Otho II.,	983	1002	980	1002
Henry the Saint,	Son of Henry the Quarrelsome of Bavaria,	1002	1024	972	1024
HOUSE OF FRANCONIA					
Conrad II.,	Was crowned Emperor,	1024	1039	?	1039
Henry III.,	Son of Conrad II.,	1039	1056	1017	1056
Henry IV.,	Son of Henry III.,	1056	1106	1050	1106
Henry V.,	Son of Henry IV.,	1106	1125	1081	1125
HOUSE OF SAXONY					
Lothaire II.,	Was elected King and crowned by the Pope,	1125	1138	?	Dec., 1137
THE HOHENSTAUFFENS					
Conrad III.,	Elected in an irregular manner,	1138	1152	1093	1152
Frederick Barbarossa,	Nephew of Conrad III.,	1152	1190	?	1180
Henry VI.,	Son of Frederick Barbarossa,	1190	1197	1165	1197
Otho IV. and Phillip Swabia,	Second son of Henry the Lion,	1197	1208	1174	1218
Frederick II.,	Youngest son of Frederick Barbarossa,	1208	1250	1177	1208
An Interregnum,	Son of Henry VI.,	1218	1250	1194	1250
HOUSE OF HABSBURG					
Rudolph of Habsburg,	Son of Albert IV.,	1273	1291	1218	1291
HOUSE OF NASSAU					
Adolph,	Elected,	1291	1298	1252	1298
HOUSE OF AUSTRIA					
Albert,	Eldest son of Rudolph I.,	1298	1308	1250	1308
HOUSE OF LUXEMBURG					
Henry VII.,	Son of the Count of Luxemburg,	1308	1313	1262	1313

EMPERORS OF GERMANY—Continued

NAME	LINEAGE	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
HOUSE OF BAVARIA					
Louis V. or IV...	Son of the Duke of Bavaria,	1313	1347	1286	1347
HOUSE OF LUXEMBURG					
Charles IV.,	Son of John of Luxemburg,	1347	1378	1316	1378
Wenceslaus,	Son of the Emperor Charles IV.,	1378	1400	1361	1419
HOUSE OF PALATINATE					
Rupert,	Was chosen King,	1400	1410	1352	1410
HOUSE OF LUXEMBURG					
Sigismund,	Son of Charles IV.,	1410	1438	1361	1438
HOUSE OF HABSBURG					
Albert,	Third son of Frederick I.,	1438	1440	1414	1486
Frederick III., . . .	Was elected Emperor,	1440	1493	1415	1493
Maximilian,	Son of Frederick III.,	1493	1519	1459	1519
Charles V.,	Son of Phillip of Burgundy,	1519	1556	1500	1558
Ferdinand I.,	Younger brother of Charles V., . . .	1556	1564	1503	1564
Maximilian II., . .	Son of Ferdinand I.,	1564	1576	1527	1576
Rudolph II.,	Son of the Emperor Maximilian II., .	1576	1612	1552	1612
Mathias,	Younger son of Maximilian II., . . .	1612	1619	1557	1619
Ferdinand II., . . .	Son of Charles, Duke of Styria, . . .	1619	1637	1578	1637
Ferdinand III., . . .	Son of Ferdinand II.,	1637	1657	1608	1657
Leopold I.,	Second son of Ferdinand III.,	1657	1705	1640	1705
Joseph I.,	Son of Leopold I.,	1705	1711	1678	1711
Charles VI.,	Son of Leopold I.,	1711	1741	1685	1740
HOUSE OF BAVARIA					
Charles VII.,	Son of Maximilian Emmanuel,	1741	1745	1697	1745
HOUSE OF LORRAINE					
Francis I.,	Son of Leopold, Duke of Lorraine, . .	1745	1765	1708	1765
Joseph II.,	Son of Francis I.,	1765	1790	1741	1790
Leopold II.,	Third son of Francis I.,	1790	1792	1747	1792
Francis II.,	Son of Leopold II.,	1792	1806	1768	1835
THE CONFEDERATION OF THE RHINE					
		1806	1815	....	....
THE GERMANIC CONFEDERATION					
		1815	1866	....	....
THE NORTH GERMAN CONFEDERATION					
		1866	1871	....	....
THE HOUSE OF HOHENZOLLERN					
William the Victorious, .	Second son of Frederick William III., .	1871	1888	1797	1888
William II.,*	Son of Frederick III. and Grandson of William I., .	1888	....	1859	....

KINGS AND QUEENS OF ENGLAND

NAME	LINEAGE	Period of Reign		Birth	Death
		A. D.	A. D.	A. D.	A. D.
ANGLO-SAXON KINGS					
Egbert,	First King of all England,	827	837	775?	837
Ethelwulf,	Son of Egbert,	838	857	....	858
{ Ethelbald,	Son of Ethelwulf,	857	860	....	860?
{ Ethelbert,	Second son of Ethelwulf,	860	866	....	866?
Ethelred I.,	Third son of Ethelwulf,	866	871	....	871
Alfred the Great, . . .	Fourth son of Ethelwulf,	871	901	849	901
Edward the Elder, . . .	Son of Alfred,	901	924	870?	924
Athelstan,	Eldest son of Edward,	925	940	895?	941
Edmund I.,	Brother of Athelstan,	940	946	923	946 or 8
Edred,	Brother of Edmund I.,	946	955	....	955?
Edwy,	Son of Edmund I.,	955	959	939?	959
Edgar,	Second son of Edmund I.,	959	975	943?	975
Edward the Martyr, . .	Son of Edgar,	975	978	961?	978
Ethelred II.,	Half-brother of Edward,	978	1016	....	1016
Edmund Ironside, . . .	Eldest son of Ethelred,	1016	1017	989	1017
DANISH KINGS					
Canute,	By conquest and election,	1017	1035	995	1035
Harold I. (Harefoot), .	Son of Canute,	1035	1040	....	1040
Hardicanute,	Another son of Canute,	1040	1042	1019	1042
SAXON KINGS					
Edward the Confessor, .	Son of Ethelred II.,	1041	1066	1004	1066
Harold II.,	Brother-in-law of Edward,	1066	....	1022	1066
NORMAN KINGS					
William I.,	Obtained the Crown by conquest,	1066	1087	1027	1087
William II.,	Third son of William I.,	1087	1100	1056	1100
Henry I.,	Youngest son of William I.,	1100	1135	1068	1135
Stephen,	Third son of Stephen, Count of Blois, .	1135	1154	1105	1154
THE PLANTAGENETS					
Henry II.,	Son of Geoffrey Plantagenet,	1154	1189	1133	1189

*Frederick III., son of William I., was emperor from March 9 to June 15, 1888.

KINGS AND QUEENS OF ENGLAND—Continued

NAME	LINEAGE	Period of Reign		Birth	Death
		A. D.	A. D.	A. D.	A. D.
Richard I. the Lion-hearted,	Eldest surviving son of Henry II.,	1189	1199	1157	1199
John,	Youngest son of Henry II.,	1199	1216	1166	1216
Henry III.,	Eldest son of John,	1216	1272	1207	1272
Edward I.,	Eldest son of Henry III.,	1272	1307	1239	1307
Edward II.,	Eldest surviving son of Edward I.,	1307	1327	1284	1327
Edward III.,	Eldest son of Edward II.,	1327	1377	1312	1377
Richard II.,	Son of the Black Prince, eldest son of Edward III.,	1377	1399	1366	1400
HOUSE OF LANCASTER					
Henry IV.,	Son of John of Gaunt, fourth son of Edward III.,	1399	1413	1366?	1413
Henry V.,	Eldest son of Henry IV.,	1413	1422	1388	1422
Henry VI.,	Only son of Henry V.,	1422	1461	1421	1471
HOUSE OF YORK					
Edward IV.,	His grandfather was Richard, son of Edmund, fifth son of Edward III.; and his grandmother, Anne, was great-granddaughter of Lionel, third son of Edward III.,	1461	1483	1441	1483
Edward V.,	Eldest son of Edward IV.,	1483	1483	1470	1483
Richard III.,	Younger brother of Edward IV.,	1483	1485	1452	1485
HOUSE OF TUDOR					
Henry VII.,	Son of Edmund, eldest son of Owen Tudor, by Katharine, widow of Henry V.; his mother, Margaret Beaufort, was great-granddaughter of John of Gaunt,	1485	1509	1457	1509
Henry VIII.,	Only surviving son of Henry VII.,	1509	1547	1491	1547
Edward VI.,	Son of Henry VIII. by Jane Seymour,	1547	1553	1537	1553
Mary I.,	Daughter of Henry VIII. by Katharine of Aragon,	1553	1558	1516	1558
Elizabeth.,	Daughter of Henry VIII. by Anne Boleyn,	1558	1603	1533	1603
HOUSE OF STUART					
James I.,	Son of Mary, Queen of Scots, granddaughter of James IV., and Margaret, daughter of Henry VII.,	1603	1625	1566	1625
Charles I.,	Only surviving son of James I.,	1625	1649	1600	1649
Commonwealth,	Commonwealth declared May 19, Oliver Cromwell, Lord Protector, Richard Cromwell, Lord Protector,	1649 1649 1649	1660 1660 1660	1599 1599 1626	1658 1658 1712
HOUSE OF STUART RESTORED					
Charles II.,	Eldest son of Charles I.,	1660	1685	1630	1685
James II.,	Second son of Charles I.,	1685	1688	1633	1701
William III. and Mary II.,	Son of William, Prince of Orange, by Mary, daughter of Charles I.,	1689	1702	1650	1702
Anne,	Eldest daughter of James II., Second daughter of James II.,	1689 1702	1702 1714	1662 1665	1694 1714
HOUSE OF HANOVER					
George I.,	Son of Elector of Hanover, by Sophia, daughter of Elizabeth, daughter of James I.,	1714	1727	1660	1727
George II.,	Only son of George I.,	1727	1760	1683	1760
George III.,	Grandson of George II.,	1760	1820	1738	1820
George IV.,	Eldest son of George III.,	1820	1830	1762	1830
William IV.,	Third son of George III.,	1830	1837	1765	1837
Victoria,	Daughter of Edward, fourth son of George III.,	1837	1901	1819	1901
Edward VII.,	Son of Victoria,	1901	....	1841	....

GOVERNORS-GENERAL OF CANADA

GOVERNOR-GENERAL	LINEAGE	Term of Office		Birth	Death
The Right Hon. Viscount Monck, G. C. M. G.,	Charles Monck, British statesman, made a peer of the United Kingdom in 1860,	1867	1869	1819	1894
The Right Hon. Lord Lisgar, G. C. M. G.,	Baron Lisgar, a British politician (Sir John Young),	1869	1872	1807	1876
The Right Hon. the Earl of Dufferin, K. P., K. C. B., G. C. M. G.,	Was created Marquis of Dufferin in 1888 (Frederick Temple, Hamilton Blackwood),	1872	1878	1826	1902
The Right Hon. the Marquis of Lorne, K. T., G. C. M. G., P. C., etc.,	Eldest son of the eighth Duke of Argyll (John George Henry Douglas Sutherland Campbell),	1878	1883	1845	....
The Most Hon. the Marquis of Lansdowne, G. C. M. G.,	Fifth Marquis of Lansdowne (Petty-FitzMaurice, Henry Charles Keith),	1883	1888	1845	....
The Right Hon. Lord Stanley of Preston, G. C. B.,	Sixteenth Earl of Derby (Frederick Arthur Stanley),	1888	1893	1841	1908
The Right Hon. the Earl of Aberdeen, K. T., G. C. M. G.,	Seventh Earl of Aberdeen (John Campbell Hamilton Gordon),	1893	1898	1847	....
The Right Hon. the Earl of Minto, G. C. M. G.,	Fourth Earl of Minto (Gilbert John Elliot-Murray Kynnmound),	1898	1904	1845	....
The Right Hon. the Earl Grey, G. C. M. G.,	Fourth Earl Grey (Albert Henry George),	1904	....	1851	....

Russia. The origin of the Russian Empire is involved in much obscurity, but it is usually regarded as having been founded by Rurik, a Scandinavian (Varangian), about 862, his dominions and those of his immediate successors comprising Novgorod, Kieff, and the surrounding country. Vladimir the Great (980-1015), the Charlemagne of Russia, introduced Christianity and founded several cities and schools. But from this period down to 1237, when the country was overrun by the Tartars, Russia was almost constantly the scene of civil war. For more than two centuries Russia continued subject to the Tartars, while on its opposite frontier it was exposed to the attacks of the Poles and Teutonic knights. In 1328, the seat of government was transferred from Novgorod to Moscow; and in 1481 the Tartars were finally expelled under Ivan the Great (1462-1505). Ivan extended the Russian dominions, married the niece of the last Byzantine Emperor, and ever since the rulers of Russia have looked with longing eyes upon the territories of which the Byzantine Empire consisted. Ivan the Terrible (1533-84) did much to extend and consolidate the Russian Territory, and in particular began the conquest of Siberia, which was completed in 1699. In 1613, the House of Romanoff, whence the present czar is descended, was raised to the throne, and from this period the empire gained greater strength and consistency. Under Alexis Michaelovitch (1645-76) White Russia and Little Russia were conquered from the Poles, and the Cossacks of the Ukraine acknowledged the supremacy of the czar; various internal improvements were effected, and the power of Russia began to be felt and feared by all her neighbors. But Russia's real greatness may be said to date from the accession of Peter the Great in 1689, who first secured to the country the attention of the more civilized nations of Europe. His first military achievement was his conquest of Azov from the Turks in 1696, which, however, he lost again in 1711. He also completed the conquest of Siberia; and, what was of more importance, obtained from Sweden by the Peace of Nystadt, in 1721, Livonia, Esthonia, Ingria, or part of Karelia, the Territory of Viborg, Oesel, and all the other islands in the Baltic from Courland to Viborg. Catharine I., widow of Peter I., succeeded on the death of the latter, but died after a reign of only two years. The throne was then occupied successively by Peter II., 1727-30; by Anna, 1730-40; by Ivan VI., 1740-41; by Elizabeth, 1741-62; by Peter III., about six months in 1762; by Catharine II., wife of Peter III., 1762-96; by Paul, 1796-1801; by Alexander I., 1801-25; by Nicholas, 1825-55; by Alexander II., 1855-81. During all these reigns the growth of the empire was continuous. The Kirghiz Cossacks were subdued in 1731, the Ossetes in 1742; the Finnish Province of Kymenegard was gained by the Treaty of Abo in 1743. The three partitions of Poland took place under Catharine II. in 1772, 1793, and 1795. Russia acquired nearly two-thirds of this once powerful state. By the Peace of Kutchuk-Kainarji in 1774, the Turks gave up Azov, part of the Crimea (the other part was taken possession of in 1783), and Kabardah; and by

the Peace of Jassy in 1792, Oczakov. Georgia also came under the protection of Russia in 1783, and Courland was incorporated in 1795. A portion of Persian Territory had already been acquired; and in 1801 the formal annexation of Georgia was effected. The Peace of Fredericks-haven, 1809, robbed Sweden of the whole of Finland, which now passed to Russia; the Peace of Bukarest, 1812, took Bessarabia from the Turks; that of Tiflis, 1813, deprived the Persians of parts of the Caucasus; and then the Vienna Congress of 1815 gave the remainder of Poland to Russia. After fresh wars the Persians lost the provinces of Erivan and Nakhichevan in 1828; and the Turks lost Anapa, Poti, Akhalzik, etc., by the Peace of Adrianople in 1829. The desire to possess further dominions of the sultan led to a war against Turkey in 1853, in which England, France, and Sardinia also took part in 1854, and which ended in the Peace of Paris, 1856. The Russians were compelled to restore to Moldavia the left bank of the Danube in Bessarabia. This district, however, was again restored to Russia by the Congress of Berlin in 1878, which followed the Russo-Turkish War of 1877-78. In 1858, Russia acquired by agreement with China the sparsely populated but widely extended district of the Amur; the subjection of Caucasia was accomplished in 1859 and 1864, and considerable conquests have followed since 1866 both in Turkestan and the rest of Central Asia. A ukase of 1868 annihilated the last remains of the independence of Poland by incorporating it completely in the czardom. On the other hand, Russian America was sold to the United States in 1867. The following table will show at a glance the extent of these continuous accessions of territory:

The extent of Russian Territory under —		
Ivan the Great, . . .	1462, about	382,716 sq. m.
Vassili Ivanovitch, .	1505, "	510,288 "
Ivan the Terrible, .	1584, "	1,530,864 "
Alexis Michaelovitch,	1650, "	5,039,094 "
Peter I.,	1689, "	5,953,360 "
Anna,	1730, "	6,888,888 "
Katharine II., . . .	1775, "	7,122,770 "
Alexander II., . . .	1868, "	7,866,940 "
Alexander II., . . .	1881, "	8,325,393 "
Alexander III., . . .	1892, "	8,644,100 "
Nicholas II., . . .	1908, "	8,647,657 "

The population from 14,000,000 in 1722 has grown to 129,562,718 in 1908. The extension of the Russian Empire in the East is still going on. In 1881, the Tekké Turcomans were subjected; in 1884, Merv was taken, and Penjdeh was occupied and annexed in 1885, which led to considerable friction between Russia and Britain. Of late years a great disturbing element to the Government of Russia has sprung up in Nihilism. Alexander II. was killed by their agency, and many attempts have been made to murder the succeeding emperors. In 1891 flour and grain were sent by the United States to relieve distress caused by failure of the harvest. Oppressive measures against the Jews have excited unfavorable comment. Alexander III. died November 1, 1894, and was succeeded by his son, Nicholas II. In 1900, following the Boxer Rebellion, China gave to Russia exclusive mining and railway privileges in Manchuria, and the command

of all the Chinese troops there to the Russian authorities. This occupation was to end in three years, and the delay in the withdrawal of Russian troops led to open hostilities between Russia and Japan in 1894. (See Russo-Japanese War.) During 1905-06, Russia was much perturbed by internal and insurrectionary disturbances. In October of 1905 the Czar issued a manifesto, assuring civil liberty, freedom of the press, extension of the suffrage, and limited representative government. A continual struggle has existed between the Imperial Government and the Duma since that time as to how this manifesto should be interpreted, and to what extent it should be made operative.

Russo-Japanese War. A war between Russia and Japan, waged in Manchuria (1904-05). The chief cause of the war was the occupation (continued notwithstanding repeated promises of withdrawal by the Russian Government) of Manchuria by Russia after the Boxer uprising of 1899-1900, with the consequent endangerment of the Japanese preponderance in Corea, which was regarded by Japan as essential to her safety. An earlier cause of irritation was the action of Russia, Germany, and France in preventing the retention by Japan of Port Arthur and the Liao-tung peninsula after the Chinese-Japanese War of 1894-95, and the subsequent leasing of this territory from China by Russia. The principal events of the war were the following: rupture of diplomatic relations with Russia by Japan, February 6, 1904; attack by torpedo-boats of the Japanese fleet under Admiral Togo upon the Russian squadron under Admiral Stark at Port Arthur, February 8, 1904; general attack by the Japanese fleet, February 9, 1904; these two attacks resulting in great injury to the Russians; naval fight off Chemulpo, resulting in the destruction of the Russian cruiser "Variag" and the gunboat "Koriets," February 9, 1904; war declared by Japan, February 10, 1904; Admiral Makaroff succeeded Admiral Stark, February 17, 1904; General Kuropatkin appointed Russian commander-in-chief in Manchuria, February 21, 1904; agreement between Japan and Corea signed at Seoul, February 23, 1904; Vladivostok bombarded by Admiral Kamimura, March 6, 1904; Port Arthur bombarded, March 21-22, 1904; Wiju occupied by the Japanese, April 6-7, 1904; destruction of the Russian battle-ship "Petropavlovsk" by a mine and death of Admiral Makaroff, April 13, 1904; Russian Vladivostok squadron appeared off Yuen-san, April 25, 1904; defeat of the Russians under Sassulitch by the Japanese First Army under Kuroki, May 1, 1904; the entrance to Port Arthur blocked for battle-ships and cruisers, May 3, 1904; Japanese battle-ship "Hatsuse" sunk by a mine, May 15, 1904; Japanese victory at Kin-chau (capture of Nanshan Hill), May 27-28, 1904; occupation of Dalny by the Japanese, May 29-30, 1904; Russians defeated at Telissu and Wafangkau, June 14-15, 1904; unsuccessful sortie of Russian fleet from Port Arthur, June 23, 1904; investment of Port Arthur (after severe preliminary fighting), July 31, 1904-January 1, 1905; sortie of the Port Arthur fleet, resulting in a sea battle, in which most of the Russian vessels were driven

back to Port Arthur and the rest dispersed with the death of Admiral Withöft, August 10, 1904; Vladivostok squadron defeated by Admiral Kamimura ("Rurik" sunk), August 14, 1904; battle of Liao-yang, resulting in the success of the Japanese under Oyama, the Russians retiring upon Mukden, August 27-September 4, 1904; battle of the Shaho, in which the Russian attack was repulsed, October 9-14, 1904; the Baltic fleet under Rozhdestvensky sailed for the Far East, October, 1904, and attacked the Hull fishing fleet on the Doggerbank, on the night of October 21-22, 1904; Port Arthur surrendered, January 1, 1905; Russians crossed the Hun River and attacked the Japanese at Haikautai, but were repulsed January 25-29, 1905; battle of Mukden, resulting in the complete defeat of Kuropatkin and the capture of the city, February 19-March 10, 1905; Kuropatkin relieved of his command and succeeded by Linievitch, March 16, 1905; the Baltic fleet reached Kamranh Bay, April 12, 1905; battle of the Sea of Japan and the annihilation of the Baltic fleet by Admiral Togo, May 27-28, 1905; President Roosevelt urged the Russian and Japanese Governments to negotiate for peace, June 8, 1905; plenipotentiaries met at Portsmouth, New Hampshire, August 9, 1905; treaty of peace signed, September 5, 1905.

Sabines. An ancient people of Italy, supposed to have been named from "Sabus," one of their deities. Little is known of their history. They were at war with the Romans at a very early period. A contest broke out between them 504 B. C., and a body of the Sabines migrated to Rome, where they were welcomed, and founded the powerful family and tribe of Claudii. The Sabines carried their ravages to the very gates of Rome, 469 B. C. On their defeat by Marcus Horatius, 449 B. C., their camp was found full of plunder obtained in the Roman territories. They were again at war with the Romans, 290 B. C., and having been vanquished, many of them were sold as slaves. The remaining citizens were admitted to the Roman franchise.

St. Bartholomew, Massacre of, a massacre of the Huguenots which took place in Paris, France, beginning on the night of August 23-24 (St. Bartholomew's Day), 1572. A large number of prominent Huguenots had been invited to the royal palace to participate in the wedding festivities of Henry of Navarre. While these guests were in the palace they were slaughtered without mercy, and at a signal the massacre quickly spread over the city. The anti-Huguenot leaders were Charles IX., the Queen-mother Catharine de Medici, and the Duke of Guise. The massacre spread over France and about 30,000 lives were lost. A religious war followed.

Salic, or Salique Law, The (*sal'ik*). An ancient fundamental law of the Riparian Franks, which excluded females from inheriting the French throne. It is supposed to have been established by Pharamond or Clovis, and to have derived its name from the River Saale, in Saxony, whence those Franks originally came. This body of law was revised and reconstituted by Charlemagne; according to it "no portion of *Salic land* can fall to females;" but what was

meant by *Salic* land has been long debated among French antiquaries. It was the cause of long wars between England and France, when, in opposition to it, Edward III. claimed the throne of France by a title prior to that of Philip of Valois. It has been recognized in all countries of which the crown has devolved on a member of the blood-royal of France; and formed the foundation of the pretensions of Don Carlos to the Spanish Crown. It was observed with reference to the great fiefs which had been granted to princes of the blood, by way of appanage; and hence, on the death of Charles the Bold of Burgundy, without a male heir, that duchy reverted to Louis XI.

Scotland was first visited by the Roman troops under Agricola, who penetrated to the foot of the Grampian Mountains. It was afterward exposed to the ravages of the Norwegians and Danes, with whom many bloody battles were fought. Various contests were also maintained with the kings of England. Robert Bruce, however, secured the independence of the country and his title to the throne by the decisive battle of Bannockburn in 1314. He was succeeded by his nephew, Robert Stewart, and he by his eldest son, Robert. The latter was a weak prince, and the government was seized by the Duke of Albany, who stoned to death the eldest son of the king. James, his second son, to escape a similar fate, fled to France; in the year 1424 he returned to Scotland, and having excited the jealousy of the nobility, he was assassinated in a monastery near Perth. James II., his son, an infant prince, succeeded him in 1437. He was killed by the bursting of a cannon at the siege of the castle of Roxburgh. James III. ascended the throne at the age of seven years. His reign was weak and inglorious, and he was murdered in the house of a miller, whither he had fled for protection. James IV., a generous and brave prince, began his reign in 1488. He was slain at the battle of Flodden. James V., an infant of less than two years of age, succeeded to the crown. He died in 1542, and was succeeded by his daughter, the celebrated Queen Mary. She was succeeded by her son James, who, in 1603, ascended the throne of England, vacant by the death of Queen Elizabeth, when the two kingdoms were united into one great monarchy which was legislatively united in 1707. At the union of the kingdoms the political system of Scotland was almost entirely incorporated with that of England.

The Court of Sessions is the Supreme Civil Court of Scotland. The Court of Justiciary, or Criminal Court, composed only of judges of the Court of Sessions, is supreme in the highest sense, since its decisions in criminal cases are not subject to any review. The principal subordinate judicatories are sheriff courts, established in each county or stewartry. Sheriff-substitutes, or judges ordinary, one or more holding separate courts in different districts, decide in the first instance, subject to the review of the principal sheriff or sheriff depute, whose decisions, though final within the limits of his jurisdiction, are reviewable by the Court of Sessions. Besides the sheriff court, each county or district of a county has its justice of peace courts, in which

judges decide on principles of equity in minor crimes; and in every town of any importance are bailie, dean, or guild, and police courts, with limited jurisdictions.

Seven Years' War, The (1756-63), was the third, last, and most terrible of the contests between Frederick the Great of Prussia and Maria Theresa (with the other powers of Europe on one side or the other) for the possession of Silesia. In 1763 Maria Theresa, sorely against her will, was finally compelled to conclude the peace of Hubertsburg, which acknowledged Frederick as Lord of Silesia. This long and desperate conflict made no change in the territorial distribution of Europe, but it increased tenfold the moral power of Prussia, and gave its army a prestige which it retained till the battle of Jean. It cost Europe 1,000,000 lives, and prostrated the strength of almost all the powers who had engaged in it.

Shays' Rebellion. At the close of the Revolution, the United States were burdened with a very heavy foreign and domestic debt. They were impoverished by the long war, and it was difficult to raise the means to meet the arrears of pay due the soldiers of the Revolution. On the recommendation of Congress, each State endeavored to provide means for raising its quota by a direct tax. This effort produced much excitement in some of the States, and, finally, in 1787, a portion of the people of Massachusetts openly rebelled. Daniel Shays, who had been a captain in the Continental Army, marched at the head of a thousand men, took possession of Worcester, and prevented a session of the Supreme Court. He repeated his performance at Springfield; and the insurrection soon became so formidable that the governor was compelled to call out several thousand militia under General Lincoln, to suppress it. This was speedily accomplished. Though some of the insurgents were sentenced to death, none were executed. A free pardon was finally given to all.

Sicilies, The Two, a former kingdom of Italy, consisting of Naples (or South Italy) and Sicily. In 1047, while Greeks and Saracens were struggling for the possession of Lower Italy and Sicily the twelve sons of Tancred de Hauteville, a count in Lower Normandy, came in with their followers. Robert Guiscard, one of these brothers, subdued Apulia and Calabria, taking the title of duke, and his youngest brother, Count Roger, conquered Sicily. Roger's son and successor, Roger II., completed the conquest of all Lower Italy by subduing Capua, Amalfi, and Naples, at that time celebrated commercial republics, and in 1130 took the title of king, calling his kingdom the Kingdom of the Two Sicilies. In 1759, when Charles IV. ascended the Spanish throne under the name of Charles III., he conferred the Kingdom of the Two Sicilies on his third son Ferdinand, and decreed at the same time that it should never again be united to the Spanish Monarchy. The reign of Ferdinand extended through the stormy period of the French Revolution and the subsequent European commotions. A varied experience followed, during which the country was successively subject to Germany, France, and Spain.

In 1860, an insurrection broke out in Sicily, and an expedition of volunteers from Piedmont and other Italian provinces under Garibaldi sailed from Genoa to the assistance of the insurgents. The result was that the Neapolitan troops were driven from the island. Garibaldi, following up his success, crossed over to the mainland, where he met little or no opposition; Francis II. fled from Naples; the strong places in his hands were reduced; and by a popular vote the Kingdom of the Two Sicilies ceased to exist as such and became an integral part of the Kingdom of Italy.

Sicilian Vespers, the name given to a massacre of the French in Sicily, March 30, 1282. On the evening of Easter Monday the conspirators were already assembled at Palermo; but the massacre was precipitated by an outrage offered by a Frenchman to a Sicilian bride, who was passing along the streets with her train. Instantly the Frenchman was killed, and, the populace being aroused by the conspirators, all the French who could be found in the city were slaughtered. Eight thousand were slain in Palermo alone, and the massacre afterwards spread over the island, the French being even dragged out of the churches to which they had fled for protection. The six hundredth anniversary of the Sicilian Vespers was celebrated with much enthusiasm at Palermo in 1882.

Slavery. The establishment of one man's right to control the liberty, property, and even life of another. Slavery probably arose at an early period of the world's history out of the accident of capture in war. Savages, in place of massacring their captives, found it more profitable to keep them in servitude. All the ancient Oriental nations of whom we have any records, including the Jews, had their slaves. In Greece in general, and especially at Athens, slaves were mildly treated, and enjoyed a large share of legal protection; while by the Romans they were used with considerable rigor. The English word *slave* is simply the name of the Slavonian race. The wars of the Frankish kings and emperors filled Saracenic Spain with Slavonic captives to such an extent that in its language, as well as in those of other European countries, a natural name meaning, in its own tongue, *glorious*, became the title of servitude. The African slave-trade was commenced by the Portuguese in 1442; it was, however, of only trifling extent till the Sixteenth Century. But the importation of negroes into the West Indies and America having once begun, it gradually increased, until the vastness and importance of the traffic rivaled its cruelty and guilt. The slave-trade was abolished in England in 1807 but it was only in 1834 that slavery itself was abolished throughout the British dominions. Long before that time, several of the North American States had decreed the extinction of slavery. Vermont abolished it in 1777, before she had joined the Union. Pennsylvania in 1780, Rhode Island and Connecticut shortly after, New York in 1797, and New Jersey in 1804, provided for the gradual emancipation of their slaves. In Massachusetts the Supreme Court declared that slavery was abolished by the act of adopting the State Constitution of 1780. In

1820, the United States passed a law declaring the slave-trade to be piracy, but no conviction was obtained under the statute until November, 1861, when Nathaniel Gordon, master of a vessel called the "Erie," was convicted and hanged at New York. Finally, the abolition of slavery, cause and fruit of the gigantic war of secession, was definitively consecrated in 1865 by the Thirteenth Amendment to the Constitution of the United States. The French emancipated their negroes in 1848, and the Dutch in 1863. Slavery was also partially abolished in Brazil in 1871, and gradual emancipation has been adopted in Cuba.

South Carolina. The first attempt to colonize the territory now included in South Carolina was made by Jean Ribault, a Frenchman, in 1562. The first permanent settlement was made by English colonists, who planted themselves on the banks of the Ashley in 1670, but removed to the site of Charleston in 1680. The province was created by Charles II. in 1683. Both the Carolinas were included under a common name and proprietary government till 1729, when the king formed the province into two royal colonies. Large numbers of French Huguenots had arrived in 1685, and subsequently Swiss, Irish, and German colonists. South Carolina suffered severely from Indian depredations, and joined with Georgia, under Oglethorpe, in a contest with Spanish Florida. She took an active part in the Revolution, and the battles of Fort Moultrie, Charleston, Camden, King's Mountain, Cowpens, Eutaw Springs, etc., were fought on her soil. The United States Constitution was ratified in 1788. In 1832, the State passed the Nullification Act, which threatened civil war, then happily averted, but afterward precipitated in 1861 by the firing on Fort Sumter. The important military operations were the capture of Hilton Head in 1861, the unsuccessful attack on Charleston in 1863, and the march of General Sherman in 1865. The State was readmitted to federal relations in 1868. From 1865 until 1871 there were reconstruction troubles, ending with the election of Wade Hampton as Governor of the State and his recognition by President Hayes. In 1886 Charleston suffered from a severe earthquake which caused much property loss. A State dispensary law for the regulation of the liquor traffic was passed in 1892. The present State constitution was adopted in 1897.

South Dakota. South Dakota became a State November 2, 1899, when the Territory of Dakota was divided into two States. The history of that part of the country will be found under Minnesota, Nebraska, and North Dakota.

Spain. the *Spania*, *Hispania* and *Iberia* of the Greeks, and known to the Romans by the same names, is supposed to have been originally inhabited by a distinct race called Iberians, upon whom a host of Celts are supposed to have descended from the Pyrenees. These two races coalesced and formed the mixed nation of the Celtiberians. About the middle of the Third Century B. C. the Carthaginian influence began to be felt in Iberia, and a considerable tract of territory was brought under subjection to Carthage by Hamilcar, who founded the city of

Barcelona. The Romans had driven the Carthaginians from the peninsula in 206 B. C., and the country was erected into a Roman Province. From the time of the complete supremacy of the Romans till the death of Constantine the condition of Spain was eminently prosperous. Everywhere throughout the country towns of purely Roman character sprang up, and numerous aqueducts, bridges, amphitheaters, etc., were built. Spain was for three centuries the richest province of the Roman Empire. In 409 A. D., hordes of barbarians, Alans, Vandals, and Suevi, crossed the Pyrenees and swept over and desolated the peninsula. About 412 the Visigoths invaded the country, and their king, Athaulf, established the Gothic monarchy in Catalonia. In 711 the Moors obtained mastery of nearly the whole of Spain. The Moors held Spain for the first few years as a dependency of the province of North Africa; but after the downfall of Musa the country was governed (717) by *emirs* appointed by the Caliph of Damascus. During the period of Moorish domination the small independent kingdom of Asturias, or Leon, had been growing in power and extent. In 758 a second independent Christian Kingdom was founded in Sobrarbe, which was in 801 swallowed up by the caliphate of Cordova. Thirty-six years afterward was founded the third Christian Kingdom, that of Navarre, and in 933 another independent monarchy was founded in Castile, which, from its central position and consequent greater facilities for expansion, soon became the most powerful of the Spanish states. The Kingdom of Aragon was the last Christian kingdom formed in Spain. The rest of the history of the Spanish kingdoms before their union is undeserving of a detailed account. Ferdinand II., the last sovereign of Aragon, by marriage with Isabella, Queen of Castile, in 1469, by the conquest of Granada in 1492, and that of Navarre in 1512, united the whole of Spain (and French Navarre) under one rule. Charles I. (Charles V. of Germany) succeeded Ferdinand, and in his reign Mexico and Peru were added to the possessions of Spain. Philip II., by his enormous war expenditure and maladministration, laid a sure foundation for the decline of the country; and the reigns of Philip III. and IV. witnessed a fearful acceleration in the decline. That of Charles II. was still more unfortunate, and the death of the latter was the occasion of the War of the Spanish Succession. Philip V. was the first of the Bourbon Dynasty who occupied the throne of Spain. Under Charles III. (1759-88) the second great revival of the country commenced, and trade and commerce began to show signs of returning activity. During the inglorious reign of Charles IV. (1788-1808) a war broke out with Britain, which was productive of nothing but disaster to the Spaniards and by the pressure of the French another arose in 1804, and was attended with similar ill success. Charles's eldest son ascended the throne as Ferdinand VII. Forced by Napoleon to resign all claims to the Spanish Crown, Ferdinand became a prisoner of the French, and Joseph, the brother of the French Emperor, was declared King of Spain and the Indies. But before this time an armed resistance had been

organized throughout the whole country. The various provinces elected juntas, or councils, consisting of the most influential inhabitants of the respective neighborhoods, and it was their business to administer local rule. The Supreme Council of Seville declared war against Napoleon and France in 1808. England, on solicitation, made peace with Spain, recognized Ferdinand VII. as king, and sent an army to aid the Spanish insurrection. After many bloody campaigns the French were driven from the country. The reign of Ferdinand's daughter, Isabella II., was disturbed by the Carlist rebellion, 1834-39. Frequent changes of ministry, occasional revolts, the banishment of Queen Christina, the war with the Moors, the annexation of St. Domingo in 1861, and the quarrels between Spain and her former colonies, Peru and Chile, were the most marked events in the more recent history of Spain. In 1868, Isabella was driven from the throne by a general revolt; and the Cortes, in 1871, elected Prince Amadeo of Italy to be king. Finding the task of ruling constitutionally hopeless, Amadeo abdicated in 1873, upon which the form of government was changed into a republic. During the remainder of 1873, and the whole of 1874, Spain was the scene of general anarchy and much bloodshed. In December, 1874, Alfonso, son of ex-Queen Isabella, was declared King of Spain at Santander, under the title of Alfonso XII. He died in 1886, and his widow, Queen Maria Christina, was chosen regent during the minority of the infant Prince Alfonso XIII. The Prince reached his majority, May 17, 1902, and assumed charge of the kingdom as Alfonso XIII. On May 31, 1904, he married Princess Ena of Battenberg, and as the king and queen were returning to the palace, they narrowly escaped death from a bomb thrown by an anarchist.

Spanish-American War. In 1898, a crisis in Cuban affairs brought on war with the United States, known as the Spanish-American War, which from its opening to its close lasted 114 days. In that time the United States land and sea forces destroyed two Spanish fleets, received the surrender of more than 35,000 Spanish soldiers, took by conquest the fortified cities of Santiago de Cuba, in Cuba, Ponce, in Porto Rico, and Manila, on the island of Luzon, in the Philippines, and secured control, pending negotiations of peace, of the entire Spanish possessions in the West Indies, the Philippines, and Guam of the Ladrone Islands. The Americans suffered no loss of ships or territory and but 279 killed and 1,465 wounded in battle, while the cost to Spain, aside from prisoners, ships, and lost territory, was 2,199 killed, and 2,948 wounded. The cost to the United States in money was \$141,000,000.

The principal events preceding and during the war and the dates on which they occurred are as follows:

February 15th—The United States battleship "Maine" was blown up in the harbor of Havana. According to the report of the Court of Inquiry appointed by the United States the explosion was due to an external mine.

- April 20th—President McKinley, authorized by Congress to intervene in Cuba, using the United States military and naval forces, sent an ultimatum to Spain. The Spanish minister at once left Washington, and the next day the United States minister left Madrid.
- April 22d—A proclamation was issued by the President blockading the principal ports of Cuba.
- April 23d—President McKinley issued a call for 125,000 volunteers to serve for two years.
- April 27th—The batteries of Matanzas, Cuba, were shelled by Admiral Sampson's flagship, the "New York," with the monitor "Puritan" and the cruiser "Cincinnati."
- April 29th—The Spanish fleet, commanded by Admiral Cervera, consisting of the "Cristobal Colon," the "Almirante Oquendo," the "Maria Teresa" and the "Viscaya," and the torpedo boats "Furor," "Terror," and "Pluton," left the Cape Verde Islands for Cuba.
- May 1st—Commodore Dewey, commanding the United States Asiatic squadron, destroyed the entire Spanish fleet in Manila Bay, Philippines, without losing a man.
- May 11th—The "Wilmington," "Winslow," and "Hudson" engaged the Spanish batteries at Cardenas. Ensign Bagley and four of the "Winslow's" crew were killed. Major-General Wesley Merritt was ordered to the Philippines as military governor.
- May 12th—A United States fleet, commanded by Rear-Admiral Sampson, bombarded the fortifications of San Juan, Porto Rico.
- May 19th—Admiral Cervera's fleet reached Santiago de Cuba, and a few days later was "bottled up" there by the "flying squadron" of Commodore Schley.
- May 25th—President McKinley called for 75,000 more volunteers. Twenty-five hundred United States troops sailed from San Francisco for Manila, several thousand more following at a later date.
- May 31st—The "Massachusetts," "Iowa," and "New Orleans" bombarded the fortifications at the mouth of Santiago Harbor. They were bombarded again several times after Admiral Sampson took command of the fleet.
- June 3d—Assistant Naval Constructor Hobson with seven men ran the collier "Merrimac" to the mouth of Santiago Harbor and sank her in the channel under the fire from the Spanish forts. Hobson and his men were taken prisoners.
- June 10th—Six hundred marines were landed at Caimanera, Guantanamo Bay, Cuba, where sharp skirmishing continued for several days, several Americans being killed.
- June 12th—The 5th Army Corps, commanded by General Shafter, sailed from Tampa on twenty-nine transports for Santiago, arriving off there on June 20th.
- June 13th—President McKinley signed the War Revenue Bill, providing for the raising of revenues by a stamp tax and providing for a popular bond loan which was immediately subscribed.
- June 17th—A Spanish fleet under Admiral Camara left Cadiz for the Philippines, but returned after passing through the Suez Canal.
- June 22d—General Shafter's troops began disembarking at Daiquiri and Siboney, near Santiago.
- June 14th—Roosevelt's Rough Riders were attacked while advancing toward Santiago; sixteen Americans were killed and forty more wounded before the Spaniards were repulsed.
- July 1st—General Lawton took El Caney, near Santiago, and General Kent, commanding the 1st division of the 5th Army Corps, which included the 2d, 6th, 9th, 10th, 13th, 16th, and 24th infantry, and the 71st New York volunteers, took San Juan Hill after heavy fighting. Official reports gave the American losses 231 killed and 1,364 wounded and missing.
- July 3d—Admiral Cervera's squadron made a dash out of Santiago Harbor, and every vessel was sunk or disabled by the American fleet. General Shafter demanded the surrender of Santiago. The seizure of Guama, in the Ladrone Islands, by the "Charleston" was reported at this time.
- July 7th—President McKinley signed resolutions passed by the Senate annexing the Hawaiian Islands to the United States, and the "Philadelphia" was ordered to Honolulu to raise the American flag.
- July 17th—General Toral, in command of the Spanish troops at Santiago, General Linares being wounded, surrendered his forces and the east portion of the province of Santiago de Cuba to General Shafter.
- July 21st—General Leonard R. Wood, formerly colonel of the 1st Volunteer cavalry, was appointed military governor of Santiago.
- July 25th—United States troops, under General Nelson A. Miles, landed at Guanica, Porto Rico, the town having surrendered to the "Gloucester."
- July 26th—Through the French ambassador, the government of Spain asked President McKinley on what terms he would consent to peace.
- July 28th—Ponce, the second largest city in Porto Rico, surrendered to General Miles, and he was received by the residents with joyful acclamations. Capture of several other towns, with little or no fighting, followed.
- July 30th—President McKinley's statement of the terms on which he would agree to end the war was given to the French ambassador. The President demanded the independence of Cuba, cession of Porto Rico and one of the Ladrone Islands to the United States, and the retention of Manila by the United States pending the final disposition of the Philippines by a joint commission.
- July 31st—United States troops engaged the Spaniards at Malate, near Manila, in the Philippines, and repulsed them, with some loss on both sides.
- August 9th—The French ambassador presented to President McKinley Spain's reply, accepting his terms of peace.

August 12th—Protocols agreeing as to the preliminaries for a treaty of peace were signed by Secretary Hay and the French ambassador. United States military and naval commanders were ordered to cease hostilities. The blockades of Cuba, Porto Rico, and Manila were lifted and hostilities ended.

August 13th—Manila surrendered after a combined assault by the army under General Merritt and Dewey's fleet.

Sparta or Lacedæmon. A celebrated city of ancient Greece; capital of Laconia and of the Spartan state, and the chief city in the Peloponnesus; on the west bank of the Eurotas River, and embraced a circuit of six miles. Sparta was a scattered city consisting of five separate quarters. Unlike Athens, it was plainly built, and had few notable public buildings; consequently, there are no imposing ruins to be seen here as in Athens, and the modern Sparta is only a village of some 4,000 inhabitants.

The Spartan state was founded, according to tradition, by Lacedæmon, son of Zeus. The most celebrated of its legendary kings was Menelaus. Shortly after their settlement in the Peloponnesus it is probable that the Spartans extended their sway over all the territory of Laconia, a portion of the inhabitants of which they reduced to the condition of slaves. They also waged war with the Messenians, the Arcadians, and the Argives, against whom they were so successful that before the close of the Sixth Century B. C. they were recognized as the leading people in all Greece.

Early in the following century began the Persian wars, in which a rivalry grew up between Athens and Sparta. This rivalry led to the Peloponnesian War, in which Athens was humiliated and the old ascendancy of Sparta regained. Soon after this the Spartans became involved in a war with Persia, and Athens, Thebes, Corinth, and some of the Peloponnesian States took this opportunity to declare war against them. This war, known as the Boeotian or Corinthian War, lasted eight years and increased the reputation and power of Athens. To break the alliance of Athens with Persia, Sparta, in 387 B. C., concluded with the latter power the peace known by the name of Antalcidas; and the designs of Sparta became apparent when she occupied, without provocation, the city of Thebes, and introduced an aristocratical constitution there. Pelopidas delivered Thebes, and the celebrated Theban War (378-363) followed, in which Sparta was much enfeebled. During the following century Sparta steadily declined, though one or two isolated attempts were made to restore its former greatness.

Stadtholder (Dutch, *Stadhouder*), the name formerly given to the chief magistrate of the United Provinces of Holland. The last Stadtholder was William V., who had to fly to England in 1795, at the invasion of the French Republican army. After the Congress of Vienna (1815), Holland, with Belgium, was erected into a kingdom, and William V., was the first king, under the name of William I.

Star-Chamber, an ancient English tribunal, said to have existed from a very early period,

but revived during the reign of Henry VII. One derivation of the name is from the star-covered roof or ceiling of the room in which the tribunal assembled; but this derivation is at least doubtful. The tribunal consisted of privy councillors, and of certain judges, who acted without the intervention of a jury. As this was a violation of *Magna Charta*, and as the tribunal had been guilty of the most grave excesses, especially in the time of Charles I., the Star Chamber was abolished by the Long Parliament in 1641, at the same time as the High Commission Court.

Sumter, Fort (named after General Thomas Sumter, 1734-1832), an American fort associated with both the beginning and the end of the Civil War; built of brick, in the form of a truncated pentagon thirty-eight feet high, on a shoal partly artificial, in Charleston Harbor, three and one-half miles from the city. On the withdrawal of South Carolina from the Union in December, 1860, Major Anderson, in command of the defenses of the harbor, abandoned the other forts, and occupied Fort Sumter, mounting sixty-two guns, with a garrison of some eighty men. The attack on the fort was opened by General Beauregard April 12, 1861, and it surrendered on the 14th; this event marked the beginning of the war. The Confederates strengthened it, and added ten guns and four mortars. In April, 1863, an attack by a fleet of monitors failed. In July batteries were erected on Morris Island, about 4,000 yards off, from which in a week 5,000 projectiles, weighing from 100 to 300 pounds, were hurled against the fort; at the end of that time it was silenced and in part demolished. Yet the garrison held on amid the ruins and in September beat off a naval attack; and in spite of a forty days' bombardment in October-December, 1863, and for still longer in July and August, 1864, it was not till after the evacuation of Charleston itself, owing to the operations of General Sherman, that the garrison retired, and the United States flag was again raised April 18, 1865; an event soon followed by the evacuation of Richmond and the Confederate surrender.

Sweden. When we first hear of Sweden the country was inhabited by numerous tribes, kindred in origin, but politically separate. Two principal groups are recognizable, *Goths* in the South and *Suedes* in the North. Ingiald Hrada, the last ruler of the old royal family of the Ynglingar, who drew their origin from Njord, sought to establish a single government in Sweden and perished in the attempt. To the Ynglingar followed, in the Upland, the dynasty of the *Skjoldungar*. Erik Edmondsson acquired the sovereignty of the whole of Sweden about the end of the Ninth Century. The dawn of Swedish history now begins. Efforts to introduce Christianity were made as early as 829 A. D., but it was not till 1000 A. D., that Olaf Skötkonung, the Lap King, was baptized. Erik undertook a crusade against the pagan Finns, and having compelled them to submit to baptism, and established Swedish settlements among them, he laid the foundation of the union of Finland with Sweden. Erik's murder in 1160 by the Danish prince, Magnus Henriksen, who had made an unprovoked attack upon the Swe-

dish king, was the beginning of a long series of troubles. In 1389, the throne was offered by the Swedish nobles to Margaret, Queen of Denmark and Norway, who threw an army into Sweden, defeated the Swedish king, Albert of Mecklenburg, and by the union of Calmar, in 1397, brought Sweden under one joint scepter with Denmark and Norway. In 1523, Sweden emancipated itself from the union with Denmark, which had become hateful to the Swedes, and rewarded its deliverer, the young Gustaf Vasa, by electing him king, and declaring its independence of Denmark. Gustaf Vasa, on his death, in 1560, left to his successor an hereditary and well-organized kingdom, a full exchequer, a standing army, and a well-appointed navy. Sigismund, grandson of Vasa, who had been elected king of Poland through the influence of his Polish mother, was compelled to resign the throne in 1599 to his uncle Karl. The deposition of Sigismund gave rise to the Swedo-Polish War of Succession, from 1604-60; and on the death of Karl, in 1611, his son, the great Gustavus Adolphus, found himself involved in hostilities with Russia, Poland, and Denmark. The young king soon concluded treaties of peace with his northern neighbors, and placed the internal affairs of his kingdom in order, and, although he ranks as one of the greatest military commanders of his age, the extraordinary number of benefits which he conferred on every department of the administrative system of Sweden entitle him to still greater renown as the benefactor of his native country. The reign of Christina was disastrous. Karl X. was occupied in generally unsuccessful wars against Poland and Denmark; while the long rule of his son, Karl XI.—from 1660-97—was characterized by success abroad and in the augmentation of the regal power, which was declared by Charles XII. In 1697, the male line of the Vasas expired, and his sister and her husband, Frederick of Hesse-Cassel, were called to the throne by election. The weak Adolphus Frederick of Holstein-Gottorp, who was called to the throne on the death of Frederick in 1751, did little to retrieve the evil fortunes of the state; but his son, Gustavus III., (1771-92), skillfully recovered the lost power of the Crown. Gustavus IV. was forcibly deposed in 1809, and obliged to renounce the Crown in favor of his uncle, Charles XIII. The dominant party in Sweden elected General Bernadotte to the rank of crown-prince, the latter assumed the reins of government, and by his steady support of the allies against the French Emperor secured to Sweden, at the Congress of Vienna, the possession of Norway, when that country was separated from Denmark. Under the administration of Bernadotte, who in 1818 succeeded to the throne as Charles XIV., the united kingdoms of Sweden and Norway made great advances in material prosperity, and in political and intellectual progress; and although the nation at large entertained very little personal regard for their alien sovereign, his son and successor, Oscar (1844-59), and his grandsons, the late king, Charles XV., and the late king, Oscar II., who came to the throne in 1872, so identified themselves with their subjects that the Bernadotte Dynasty secured the

loyal affections of every section of the united nations of Sweden and Norway down to 1903.

In that year serious difficulty arose between Norway and Sweden, owing to the desire of the former for autonomous government. In 1905 the two nations separated, and Oscar II. continued monarch of Sweden until his abdication and death December 8, 1907, when he was succeeded by his oldest son, Gustave V.

Switzerland was in Roman times inhabited by two races—the Helvetii, supposed to have been Celts, on the northwest, and the Rhatians on the southeast. After the conquest of Gaul both races adopted the language and habits of Rome. When the invasions took place the Burgundians settled in Western Switzerland, while the Alemanni, another Germanic tribe, took possession of the country east of the River Aar. A third Teutonic people, the Goths, entered the country from Italy and took possession of the country of the Rhatians. The Helvetii retained their old pagan creed until the Seventh Century, when they were converted by Irish monks. During the Eleventh and Twelfth Centuries the greater part of Switzerland was ruled on behalf of the emperors by the lords of Zähringen, who, however, became extinct in 1218. In 1273, Rudolf of Habsburg, a Swiss nobleman, became emperor. Schwyz, Uri, and Unterwalden, with Lucerne, Zurich, Glarus, Zug, and Berne, eight cantons in all, in 1352, entered into a perpetual league which was the foundation of the Swiss Confederation. In 1415 the people of the cantons invaded Aargau and Thurgau, parts of the Austrian territory, and annexed them; three years later they crossed the Alps, and annexed Ticino, and constituted all three subject states. In 1481 the towns of Freiburg and Soleure were admitted into the confederacy. Basel and Schaffhausen (1501) and Appenzell (1513) were next received into the confederation, and its true independence began. War broke out in 1531 between the Catholics and Protestants, and the former were successful. During the Thirty Years' War Berne and Zurich contrived to maintain the neutrality of Switzerland, and in the Treaty of Westphalia, in 1648, it was acknowledged by the great powers as a separate and independent state. In 1798, Switzerland was seized by the French. At the peace of 1815 its independence was again acknowledged. In 1847, the Jesuits were expelled and the monasteries were suppressed. An attempt was made by diplomatic notes to intimidate the Swiss Government, but the revolution of 1848 broke out and prevented further interference. In the same year the radical party carried the constitution of 1848. After a rebellion against the King of Prussia, as Prince of Neuchâtel, the canton was declared a republic, with a constitution similar to that of the other Swiss states.

Tarpeian Rock (*târ-pé' yan*), a precipitous rock forming part of the Capitoline Hill at Rome over which persons convicted of treason to the state were hurled. It was so named, according to tradition, from *Tarpeia*, a vestal virgin of Rome, and daughter of the governor of the citadel on the Capitoline, who, covetous of the golden bracelets worn by the Sabine soldiery, opened the gate to them on the promise of receiv-

ing what they wore on their left arms. Once inside the gate they threw their shields upon her, instead of the bracelets. She was buried at the base of the Tarpeian Rock.

Tartary, properly *Tatary*, the name under which, in the Middle Ages, was comprised the whole central belt of Central Asia and Eastern Europe, from the Sea of Japan to the Dnieper, including Manchuria, Mongolia, Chinese Turkestan, Independent Turkestan, the Kalnuck and Kirghiz steppes, and the old khanates of Kazan, Astrakhan, and Crimea, and even the Cossack countries; and hence arose a distinction of Tartary into European and Asiatic. But latterly the name Tartary had a much more limited signification, including only Chinese Turkestan and Western Turkestan. It took its name from the *Tatars* or *Tartars*.

Temple, Solomon's, the building reared by Solomon as a habitation for Jehovah. David had planned the Temple, but was divinely forbidden to erect it, as he had shed so much blood in his wars. He made great preparations for his son and successor, who, he learned from the prophet Nathan, was destined to achieve the work. It was built on Mount Moriah, chiefly by Tyrian workmen, and had massive foundations. The stone for its erection was dressed before its arrival, so that the edifice arose noiselessly; the floor was of cedar, boarded over with planks of fir; the wainscoting was of cedar, covered with gold, as was the whole interior. It was modeled inside on the tabernacle, which was Jehovah's dwelling while journeyings were continually taking place. There was a Holy and Most Holy Place. The temple was surrounded by an inner court for the priest. There was also a Great or Outward Court, called specially the Court of the Lord's House. This temple was destroyed by the Babylonians during the siege of Jerusalem under Nebuchadnezzar. On the return from Babylon, a temple, far inferior to Solomon's was commenced under Zerubbabel, B. C. 534, and, after a long intermission, was resumed B. C. 520, and completed B. C. 516, under Darius Hystaspes. The second temple was gradually removed by Herod, as he proceeded with the building or rebuilding of a temple designed to rival the first rather than the second. The work was commenced B. C. 21 or 20; the temple itself was finished in about a year and a half, the courts in eight years, but the subsequent operations were carried on so dilatorily that the Jews reckoned forty-six years as the whole time consumed. In the courts of this temple Jesus preached and healed the sick. It caught fire during the siege of Jerusalem under Titus, and was burned to the ground.

Tennessee. The name is derived from "*Tannasse*," the Indian appellation of the Little Tennessee River. The first permanent white settlement was made on the Tennessee River, about thirty miles from the site of Knoxville, and Fort Loudon built. Indian wars lasted till 1761, when the savages were reduced to terms. From 1777 to 1784 the territory formed a portion of North Carolina. During the four years subsequent, the settlers maintained an organization as the State of Franklin, but were reunited to North Carolina in 1788. In 1789

the Territory, with that of Kentucky, was organized by the United States Government, which had received its cession from North Carolina. In 1794, a distinct territorial organization was made, and in 1796 Tennessee was admitted as a State, the third under the Federal Constitution. The State seceded in June, 1861. The principal military events within her limits during the Civil War were the capture of Forts Henry and Donelson, in February, 1862; the battle of Pittsburg Landing, or Shiloh, in April, 1862; the battle of Murfreesboro, in January, 1863; the battle of Chickamauga, in September, 1863; the battles about Chattanooga, and the battles of Franklin and Nashville, in November, 1864. State was readmitted in 1866. The Centenary of the State was celebrated by an Exposition at Nashville in 1897. In 1907 the National Rivers and Harbors Convention met at Memphis and was attended by the President.

Teutones, a tribe of Germany, which, with the Cimbri, invaded Gaul in B. C. 113. In B. C. 102, they were defeated with great slaughter near *Aqua Sextia* (Aix in the department of Bouches du Rhône) by the Roman general Marius. A tribe of the same name is mentioned by Pliny and others as inhabiting a district north of the Elbe, which appears to have been the original settlement of the Teutones before their invasion of Gaul.

Teutonic Knights, a military religious order of knights, established toward the close of the Twelfth Century, in imitation of the Templars and Hospitalers. It was composed chiefly of Teutons or Germans who marched to the Holy Land in the Crusades, and was established in that country for charitable purposes. In the Thirteenth Century they acquired Poland and Prussia, and they long held sway over a great extent of territory in this part of Europe. The order began to decline in the Fifteenth Century, and was finally abolished by Napoleon in 1809.

Texas. The first attempt at colonization known to history was made by La Salle, who sailed into Matagorda Bay, and erected Fort St. Louis on the Lavaca in 1685. Four years later the French were ousted by the Spaniards. The two nationalities contested the dominion of the country with bitterness, though the right of possession was for the most part with the Spaniards. In 1715, the name of New Philippines was given to the country, and the Marquis de Aguayo was made governor-general, under whose rule Spanish settlements were rapidly multiplied. In 1762-63, France settled the feud by her cession of the Louisiana territory to Spain. The recession of Louisiana to France in 1803, and the sale by the latter power to the United States, still left the boundary of the old Spanish possessions west of Louisiana open to controversy, as there had previously been no well-defined line. In 1806, the territory between the Sabine and Arroya Honda was established as a neutral ground by the Spanish and American generals commanding on the frontier. In the absence of any national settlement, a series of revolutionary intrigues began with the projected movement of Aaron Burr in 1806. Filibustering expeditions into Texas from the United States led to several severe battles, and it was not till 1819 that the

Sabine River was finally established as the Texan boundary. The revolutionary spirit, which made Texas a region of turmoil, did not cease when Mexico became independent under the leadership of Iturbide. Invasions from the United States continued, and, though several peaceable and thrifty American colonies had been planted, the dictator Bustamante, in 1830, forbade the people of the United States from further immigration. The long bitterness between the two races culminated in 1835, and the Americans in the province, after fighting several engagements, organized a provisional government, with Sam Houston as Commander-in-Chief of the Texan forces. A series of sanguinary battles ensued between the Mexican troops under General Santa Ana and the Texan revolutionists, and the atrocities of the Mexicans awakened deep sympathy for the Texans. The issue of the contest was practically settled with the battle of San Jacinto, April 21, 1836, when Santa Ana was taken prisoner. General Houston was elected president of the Texan Republic the same year, and in March, 1837, the United States formally recognized the new government. Intermittent hostilities continued between Mexico and Texas, which, in 1839-'40, had been recognized by the leading European governments; but the threats of the former nation to subjugate the Texans was rendered negative by her own weakness and the growing power of the young State. The annexation of Texas to the United States, which led to the Mexican War, occurred by her admittance as a State in 1845, the fifteenth under the Constitution. After the election of Abraham Lincoln the State seceded, February 23, 1861, by force of a popular vote, ratifying the ordinance of the convention called for that purpose. General Twiggs, on February 18th, surrendered to the State authorities all the United States posts, troops, and munitions of war in the department. No very important military operations occurred within the State limits during the war. The last fight of the war took place in Texas, ending in a Federal defeat, on May 13, 1865, and General Kirby Smith surrendered the last Confederate army here on May 26th. Texas was readmitted to her full rights in the Union, March 30, 1870. A period of lawlessness existed in the State for a number of years, but was finally suppressed by the Texas Rangers in 1879. A storm and tidal wave destroyed Galveston in 1900. In the next year vast oil fields were discovered near Beaumont. Colored United States soldiers engaged in a riot at Brownsville in 1905, and were dismissed from the service by the President.

Thebes (*thēbz*). The principal city of Boeotia, seated on the River Ismenus. Its fame was great in legendary Greece; it was built by Cadmus; Amphion reared its walls; the Sphinx, Œdipus, and the fatal combat of Eteocles and Polynices, figured in its story. It played a subordinate part in the history of Greece, until the times of Epaminondas, when by his genius it was raised to the first rank among the states of Hellas. But it fell with his death, and never recovered from the destructive siege by Alexander the Great, in 336 B. C.—A city of Egypt, on the Nile, called *No* in the Old Testament, and

in the Iliad celebrated for its 100 gates, and its vast military forces. Amun, or Ammon, was especially worshiped there. Among its ruins are the magnificent temples of Luxor and Karnak, on the east bank of the Nile.

Thermopylæ, a celebrated pass of Ancient Greece, leading from Thessaly into Locris, between Northern and Southern Greece. It lay between Mount Œta (celebrated mythologically as the mountain on which Hercules burnt himself to death) and a morass which fringed the Malic or Maliac Gulf; both the eastern and the western entrance to the pass approaching so close to the morass as to leave room for only a single carriage. In this pass, Leonidas, King of Sparta, was appointed to oppose the invading armies of Xerxes (480 B. C.). These were driven back with immense slaughter, in their repeated attempts to force the pass; till at last Ephialtes, a Malain, guided a body of Persians over the mountain, and thus enabled them to fall on the rear of the Greeks, who were all slain (Leonidas included), with the exception of one man. The pass derived its name from the hot springs, sacred to Hercules, by which it was distinguished.

Thirty Tyrants of Rome. The collective title given to a set of military usurpers who sprung up in different parts of the empire during the fifteen years (253–268 A. D.) occupied by the reigns of Valerian and Gallienus, and, amid the wretched confusion of the time, endeavored to establish themselves as independent princes. The name is borrowed from the Thirty Tyrants of Athens, but, in reality, historians can only reckon nineteen: Cyriades, Macrianus, Balista, Odenathus, and Zenobia, in the East; Postumus, Lollianus, Victorinus and his mother Victoria, Marius, and Tetricus, in the West; Ingenuus, Regillianus, and Aureolus, in Illyricum and the countries about the Danube; Saturninus, in Pontus; Trebellianus, in Isauria; Piso, in Thessaly; Valens, in Achæa; Æmilianus, in Egypt; and Celsus, in Africa.

Thirty Years' War (1618 to 1648), a war in Germany, at first a struggle between Roman Catholics and Protestants. Subsequently it became a struggle for political ascendancy in Europe. On the one side were Austria, nearly all the Roman Catholic princes of Germany, and Spain; on the other side were, at different times, the Protestant powers and France. The occasion of this war was found in the fact that Germany had been distracted ever since the Reformation by the mutual jealousy of Catholics, Lutherans, and Calvinists. Certain concessions had been made to the Protestants of Bohemia by Rudolph II. (1609), but these were withdrawn by his successor Matthias in 1614, and four years afterward the Bohemian Protestants were in rebellion. Count Thurn at the head of the insurgents repeatedly routed the imperial troops, compelling them to retire from Bohemia, and (1619) invaded the archduchy of Austria. Matthias having died in 1619, he was succeeded by Ferdinand II., who was a rigid Catholic, but the Protestants elected as their king, Frederick, Elector Palatine, who was a Protestant. Efforts at mediation having failed, the Catholic forces of Germany marched

against Frederick, who, with an army of Bohemians, Moravians, and Hungarians, kept the field till November 8, 1620, when he was totally routed at Weissenberg, near Prague, by Duke Maximilian of Bavaria. The Protestant cause was now crushed in Bohemia, and the people of that province were much embittered. The dominions of Frederick, the Palatinate of the Rhine included, were now conquered, the latter being occupied by Count Tilly, assisted by the Spaniards under Spinola. At the Diet of Ratisbon (March, 1623) Frederick was deprived of his territories, Duke Maximilian receiving the Palatinate. Ferdinand, whose succession to the throne of Bohemia was thus secured, sought foreign assistance, and a new period of war began. Christian IV. of Denmark, induced partly by religious zeal and partly by the hope of an acquisition of territory, came to the aid of his German co-religionists (1624), and being joined by Mansfeld and Christian of Brunswick, advanced into lower Saxony. There they were met by Wallenstein, Duke of Friedland, who in 1626 defeated Mansfeld at Dessau, while Tilly was also successful in driving Christian back to Denmark. In the peace of Lubeck which followed (May, 1629), Christian of Denmark received back all his occupied territory, and undertook not to meddle again in German affairs. After this second success, Ferdinand again roused his people by an edict which required restitution to the Roman Catholic Church of all church lands and property acquired by them since 1552.

To the assistance of the Protestants of Germany came Gustavus Adolphus, King of Sweden, who landed (1630) with a small army on the coast of Pomerania. Joined by numerous volunteers, and aided by French money, he advanced, and routed Tilly at Breitenfeld (or the battle of Leipsic, September, 1631), victoriously traversed the Main and the Rhine valleys, defeated Tilly again near the confluence of the Lech and the Danube (April, 1632), and entered Munich. Meanwhile the emperor sought the aid of Wallenstein, by whose ability and energy Gustavus was obliged to retire to Saxony, where he gained the great victory of Lutzen (November, 1632), but was himself mortally wounded in the battle. The war was now carried on by the Swedes under the chancellor Oxenstierna, till the rout of the Swedish forces at Nordlingen (September, 1634) again gave to the emperor the preponderating power in Germany. The Elector of Saxony, who had been an ally of Gustavus, now made peace at Prague (May, 1635), and within a few months the treaty was accepted by many of the German princes. The Swedes, however, thought it to their interest to continue the war, while France resolved to take a more active part in the conflict. Thus the last stage of the war was a contest of France and Sweden against Austria, in which the Swedish generals gained various successes over the imperial forces, while the French armies fought with varied fortunes in West Germany and on the Rhine. Meanwhile the emperor had died (1637), and had been succeeded by his son, Ferdinand III. The struggle still continued till, in 1646, the united armies of the French under the great generals Turenne and Conde, and the Swedes advanced through

Suabia and Bavaria. The combined forces of Sweden, Bavaria, and France were then about to advance on Austria, when the news reached the armies that the peace of Westphalia (1648) was concluded, and that the long struggle was ended.

Ticonderoga, a village in Essex County, N. Y., on Lake Champlain. Ticonderoga figured prominently during the colonial and revolutionary periods. In 1755 the French erected a fort here and named it Carrillon. Two years later Montcalm started from this place with 9,000 men and captured Fort William Henry on Lake George. In 1758 General Abercrombie endeavored to take the French fort, and was repulsed after losing 2,000 men; but in 1759 it fell into the hands of General Amherst together with Crown Point. Both were then enlarged and strengthened at a heavy expense. In 1775 the works were taken by Ethan Allen while weakly garrisoned. Two years later the fort surrendered to General Burgoyne, and after being dismantled was abandoned.

Tiers Etat (*te-arz a-tah'*). [Fr., the third estate.] This term was universally applied in France to the mass of the people under the old régime. Before the cities rose to wealth and influence, the nobility and clergy possessed the property of almost the whole country, and the people were subject to the most degrading humiliations. But as trade and commerce began to render men independent, and they were able to shake off their feudal bonds, the Tiers Etat gradually rose into importance; and at length the third estate, during the Revolution, may be said to have become the nation itself.

Tilsit, a town of Germany, in the Prussian province of East Prussia, on the river Niemen, about sixty miles northeast of Königsberg. It is celebrated for the Peace concluded in the town, in 1807, between the Emperor Napoleon, the Emperor of Russia, and the King of Prussia. The three monarchs met on a raft moored in the river. The population of the town in 1890 was 23,700.

Toleration, Act of, an Act of Parliament passed in the reign of William and Mary (1689), and confirmed by Anne, relieving all persons who dissented from the Church of England (except Roman Catholics and persons who denied the doctrines of the Trinity) from many of the disabilities under which they had been placed by the acts of former reigns. By the Act of Toleration, such persons were to be no longer prevented from assembling for religious worship according to their own forms, but they were to be required to take the oaths of allegiance and supremacy, and to subscribe a declaration against transubstantiation; and Dissenting ministers were to be also required to subscribe to certain of the Thirty-nine Articles. The benefits of the Act were subsequently (in 1813) extended to persons who deny the doctrine of the Trinity. Most of the remaining disabilities of Nonconformists have been removed by later legislation; and the disabilities of the Roman Catholics (which were continued by the Act of Toleration) were repealed in 1829 by the passing of the Catholic Emancipation Act.

Toltecs, a Mexican race who are supposed to have been supreme in Central America from

the Seventh to the Eleventh Centuries. They were completely obliterated by the Aztecs and Tezcucans, who held the country when the Spaniards first landed. The latter races were of a martial spirit, but they were indebted for their arts, their civilization, and their religion to their milder predecessors. The Toltecs present striking analogies to the Etruscans, and in a less degree to the Egyptians and Assyrians. They were great builders, and their religion was a mystic system of great complexity, intimately connected with the study of astronomy, and interpreted by a priesthood, who formed an exclusive caste.

Tory, a political party name of Irish origin, first used in England about 1679, applied originally to Irish Revolutionary Catholic outlaws, and then generally to those who refused to concur in the scheme to exclude James II. from the throne. The nickname, like its contemporaneous opposite, Whig, in coming into popular use became much less strict in its application, till at last it came simply to signify an adherent of that political party in the state who disapproved of change in the ancient constitution, and who supported the claims and authority of the king, church, and aristocracy, while their opponents, the Whigs were in favor of more or less radical changes, and supported the claims of the democracy. In modern times the term has to some extent been supplanted by Conservative.

Tournament, or **Tourney**, a common sport of the middle ages, in which parties of mounted knights encountered each other with lances and swords in order to display their skill in arms. Tournaments reached their full perfection in France in the Ninth and Tenth Centuries where they first received the form under which they are known to us. They were introduced into England soon after the Conquest by the Normans. *Jousts* were single combats between two knights, and at a tournament there would often be a number of jousts as well as combats between parties of knights. The place of combat was the *lists*, a large open place surrounded by ropes or a railing. Galleries were erected for the spectators, among whom were seated the ladies, the supreme judges of the tournaments. A knight taking part in a tournament generally carried some device emblematic of a lady's favor. Tournaments gradually went out with the decline of chivalry, and are rare, except in America, where they are a form of sport.

Tower of London. The most ancient, and historically the most interesting pile in the English metropolis; a mass of buildings on the north side of the Thames, immediately to the east of the ancient city walls, its ramparts and gates surrounded by a dry ditch in pentagonal shape; in outer circuit measuring 1,050 yards. Within this the whole of the buildings are encircled by a double line of walls and bulwarks, in some places forty feet high and twelve feet thick; the space between the walls being known as the outer ward, and the interior as the inner ward. The inner ward was formerly the royal quarter. The outer ward was the folk's quarter. The inner ward is defended by twelve massive and conspicuous towers, stationed at unequal distances, and possessing distinctive names and formations. In the center, rearing its head

proudly above them all, stands the main quadrangular building and great Norman keep, known as the White Tower. To the north are the barracks, and to the northwest the Church of St. Peter and Vincula. The entrance to the buildings is on the west side by the Lion's Gate.

For centuries the tower was a palace, a prison, a fortress, and a court of law. Here the Plantagenet kings held their gay tournaments, magnificent revels, and pompous religious ceremonies. Here also tragedy succeeded tragedy, and the innocent blood of many of England's bravest and most beautiful poured forth in a cruel stream. Wise statesmen, fair queens, child princes, noble warriors, and priests were slain, their only crimes, in many cases, being their rank, their patriotism, and their faith. "No sadder spot on earth," says Macaulay, of England. . . . "Death is there associated . . . with whatever is darkest in human nature and in human destiny, with the savage triumph of implacable enemies, with the inconstancy, the ingratitude, the cowardice of friends, with all the miseries of fallen greatness and of blighted fame."

The tower is now chiefly used as an arsenal, and has a small military garrison of the yeomen of the guard. The governorship is still a post of distinction.

Treaty, **A**, in public law, is an agreement of friendship, alliance, commerce, or navigation, entered into between two or more independent states. Treaties have been divided by publicists into *personal* and *real*, the difference being that the former relate exclusively to the persons of the contracting parties — e. g., treaties guaranteeing the throne to a particular sovereign and his family, and the latter are treaties for national objects, independent of the rulers of the state. While personal treaties expire with the death of the sovereign, or the extinction of his family, real treaties bind the contracting parties independently of any change in the sovereignty of the states. The constitution of each particular state must be looked to to determine in whom the power of negotiating and contracting treaties with foreign powers resides. In monarchies, whether absolute or constitutional, it is usually vested in the sovereign. In republics the chief magistrate, senate, or executive council is intrusted. The Constitution of the United States of America (Article II, Section 2) vests it in the President, with the advice and consent of the Senate. No special form of words is necessary for the validity of a treaty; but modern usage requires that an agreement which has originally been verbal should, as soon as possible, be committed to writing. Treaties of alliance may be offensive or defensive; in the former the ally engages to coöperate in hostilities against a specified power, or against any power with which the other may be at war; in the latter, the engagements of the ally extend only to a war of aggression commenced against the other contracting party.

Treaties, Coalitions, Conventions, and Leagues. The principal treaties of history are the following:

Adrianople, 1829, Adrianople restored by the Russians to Turkey.

Aix-La-Chapelle, 1748, celebrated treaty between Great Britain, France, Holland, Hungary, Spain, and Genoa. A number of previous treaties renewed and confirmed.

Aix-La-Chapelle, 1818, between the Allies and France. The latter pays 265,000,000 francs to the Allies.

Amiens, 1802, Treaty of Peace between Great Britain and Holland, France, and Spain.

Augsburg, League of 1686, between Holland and other European powers to enforce respect for the treaties of Munster and Nimeguen.

Baden, 1714, terminating the War of the Spanish succession between France and the Emperor.

Basle, 1795, treaties between France and Prussia and between France and Spain.

Berlin, decree, 1806, issued by Napoleon I., against the commerce of England.

Breda, 1667, treaty between England, Holland, France, and Denmark.

Breslau, 1742, between Maria Theresa of Austria and Frederick II. of Prussia.

Bretigny, 1360, treaty of peace that interrupted the Hundred Years' War between England and France.

Calmar Union, of, 1397, United Denmark, Sweden, and Norway under Queen Margaret of Denmark.

Cambrai, 1508, league against Venice, comprising the Pope, the Emperor, and the Kings of France and Spain.

Cambrai, Peace of, 1529, between Francis I. and Charles V.

Campo Formio, Peace of, 1797, between France and Austria.

Carlowitz, Peace of, 1699, between Turkey and Austria, Poland and Venice. Humiliating concessions made by Austria.

Carlsbad, Congress of, 1819, held by the German powers to protest against the progress of free institutions and popular rights.

Coalitions Against France, 1792, 1799, 1805, 1806, 1809, 1813, led by England and entered into by the great powers of the Continent to break down French influence in Europe.

Concordat, 1801, between Napoleon I. and Pius VII., whereby the former was made in effect head of the Gallican Church.

Constance, 1183, between Frederick Barbarossa and the Lombard cities.

Copenhagen, 1660, treaty between Denmark and Sweden.

Fontainebleau, 1807, treaty between Napoleon and the royal family of Spain.

Frankfort, 1871, conclusion of the preliminary treaty of Versailles.

Gastein, Convention of, 1865, between Prussia and Austria.

Ghent, 1814, treaty of Peace between United States and England, closing War of 1812.

Hague, 1659, between England, France, and Holland, with a view to preserve the equilibrium of Northern Europe.

Hamburg, 1241, league with Subeck, giving rise to the Hansatic League.

Holy Alliance, 1815, a league between the Emperors of Russia and Austria and the King of Prussia, by which they ostensibly bound themselves to Christian principles in political matters.

Hubertsburg, 1763, peace between Austria, Prussia, and Saxony.

Jay's Treaty, 1794, between the United States and Great Britain.

Kiel, 1814, between Denmark, Sweden, and England, Norway and Sweden united.

Kutchuk-Kainardji, 1774, between Turkey and Russia.

League, Catholic, 1576, formed to prevent the accession of Henry IV. of France.

London, 1840, quadruple treaty between Great Britain, Austria, Prussia, and Russia on the one hand, and Turkey, touching the states of Egypt.

Luneville, 1801, between France and Austria and the German Empire.

Madrid, 1526, treaty between Charles V. and Francis I.

Munster, 1648, between France and the Emperor of Sweden. By this peace, the principle of a balance of power in Europe was first recognized.

Nankin, 1842, ended the opium war between Great Britain and China.

Nantes, Edict of, 1598, by which Henry IV. of France granted toleration to the Huguenots.

Nystadt, 1721, closed the war between Sweden and Russia.

Paris, Treaties of: 1763, terminating the Seven Years' War, in Austria, the French and Indian War. **1783**, terminating the American Revolutionary War. **1814-15**, between France and the Coalition. **1856**, terminating the Crimean War. **1898**, terminating the Spanish-American War.

Partition of Poland:

1772, secret treaty between Russia and Prussia at St. Petersburg.

1795, between Russia, Austria, and Prussia.

Passau, 1552, securing the liberties of German Lutherans.

Perry's Treaty, 1854, commercial treaty between United States and Japan.

Portsmouth, 1905, treaty between Japan and Russia, closing the Russo-Japanese War.

Prague, 1866, peace between Prussia and Austria.

Presburg, 1805, peace between France and Austria; ancient states of Venice ceded to Italy, and independence of Switzerland stipulated.

Pretoria, 1902, terminated the Boer War between Great Britain and the Transvaal.

Pyrenees, 1659, between France and Spain; mutual concessions of territory made.

Quadruple Alliance, 1718, celebrated treaty between Great Britain, France, the Emperor, and Holland, for the purpose of guaranteeing the succession of the reigning families in Great Britain and France, and settling the partition of the Spanish Monarchy.

Rastadt, 1714, between France and Austria.

Rastadt, Congress of, 1797, between France and the Empire, established a general peace with the Germanic powers.

Ratisbon, 1806, secession of the Germanic princes from the Empire, to the cause of Napoleon, forming the—

Rhine Confederation of, 1806.

Ryswick, 1697, peace between France and the allied powers, closing the war of the "Peach Note."

St. Clair-Sur-Epte, 911, terminated the war between the Norse under Rolla and Charles the Simple of France.

Saint Germain, 1570, peace between the Catholics and Huguenots.

San Stefano, 1878, this treaty, supplemented by the Congress of Berlin closed the Russian-Turkish War.

Schonbrunn, 1809, treaty between France and Austria.

Shimonoseki, 1895, closed the war between Japanese and China.

Thorn, 1466, settled the terms of the Polish conquest of Western Prussia.

Tientsin, 1858, between China and each of the nations of Great Britain, France, Russia, and the United States.

Tilsit, 1807, treaty concluded between France and Russia, whereby Napoleon restored to the Prussian Monarch one-half of his territories, and Russia recognized the Confederates of the Rhine, and the elevation of Napoleon's brothers, Joseph, Louis, and Jerome to the thrones of Naples, Holland, and Westphalia.

Tolentino, 1797, between the Pope and the French Republic.

Triple Alliance, 1668, the celebrated alliance between the States-General and England against France for the protection of the Spanish Netherlands. Sweden afterward joined the league.

Triple Alliance, 1879, between Austria, Germany, and Italy.

Troyes, 1420, between England, France, and Burgundy, whereby Henry V. of England succeeded to the throne of France.

Ulm, 1620, by which Frederick V. lost Bohemia.

Utrecht, 1713, terminated the wars of Queen Anne of England, and secured the Protestant succession in England, and enlarged British colonization in America.

Utrecht, Union of, 1579, foundations of the Dutch Republic laid.

Valencay, 1813, between Napoleon and Ferdinand VII. of Spain, whereby the latter restored full possession of his kingdom upon agreeing to maintain its integrity.

Verdun, Contract of, 843, concluded the war between Lothaire, Louis the German, and Charles the Bald, and settled their respective imperial dominions after the death of their father, Louis the Pious.

Verona, Congress of, 1822, held by the great powers to adjust Spanish and Grecian disturbances.

Versailles, 1783, between Great Britain and the United States at close of American Revolution; the treaty was signed in Paris. **1783**, between Great Britain, France, and Spain. **1871**, between France and Germany: William I., proclaimed Emperor of Germany.

Vienna, 1725, treaty between the Emperor of Germany and the King of Spain, settling the sovereignty

over certain parts of the Spanish dominions. **1731**, treaty of alliance between Germany, Great Britain, and Holland, by which the Pragmatic Sanction was granted, and the Spanish succession settled. **1738**, treaty of peace between Germany and France; Lorraine ceded to France, and France guaranteed the Pragmatic sanction. **1809**, treaty of peace between Napoleon and Francis I. of Austria. Austria ceded to France the Illyrian Provinces. **1815**, treaty between Great Britain, Austria, Russia, and Prussia, confirming the treaty of Chaumont. **1815**, treaty between the Low Countries, and Great Britain, Russia, Austria, and Prussia, agreeing to the enlargement of the Dutch territories, and vesting the sovereignty in the house of Orange. **1815**, Federative constitution of Germany signed.

Warsaw, 1683, alliance between Austria and Poland against Turkey, in pursuance of which John Sobieski assisted in raising the siege of Vienna. **1768**, treaty between Russia and Poland.

Washington, 1842, Ashburton treaty defined the northwestern boundary between the United States and Canada.

Washington, 1871, between Great Britain and the United States to adjust the Alabama claims.

Westphalia, 1648, treaty of peace between France, Germany, and Sweden, terminating the Thirty Years' War.

Worms, Concordat of, 1122, between the Emperor and the Pope, closed the long strife called the War of Investitures.

Worms, Diet of, 1521, imperial conclave before whom Luther was summoned and presented.

Zurich, 1859, closed the dispute between Austria and France and Sardinia.

Tribune (*tribūnus*), in Roman antiquity, originally an officer connected with a tribe, or who represented a tribe for certain purposes; especially, an officer or magistrate chosen by the people to protect them from the oppression of the patricians or nobles, and to defend their liberties against any attempts that might be made upon them by the senate and consuls. These magistrates were at first two, but their number was increased to five, and ultimately to ten. This last number appears to have remained unaltered, down to the end of the empire. There were also military tribunes, officers of the army, each of whom commanded a division or legion, and also other officers called tribunes; as, *tribunes of the treasury*, of the horse, etc.

Triumvirate, a coalition of three men in office or authority; specifically applied to two great coalitions of the three most powerful individuals in the Roman Empire for the time being. The first of these was effected in the year 60 B. C., between Julius Cæsar, Pompey, and Crassus, who pledged themselves to support each other with all their influence. This coalition was broken by the fall of Crassus at Carrhæ in Mesopotamia; soon after which the civil war broke out, which ended in the death of Pompey, and establishment of Julius Cæsar as perpetual dictator. After his murder, 44 B. C., the civil war again broke out; and after the battle of Mutina, 43 B. C., Antony, Octavius, and Lepidus coalesced, thus forming the second triumvirate. They divided the provinces of the empire; Octavius taking the West, Lepidus, Italy, and Antony, the East.

Troy, or Ilium (Greek, *Troia* or *Ilion*), an ancient city in the Troad, a territory in the northwest of Asia Minor, south of the western extremity of the Hellespont, rendered famous by Homer's epic of the Iliad. The region is for the most part mountainous, being intersected by Mount Ida and its branches. There have been various opinions regarding the site of the Homeric city, the most probable of which places

ancient Troy at the head of the plain bounded by the modern river Mendereh, supposed to be the Scamander of Homer, and the Dombrek, probably the Homeric Simois. The Ilium of history was founded about 700 B. C. by Æolic Greeks, and was regarded as occupying the site of the ancient city, but this is doubtful; it never became a place of much importance. The ancient and legendary city, according to the Homeric story, reached its highest splendor when Priam was king; but the abduction of Helen, wife of Menelaus, King of Sparta, by Paris, one of Priam's sons, brought about its destruction. To revenge this outrage, all the Greek chiefs afterwards famous in history, banded themselves against the Trojans and their allies, and went against Troy with a great fleet. The first nine years of the war were spent by the Greeks in driving the Trojans and their allies within the walls of the capital. The tenth year brought about a quarrel between Achilles, the bravest of the Greeks, and Agamemnon, the Greek commander-in-chief, which proved for a time disastrous to their party, and which forms the subject of the Iliad. In the end, the city was taken by means of a large hollow wooden horse, in which a number of the bravest of the Greek heroes concealed themselves, while the rest retired to their ships. Thinking that the Greeks had given up the siege, the Trojans incautiously drew the horse within the city, and gave themselves up to revelry. The Greeks within the horse issued from their concealment, and being joined by their companions without the walls, Troy was taken and utterly destroyed. This is said to have occurred about 1184 B. C. Not only has the site of the ancient city been disputed, but the legends connected with it are held by some scholars to have no historical foundation; nor has this view been altered by the excavations of Schliemann, and his discovery of the remains of a prehistoric city or cities at Hissarlik, the site of the historic Ilium.

Tudor, the name of one of the royal families of England allied to the race of Plantagenets. The line embraced five sovereigns, and commenced in 1485 with Henry Tudor, Earl of Richmond, the grandson by his wife, of Sir Owen Tudor, a Welsh knight of distinction, the widow of Henry V., and who, after the battle of Bosworth Field, was proclaimed king by the title of Henry VII. From him the crown descended to his son Henry VIII., whose son Edward VI. succeeded, and after him his two sisters, Mary and Elizabeth; the Tudor dynasty expiring with the death of the latter in 1603, when the house of Stuart succeeded.

Tulleries (*tu'e-le-riz*), the residence of the French monarchs; on the right bank of the Seine, in Paris. Catharine de Medici, wife of Henry II., began the building (1564); Henry IV. extended it, and founded the old gallery (1600); and Louis XIV. enlarged it (1654), and completed that gallery. The side toward the Louvre consisted of five pavilions, and four ranges of buildings; the other side had only three pavilions. During the revolution of 1830 the palace was sacked. It was restored by Louis Philippe to its former splendor, but in 1848 it was again pillaged. The Tuileries then

became a hospital for wounded soldiers, a picture gallery, and the home of Louis Napoleon in 1851. On May 23, 1871, it was almost totally destroyed by fire (the work of the communists), and the remaining portions were removed in the year 1883.

Turkish, or Ottoman, Empire comprises the territories in Europe, Asia, and Africa more or less under the sway of the Turkish sultan. In Europe, besides the immediate provinces in the Balkan Peninsula, are Bulgaria (with Eastern Roumelia), and Bosnia, Herzegovina, etc., held by Austria; in Asia, Asia Minor, Syria, including Palestine, Mesopotamia, part of Arabia, Candia, and others of the islands of the archipelago; in Africa, Egypt, over which there is a nominal suzerainty, and the vilayet of Tripoli. Formerly the empire was much more extensive, even in recent times comprising Greece, Rumania, Servia, Bessarabia, Tunis, etc. We shall here give a brief sketch of the history of the Ottoman Empire, referring to the article *Turkey* for information regarding the geography, constitution, etc., of Turkey proper.

The Ottoman Turks came originally from the region of the Altai Mountains, in Central Asia, and in the Sixth Century A. D., pushed onward to the west in connection with other Turkish tribes. Early in the Eighth Century they came in contact with the Saracens, from whom they took their religion, and of whom they were first the slaves and mercenaries, and finally the successors in the caliphate. In the Thirteenth Century they appeared as allies of the Seljukian Turks against the Mongols, and for their aid received a grant of lands from the Seljuk sultan of Iconium in Asia Minor. Their leader, Othman or Osman, of the race of Oguzian Turkomans, became the most powerful emir of Western Asia, and after the death of the Seljuk sultan of Iconium, in the year 1300, he proclaimed himself sultan. He died in 1326. Thus was founded upon the ruins of the Saracen, Seljuk, and Mongol power the Empire of the Osman or Ottoman Turks in Asia; and after Osman, the courage, policy, and enterprise of eight great princes, whom the dignity of caliph placed in possession of the standard of the Prophet, and who were animated by religious fanaticism and a passion for military glory, raised it to the rank of the first military power in both Europe and Asia (1300-1566).

The first of them was Orkhan, son of Osman. He subdued all Asia Minor to the Hellespont, took the title of *Padishah*, and became son-in-law to the Greek Emperor Cantacuzenus. Orkhan's son, Soliman, first invaded Europe in 1355. He fortified Gallipoli and Sestos, and thereby held possession of the straits which separate the two continents. In 1360 Orkhan's second son and successor, Amurath I., took Adrianople, which became the seat of the Empire in Europe, conquered Macedonia, Albania, and Servia, and defeated a great Slav confederation under the Bosnian King Stephen at Kossova in 1389. After him Bajazet, surnamed Ilderim (*Lightning*), invaded Thessaly, and also advanced towards Constantinople. In 1396 he defeated the Western Christians under Sigismund, King of Hungary, at Nicopolis, in Bul-

garia; but at Angora, in 1402, he was himself conquered and taken prisoner by Timour, who divided the provinces between the sons of Bajazet. Finally, in 1413, the fourth son of Bajazet, Mohammed I., seated himself upon the undivided throne of Osman. In 1415 his victorious troops reached Salzburg and invaded Bavaria. He conquered the Venetians at Thessalonica in 1420; and his celebrated grand-vizier Ibrahim created a Turkish navy. Mohammed was succeeded by his son, Amurath II., who defeated Ladislaus, King of Hungary and Poland, at Varna, in 1444. Mohammed II., the son of Amurath, completed the work of conquest (1451-81). He attacked Constantinople, which was taken May 29, 1453, and the Byzantine Empire came finally to an end. Since that time the city has been the seat of the Sublime Porte or Turkish Government. Mohammed added Servia, Bosnia, Albania, and Greece to the Ottoman Empire, and threatened Italy, which, however, was freed from danger by his death at Otranto in 1480. His grandson, Selim I., who had dethroned and murdered his father in 1517, conquered Egypt and Syria. Under Soliman II., the *Magnificent*, who reigned between 1519 and 1566, the Ottoman Empire reached the highest pitch of power and splendor. In 1522 he took Rhodes from the Knights of St. John, and by the victory of Mohacz, in 1526, subdued half of Hungary. He exacted a tribute from Moldavia, made Bagdad, Mesopotamia, and Georgia subject to him, and threatened to overrun Germany, but was checked before the walls of Vienna (1529). Soliman had as an opponent Charles V. of Germany, as an ally Francis II. of France. From his time the race of Osman degenerated and the power of the Porte declined.

In the latter part of the Sixteenth Century, and most of the Seventeenth Century, the chief wars were with Venice and with Austria. The battle of Lepanto (1571), in which the Ottoman fleet was overthrown by the combined fleets of Venice and Spain, was the first great Ottoman reverse at sea; and the battle of St. Gothard (1664), near Vienna, in which Montecuculi defeated the Vizier Kiuprili, the first great Ottoman reverse on land. In 1683 Vienna was besieged by the Turks, but was relieved by John Sobieski and Charles of Lorraine; in 1687 the Turks were again defeated at Mohacz, and in 1697 (by Prince Eugene), at Szent. Then followed the Treaty of Carlowitz in 1699, by which Mustapha II. agreed to renounce his claims upon Transylvania and a large part of Hungary, to give up the Morea to the Venetians, to restore Podolia and the Ukraine to Poland, and to leave Azov to the Russians. Eugene's subsequent victories at Peterwardein and Belgrade obliged the Porte to give up, by the Treaty of Passarowitz in 1718, Temeswar, Belgrade, with a part of Servia and Walachia; but the Turks on the other hand took the Morea from Venice, and by the Treaty of Belgrade in 1739 regained Belgrade, Servia, and Little Wallachia, while for a time they also regained Azov.

Russia, which had been making steady advances under Peter the Great and subsequently, now became the great opponent of Turkey. In

the middle of the Eighteenth Century the Ottoman Empire still embraced a large part of Southern Russia. The victories of Catharine II.'s general Romanzoff in the war between 1768 and 1774 determined the political superiority of Russia, and at the Peace of Kutchuk-Kainarji, in 1774, Abdul-Hamid was obliged to renounce his sovereignty over the Crimea, to yield to Russia the country between the Bog and the Dnieper, with Kinburn and Azov, and to open his seas to the Russian merchant ships. By the Peace of Jassy, 1792, which closed the war of 1787-91, Russia retained Taurida and the country between the Bog and the Dniester, together with Otechakov, and gained some accessions in the Caucasus. In the long series of wars which followed the French revolution the Ottoman Empire first found herself opposed to France, in consequence of Bonaparte's campaign in Egypt, and finally to Russia, who demanded a more distinct recognition of her protectorate over the Christians, and to whom, by the Peace of Bucharest, May 28, 1812, she ceded that part of Moldavia and Bessarabia which lies beyond the Pruth. In 1817, Mahmud II. was obliged to give up the principal mouth of the Danube to Russia. Further disputes ended in the Porte making further concessions, which tended towards loosening the connection of Servia, Moldavia, and Wallachia with Turkey. In 1821, broke out the war of Greek independence. The remonstrances of Britain, France, and Russia, against the cruelties with which the war against the Greeks was carried on, proving of no avail, those powers attacked and destroyed the fleet of Mahmud at Navarino (1827). In 1826, the massacre of the Janizaries took place at Constantinople, after a revolt. In 1828-29, the Russians crossed the Balkans and took Adrianople, the war being terminated by the Peace of Adrianople (1829). In that year Turkey had to recognize the independence of Greece. In 1831-33, Mehemet Ali, nominally Pasha of Egypt, but real ruler both of that and Syria, levied war against his sovereign in 1833, and threatened Constantinople; when the Russians, who had been called on for their aid by the sultan, forced the invaders to desist. In 1840 Mehemet Ali again rose against his sovereign; but through the active intervention of Great Britain, Austria, and Russia, was compelled to evacuate Syria, though he was, in recompense, recognized as hereditary viceroy of Egypt.

The next important event in the history of the Ottoman Empire was the war with Russia, in which Turkey became involved in 1853, and in which she was joined by England and France in the following year. This war, known as the Crimean War, speedily terminated with the defeat of Russia, and the conclusion of a treaty at Paris on the 30th of March, 1856, by which the influence of Russia in Turkey was greatly reduced. The principal articles were the abolition of the Russian protectorate over the Danubian principalities (Moldavia and Wallachia), united in 1861 as the principality of Roumania), the rectification of the frontier between Russia and Turkey, and the cession of part of Bessarabia to the latter power.

In 1875 the people of Herzegovina, unable

to endure any longer the misgovernment of the Turks, broke into rebellion. A year later the Servians and Montenegrins likewise took up arms, and though the former were unsuccessful and obliged to abandon the war, the Montenegrins still held out. Meantime the great powers of Europe were pressing reforms on Turkey, and at the end of 1876 a conference met at Constantinople, with the view of making a fresh settlement of the relations between her and her Christian provinces. All the recommendations of the conference were, however, rejected by Turkey; and in April following, Russia, who had been coming more and more prominently forward as the champion of the oppressed provinces, and had for months been massing troops on both the Asiatic and the European frontier of Turkey, issued a warlike manifesto and commenced hostile operations in both parts of the Turkish Empire. She was immediately joined by Roumania, who on the 22d of May (1877) declared her independence. The progress of the Russians was at first rapid; but the Turks offered an obstinate resistance. After the fall of Kars, however, November 18th, and the fall of Plevna, December 10th, the Turkish resistance completely collapsed, and on the 3d of March, 1878, Turkey was compelled to agree to the Treaty of San Stefano, in which she accepted the terms of Russia. The provisions of this treaty were, however, considerably modified by the Treaty of Berlin, concluded on the 13th of July following, by which Roumania, Servia, and Montenegro were declared independent; Roumanian Bessarabia was ceded to Russia; Austria was empowered to occupy Bosnia and Herzegovina; and Bulgaria was erected into a principality.

The main events in the history of the Ottoman Empire since the conclusion of the Treaty of Berlin are the French invasion of Tunis in 1881, which soon after was formally placed under the protectorate of the French; the treaty with Greece, executed under pressure of the great powers in 1881, by which Turkey ceded to Greece almost the whole of Thessaly and a strip of Epirus; the occupation of Egypt by Great Britain in 1882; and the revolution at Philippopolis in 1885, when the government of Eastern Roumelia was overthrown, and the union of that province with Bulgaria proclaimed. The results of the revolution were recognized by an imperial firman in 1886, and Eastern Roumelia has since for all practical purposes formed part of Bulgaria.

In 1903, serious revolts broke out in Bulgaria and Albania, attended with massacres and atrocities. A Macedonian revolution was also threatened.

Tuscany (Italian, *Toscana*), formerly a grand-duchy, now a department of Italy; area, 9,289 square miles; population, 2,340,100. The chain of the Northern Apennines forms a considerable portion of its northern boundary, the sea being its boundary on the west. The principal river is the Arno. Cereals cover a large area, and vineyards, olive-yards, and orchards are numerous. The manufacture of silk is considerable. The marble of Tuscany, especially that of Siena, is well known. Tuscany

corresponds to the ancient Etruria, which was, however, of wider extent. After the fall of the Western Empire (476) it passed successively into the hands of the Ostrogoths, Byzantine Greeks, and Lombards. Charlemagne made it a Frankish province, and it was governed by marquises or dukes until the Twelfth and Thirteenth Centuries, when it became broken up into a number of small republics, four of which were Florence, Pisa, Siena, and Lucca. From the first, Florence occupied the leading place, and it gradually extended its territory. In 1569 Pope Pius I. granted to Cosmo I. the title of Grand-duke of Tuscany, and this position was retained, with interruptions, by the celebrated Medici family, until 1737, when it passed to Francis Stephen, Duke of Lorraine. In 1859, when under his descendant, the Grand-duke Leopold, it was annexed to Sardinia by a popular vote, and in 1861 became, with Sardinia, part of the kingdom of Italy.

United States of America. When first visited by Europeans, the country now comprised within the United States was exclusively inhabited by the race commonly called American Indians. According to the Scandinavian sagas, Leif, a Norwegian, sailed about 1001 from Iceland for Greenland, but was driven southward by storms till he reached a country called Vinland, which is supposed to have been Rhode Island or some other part of the coast of New England. In 1497, about five years after the discovery of America by Columbus, John Cabot sailed westward from Bristol, England, and on June 24th discovered land (Labrador), along which he coasted to the southward nearly 1,000 miles. In 1498, his son, Sebastian Cabot, sailed from the same port in search of a north-west passage to China; but finding the ice impenetrable, he turned to the south and coasted as far as Chesapeake Bay. In 1513, the Spaniard Ponce de Leon discovered Florida. In 1539, took place the expedition of the Spaniard De Soto, who, in the course of two years, penetrated overland from Tampa Bay on the west coast of Florida to a point 200 miles beyond the Mississippi. In 1565, the Spaniards founded St. Augustine, the first permanent settlement in the United States. In 1585, an expedition sent by Sir Walter Raleigh made a settlement on Roanoke Island, N. C., which failed. In 1607, the English founded Jamestown on James River, Virginia, their first permanent settlement. The master spirit of this enterprise was Captain John Smith. Plymouth, Mass., was founded in 1620 by the "Pilgrim fathers of New England," a body of Puritans led by John Carver and others, who sailed from England in the "Mayflower." Salem was settled by John Endicott in 1628. In 1630, John Winthrop settled Boston. In 1692, Plymouth Colony was united to Massachusetts. Portsmouth and Dover in New Hampshire were settled in 1623. The first permanent English settlements in Maine were made about the same time. These settlements ultimately fell under the jurisdiction of Massachusetts. Connecticut was colonized in 1635-36 by emigrants from Massachusetts, who settled at Hartford, Windsor, and Wethersfield. Rhode Island was first settled at Providence in 1636 by

Roger Williams. In 1623, permanent settlements were made by the Dutch at Fort Orange (now Albany) and at New Amsterdam on the present site of New York. The Swedes settled on the Delaware in 1638, and were expelled in 1655 by a Dutch army. The English seized New Amsterdam in 1664, and with it the whole of New Netherland, which they named New York from the Duke of York, to whom it had been granted by Charles II. New Jersey at this time acquired its distinctive name. In 1681 the territory west of the Delaware was granted to William Penn, who colonized it chiefly with Friends or Quakers, and founded Philadelphia in 1682. Maryland was settled in 1634 by Roman Catholics sent out by Lord Baltimore. The first permanent settlement in North Carolina appears to have been made about 1663, on Albemarle Sound, by emigrants from Virginia. The first permanent settlement in South Carolina was made in 1670 by colonists from England on the Ashley River, near the site of Charleston, which began to be settled about the same time. Georgia was settled by General James Oglethorpe, who, in 1733, founded Savannah. The principal Indian wars were those of 1622 and 1644-46 in Virginia; the Pequot War (1636-37) and King Philip's War (1675-76) in New England; that with the Corees and Tuscaroras in 1711, and that with the Yemasseees in 1715, in the Carolinas. Toward the close of the Seventeenth Century the Indians on the northern and western frontiers began to receive aid from the French in Canada, who, whenever their mother country was at war with England, carried on hostilities with the English colonies, and frequently, accompanied by their savage allies, made destructive and bloody inroads into New England and New York. The first conflict with the French, known as King William's War lasted seven years, terminating in 1697. Queen Anne's War (1702-13) was marked by the conquest from the French in 1710 of Acadia (Nova Scotia). The principal event of King George's War was the capture (1745) of Louisburg, the chief stronghold of the French in America, which was restored to the French at the close of the war (1748). Disputes having arisen with the French on the Ohio, an expedition under Washington, was sent toward that river, which, on May 28, 1754, cut to pieces a French detachment under Jumonville, who was slain. This affair began the long contest known as the French and Indian War. Among its prominent events were Braddock's defeat (1755) near Fort Duquesne, when Washington distinguished himself by covering the retreat; the capture by the French of Oswego (1756) and Fort William Henry, at the head of Lake George (1757); and the taking of Louisburg after a siege of seven weeks by Generals Amherst and Wolfe, and the repulse of an attack on Ticonderoga made by a powerful army under General Abercrombie and Lord Howe (1758). The crowning exploit of the war was the taking of Quebec (1759) by an army led by General Wolfe. In 1763, by the Treaty of Paris, Canada and its dependencies were formally ceded to Great Britain. The transfer from the French to the English of the posts between the Great

Lakes and the Ohio led (1763) to a war with the Indian tribes, of which the master spirit was Pontiac. The sentiment of political freedom was strongly developed among the colonists, and republican ideas and feelings transmitted from the period of the commonwealth in England were widely diffused, though at the same time a warm attachment existed for the mother country and a devoted loyalty to the Crown. The first opposition was aroused by an act of parliament in 1761, authorizing sheriffs and officers of the customs to use "writs of assistance" or general search warrants. These writs were resisted in Massachusetts, where the rights of the people were defended by James Otis. In 1765 the Stamp Act was passed, which declared that every document used in trade or legal proceedings, to be valid, must have affixed to it a tax stamp of the minimum value of one shilling, and increasing indefinitely according to the value of the writing. To enforce the act parliament authorized the ministry to send troops, for whom the colonies were required to provide quarters and various necessities. These acts created great excitement and indignation in America. Everywhere the people determined not to use the stamps, and associations calling themselves "sons of liberty," were organized in opposition to the act and for the general defense of the rights of the colonies. In October a congress of delegates from nine colonies assembled in New York on the invitation of Massachusetts, and drew up a declaration of rights, a memorial to parliament, and a petition to the king, in which they claimed the right of being taxed only by their own representatives. The merchants of the principal cities agreed to purchase no more goods in England till the act was repealed, and the people pledged themselves to use no articles of English manufacture. The Stamp Act was repealed in 1766, but the next year parliament passed an act imposing duties on paper, glass, tea, and some other articles imported into the colonies. The colonies in return revived with renewed vigor their non-importation associations. Massachusetts, and especially Boston, was foremost in the opposition. A military force under General Gage was sent to occupy the town in 1768. A collision took place March 5, 1770, between the soldiers and a crowd of citizens, in which three of the latter were killed and eight wounded. The "Boston Massacre," as this was called, caused great excitement throughout the country. In April, 1770, the government removed all the duties except that of threepence a pound on tea. Combinations were now formed against the importation and use of tea, and measures taken to prevent its being either landed or sold. At Boston, December 16, 1773, a band of men disguised as Indians went on board three tea ships which had recently arrived from England, and emptied the tea into the water. Parliament thereupon, in 1774, passed the "Boston Port Bill," which closed that port to all commerce, and transferred the board of customs to Marblehead and the seat of colonial government to Salem. Other repressive bills were also passed. On September 5th the "Old Continental Congress" met in Philadelphia, in which all the

colonies were represented except Georgia. A declaration of rights was agreed upon, in which was set forth the claim of the colonists as British subjects to participate in making their own laws and imposing their own taxes, and to the rights of trial by a jury of the vicinage, of holding public meetings, and of petitioning for redress of grievances. The maintenance of a standing army in the colonies without their consent was protested against, as were eleven acts passed since the accession of George III. in violation of colonial rights and privileges. The first conflict occurred, and the first blood of the Revolution was shed, on April 19, 1775. (See Concord, and Lexington.) On the night of the day following the action the king's governor and army found themselves closely beleaguered in Boston. The people everywhere rose in arms, and before the close of summer the power of all the royal governors from Massachusetts to Georgia was at an end. Volunteer expeditions from Vermont and Connecticut, led by Ethan Allen and Benedict Arnold, seized the important fortresses of Ticonderoga (May 10th) and Crown Point (May 12th). The second Continental Congress assembled on May 10th at Philadelphia, in the State house, now known as Independence Hall. It sent another petition to the king, denying any intention of separation from England, and asking only for redress of grievances; but measures were taken to raise an army, to equip a navy, and to procure arms and ammunition. The forces before Boston were adopted as the Continental army, and Washington was nominated and unanimously chosen (June 15th) as commander-in-chief. Before he could reach the seat of war the battle of Bunker Hill had been fought, June 17th. He regularly beleaguered Boston till March 17, 1776, when the British evacuated it and sailed for Halifax. Meantime, an invasion of Canada under General Montgomery resulted in the capture of Montreal and a repulse from Quebec, which was attacked December 31, 1775, by parties led by Montgomery and Arnold. On June 28, 1776, a British fleet attacked Charleston, S. C., and was repulsed with great loss by a small force in Fort Sullivan (afterward Fort Moultrie), commanded by Colonel Moultrie. On July 4th the Declaration of Independence written by Jefferson, was adopted, and in this document the colonies were first designated the "United States of America." Soon after the evacuation of Boston by the British, Washington transferred his army to New York. On June 29th the late garrison of Boston arrived from Halifax, and soon after other British troops from Europe and from the South. The campaign began on Long Island, where, on August 27th, the Americans were defeated with heavy loss, and forced to abandon that island, and soon after the city of New York. Having fought another unsuccessful battle at White Plains (October 28th), Washington early in December was compelled to retreat beyond the Delaware at the head of but 3,000 men. About the same time the British seized and held the island of Rhode Island. On the night of December 25th Washington crossed the Delaware in open boats with 2,400 men, and falling upon the British forces at Trenton, captured about 1,000 Hessians.

On January 3, 1777, he defeated the enemy again at Princeton, taking 230 prisoners. A movement threatening Philadelphia called Washington south. In the battle on the Brandywine, September 11th, he was outnumbered and compelled to retreat with a loss of nearly 1,000 men. On the 26th, the British took possession of Philadelphia without opposition. On October 4th, Washington attacked the British at Germantown, seven miles from Philadelphia, but was repulsed with heavy loss; and soon afterward both armies went into winter quarters, the Americans at Valley Forge, on the Schuylkill, twenty miles from Philadelphia. Meantime, a British army, 7,500 strong, besides Indians, commanded by General Burgoyne, advanced from Canada by Lake Champlain, and took Ticonderoga, Fort Independence, and Whitehall. Strong detachments, which were sent to Bennington, Vt., to destroy a collection of stores, were met there (August 16th) and defeated with the loss of about 200 killed and 600 prisoners by the Vermont and New Hampshire militia led by General Stark. Burgoyne was encountered by General Gates, to whom, after the battles of Stillwater (September 19th) and Saratoga (October 7th), he capitulated at Saratoga (October 17th) with his whole army. The consequences of this victory were apparent in the signing, in February, 1778, of treaties of alliance and of amity and commerce with France. The British evacuated Philadelphia in the night of June 17th with more than 17,000 men. Washington pursued, and on the 28th the two armies engaged in battle on the plains of Monmouth, near Freehold, N. J. The Americans remained masters of the field, while the British retreated to New York. An attempt made in August, with the assistance of the French fleet under Count d'Estaing, to drive the British from Rhode Island, proved a failure. On December 29th the British, having defeated the American forces at Savannah, took possession of the city. In September, 1779, Savannah was besieged by a French and American force, and on October 9th an assault was made upon it, which was repulsed with a loss to the allies of nearly 800 men, among them Casimir Pulaski. About this time the British evacuated Rhode Island, to concentrate their forces at New York. One of the most brilliant achievements of the war was the storming (July 16, 1779) of Stony Point on the Hudson by General Wayne. On the ocean, which swarmed with American privateers, Paul Jones chiefly distinguished himself. Charleston, S. C., after a feeble defense of several weeks, was surrendered to the British on May 12, 1780, by General Lincoln. The rest of South Carolina nominally submitted to the royal authority; but a guerilla warfare was kept up by Sumter, Marion, and other partisan leaders. Congress sent General Gates to recover South Carolina. On his first encounter with Cornwallis at Camden, August 16th, he was routed with great loss, and with the remnant of his force fled to North Carolina. Early in September Cornwallis marched into North Carolina, where, on October 7th, at King's Mountain, a detachment from his army was totally defeated by 900 militia, who killed and captured upward of 1,100 of the

enemy. Cornwallis withdrew to South Carolina. On July 10th, a French fleet arrived at Newport, bringing the Count de Rochambeau and 6,000 soldiers. In September a treasonable plot schemed by Arnold was discovered. The principal military operations of 1781 were in the south, where Greene had superseded Gates. At the Cowpens, S. C., on January 17th, General Morgan won a brilliant victory over the British under Colonel Tarleton. On March 15th, the British gained a victory at Guilford Court House, N. C., but drew from it no advantage; and on September 8th occurred the drawn battle of Eutaw Springs, which nearly terminated the war in South Carolina. Cornwallis, having advanced into Virginia in April, was opposed by Lafayette, Wayne, and Steuben, and fortified himself at Yorktown. Meanwhile, the American army under Washington and the French army of Rochambeau had formed a junction on the Hudson. The allied army arrived before Yorktown September 28, 1781, and began a regular siege, which lasted till October 19th, when Cornwallis surrendered with his whole force of 7,247 men, besides 840 sailors; 106 guns were taken. This victory substantially terminated the contest. A preliminary treaty of peace was signed at Paris, November 30, 1782, by Franklin, Adams, Jay, and Laurens. On September 3, 1783, a definitive treaty was signed at Versailles, by which the United States were formally acknowledged by Great Britain to be free, sovereign, and independent. New York, the last position held by the British on our coast, was evacuated November 25, 1783. On June 12, 1776, while the resolution of independence was under consideration in Congress, a committee of one from each colony was created to draft a form of confederation, and the articles reported by it were adopted November 15, 1777. Having been ratified by all the States, they went into effect on March 1, 1781. Dissatisfaction with the confederation, owing to the weakness of the central government under it, soon became widespread, and in 1786 a convention of delegates from several States at Annapolis, Md., recommended the calling of a convention of delegates from all the States to propose changes in the articles of confederation. This plan was approved by Congress on February 21, 1787, and the convention organized at Philadelphia on May 25th, by the choice of Washington as president. It remained in session until September 17th, when it adjourned after adopting the Constitution. All the States were represented except Rhode Island. Having been ratified by the requisite number of States, the Constitution went into effect on March 4, 1789. At the first election Washington was chosen president and John Adams vice-president, and Washington was inaugurated in New York on April 30th. In the summer of 1790 an Indian war broke out with the tribes of the northwest, who, after inflicting defeats on Generals Harmar and St. Clair, were finally quelled by General Wayne, and peace was restored in August, 1795. At the second presidential election in 1792, Washington again received the unanimous votes of the electoral colleges, and Adams was reelected vice-president. The whiskey insurrection against an unpopular excise law in 1794 threw Western

Pennsylvania into confusion, but was energetically suppressed by the president. Two parties had sprung up, the Federalists, supporters of the Constitution as it was, and the Republicans or Democrats, who desired to limit the federal power. The Republicans were active in their sympathy for the French Republic. At the third presidential election (1796) the Federalists, among whom Alexander Hamilton was prominent, supported John Adams and the Republicans Thomas Jefferson. Adams, who received seventy-one electoral votes, was chosen president while Jefferson, who received sixty-eight, the next highest number, became, by the Constitution as it then was, the vice-president. At the beginning of the administration the relations with France were threatening, and envoys were sent to adjust the difficulties; but the French Government refused to receive them. This excited great indignation in the United States, and Congress made preparations for war. The measures adopted were not without effect. A fresh embassy was sent, and a treaty was concluded in 1800. During the troubles with France two acts were passed by Congress, known as the alien and sedition laws: the first, which was limited to two years, empowering the president to order aliens who were conspiring against the peace of the United States to quit the country; the other, which was to remain in force till March 4, 1801, providing among other things for the punishment by fine and imprisonment of seditious libels, upon the government. These laws became exceedingly unpopular, and were bitterly denounced as harsh and unconstitutional. They contributed largely to the dissatisfaction with Mr. Adam's administration, which led in the next presidential election to the success of the Republican candidates, Jefferson and Burr, each of whom received seventy-three votes. The tie threw the election into the House of Representatives, where, on the thirty-sixth ballot, Jefferson was chosen president and Burr vice-president. This contest led to the adoption of the twelfth amendment of the Constitution, requiring the electors to designate which person is voted for as president and which as vice-president. Jefferson's administration for the most part was marked by vigor and enlightened views, and in 1804 he was reelected, with George Clinton as vice-president. The vast territory then called Louisiana was purchased from France in 1803. A war with Tripoli, ended in 1805, humbled the Barbary pirates. In 1806 Aaron Burr secretly organized a military expedition, chiefly in the western States, which led to his arrest and trial at Richmond in 1807, on a charge of attempting to dismember the Union and to establish an independent dominion west of the Alleghanies; but no overt act being proved against him, he was acquitted. The relations with Great Britain began in 1805 to be disturbed by the unfriendly acts of that power directed against American commerce, and by the exercise of the asserted right to search American vessels for suspected deserters from her navy. In 1806, an act was passed prohibiting the importation of certain articles of British production. In 1807, Congress laid an embargo, which prohibited the departure from American ports of vessels bound

for foreign countries. This measure was vehemently denounced by the Federal party, and was repealed in 1809. In the presidential election of 1808 the Republican candidates, James Madison for president and George Clinton for vice-president, were elected. Congress continued the non-importation system. A long negotiation was carried on with the English Government without result, and on June 18, 1812, war was declared against Great Britain. In the summer of 1811, hostilities, excited as was alleged by British emissaries, were begun by the Indian tribes north of the Ohio under the lead of Tecumseh. William Henry Harrison, Governor of Indiana Territory, defeated them on the banks of the Tippecanoe River, November 7, 1811. The campaign of 1812 closed with little or no credit to the American arms on land, the principal event being the surrender of Detroit (August 16th) by the American General Hull to General Brock. But the navy achieved a series of brilliant victories, which were followed by others during the succeeding years of the war. The campaign of 1813 was marked by alternate successes and reverses. The principal events were the defeat of General Winchester at the River Raisin by the British and Indians, the capture of York (now Toronto) and of Fort George in Canada by the Americans, the repulse of a British attack on Sackett's Harbor, and the defeat of the British and Indians near Thames River, Canada, by General Harrison, Tecumseh being slain. On Lake Erie, September 10th, a British fleet of six vessels was captured after a severe contest by Lieutenant O. H. Perry. On July 5, 1814, the British were defeated at Chippewa by General Brown, and on the 25th at Bridgewater or Lundy's Lane by Generals Brown and Winfield Scott. On September 11th the United States fleet, under Commodore Macdonough, totally defeated the English fleet on Lake Champlain; and on the same day the British army, which had invaded New York and laid siege to Plattsburgh, retreated to Canada. In August, a British fleet arrived in the Chesapeake with an army of 5,000 men commanded by General Ross, who marched on Washington, and, after putting to flight the militia at Bladensburg, took possession of the federal city on the 24th, and burned the capitol, the president's house, and other public buildings. On the next day the British retired to their ships, and on September 12th-13th attacked Baltimore, where they were repulsed by the citizens, and General Ross was killed. After protracted negotiations a treaty of peace was signed at Ghent, December 24, 1814, which provided for the mutual restoration of all territory taken during the war. Nothing was said of the impressment of American seamen, one of the main causes of the war, but the practice was discontinued. Before the news of peace could cross the Atlantic, a British army, 12,000 strong, was defeated at New Orleans (January 8, 1815) by fewer than 5,000 men under General Jackson. In the same year Commodore Decatur compelled the rulers of Algiers, Tunis, and Tripoli to make indemnity for former outrages, and to agree to abstain from depredations on American commerce. The presidential election of 1812 had resulted in the reelection of Mr. Madison. El-

bridge Gerry was chosen vice-president. At the presidential election of 1816 James Monroe of Virginia, and Daniel D. Tompkins of New York, Democrats, were elected president and vice-president, respectively. Monroe's administration began under very favorable circumstances. Party distinctions had so nearly disappeared, that Democrats and Federalists combined to support the government. He was reelected in 1820 by all the electoral votes except one. Daniel D. Tompkins was reelected vice-president. The main event of Monroe's administration was the Missouri controversy, by which, for the first time, the country was disastrously divided upon the slavery question. In the session of 1818-19 a bill was introduced in Congress authorizing the Territory of Missouri to form a constitution, whereupon James Tallmadge of New York moved in the House of Representatives to insert a clause prohibiting any further introduction of slaves, and granting freedom to the children of those already in the Territory on their attaining the age of 25. This motion was carried, but the Senate refused to concur. In the session of 1819-20 the debate was long and acrimonious. The Senate sent to the House the Missouri bill with the prohibition of slavery in that State struck out, but with the proviso that it should not thereafter be tolerated north of latitude 36° 30'. This compromise was at length agreed to. The other great event of Mr. Monroe's administration was the recognition (1822) of the Spanish American republics, which had declared and maintained their independence for several years. In 1823 the president in his annual message put forth a declaration, famous as the "Monroe Doctrine," in which it was announced that any attempt on the part of European governments to extend their system to any portion of this hemisphere would be considered dangerous to the peace and safety of the United States. In 1819, Florida had been ceded by Spain. In the presidential election of 1824 none of the four candidates (Andrew Jackson, John Quincy Adams, William H. Crawford, and Henry Clay) had a majority of the electoral votes, and Adams was elected by the House of Representatives. John C. Calhoun had been elected vice-president by the electoral colleges. Adam's administration was remarkable for order, method, and economy, but party spirit was higher than it had been for many years. At the election of 1828 General Jackson was chosen president, while John C. Calhoun was reelected vice-president. In his first annual message (December, 1829) the president took strong ground against the renewal of the charter of the United States bank, as not being authorized by the Constitution. Congress, in 1832, passed a bill to recharter it, but Jackson vetoed it; and the charter expired by limitation in 1836. The commercial part of the community generally took the side of the bank, and the party formed in opposition to the president assumed the name of Whigs, while his supporters adhered to the old name of Democrats. In 1832 arose the so-called nullification movement in South Carolina, growing out of the tariff acts of that year and of 1828. A State convention held in November declared these acts unconstitutional and, therefore, null

and void, and proclaimed that any attempt by the General Government to collect duties in the port of Charleston would be resisted by force of arms, and would produce the secession of South Carolina from the Union. Jackson had just been reelected for a second term, while Martin Van Buren was chosen vice-president. The firmness of the president gave an effectual check to the incipient rebellion, and the affair was finally settled by a proposition brought forward in Congress by Henry Clay, the leading champion of the protective system, for the modification of the tariff by a gradual reduction of the obnoxious duties. Other events of Jackson's administration were the removal of the public funds from the United States bank, the extinction of the national bank and the beginning, toward the close of 1835, of a war with the Seminole Indians in Florida. In the presidential contest of 1836, Mr. Van Buren, who was supported by the Democrats, was elected. No candidate having been elected vice-president, Richard M. Johnson was chosen by the Senate. The new administration began under most untoward circumstances. Within two months after the inauguration the mercantile failures in the city of New York alone amounted to more than \$100,000,000. The war with the Seminoles was not ended till 1842. At the election in 1840, Harrison and Tyler, the Whig candidates for president and vice-president, were chosen. General Harrison was inaugurated March 4, 1841, and died on April 4th. The presidential office devolved on John Tyler, who soon developed a policy in relation to a national bank much more in accordance with the views of the Democratic party than with those of the Whigs. A treaty was concluded in 1842 with Great Britain by Daniel Webster for the settlement of the north-eastern boundary. The Texas question (see Texas) became the prominent issue in the presidential contest of 1844, the Democratic party supporting and the Whigs opposing annexation. The Democratic candidates, James K. Polk for president and George M. Dallas for vice-president, were elected over Henry Clay and Theodore Frelinghuysen. Joint resolutions for annexing Texas as one of the States of the Union were signed by President Tyler March 1, 1845, which led to a war with Mexico in 1846. General Zachary Taylor defeated the Mexicans at Palo Alto May 8th, at Resaca de la Palma May 9th, at Monterey in September, and at Buena Vista February 23, 1847. General Scott landed near Vera Cruz on March 9th with about 12,000 men, immediately besieged that city, which surrendered before the end of the month, and entered the city of Mexico on September 14th, after a series of hard-fought and uniformly successful battles. A treaty of peace was negotiated at Guadalupe Hidalgo, February 2, 1848, by which Mexico granted to the United States the line of the Rio Grande as a boundary, and ceded New Mexico and California. The Oregon dispute with Great Britain, which claimed the whole region, while the United States claimed as far north as latitude 54° 40', was settled by the treaty of 1846, which adopted the boundary of the parallel of 49°, with a modification giving to Great Britain the whole of Vancouver Island.

In the Democratic National convention of 1848, Lewis Cass was nominated for president, and William O. Butler for vice-president. By the Whig convention Zachary Taylor and Millard Fillmore were nominated. The question of slavery had a powerful influence on the political combinations of this period. In 1846, during the Mexican War, a bill being before Congress authorizing the president to use \$2,000,000 in negotiating a peace, David Wilmot, a Democratic representative from Pennsylvania, moved to add thereto a proviso prohibiting slavery in any territory acquired from Mexico. This proviso was adopted in the House, nearly all the members from the free States voting for it, but failed in the Senate from want of time. Several delegates seceded from both the Whig and Democratic conventions of 1848, on the failure of those bodies to pronounce in favor of the principle of the proviso. These, with the Liberty party, formed in 1840, organized a free-soil or free Democratic party, and Martin Van Buren was nominated for president and Charles Francis Adams for vice-president. Van Buren and Adams received at the election, in November, a popular vote of 291,263, but secured no electoral vote. Taylor and Fillmore were elected. The application in 1850 of California for admission as a State roused the slavery controversy, and the difficulty was complicated by the application of New Mexico for admission, and by a claim brought forward by Texas to a western line of boundary which would include a large portion of New Mexico. Finally, a compromise was proposed by Henry Clay in the Senate as a final settlement of the whole question of slavery, and after a long discussion the result aimed at was attained by separate acts, which provided for: (1) the admission of California as a free State; (2) Territorial Governments for New Mexico and Utah without excluding slavery, but leaving its exclusion or admission to the local population; (3) the settlement of the Texas boundary question; (4) the abolition of the slave trade in the District of Columbia; (5) the enactment of a stringent law for the arrest and return of fugitive slaves. President Taylor died July 9, 1850, and was succeeded by the vice-president, Millard Fillmore. The whole weight of his administration was given to the support of the compromise measures. The Democratic National Convention of 1852 nominated for president Franklin Pierce of New Hampshire, who was known to hold opinions satisfactory to the South on the subject of slavery, and William R. King of Alabama for vice-president. The Whig National Convention nominated for president General Winfield Scott, and for vice-president William A. Graham of North Carolina. The National Convention of the Free-soil party nominated John P. Hale for president, and George W. Julian for vice-president. Pierce and King were elected. The passage in 1854 of a bill for the organization of the Territories of Kansas and Nebraska, by which the Missouri Compromise Act of 1820 was repealed, roused great excitement and indignation in the free States. The struggle in Kansas between the anti-slavery and pro-slavery parties (see Kansas) and the assault by Brooks on Sumner (see Sumner, Charles) added to the

feeling. Preparatory to the presidential canvass of 1856 the Republican party was formed, which absorbed the entire Free-soil party, the greater part of the Whig party, and considerable accessions from the Democratic. That portion of the Whig party opposed to anti-slavery measures was merged, especially at the South, in an organization called the American party, from its opposition to foreign influence, and particularly to Roman Catholic influence, in our political affairs, but popularly known as the "Know-Nothing Party" from the secrecy of its organization and the reticence of its members. This party nominated Millard Fillmore for president, and Andrew J. Donelson of Tennessee for vice-president. The Democratic National Convention nominated James Buchanan of Pennsylvania for president, and John C. Breckenridge of Kentucky for vice-president. The Republican National Convention nominated John C. Fremont of California for president, and William L. Dayton of New Jersey for vice-president. Buchanan and Breckenridge were elected. The chief interest of Mr. Buchanan's administration centered around the slavery controversy. A constitution for Kansas framed at Leecompton in 1857 was laid before Congress in the session of 1857-58, and its discussion resulted in a schism in the Democratic party, and eventually in its division into two bodies, one of which looked upon Stephen A. Douglas as its leader, while the other supported Breckenridge for the presidency. The Democratic National Convention met at Charleston, April 23, 1860, and a controversy on the subject of slavery immediately arose. A non-committal platform having been adopted, most of the Southern delegates withdrew and adopted a platform of their own, denying the right of Congress to interfere with, and asserting its duty to protect, slavery in the Territories. The convention adjourned May 3d, reassembled in Baltimore June 18th, and nominated Stephen A. Douglas of Illinois for president, and Benjamin Fitzpatrick of Alabama for vice-president. The latter afterward declined, and Herschel V. Johnson of Georgia was substituted. A convention called by the seceding delegates convened at Baltimore on June 23d, and nominated John C. Breckenridge for president, and Joseph Lane of Oregon for vice-president. The "Constitutional Union" party, composed mainly of the American party, nominated for president John Bell of Tennessee, and for vice-president Edward Everett of Massachusetts. The Republican National Convention assembled at Chicago on May 10th, and nominated for president Abraham Lincoln of Illinois, and for vice-president Hannibal Hamlin of Maine. In the election, November 6th, Mr. Lincoln received the electoral votes of all the free States (except three in New Jersey), 180, and was elected. Mr. Bell received the votes of Virginia, Kentucky, and Tennessee, 39; Mr. Douglas the 9 votes of Missouri and 3 from New Jersey; and the remaining Southern States cast their 72 electoral votes for Breckenridge. A convention was at once called in South Carolina, and on December 20th unanimously adopted an ordinance of secession from the Union. Before the end of May, 1861, eleven States had passed ordinances of secession (South Carolina, Missis-

issippi, Florida, Alabama, Georgia, Louisiana, Texas, Virginia, Arkansas, Tennessee, and North Carolina). On February 4th a Congress met at Montgomery Ala., and framed a constitution for the "Confederate States of America." Jefferson Davis of Mississippi was chosen president, and Alexander H. Stephens of Georgia vice-president. After governmental organization, the first warlike act was the bombardment by the Confederates of Fort Sumter, which surrendered April 13, 1861. On July 21st was fought the battle of Bull Run, near Manassas Junction, Va., the first of any magnitude during the war, in which the Union forces under General McDowell were defeated by the Confederates under General Beauregard, and fell back in disorder to Washington. Soon after General McClellan, who had cleared West Virginia of Confederate troops, was placed in command of the army of the Potomac. On August 10th, a battle was fought at Wilson's Creek, near Springfield, Mo., between the Confederates under General McCulloch and the Federals under General Lyon, who fell. This was followed by a varying and indecisive warfare in that State. On August 29th, Forts Hatteras and Clark, N. C., were taken by General Butler and Commodore Stringham; and on November 7th, Port Royal, S. C., by Commodore Du Pont and General T. W. Sherman. On October 21st, a portion of General Stone's command, having crossed the Potomac at Ball's Bluff, about midway between Harper's Ferry and Washington, was defeated by the Confederate General Evans, with a loss of 1,000 out of 1,900 men. On February 6, 1862, the Federal Commodore Foote, with a fleet of gunboats from Cairo, reduced Fort Henry on the east bank of the Tennessee River in Tennessee; and on the 16th Fort Donelson, on the west bank of the Cumberland, surrendered with about 13,000 men to General Grant. The Confederates under McCulloch and others, just driven out of Missouri, were defeated at Pea Ridge, Ark., March 7th-8th. In the night of April 7th, Island No. Ten in the Mississippi, a few miles above New Madrid, Mo., surrendered, after a series of operations by General Pope and Commodore Foote, lasting over a month. The Federal fleet was now enabled to proceed down the river as far as Vicksburg, Miss., receiving the surrender of Memphis, Tenn., June 6th. The battle of Shiloh, Miss., raged two days (April 6th and 7th), when the Confederates under Beauregard fell back to Corinth, leaving the field in the possession of the Union army under Generals Buell and Grant. Corinth was evacuated after some operations against it under General Halleck. An important event of the year was the capture of New Orleans toward the close of April by naval and land forces under Captain Farragut and General Butler. Early in the year Roanoke Island, New Berne, Beaufort, Washington, Plymouth, and other places on the coast of North Carolina were occupied by the Federals. On April 11th, Fort Pulaski, at the mouth of the Savannah River, was reduced. Toward the end of August the Confederate General Bragg started on an invasion of Kentucky from East Tennessee. He captured Richmond, Lexington, and Munfordsville, and on October 1st entered

Frankfort. The Union forces under General Buell moving against him, he slowly retreated to Perryville, where, on the 8th, a severe battle was fought. During the succeeding night Bragg continued his retreat, and passed into East Tennessee. About the end of September the Confederates under Generals Price and Van Dorn advanced against Corinth, Miss., now defended by General Rosecrans. Their assaults (October 3d, 4th) were repulsed with great loss. General Rosecrans, having superseded Buell, moved into Tennessee, and marched upon Murfreesboro, where Bragg's forces were concentrated, reaching Stone River near that place on December 29 and 30th. Here bloody engagements occurred December 31, 1862, and January 2, 1863, which resulted in Bragg's retreat. Still greater operations took place on the eastern theater of the war. Brisk fighting occurred in the Shenandoah Valley (March-June), with decided advantage on the whole to the Confederate General Jackson over Banks, Fremont, and others. About April 1, 1862, General McClellan transferred his forces to Fortress Monroe, near which a remarkable naval duel had taken place (at Hampton Roads) and began a movement upon Richmond up the peninsula between the York and James Rivers, fighting at Yorktown, Williamsburg, Seven Pines Fair Oaks, and Mechanicsville, and, during a retrograde movement to Harrison's Landing on the James, at Cold Harbor, Savage's Station, Frazier's Farm, and, finally (July 1st), at Malvern Hill. About the middle of August his army was transferred to the Potomac. The Confederate army, commanded by General Robert E. Lee, who had succeeded J. E. Johnston, had retired to Richmond, to assume the offensive against Washington. On August 9th an indecisive battle was fought by General Banks against Jackson at Cedar Mountain; and on August 29th and 30th occurred the second battle of Bull Run, between the Union army under Pope and the Confederate forces under Jackson and Longstreet, in which the latter had the advantage. Lee moved to the Potomac above Washington and crossed into Maryland. Jackson captured Harper's Ferry with 11,500 men. McClellan, advancing to meet Lee, found him on September 15th strongly posted across Antietam Creek near Sharpsburg, where, on the two following days, a bloody battle was fought. In the night of the 18th, Lee retreated into Virginia. McClellan crossed the Potomac about November 1st. On the 7th he was superseded by General Burnside, who moved down the Rappahannock to Fredericksburg. Lee had made a parallel movement down the south bank and strongly intrenched himself on the bluffs behind the town. On December 13th, Burnside crossed the river and made repeated attacks on the enemy's position, but was repulsed with great slaughter, and on the 15th returned to the north bank. On January 26, 1863, Burnside was superseded by General Joseph Hooker. About the close of April Hooker began to cross the Rappahannock, and concentrated his forces at Chancellorsville, where a bloody engagement ensued, May 2d-4th, in which the Union army was worsted by the forces under Lee, Hooker recrossing to the north side of the river. General Jackson was mortally

wounded. About the beginning of June, Lee again assumed the offensive. The main body of the Confederate army crossed the Potomac above Harper's Ferry, June 24th-25th, and marching across Maryland entered Pennsylvania. Hooker moved north, so as to cover Washington, and on the 26th crossed the Potomac about half way between Washington and Harper's Ferry. On the 28th he was succeeded by General Meade. The latter advanced into Pennsylvania, and on July 1st, 2d, and 3d the two armies met in the great battle of Gettysburg, which ended in the discomfiture of the Confederate army. On the 4th, Lee began his retreat, and on the 13th recrossed the Potomac. Meade crossed on the 18th, and reached Warrenton on the 25th, where he was soon confronted by Lee on the other side of the Rappahannock. In the west important operations had taken place under Generals Grant and Sherman against Vicksburg. Close pressed, on July 3d, General Pemberton surrendered that Confederate stronghold, with 27,000 men, to General Grant, who, on the 4th, occupied the city. The result of this campaign rent the Confederacy in twain, and decided its fate. Port Hudson, La., on the Mississippi, surrendered after a siege to General Banks, July 8th. Rosecrans remained quietly at Murfreesboro till June 23, 1863, when he advanced, forcing Bragg to retreat to Chattanooga, which was occupied by a detachment on September 9th, Bragg retiring into Georgia and posting his troops in the vicinity of Chickamauga Creek, east of Trenton. Here, September 19th and 20th, occurred a severe engagement, in which the Federals were worsted and fell back to Chattanooga, where they were besieged by Bragg. On October 23d, General Grant arrived and took command. A series of movements was at once initiated, which resulted in driving Bragg from Chattanooga (November 25th) and forcing him to retreat into Georgia. An army under General Burnside, which had occupied Knoxville, and was besieged there by Longstreet, was relieved at the beginning of December. All Tennessee was now recovered. In Arkansas, General Steele had captured Little Rock, September 10th. Fort Wagner, on Morris Island at the entrance of Charleston Harbor, after vigorously repelling a heavy assault, had about the same time been reduced by a regular siege under General Gillmore. On April 20, 1864, Plymouth, N. C., was compelled to surrender to a Confederate force under General Hoke, and as a consequence Washington, N. C., was evacuated by the Federals eight days later. On October 31st, Plymouth was retaken by the Federal fleet. On April 12th Fort Pillow, on the Mississippi about forty miles above Memphis, was taken by assault by the Confederates under General Forrest, and many of its colored defenders were killed after the capture. In August, Forts Gaines and Morgan, commanding the entrance to Mobile Bay, were reduced by a fleet under Admiral Farragut, aided by a land force under General Granger, and the Confederate fleet there was destroyed. West of the Mississippi, the most important movement in 1864 was Bank's disastrous Red River campaign in the early spring. In September and October,

General Price with a considerable force made a raid through Missouri. In Virginia, General Grant, who had received the chief command of the Union armies, began on May 4th to cross the Rapidan and advance into the "Wilderness." Here (May 5th and 6th) and at Spottsylvania Court House near by (May 8th-21st) followed a series of sanguinary engagements, which baffled the direct advance. Grant then advanced by a succession of flank movements to the Chickahominy, where, on June 3d, he suffered a disastrous check in the second battle of Cold Harbor. On the 12th, having determined to attack Richmond from the south, he began to move, crossing the Chickahominy below Lee's position, and effecting the passage of the James, June 14th-15th. Lee thereupon retired within the intrenchments covering Richmond. On the 15th and 16th a part of the Union forces unsuccessfully assailed Petersburg, and on the 19th Grant began a regular siege. An invasion of Maryland under General Early in July, which threatened Washington, failed, and led to operations in the Shenandoah Valley, in which General Sheridan nearly destroyed Early's forces at Winchester. On May 5, 1864, General W. T. Sherman started from Chattanooga on his campaign against Atlanta, in which he was ably opposed by Johnston, and vainly assailed by his successor in command, General Hood. Atlanta was evacuated by the Confederates on September 1st. Near the middle of November he started for the coast. Marching through the heart of Georgia without opposition, he reached the vicinity of Savannah, capturing Fort McAllister December 13th, and occupying the city December 21st. On December 15th and 16th, Hood, who had marched north with his army, suffered a bloody repulse before Nashville by Thomas. An attempt in December, by a fleet under Admiral Porter and a land force under General Butler, to reduce Fort Fisher at the mouth of Cape Fear River, commanding the approach to Wilmington, N. C., failed; but on January 15, 1865, it was carried by an assault under General Terry, aided by the fleet. The Federal forces occupied Wilmington on February 22d. The siege of Petersburg and Richmond continued till April 3, 1865, when, after Lee's defeat at Five Forks (March 31st, April 1st), those places were occupied by the Federals, having been evacuated by Lee during the preceding night. Grant vigorously pursued the retreating army, and at Appomattox Court House, on the 9th, compelled Lee to surrender the remnant of his forces, about 27,000 in all, an event which virtually terminated the war. On February 1st, General Sherman started from Savannah on a northward movement through the Carolinas, and reached Columbia on the 17th. General Hardee, being thus taken in the rear, evacuated Charleston, which was occupied by a detachment of General Gillmore's forces on the 18th, and the same day the national flag was raised over Fort Sumter. Sherman reached Fayetteville, N. C., on March 12th. On the 19th the left wing under Slocum encountered the Confederate army under General Johnston at Bentonville, repelled several assaults, and on the 21st, being reinforced, compelled it to retreat

to Smithfield, covering Raleigh. Sherman then occupied Goldsboro, whence he advanced on April 10th. Johnston retreated through Raleigh, and on April 26th surrendered his entire army, then reduced to about 31,000 men. In the meantime, a cavalry force under General Wilson had swept through Alabama from the north, and passed into Georgia, occupying Selma on April 2d, Montgomery on the 12th, and Columbus, Ga., on the 16th. Mobile was taken on April 12th by General Canby, aided by a fleet under Admiral Thatcher. On May 4th, General Taylor surrendered the Confederate forces in Alabama to General Canby. The last fight of the war occurred May 13th, on the Rio Grande in Texas, between Colonel Barrett (Federal) and General Slaughter (Confederate), the latter being victorious. The trans-Mississippi army of the Confederates, the last in the field, was surrendered by Kirby Smith on May 26th. During the war Confederate cruisers, mostly built and fitted out in British ports, and manned by British sailors, scoured the ocean. Evading vessels of war, they destroyed hundreds of merchantmen, doing irreparable injury to the commerce of the Union. The chief of these were the "Alabama," "Chickamauga," "Florida," "Georgia," "Olustee," "Shenandoah," "Sumter," and "Tallahassee." The "Alabama," the most famous, commanded by Raphael Semmes, was sunk off Cherbourg, France, June 19, 1864, by the United States steamer "Kearsarge," commanded by Captain Winslow. After the fall of Richmond, President Davis of the Confederacy fled south, and was captured at Irwinville, Ga., by General Wilson's forces, May 10, 1865. He and some other prominent leaders were imprisoned for a time, but no man was punished for participation in the rebellion. The National Republican Convention assembled at Baltimore on June 7, 1864, and nominated President Lincoln for reelection, and for vice-president Andrew Johnson of Tennessee. The platform pledged a vigorous prosecution of the war for the suppression of the rebellion, and favored an amendment to the Constitution abolishing slavery. The National Democratic Convention assembled at Chicago on August 29th, and nominated General George B. McClellan for president, and for vice-president George H. Pendleton of Ohio. The election took place on November 8th, the eleven seceded States not participating. McClellan and Pendleton received the electoral votes of New Jersey, Delaware, and Kentucky, 21; Lincoln and Johnson received those of all the other States, 212, and were elected. On March 4, 1865, Lincoln's second inauguration took place. On April 14th he was assassinated by John Wilkes Booth, and the Secretary of State, Mr. Seward, dangerously wounded by another conspirator; and on the following day Vice-President Johnson entered upon the duties of the presidency. The question of emancipation early attracted the attention of the administration and Congress. On April 16, 1862, an act was passed abolishing slavery in the District of Columbia, and on June 9th another act declared that slavery should not thereafter exist in the Territories. On January 1, 1863, Mr. Lincoln issued a proclamation de-

claring free all persons held as slaves within the States or portions of States then in rebellion. The 13th amendment to the Federal Constitution, declaring that slavery shall not exist within the United States or any place subject to their control, was declared adopted by the proclamation of the Secretary of State on December 18, 1865. The first step toward the reconstruction of loyal governments in the seceded States was the proclamation of President Lincoln of December 8, 1863. Under this scheme governments were organized in Louisiana and Arkansas in the early part of 1864, and in Tennessee early in 1865, but senators and representatives from those States were not admitted to Congress. After the close of the war President Johnson appointed provisional governors for several of the seceded States. But Congress did not approve this scheme of reconstruction, and senators and representatives from those States were not admitted. In June, 1866, a joint resolution adopted by Congress proposed the 14th amendment to the Constitution, extending the rights of citizenship to all classes of native and naturalized persons, guaranteeing the validity of the national debt, forbidding the payment of any part of the Confederate debt or of claims for the loss of slaves, etc. In July senators and representatives were admitted from Tennessee, that State having ratified the 14th amendment. On January 8, 1867, an act was passed over President Johnson's veto, conferring the right of suffrage on colored citizens of the District of Columbia, and on the 24th a similar act became a law for the Territories. The congressional plan of reconstruction was developed in the act of March 2d and the supplementary acts of March 23d and July 19th, each of which was passed over the President's veto. These acts declared that "no legal State Governments or adequate protection for life or property now exist in the rebel States of Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Florida, Texas, and Arkansas," and divided them into five military districts. The district commanders were required to make a registration of voters, comprising male citizens of the United States 21 years old and upward, without regard to race, color, or previous condition, who had resided in the respective States one year, and were not excluded from holding office by the 14th amendment. Delegates were to be elected in the several States by the registered voters to conventions for framing new constitutions. Only when constitutions had been adopted conferring the right of suffrage on colored persons, and such constitutions had been approved by Congress, and when the 14th amendment had been ratified by the legislatures of the respective States, were senators and representatives to be admitted. The conditions of these acts were complied with in Alabama, Arkansas, Florida, Georgia, Louisiana, North Carolina, and South Carolina in 1868, and in Mississippi, Texas, and Virginia in 1870. But the subsequent action of the legislature of Georgia in excluding colored members led to further measures on the part of Congress, and delayed the final restoration of that State until 1870. The adoption of the

14th amendment was proclaimed on July 28, 1868. In February, 1869, a joint resolution proposing the 15th amendment to the Constitution, prohibiting the denial or abridgement by any State of the Union of the right to vote on account of color or previous condition of servitude, was passed. The difference between President Johnson and Congress on the question of reconstruction led to his separation from the Republican party, and to the passage on March 2, 1867, over his veto, of the "tenure of office" act, which took from the President the power to remove, without the consent of the Senate, such civil officers as are appointed by the President with the consent of the Senate. His attempt to remove Mr. Stanton, secretary of war, notwithstanding the act, led to his impeachment, a resolution to that effect passing the House of Representatives February 24, 1868. He was tried before the Senate and acquitted in May, there being a majority against him, but not the necessary two-thirds vote. In 1867, Alaska was purchased of Russia. The National Republican Convention assembled at Chicago on May 21, 1868, and nominated General Ulysses S. Grant for president, and for vice-president Schuyler Colfax of Indiana. The National Democratic Convention assembled at New York on July 4th, and nominated Horatio Seymour of New York for president, and Francis P. Blair, Jr., of Missouri, for vice-president. The election took place on November 3d, Virginia, Mississippi, and Texas not voting. Seymour and Blair received 80 electoral votes; Grant and Colfax received 214, and were elected. On May 1, 1872, a convention assembled at Cincinnati, composed of persons previously in sympathy with the Republican party, but now dissatisfied with the administration of President Grant and opposed to his reelection. They styled themselves "Liberal Republicans." By this convention Horace Greeley of New York was nominated for president, and Benjamin Gratz Brown of Missouri for vice-president. The National Republican Convention assembled at Philadelphia on June 5th, and nominated President Grant for reelection, and for vice-president Henry Wilson of Massachusetts. The National Democratic Convention assembled at Baltimore on July 9th, and nominated the same candidates and adopted the same platform as the Cincinnati Convention. The election, which took place on November 5th, resulted in the choice of Grant and Wilson, who each received 286 electoral votes, out of a total of 366. One of the most prominent events of Grant's administration was the settlement by the Treaty of Washington (May 8, 1871), and a subsequent arbitration at Geneva, Switzerland (1871-2), of outstanding disputes with Great Britain, of which the principal (the "Alabama claims" question) related to the charge that the British Government had failed in its duties as a neutral in allowing the construction and fitting out of Confederate cruisers (the "Alabama," etc.) in British ports. The verdict of the arbitrators awarded to the United States an indemnity of \$15,500,000 in gold. The National Republican Convention of 1876 assembled at Cincinnati on June 14th, and nominated Rutherford B. Hayes

of Ohio for president, and William A. Wheeler of New York for vice-president. The National Democratic Convention, which assembled at St. Louis on June 27th, nominated Samuel J. Tilden of New York for president, and Thomas A. Hendricks of Indiana for vice-president. Hayes and Wheeler, although they received a minority of the popular vote, were declared by a special commission, whose report was adopted by Congress in joint convention, to have been elected by a majority of one in the electoral colleges.

In 1876, the Centennial Exposition was held in Philadelphia, in celebration of the one hundredth year of American independence. The exhibitors, from all parts of the world, numbered 30,865. The buildings were of the grandest description, exceeding any that had hitherto been conceived for the purpose of an international exposition. After a presidency of two terms General Grant was succeeded by Rutherford B. Hayes, whose election was granted by an electoral commission formed by patriotic compromise. At the following election (1880) the Republicans elected General Garfield, who was shot by Charles J. Guiteau, July 2, 1881, at the Baltimore and Potomac depot, Washington, D. C., and died September 19, 1881. Mr. Arthur, the vice-president, became president. In 1885, Grover Cleveland, the first Democrat holding the office since 1861, succeeded as president. The Anti-polygamy Bill, virtually disfranchising Mormons, became a law in 1886; also the Interstate Commerce Bill, establishing a commission to secure uniformity of railroad rates, nationalize through-route traffic, and break up harmful combinations. In 1888, North Dakota, South Dakota, Montana, and Washington Territories were admitted as States. A bill passed in 1879 prohibiting the immigration of Chinese as laborers, amended in 1882 making the restriction to last for twenty years, was further amended in 1888 by taking away from the Chinese now or heretofore in the country the privilege of return unless they had previously procured certificates. President Cleveland retired to private life after giving a cautious and prudent administration, signalized by patient attention to details and strong assertion of official prerogative. In 1889, Benjamin Harrison, elected by the Republicans, became president, the issue of the campaign being Free-trade vs. Protection. In 1890 a protective tariff bill, known as the McKinley Act, became a law. It increased duties on 115 articles, embracing farm products and manufactures, and decreased those on 190, i.e., manufactures established. It placed sugar on the free list. The Coinage Act of 1890 made it compulsory on the government to buy 54,000,000 ounces of silver yearly; instead of coining the same, to issue silver certificates therefor. Acts to admit Wyoming and Idaho as States were passed in 1890. On June 19, 1890, the report of the International American Conference was presented, forming the basis of the policy of reciprocity by which treaties were entered into with Germany, France, Spain, Brazil, and the countries of Central and South America. By the end of 1892 these treaties began to bring about an anticipated increase of trade. An

application of the "Monroe Doctrine" in regard to the Samoan group of islands strategically situated in the Pacific Ocean, which had been seized by Germany, resulted in the conclusion of a treaty which saved the absorption of the islands. The Bering Sea question, long a diplomatic stumbling-block between the United States and Great Britain, was, after skillful diplomacy, referred to a board of arbitration. A dangerous complication with Italy, caused by the lynching of Italians in New Orleans in 1891, was amicably settled and friendly relations restored. In October, 1891, the crew of the United States war-vessel "Baltimore" having met with outrageous treatment by the police of Valparaiso, the government demanded an apology from Chile, which after delay was extended, with promise of full reparation. The presidential election in 1892 resulted in the selection of Grover Cleveland. President Harrison retired from office, March 4, 1893. President William McKinley was inaugurated March 4, 1897, and a year later, after a number of attempts to allay the Cuban situation, came the war with Spain. (See Spanish-American War.)

A peace commission (consisting of—American: Hon. William R. Day, president; Senators, C. K. Davis, William P. Frye, Geo. Gray; White-law Reid, with Prof. J. B. Moore, secretary—Spanish: Senor Montero Rios, president; General Cerero, Senor de Villaurratia, Senor de Garnica, Senor Abarzua) met in Paris to discuss the terms of peace between Spain and the United States. December 28, 1898, Spain ceded to the United States the Philippines, Porto Rico, and Guam, and agreed to retire from Cuba, accepting the offer of \$20,000,000, the United States' proposition.

President McKinley was inaugurated for the second term March 4, 1901. He was assassinated September 14, 1902, and was succeeded by Vice-President Roosevelt, who, after the election of 1904, was inaugurated March 5, 1905, for a full term.

President Roosevelt at once set about initiating needed reforms in railroad, corporations, and trust methods, and in pushing forward the construction of the Panama Canal. In 1906, a race war occurred at Brownsville, Texas, resulting in the colored troops stationed there being ordered out of the State, and in their subsequent expulsion from the United States army by order of the President. In March, 1907, the President issued orders for the exclusion of Japanese laborers, and for the dismissal of suits against the San Francisco school board. This action opened the way for negotiations between the governments of Japan and the United States, which culminated, early in 1908, by order of the Japanese Government in the complete restraint of Japanese immigration to the United States.

Vermont. The first white settlement was made at Brattleboro, in 1724, as a military station, by the Massachusetts colonists. It served as a base of operations during the French wars. Immigration set in, and in 1768, 124 townships had been granted by Governor Wentworth, of New Hampshire, by which colony the fee and jurisdiction of the soil were claimed.

A counter-claim was made by New York in 1763, and until the outbreak of the Revolution there was a bitter controversy between the two colonies over their respective rights to Vermont. In 1777, the people of Vermont declared their independence, and, though admission to the confederacy of States was sought, it was refused, and Vermont remained outside of the Union till 1791. During the previous year New York had surrendered its claims for a financial consideration. Vermont was the first State to join the original thirteen. Though not confederated with the other colonies against Great Britain, the "Green Mountain Boys" had signaled their valor and patriotism in a number of hard-fought battles and expeditions. Among these were the capture of Ticonderoga by Ethan Allen, the invasion of Canada, the battles on Lake Champlain, and the two battles near Bennington, which were the primary cause of Burgoyne's defeat at Saratoga. In 1837, Vermont was the starting point of the Canadian raids, and also of the Fenian raids.

Vinland, the name given to the chief settlement of the early Norsemen in North America. It is undoubtedly represented in modern times by part of Massachusetts and Rhode Island. The first that saw it was Bjarne Herjulfson, who was driven thither by a storm in the summer of A. D. 986, when making a voyage from Iceland to Greenland, of which country his father, Herjulf, and Eric the Red, were the earliest colonists. But Bjarne did not touch the land, which was first visited by Leif the Lucky, a son of Eric the Red, about A. D. 1000. One part of the country he named Helluland ("Stoneland"); another Markland ("Woodland"); the modern Newfoundland and Nova Scotia; a German in his company having found the grape growing wild, as in his native country, Leif called the region Vineland. The natives from their dwarfish size they called skraelings. Two years after Leif's brother, Thorwald, arrived, and in the summer of 1003 led an expedition along the coast of New England south, but was killed the year following in an encounter with the natives. The most famous of the Norse explorers, however, was Thorfinn Karlsefne, an Icelander, who had married Gudrid, widow of Thorstein, a son of Eric the Red, and who in 1007 sailed from Greenland to Vineland with a crew of 160 men, where he remained for three years, and then returned, after which no further attempts at colonization were made. Ran, in his "Antiquitates Americanae," published the first full collection of the evidence which proves the pre-Columbian colonization of America. Both he and Finn Magnussen labor to show that Columbus derived his first hints of a new world from the accounts of these old Icelandic expeditions. Finn Magnussen is believed to have established the fact that Columbus did visit Iceland in 1477, fifteen years before he undertook his expedition across the Atlantic, and so may have heard something of the long-abandoned Vineland.

Virginia. The name Virginia, originally bestowed by Queen Elizabeth in 1584 on the region now known as North Carolina, discovered by Sir Walter Raleigh's expedition, was after-

ward applied to the whole country to 45° north. In 1606, James I. gave to the London Company, which made the first permanent settlement of the English in America at Jamestown the year after, the country from 34° to 38° north, extending 100 miles from the sea. The colony was saved from ruin by Captain John Smith two years later. Colonization increased rapidly, and in 1621 a legislative body was formed. In 1641, there were 15,000 English in the colony. In 1676, occurred Bacon's Rebellion, brought on by the tyranny of Sir William Berkeley, the Governor. The French War of 1754, of which Braddock's defeat was the most notable incident, first brought George Washington into notice. Virginia, under the leadership of Patrick Henry, was the first to protest against British oppression in 1764, and sent representatives to the Continental Congress in 1775. The most important military event during the Revolutionary War, in Virginia, was the surrender of Cornwallis at Yorktown, October 19, 1781. Virginia passed an ordinance of secession, April 17, 1861, and in the war that followed became the bloodiest cock-pit of the whole contest. The most important battles were Bull Run July 21, 1861; Winchester, May 25, 1862; the battles of the Peninsular campaign in the summer of 1862; second battle of Bull Run, August 29, 1862; Fredericksburg, December 13, 1862; Chancellorsville, May 2-4, 1863; the battles of the Wilderness campaign in 1864, ending in the investment of Petersburg and Richmond, and the final surrender of General Lee at Appomattox Court House, April 9, 1865. The State was readmitted January 27, 1870.

Washington. The first record in history of the region which is now the State of Washington was the discovery, in 1592, of the Strait of Juan de Fuca by a Greek pilot. In 1775 Captain Heceta, a Spanish navigator, discovered the mouth of the Columbia, but was unable to enter the river. In 1789 Captain Kendrick, an American, sailed through the Strait of Fuca, through the Gulf of Georgia and Queen Charlotte Sound, and was the first to make known the character of these inland waters. On the 11th of May, 1792, Captain Gray, of the American ship "Columbia" entered the river, to which he gave the name of his ship. This gave to the United States, the priority of claim to the Oregon region, which then comprised the present States of Washington, Oregon, and Idaho. In October of the same year an Englishman sailed up and examined the Columbia about 100 miles from the mouth. The coast soon became well-known, and the United States Government fitted out expeditions to more thoroughly explore the interior. The most important of these was that under Lewis and Clark, who, ascending the Missouri, made the Clearwater River, thence entering the Columbia and reaching the Pacific Ocean in December, 1805.

In 1810, two expeditions were sent out by companies formed by J. J. Astor for the purpose of engaging in fur trade along the river, and the following year a trading post was established at Astoria, near the mouth of the Columbia. In the meantime another fur trading expedition had been sent out by the Northwest Fur Com-

pany in an attempt to forestall the Astor Expedition, but it reached the river too late. For some time after the history of the country was merely the record of the Northwest Fur Company and the Hudson Bay Company. During all the years of the fur trading a dispute had been going on between the United States and England, and at times war was threatened. An agreement was arrived at after a time, and in 1846 a treaty was signed fixing the boundary at the forty-ninth parallel. The Territory of Oregon was formed in 1848, and in 1853 the Territory of Washington was established from a part of the original country. Washington was admitted to Statehood November 11, 1889.

Waterloo, Battle of. an important battle won by the allied forces over Napoleon, near Waterloo, a Belgian village eleven miles south of Brussels, June 18, 1815. The preliminary battles had been at Ligny, June 16th (when Napoleon had defeated the Prussians under Blucher), and at Quatre-Bras, on the same day (when the allies under Wellington compelled the French Marshal Ney to retire). At Waterloo the French numbered about 72,000. The allies (British, Dutch, and Germans), under Wellington, had about 67,000; the Prussians (about 50,000 more), under Blucher, came up in time to take part in the close of the battle, and in the pursuit. The battle began about 11.30 A. M. Briefly it may be said to have consisted of a series of brilliant but unsuccessful charges made by the French, and dogged resistance on the part of the British; in the evening the French Old Guard charged, but unavailingly; after which the allies advanced. The French lost about 35,000, and many prisoners; the allies about 22,000. Marshal Grouchy, though he defeated Blucher at Wavre, June 18th, failed to prevent him from joining Wellington, and himself failed to come to Napoleon's aid, though but a few miles distant. The rout of the French was complete, and the disaster final to Napoleon, the result being his deposition and exile to St. Helena.

West Virginia. Immediately after the ordinance of secession, passed by Virginia in April, 1861, a mass-meeting of citizens convened at Clarksburg, and denounced the action of the convention, recommending the citizens of Northwest Virginia to meet in convention at Wheeling on May 13th. Other meetings sustained the movement, and delegates from twenty-five western counties met in convention, denounced the action of Virginia, and provided for a convention of all the counties of the State adhering to the Union. The latter convention repudiated the action of Virginia, and elected Francis H. Pierpont as governor of the reorganized State of Virginia. The ultimate result was the formation of the new State under the title of West Virginia, and in 1863 the State was admitted to the Union. Military operations in what is now known as West Virginia were mostly confined to 1861, and the most important engagements were at Philippi, Beverly, Rich Mountain, Cheat Mountain, and Carnifex Ferry.

Whisky Insurrection, a popular outbreak in Western Pennsylvania, in the summer

of 1794, on account of the imposition of duties on domestic distilled spirits. The people of Western Pennsylvania, where large quantities of whisky were manufactured, resisted the collection of the revenue by excise officers with force of arms. The insurrection became general in several counties. Many outrages were committed. Buildings were burned, the mails were rifled, and government officers were insulted and abused. At one time there were 6,000 or 7,000 insurgents under arms. The President of the United States (Washington) finally called out the military force of the country, to put down the insurgents, and was successful. Great leniency was shown to the offenders, and the excitement died away.

Wisconsin. The name is derived from the River Wisconsin (originally used with the French orthography, *Ouisconsin*), from an Indian word, meaning "wild, rushing river." The first white people in Wisconsin were French explorers, Jean Nicolet and his followers, who entered the region in 1634. In 1658-59, two fur traders, Radisson and Groseilliers, visited the Mississippi and left a record of their travels. In 1665, a Jesuit mission at La Pointe was founded by Father Claude Allouez, and three years later he established the mission of St. Francis Xavier on the shores of Green Bay. In 1673, Father Marquette, accompanying Louis Joliet, reached the Mississippi by passing through Wisconsin, and later Father Hennepin and La Salle traced other waterways within the territory. Trading posts were established soon after this, becoming dependencies of Mackinaw. About the middle of the Eighteenth Century a fixed settlement was established at Green Bay, and at the close of the Revolutionary War Prairie du Chien, at the mouth of the Wisconsin, grew into a like settlement, and a few years later La Pointe and Portage became permanent trading posts.

England retained Mackinaw after the treaty of 1783, and American dominion was not felt by the Wisconsin traders until after the War of 1812. The formation of Astor's company to establish fur trade in this region was followed by a law forbidding English traders in the territory, which resulted in an increase of American influence. By the ordinance of 1787 Wisconsin had been a part of the Northwest Territory. In 1800, it was included in Indiana Territory. In 1809, it passed to Illinois, and in 1818 to Michigan. In 1825, the lead mines in the southern part of the State began to attract attention and considerable mining population came into the country. In 1828, Fort Winnebago was erected at Portage and the mining region was ceded to the whites by the Indians. In 1832, occurred the Black Hawk War, which ended in the almost entire extermination of the Sacs. The Territory of Wisconsin was formed in 1836 out of lands then comprised in the Territory of Michigan. It embraced all the land now within the States of Iowa, Wisconsin, and Minnesota, and that part of the Territory of Dakota which lies east of the Missouri and White Earth rivers. In 1838, all the territory west of the Mississippi River, and of a line due north from the source of that river to the international boundary-line, was taken to form the Territory of Iowa. As thus

bounded, Wisconsin became a State in 1848, the seventeenth admitted under the Federal Constitution.

Wyoming was first visited by white men in 1742 and 1744, when Sieur de Verendrye, with a party from Canada, entered the territory and discovered the Rocky Mountains. John Colter, of Lewis and Clark's expedition of 1806-10, explored the northern part of the section and discovered Yellowstone Park. In 1807, Ezekiel Williams made extensive explorations in Wyoming, and in 1812 Robert Stuart's courier party discovered the route to the West known as the "Overland Trail." In 1834, Sublette and Campbell built Fort Williams, afterward called Fort Laramie, and established the first permanent post in the State. In 1834, the first emigrants to the Pacific Coast passed along the overland trail, and in 1836 the first white women crossed the Rocky Mountains.

Fort Bridger, the second permanent post, was built in 1842. In 1847, the advance guard of the Mormons crossed Wyoming on their way to Utah. Fort Laramie was garrisoned in 1849 and made a government post. In 1854, began a series of Indian wars which continued until 1876. The greatest Indian uprising happened from 1862 to 1868, and in 1866 occurred the massacre of Fort Phil Kearny, when Colonel Fetterman and eighty men were killed. The gold mines of Sweetwater were discovered in 1867, and the city of Cheyenne was founded in the same year. The first passenger train on the Union Pacific Railroad arrived in Wyoming in 1867. In 1868, the Territory of Wyoming was organized. Cheyenne was designated as the capital, and Laramie was founded. The first territorial legislature convened at Cheyenne in 1869. An act was approved that year giving women the right to vote and hold office in Wyoming. Coal was discovered in 1869 and the first mine was opened. In 1890, Wyoming was admitted to statehood and the first legislature convened at Cheyenne. In the same year cowboys, in an attempt to put a stop to train robbery, brought about a period of outlawry that necessitated a call for United States troops.

Serious trouble was caused for some years in Wyoming by the State game laws, to which the Indians were naturally unable to reconcile themselves. In the latter part of October and the beginning of November, 1903, severe fighting took place between the whites and Indians who had been killing game, in which several whites were killed.

Yorktown, Virginia. Lord Cornwallis had taken possession of Yorktown in August, 1781; but, after sustaining a disastrous siege, he was obliged to surrender his army, consisting of about 7,000 men, to the allied armies of France and America, under the command of General Washington and Count Rochambeau, October 19, 1781. This mischance was attributed to Sir Henry Clinton, who had not given the garrison the necessary succor they expected; and it mainly led to the close of the war. It was strongly fortified by the Confederates in the American Civil War, but surrendered to McClellan, May, 1862.

SECOND BOOK

LANGUAGE

NOAH WEBSTER
SCHOOLMASTER OF THE ENGLISH LANGUAGE

LANGUAGE

It has been estimated that more than twelve hundred languages were spoken in the two Americas. These languages give evidence of no continuously progressive type of culture. The many tribes have changed their vocabularies; but the identical method of putting words together has survived without change. One striking characteristic is the frequency of long words. This is well illustrated by the Aztec word for letter-postage — *amatlocuilolitzquitcatlaxlahuilli*, the literal meaning of which is, "the payment received for carrying a paper on which something is written." By comparison and classification of the countless dialects and languages, they are reduced to a few great groups: the Tuméh group covers the northern part of the Rocky Mountains; the Aztec group has its seat in Central Mexico and Central America; the Maya group has its seat in Central America and Yucatan; the Appalachian tribes include all those with which the English and the French first came into contact from the Atlantic to the basin of the Mississippi, and also the tribes of the northern part of South America; the Amazonian tribes occupy a large part of South America.

The Hamitic race belongs historically to the northern parts of Africa, the southern parts of Europe, and the western parts of Asia. The Hamitic people were called, by the historic Greeks, Pelasgic. Their civilization has been so overlaid by that of the Aryans as to be almost wholly obscured. The great Hamitic civilization was that of Egypt, long considered the earliest of all the civilizations.

HAMITIC TONGUES

Sidonian,	Egyptian,	Berber,	Iberian,
	or	or	
	Rotic	Libyan	Biscayan
	Koptic		
Pelasgian,	Minæan,	Galla	
(probably)	(probably)	(probably)	

At the beginning of this century we knew little more of Semitic literature than what was contained in the ancient Hebrew Scriptures and in that body of Arabic literature that grew up after the era of Mohammed. Our knowledge has been greatly added to by the numerous inscriptions which have been found and deciphered. The Semitic races first appear historically in the great desert region covering Arabia and extending to the border of the Mesopotamian River valleys. The Semitic tongues are different dialects, rather than different languages.

The Koran made the Arabic language sacred, as well as classic. About the Eleventh Century that treasure-house of tales, "The Thousand Nights and a Night," was produced. From the Canaanite family came our Hebrew Bible, a library of very varied literature.

AMERICAN LANGUAGES

Blackfeet,	Chippewa,	1 TUMÉH
Cree,	Kutchin,	
Montagnoi,	Kenai,	
Micmac,	Tacullie,	
Ottawa,	Umpqua,	
Abenaki,	Hoopab,	
Passamaquoddy,	Apache,	
Pequoid,	Navajo,	
Mohegan,	Lipan,	
Lenape,		
Nanticoke,		
Powhatan,		
Miami,		2 NARVAZ
Sac,	Toltec,	
Fox,	Aztec,	
Kickapoo,	Chichimec,	
Shawnee,	Pipile,	
	Nicarao,	3 QUICHÉ-MAYA
	Alaguiliac,	
Seneca,		4 APPALACHIAN
Cayuga,	Itza,	
Onondaga,	Tzendal,	
Oneida,	Quiché,	
Mohawk,	Cakchiquel,	
Tuscarora,	Huasteca,	5 AMAZONIAN
Huron,	Maya,	
	Quichúa,	
	Amará,	
Assiniboin,		6 APPALACHIAN
Sioux,	Algonkin,	
Crow,	Iroquois,	
Winnebago,	Dakota,	
Omaha,	Chahta-Muskoki,	
Mandan,	Caddo,	7 APPALACHIAN
Oto,	Kioway,	
Ponca,	Shoshonee,	
Osage,	West Indian,	
Kansas,		
Tutelo,		8 APPALACHIAN
Cherokee,		9 APPALACHIAN
Creek,	Tupi,	
Choctaw,	Guarani,	
Chickasaw,	Mundurucu,	
Yemassee,	Orára,	
Seminole,	Tiëuna,	10 APPALACHIAN
	Parentintin,	
	Múra,	
	Purupurú,	
	Piro,	
	Miránha,	11 APPALACHIAN
	Caishána,	
Caddo,		12 APPALACHIAN
Pawnee,		
Arikaree,		
Wishita,		
Ute,		13 APPALACHIAN
Comanche,		
Carib,		14 APPALACHIAN
Arawak,		

ARYAN TONGUES OF THE EAST

SEMITIC LANGUAGES

Aryan (*Indo-European, Indo-Germanic*) **Family.** To this family belongs the first place. From the Aryans sprang both Persians and Greeks midway in its development; this family rules both Europe and America, the African coasts and Australia, as well as the north and south of Asia. Its literature, both in abundance and quality, is unsurpassed by those of any of the other world families of language. From the Aryans have come the great world literatures in politics, art, letters, science, and religious truth. From them came the *Iliad* and the *Odyssey*, the *Vedas* of India, and the *Sháh-námeh* of Persia, the *Eddas* of the Norsemen, the *Gunrun*, the *Lay* of the *Nibelungs*, the *Beowulf*, the *Romaunt* of *Roland*, the *Arthurian Tales*, and the *Keltic Mabinogion*.

One group of the Aryan family conquered and civilized India and Ceylon. Sanskrit was the language in their day of greatness. The group that traveled farthest west was the Kelts. These were soon followed by the Teutonic tribes. Then came the Slav, Serb, or Wend.

"The care of the national language I consider as at all times a sacred trust and a most important privilege of the higher orders of society. Every man of education should make it the object of his unceasing concern, to preserve his language pure and entire, to speak it, so far as is in his power, in all its beauty and perfection. * * * A nation whose language becomes rude and barbarous, must be on the brink of barbarism in regard to everything else. A nation which allows her language to go to ruin, is parting with the best half of her intellectual independence, and testifies her willingness to cease to exist."—*F. Schlegel*.

"It is with words as with sunbeams, the more they are condensed the deeper they burn."—*Southey*.

"Though our comparison might be bold,

it would be just as if we were to say that the English language is a conglomerate of Latin words bound together in a Saxon cement; the fragments of the Latin being partly portions introduced directly from the parent quarry, with all their sharp edges, and partly pebbles of the same material, obscured and shaped by long rolling in a Norman or some other channel."—*Whewell*.

The English language is a conglomerate. Whenever there is an invention made or a psychological truth discovered, or a new article of commerce is introduced, or contact or intercourse with a new nation or people is established, a new word or set of words is added to our vocabulary. Every new game or fashion creates new names. Our complex civilization is reflected in a complex vocabulary or language. It is important that we should familiarize ourselves with the sources of our language, and with the sources of its strength, and each do his share towards preserving it in its purity and beauty. We should have an intelligent interest in our mother tongue in order that we may use it intelligently. We must spend a little time in the study of the past of our language, because it is only in the light of that past that the present is intelligible. Few of us are conscious of the changes taking place now, yet these changes must be taking place, for ours is the same language used by Chaucer, yet how different. New words are coming in, and old ones becoming obsolete every year.

Slang is responsible for the introduction of many new words. When we first hear a slang phrase, we are surprised; but in this day of great surprises, we quickly grow accustomed to it, and soon adopt it as an integral part of our language. We use it as though it were not a thing of yesterday, but had existed as long as the language itself. Later, we shall examine some of these, and see which have been incorporated into the language, and so have a right to be used in polite society and in serious composition.

Trench says that if the English language were to be divided into a hundred parts, "forty-five of these might be Anglo-Saxon, or Old English, as now some prefer to call them; forty-five Latin (including, of course, the Latin which has come to us through the French); five perhaps would be Greek. We should, in this way, have allotted ninety-five parts, leaving the other five to be divided among all the other languages, which have made their smaller contributions to the vocabulary of our English tongue." It will be interesting to find what classes of words come from the different sources.

The Anglo-Saxon is the basis of the English language; it is the warp while the Latin is the woof. The monosyllables in great part are Anglo-Saxon. The articles, conjunctions, pronouns, prepositions, numerals, and auxiliary verbs are Saxon. Verbs of action and words that relate to the primary action of the senses are Saxon; as, think, feel, sing, see, talk, walk, run, and the like.

Ever since the English language began we have been filibusters; we have plundered every other tongue for words to make our meaning plain; we have raided where we would, and

have never hesitated to put ourselves under obligation to all strangers coming to our shores, or whose shores we have visited. The history of the English language is, in fact, but the history of the English people, and of their doings.

The early British language was under debt to the Kelts, first of all; and we find in our present-day vocabulary such words as apply to Celtic things, as, bard, shamrock, whiskey, clan, dirk, cromlech, kilt, etc. The Anglo-Saxons, while they eagerly discarded words of Celtic origin, as did the French later, enriched their language from the Latin. The Roman occupation of Britain from A. D. 43 to A. D. 418, bequeathed to us five or six terms: *castra*, a camp, has been retained in Doncaster, Lancaster, Gloucester, Winchester, Bibehester, Exeter, formerly Excestre; *strata*, a paved road, in street, Park street, Stratford, Stretford, Streatham, Stradbroke; *colona*, a colony, in Lincoln; *portus*, a harbor, in Portsmouth, Porchester, Portsea; *pons*, a bridge, in Pontefract; *fossa*, a bridge, in Fossway, Fossbridge; *vallum*, a rampart, in Wallbury.

The conversion of the British to Christianity is marked by another influx of Latin words or terms relating to the Church: abstinence, avarice, bounty, cardinal virtues, conscience, charity, chastity, confession, consistory, contemplation, contrition, indulgence, recreant, relic, reverence, sanctity, spiritual, unity, etc. Then the Danes lent a hand, giving us: to plough, to ask, cross.

Nor is it without a strange irony that the lawless Vikings gave us our word "law." The early supremacy of the Dutch in agriculture, in horticulture, and in ship building is made evident by the fact that a large proportion of the English words, dealing with the farm, the garden, and the ship are of Dutch origin, and were borrowed from the brave little republic when the English went to school to the Hollander, to learn what he had to teach. A few of the words they give us are: ahoy, aloof, ballast, bluff, blunderbuss, boom, house, brack, brackish, brandy, bruin, dot, duck, golf, growl, boarding, hope, knapsack, landscape, leaguer, loiter, manikin, measles, mope, mumps, pink, sheer, slim, sloop, swab, switch, uproar, wagon, yacht, dock, hull, skipper, fly boat.

During the First Century that followed the Conquest in 1066, the language of the native population was, as they were themselves, utterly crushed and trodden under foot. The Conquest revolutionized our language as it did our life. A foreign dynasty, speaking a foreign tongue, and supported by an army of foreigners, was on the throne of England; Norman ecclesiastics filled all the high places of the Church, and places of honor and emolument. This meant that French became the language of the court, of society, and even of the many Norman families, who employed the Saxons as servants. But the masses of England still spoke their native tongue.

The better or richer families of the Anglo-Saxons began to adopt the French fashions and manners, and to speak the French language, as a mark of gentility. The many churches and castles, which the Normans built in different parts of England, meant that the French would

there be used, and add to the influence at work to make a new English language. The language of chivalry was exclusively French, and brought in such words as, honor, glory, renown, host, champion, valiant, feat, achievement, courtesy, gentle, etc.. With the lawyer, who was a great power during this time of transition, came such words as advocate, alliance, chattels, demise, devise, demurrer, domain, estate, fief, homage, liege, loyalty, manor, personality, pursuit, realty, rent, treaty, voucher, etc.

The words which describe the pursuits of gentlefolk are mostly of French origin; and it is a curious comment on history that, as Wamba points out in "Ivanhoe," while live animals—ox, sheep, calf, swine, deer—retain their native names, they are described by French words—beef, mutton, veal, pork, venison—when they are brought to table. The "Saxon" serf had the care of the animals while they were alive, but when killed they were eaten by his "French" superiors. Abundant words relating to law, government, and property, have their origin in the Conquest. Such are: custom, prime, court, assize, tax, county, city, judge, jury, justice, prison, goal, parliament, manor, money, rent, chattel, mortgage, council, bill, act, etc. The French had shown their greater genius for war, and so, very naturally, their military terms were accepted. Army, battle, fortress, cannonade, assault, siege, hauberk, ambuscade, brigadier, colonel, arms, armor, standard, banner, harness, glaive, tower, and lance are some of them.

From the fact that butcher, grocer, mason, carpenter, barber, chandler, cutter, draper, and tailor are of French extraction, we would conclude that the strangers were superior to the natives in the industrial occupations.

"It is owing to the coming of William," says Dr. Freeman in his "History of the Norman Conquest," "that we cannot trace the history of our native speech, that we cannot raise our wail of its corruption without borrowing largely from the store of foreign words which, but for his coming, would never have crossed the sea. So strong a hold have the intruders taken on our soil that we cannot tell the tale of their coming without their help."

Nearly all the scholarly writers of to-day have been classically educated, and they write for readers presumed to have more or less knowledge of Latin, hence they do not hesitate to use Latin derivatives, and often anglicize a Latin word rather than invent a native English compound. It is this tendency which has kept us from forming compound words, as do the Germans for each new idea. But recently the German Emperor put forth a strong plea for the use of the native words instead of the foreign words, which the people were adopting so readily. He even wanted them to use a native compound in place of the cosmopolitan word *telephone*.

The English tongue is fortunate in that it is an ingenious and partial compound of German and Latin. The German gives force, the Latin sonority to our verse and prose, while an interchanging of German and Latin gives a variety which every other language may seek in vain.

Most of our scientific nomenclature is from

the Greek. Not only do we get our scientific terms from the Greek, but also the names for the new instruments and processes, as, lithography, photography, telephone, cinematograph, etc.

Our musical vocabulary is largely from the Italian, as the following words bear witness: contralto, duet, opera, piano, quartet, solo, sonata, soprano, stanza, trio, trombone, allegro, adagio, baritone, cantata, canto, fugue, canon, etc.

The French give us terms of dress and cooking: flounce, jewel, pattern, plait, toilet, tongs, vesture, trousseau, costume, model, peruke, drape, embroider, furbelow, jacket, apparel, apron, bracelet, brooch, buckle, fricassee, fritter, fog, gem, jelly, juice, omelet, parboil, peel, pie, ragout, sauce, sausage, victuals, salad, etc.

The advent of the English in the New World is known by the adoption of tobacco, potato, tepee, wigwam, toboggan, moccasin, pemmican, etc.

Were it wise to use the space for it, illustrations of words taken from every language could be given. But enough has already been done to show the composite make-up of our mother tongue, and to show the sources of its strength.

Every Englishman should speak English. If a foreign word has been adopted into the English language, why not let it take the English forms? Let the plural of syllabus be syllabuses; of cactus, cactuses; of focus, focuses; etc. Let others take on the English spelling, as, technic, not technique; grip, not gripper; conservatory, not conservatoire; exposure, not exposé, etc. Only a pedant will use serviette in place of napkin.

Let the student or would-be author not try to adorn his style with foreign words; let him use the most usual terms to produce the desired effect. Let him remember that, though English has borrowed a great deal of French, though it has lost a large stock of English words, though it has adopted many a French idiom, and has been influenced by French in endless indirect ways, it still remains English.

In former times "hard work made one sweat"; now-a-days excessive labor causes profuse perspiration. If a man, thus overheated, were to stand in a draught, he might catch his death of cold, get very sick, and even die, would read well enough as an ordinary warning; but in a treatise on hygiene for popular use, the matter is now presented as follows: "If a person, whose system is excited by vigorous exertion, should suddenly expose himself to a current of air, he would probably check his perspiration and contract a disease which might involve the most serious and even fatal consequences." Which form of expression shall we cultivate? Which recommends itself to you?

Dr. Freeman says: "In almost every page I have found it easy to put some plain English word, about whose meaning there can be no doubt, instead of those needless French and Latin words which are thought to add dignity to style, but which in truth only add vagueness. I am in no way ashamed to find that I can write purer and clearer English now than I did fourteen and fifteen years back; and I think it well

to mention the fact for the encouragement of younger writers. The common temptation of beginners is to write in what they think a more elevated fashion. It needs some years of practice before a man fully takes in the truth that for real strength, and above all, for real clearness, there is nothing like the old English speech of our fathers."

CAPITALS

1. The first word of every full sentence should begin with a capital, unless a literal reprint of the writing of an illiterate person, who does not begin a sentence with a capital, is to be made.

Two lines of invasion were adopted. Montgomery descended Lake Champlain with 2,000 men, and after a campaign of two months captured Montreal.

2. Every line or verse of poetry should begin with a capital.

Morning, evening, noon, and night,
"Praise God!" sang Theocrite.
Then to his poor trade he turned,
Whereby the daily meal was earned.

The initial letter in the first word of a poetical quotation, though not beginning a line, should be capitalized.

But that's not enough:
Give my conviction a clench!

3. The name of the Deity in every person, and in every synonym or attribute, should begin with a capital; as, God, Christ, Jesus, Son, Holy Ghost, Jehovah, Heaven, Creator, Providence, Infinite One, Supreme Being, etc.

When the attributes of the Deity or of the Saviour are expressed, not by adjectives, but in the Hebrew style, by nouns, they should begin with small letters, as Father of mercies, God of wisdom, Prince of peace.

Also write Son of man, Spirit of God, Lord of lords, King of kings, etc.

4. Pronouns referring to God and Christ should not begin with capitals, unless they are used emphatically without a noun.

Shepherd! with thy tenderest love,
Guide me to thy fold above;

* * * * *
Jesus said, I and my Father are one.

5. The pronoun I and the interjection O always take a capital letter. Oh does not unless it begins a sentence.

The heavens and earth, O Lord! proclaim thy boundless power.

6. The proper names of the days of the week and of the months of the year, and of days of feasts and fasts, festivals and holidays, both religious and civic, should begin with capitals; as, Monday, March, Arbor Day, New Years, Whitsunday, Decoration Day, Labor Day, Easter, Black Friday, etc.

The names of the seasons are not capitalized.

7. All proper nouns and adjectives derived from these nouns should begin with capitals; as, a Greek, a Roman, a Hebrew, a Christian, a Mohammedan, Elizabethan.

Names of all geographical zones or sections of the world, when used as proper nouns, take a capital; as, the Occident, the Orient, the Levant, etc.

Names of political parties should be capitalized; as Tory, Republican, Federalist, Free Soiler, etc.

Geographical, national, or personal qualities, when used as nouns or before nouns in common use that specify merchandise, do not need a capital; as china, india ink, prussian blue, turkey red, majolica, delft, oriental rugs, castile soap, etc.

There are some verbs derived from proper nouns that have lost their reference to the noun, and so are printed with small letters; as, to hector, to philippize, to romance, to japan, to galvanize. But Judaize and Christianize are exceptions to this rule.

8. Capitalize the first word in all titles of books, periodicals, plays, and pictures, and also every other word in the titles except articles, prepositions, and conjunctions.

Fiske's The War of Independence.

This rule is contrary to the custom of the American Library Association's rules, used in cataloguing books. They capitalize only the first word and proper nouns and proper adjectives; as, Fiske's The war of independence.

9. The first word and all important words in the titles of corporations and societies, should begin with a capital letter; as, The Society for the Prevention of Cruelty to Animals, the Synod, the Government (when it stands in place of the title of the divisions of the government). In general one should use a capital in the last illustrations when the definite article is used, and a small letter if the indefinite article is used.

10. Titles of office or honor should be capitalized if used before the name of the person, as, Mr. Smith, President Roosevelt, Messrs. A. K. Bidwell & Co., Brother George, Aunt Hannah.

If used after, they are better written with a small letter; as, Hon. James G. Blaine, ex-senator from Maine; James Brown, roundsman, Broadway maid.

When titles occur frequently on a page, and are used without any particular expression of honor, they should be written with small letters.

In official documents the titles of potentates are often capitalized, even though they follow the name of the ruler; as, Victoria, by the grace of God, Queen of Great Britain and Ireland, Empress of India, etc.

When sir, friend, boy, and the like words are used in the salutation of a letter, they should be capitalized; as, My dear Sir, My dear Boy.

A title used in place of the person's name should begin with a capital; as, Good morning, Captain; Mr. President, I call for the question.

Abbreviated titles of honor or respect should be capitalized: James Bryce, D. C. L., Henry Northam, M. D., LL. D.

11. Words of primary importance, especially if they indicate some great event, or remarkable change in religion or government, are commenced with capital letters; as, The Reformation, effected by Luther, is one of the most wonderful events in modern times.

12. The names of the points of the compass when used to indicate direction should begin with small letters. When used to indicate a

section of the country, they should begin with capitals; as, I am going West; he is a representative man of the South; the river flows south-west.

13. Appellatives used either before or after geographical nouns are capitalized; as, Erie Canal, Hudson River Railroad, Strait of Magellan, Coe Place, Shenandoah Valley, though many publishers omit the capital for the generic word, when it precedes the specific term; as, county of Winchester, state of New York, empire of Russia.

14. Abstract qualities, when personified, should be capitalized; as, O Death! where is thy sting. Then Crime ran riot.

15. All quotations that are intended to be emphatic, or that consist of a complete sentence, should begin with a capital; as,

Then Elijah said, "Thou art the man."

These two questions, "What are we?" and "Whither do we tend?" will at all times press painfully upon thoughtful minds.

When a quotation is introduced by that it should begin with a small letter; as, "He said that this great patriot bequeathed to his heirs the sword which he had worn in the war for liberty, and charged them never to take it from the scabbard but in self defense, or in defense of their country and her freedom."

16. In writing resolutions, the word immediately following Resolved, should begin with a capital. See Punctuation, Comma, Rule 13.

Resolved, That the discovery of smokeless gunpowder has increased the horrors of war.

17. Abbreviations should be followed with a period; as, Geo., Co., Gen., LL. D., D. D., Dr., etc.

PUNCTUATION

Punctuation is the art of breaking up a sentence by means of points and stops, so as to convey to the reader's mind, as quickly and easily as possible, the writer's meaning. There are two systems of punctuation, the close and the open. The close system is used in legal documents, laws, ecclesiastical formularies, and in precise composition of every sort. Even the omission of a hyphen from a compound word may make a serious error. The insertion of a comma in place of a hyphen between "fruit" and "seeds" in an enactment of Congress cost the government thousands of dollars. The loose punctuation should be used in ordinary descriptive writing. Formerly too many marks were used; to-day the tendency is toward the use of too few marks. Punctuation can surely not be classed among the exact sciences. It is not even an established system, for many of the rules of the teachers differ, and the practice of their pupils differs still more. Points may be omitted or inserted in a catalogue in a way that would not be tolerated in a history.

However, there are some explicit directions that may be given that all writers should follow. The points should be used to show the grammatical relation of words, and never solely to indicate rhetorical pauses in reading.

The necessity for a knowledge of correct punctuation is well illustrated by this anecdote: "The following request is said to have been made at church: 'A sailor going to sea, his wife

desires the prayers of the congregation for his safety.' But, by an unhappy transposition of the comma, the note was read thus: 'A sailor going to see his wife, desires the prayers of the congregation for his safety.'"

The marks used for punctuation are the period [.] , colon [:] , semicolon [;] , comma [,] , interrogation point [?] , exclamation point [!] , dash [—] , parenthesis () , brackets [] , hyphen [-] , double quotation marks [" "] , single quotation marks [' '] , apostrophe ['].

Period. 1. All declarative and imperative sentences, and sentences that are interrogative in form, but to which an answer is not expected, should be followed by a period; as, He has gone. Go at once. Ah! whither now are fled those dreams of happiness. The Cyprians asked me why I wept.

2. All abbreviations, unless the ellipsis of intermediate letters in the words has been indicated by using the apostrophe, should be followed by the period; 7th, 9th, 3d, etc., are not followed by the period.

3. When capitals are used for numerals, it was customary formerly to follow them by a period; e. g., Henry VIII., John IV. 3. The latest usage seems to omit the period, especially in the possessive construction; as, Henry VIII's reign.

Comma. 1. All nouns of direct address should be set off by commas; as, John, come here. I say, Mary, can you go now? Sir, I cannot do it.

2. When there are three or more parts in the subject of a sentence, and the conjunction is used between the last two only, a comma should be used after each part except the last.

Mary Lee and Laura came yesterday. As the sentence stands, you may think that there are but two persons that came yesterday; viz., Mary Lee and Laura. If the sentence is written Mary, Lee and Laura came yesterday, then Mary may be a noun of direct address, and the boy Lee and the girl Laura came; but if it is written, Mary, Lee, and Laura came, you know that three persons came. The comma before the *and* is frequently omitted by rapid writers; but it should not be omitted in this compound construction.

3. Parenthetical or additional expressions, that is, those expressions that break the directness of the statement, require to be cut off by commas; as, Christopher Columbus, an Italian by birth, discovered America. It is mind, after all, that does the work of the world. In this sentence, 'after all' does not modify 'does,' but shows a connection between this sentence and something gone before. Another illustration would be, It was not necessary, however, for you to go.

Some of the phrases in common use that are usually set off by commas are: in short, in fact, in reality, in brief, as it happens, no doubt, in a word, to be sure, to be brief, etc. Some of the words used parenthetically, which, according to the close punctuation should be set off by commas, and according to the loose, should not be, are: therefore, then, however, perhaps, namely, indeed, too, moreover, etc.

Most of these words named last are capable of two constructions,—they may either belong to the proposition as a whole, or to a single word

in it. It is only when used in the former sense that they require to be set off by commas; e. g., On this assistance, then, you may rely. Then I believed you, now I do not.

4. Independent adverbs at the beginning of the sentence should be set off by a comma; as, Well, I will go. Why, you may if you want to.

NOTE.—Used in this way it would be better to omit them from all sentences.

5. The nominative, the infinitive, and the participle used absolutely, should be set off by commas: The wind having gone down, we may go sailing. To tell the truth, I must remain here; Generally speaking, he is a good fellow.

6. Nouns in apposition are set off by commas: George, my brother, can do it for you. We, the people of the United States, do ordain and establish this constitution.

7. If the subordinate clause in a complex sentence comes first, it should be followed by a comma: If I go, you must remain; While he stays, you must stay.

8. A series of words used in the same construction should be separated by commas; as, Ulysses was wise, eloquent, cautious, and intrepid, as was requisite in a leader of men. He stood, walked, ran, and jumped.

If the words are used in pairs, only the pairs should be separated; as, Ulysses was wise and eloquent, cautious and intrepid, as was, etc.

9. When two statements, each with its own subject, verb, and object, are put in one sentence, the comma should be used to show their distinctiveness, even when the sentence is very short: as, You may go, and I will stay.

10. Use a comma between two words in the same construction when they are differently modified; as, He sold a horse, and wagon of wood. If the comma is omitted, the horse was of wood.

11. When the subject consists of two or more nouns not joined by a conjunction, use a comma before the predicate; as, Riches, pleasures, health, become evils to those, etc.

12. A comma is put before a relative clause, when it is explanatory of the antecedent, or presents an additional thought.

But the point is omitted before a relative clause which restricts the general notion of the antecedent to a particular sense.

To make clear the difference between an additional and a restrictive clause, let me use this sentence: Her entrance was unnoticed by the officer who sat gazing in the fire. We restrict when we wish to separate one object from other objects of the same sort. If there were several officers in the room, and you wish me to know that her entrance was unnoticed by but one of them, you wish to separate or distinguish him from the others. Then the clause is used restrictively and should not be set off by a comma. But if there was but one officer in the room, you use this same clause to tell an additional fact about him; then it is used additionally and should be set off by commas.

Much confusion arises in this sort of sentence because authors on punctuation say that a descriptive or additional clause should be set off by commas. A descriptive clause may be

used to express either an additional or a restrictive thought. Bring me the dress that is made of red silk. This sentence requires no comma because there are several dresses there, and I want the red silk one. Bring me the dress, which is made of red silk. Here I have used the same descriptive clause, but the use of 'which' and the comma shows that that is the only dress there.

NOTE.—In all *restrictive* relative clauses, the pronoun "that" should be used; and in all *additional* relative clauses use "who" when referring to people and "which" when referring to animals or inanimate objects. If writers would bear this use of these pronouns in mind, the matter of the comma would be immaterial because the pronoun would sufficiently indicate the use of the clause.

13. One good authority says do not use a comma after whereas, It appears, etc.; Resolved, That, etc.; Ordered, That, etc. He also says, Do not use a capital after these words. Write, Resolved that women, etc.

14. When a clause is used as the subject of a verb, it should not, even though long, be followed by a comma, unless it ends with a verb; as, That the governor of this great State of Illinois should make this unworthy appeal to the passions and prejudices of the foreign-born citizens of the nation must always be a cause of mortification to every lover of his country.

The second part of the rule is illustrated by, Whatever is, is right.

15. A comma is used before a short direct quotation: He said, "I will go."

NOTE.—A colon is used before a long direct quotation.

16. The comma shows the omission of words; as, Her address is 718 Norwood Ave., Rochester, N. Y., which means in Rochester, in the State of New York. Reading maketh a full man; writing, an exact man.

NOTE.—The latest authority says omit the comma in the last sentence because no misunderstanding can arise thereby; but custom still uses it.

Semicolon. This mark is used to separate such parts of a sentence as are somewhat less closely connected than those separated by a comma.

1. When two clauses are joined by *for*, *but*, *and*, or an equivalent word, the one clause perfect in itself, and the other added as a matter of inference, contrast, or explanation,—they are separated by a semicolon: Economy is no disgrace; for it is better to live on a little than to outlive a great deal.

2. When the parts of a compound sentence, even though they are short, are not closely connected in thought, they should be separated by a semicolon; as, I live to die; you dye to live.

3. Use the semicolon to separate the parts of a compound sentence, when one or both members contain commas: Men are not judged by their looks, habits, and appearances; but by the character of their lives and conversations, and by their works.

4. If a series of expressions depend on a commencing or concluding portion of the sentence, they should be separated by a semicolon: Philosophers assert, that nature is unlimited in her operations; that she has inexhaustible treasures in reserve; that, etc. Also in such a sentence

as, If we think of glory in the field; of wisdom in the cabinet; of the purest patriotism; of the highest integrity, public and private; of morals * * * the august figure of Washington presents itself as the personation of all these ideas.

5. All of the older authorities say use a semicolon before and comma after *as*, viz, *to wit*, namely, *i. e.*, or *that is*, when they precede an example or an illustration. The latest authority says use the comma in both places. This is but another illustration of the changes in punctuation that are coming in.

Colon. 1. When a sentence is long, and one or both of the parts contain semicolons, the greater division should be marked by a colon: Art has been to me its own exceeding great reward: it has soothed my afflictions; it has refined my enjoyments; it has endeared my solitude; and it has given me the habit of wishing to discover the good and the beautiful in all that surrounds me.

2. A colon should follow a clause that is complete in itself, but is followed, without a conjunction, by some remark, inference, or illustration: Nor was the religion of the Greek drama a mere form: it was full of truth, spirit, and power.

3. A colon should be used before a long direct quotation, or a list of articles formally introduced: She finished her helpful talk with the "Song" from "Pippa Passes":

"The year's at the spring
The day's at the morn;
Morning's at seven;
Etc.

Will you kindly send me the following articles:

2 lbs. of granulated sugar.
1 lb. of coffee.
Etc.

4. The words *yes* and *no* should be followed by a colon, provided the words that follow are a continuation or repetition of the question: Can these words add vigor to your hearts? Yes: they can do it; they have often done it.

5. The colon is more often used than any other mark after the salutation in a letter: My dear Sirs:

Interrogation Point. 1. An interrogation mark is placed at the end of every direct question: Will you go? He asked me, "Will you go?"

2. The mark of interrogation should not be used when it is only affirmed that a question has been asked, and the expression denoting inquiry is put in any other form than that of a direct question: I was asked if I would go to Europe next summer.

Note.—It should be placed inside of the quotation marks if it belongs properly to the quotation, and outside in other cases:—He asked, "Will you return by nine o'clock?" What can be more interesting than "the passing crowd"?

Exclamation Point. This point is used after any expression of strong emotion, and after interjections: Friends, countrymen, and lovers! hear me for my cause, and be silent that you may hear. The heavens and earth, O Lord! proclaim Thy boundless power. Oh! nothing is further from my thoughts than to deceive you. Oh, that all classes of society were both enlightened and virtuous!

The Marks of Parenthesis. If an expression is inserted in the body of a sentence, with which it has no connection in sense or construction, it should be enclosed by the marks of parenthesis. The test is, Can the words to be enclosed be omitted without injury to the sense? I have clearly seen charity (if charity it may be called) insult with an air of pity. She had managed this matter so well (oh, how artful a woman she was), that my father's heart was gone before I suspected it was in danger.

Notice the use of the mark of interrogation in this sentence: "While the Christian desires the approbation of his fellow-men (and why should he not desire it?), he disdains to receive their good-will by dishonorable means."

The Dash. 1. The dash is used to show an abrupt break in a sentence; to show a suspension in the thought; or an epigrammatic turn in sentiment. Closely following came—what do you suppose? The eye of the child—who can look unmoved into that "well undefiled," in which heaven itself seems to be reflected?

2. The dash is used where there is an ellipsis of such words as, namely, that is, etc. To separate adjectives in opposition but closely connected,—Though deep, yet clear.

Brackets. These marks, used for nearly the same purposes as the parenthesis, are usually confined to expressions inserted in or appended to a quotation, and not belonging to it. They are intended to give an explanation, to rectify a mistake, or to supply an omission; as, "The captain had several men died [who died] in the ship"; * * * because the people love the principles of the Constitution [long continued applause] and to-day, etc.

Hyphen. 1. The hyphen is used in forming compound words. When each of the words of which a compound is formed retains its original accent, they should be united by a hyphen: The all-'pow'-erful God; In-'cense-breath'ing morn. Everlasting, notwithstanding, and a few other words are exceptions to this rule.

2. If a prefix ends in a vowel, and the word to which it is joined begins with a vowel, the hyphen, or the diæresis over the second vowel is used: co-operate or coöperate.

3. The hyphen is used to show the division of words into syllables: hy-phen.

Double and Single Quotation Marks. 1. Every direct quotation should be enclosed in double quotation marks: To me he said, "I cannot believe it is true."

2. If the thought, but not the words of another are given, quotation marks are not used: He said that he could not believe that it was true.

3. You may use italics, or double, or single quotation marks if you are quoting a single word or short expression. "Petticoat" (literally 'little coat'), in itself a sufficiently inoffensive term, has shown a tendency to give way to "skirt." In this illustration "petticoat" and "skirt" may be italicized and the quotation marks omitted.

4. If a quotation occurs within a quotation, enclose the second one in single quotation marks: In his letter he wrote, "If the physi-

cian sees you eat anything that is not good for you, he says, 'It is poison!'"

5. When several paragraphs are quoted, use double marks at the beginning of each paragraph, and at the end of the last paragraph only.

Apostrophe. 1. Used to mark the possessive case. John's.

2. To show the contraction of words and omission of letters: I'll, you'd, etc.

3. To show the clipping of words in dialect: He wa' singin' to 'em.

4. To form plurals of letters, signs, and figures: There are twenty a's on this page. Count the 2's in this sum. Your x's or 0's were not well made.

RIGHT USE OF SOME COMMON WORDS

A. Always repeat the article if you refer to two objects, as, He has *a* black and *a* white dog. If there is but one dog, say, He has *a* black and white dog.

Abortive. A ridiculous perversion of this word is creeping into use through the newspapers. "A lad was yesterday caught in the act of *abortively* appropriating a pair of shoes." That is *abortive* that is untimely in its birth; and, by figure of speech anything is *abortive* which is brought out before it is well matured. *Abortive* should never be used in the sense of failure.

Accept of. Never use the preposition after this verb.. We accept invitations, presents, and the like.

Accept and Except. *Accept* means to take when offered; *except* means to leave out, to exclude. I *accepted* the gift. All *except* two will go.

Accord. To accord means to render or bestow upon another, as honor: therefore one should never say, "The information he desired was accorded him."

Administer. The man died from blows administered by the policeman. Oaths, medicine, affairs of state are *administered*. Blows are *dealt*.

Adopt. This word is often used instead of *to decide upon* and *of to take*; thus, "The measures *adopted* by Congress as the result of this inquiry, will be productive of good." Better, "The measures *decided upon*," etc. Instead of "What course shall you *adopt* to get your pay?" say, "What course shall you *take*?" etc. In the newspapers one may see "Wanted to *adopt*—A beautiful female infant." The advertisers meant to say that they wanted the child mentioned in their advertisement *adopted*. The word is correctly used in "The measures proposed by the senator were *adopted* by the committee."

Affect. See effect.

Aggravate. This word is often used when the speaker means to provoke, irritate, or anger. Thus, "It *aggravates* (provokes) me to be continually found fault with"; "He is easily *aggravated* (irritated)."

Agree. Do not use agree for *admit*. "That a flat brick façade pierced by a few windows, does not make an inspiring picture all will *agree*." Say, "all will *admit*."

Agriculturist is to be preferred to *agriculturalist*. The same is true of *conversationist*.

Ain't. This is not a contraction, and cannot take the place of *I'm not*.

Alike. This word should not be used with *both*, nor with *both just*, as in "These hats are both *alike*" or "*both just alike*"; say, "These hats are *alike*."

All of. *The of* is a superfluity. "I have them all," not "I have *all of* them"; "Take it all," not "Take *all of* it."

All Over. *All* should modify the noun, and not the prepositional phrase in "The disease spread *over all* the country," not "*all over* the country."

Allege. Do not use this word as a synonym for *say* or *tell*, as in "He *alleges* that the engine ran sixty miles an hour." Instead, "He *says* or *tells* us that," etc.

Allow. This word is frequently misused in the West and the South for *think*; *to be of opinion*; *to admit*; as, "He *allows* his horse can beat yours." Instead of this say, "He *thinks* or is of the *opinion* that, etc."

Almost—Nearly. These two adverbs should not be used indiscriminately. *Almost* regards the ending as an act; *nearly*, its beginning. A man that receives an injury so severe that he comes off with barely his life is *almost* killed; a man that escapes what would have killed him is *nearly* killed. These words are correctly used in "I am *almost* dead with fatigue"; "I am *almost* done with my work"; "I *nearly* ran over the child."

Alone—Only. That is *alone* that is unaccompanied; that is *only*, of which there is no other. "Virtue *only* makes us happy" means that nothing else can do it. If we say "Virtue *alone* makes us happy," we mean that virtue unaided makes us happy. "This means of locomotion is used by man *only*."

Alternative. Do not use this when more than two things are referred to. "You may have the choice of three courses, not of three *alternatives*."

Always. Often used redundantly. "Whenever I see her, I think of mother," not "I *always* think of mother."

Ameliorated. "Her troubles are greatly *ameliorated*," should be *are lessened*.

Among. "He was there *among* the rest" should be *be with* the rest.

Among One Another. "They exchanged votes *among one another*" should be *with one another*.

Amount. "A surprising *amount* of perfection has been reached" should be "A surprising *degree* of perfection, etc."

An. Always use *an*, not *a* before such words as heroic, historical, habitual, etc.

And. Do not use *and* in place of the particle *to*. "Come to see me," not "Come *and* see me."

And should never introduce a relative clause unless it joins it to a coordinate relative clause. "I have a dress worn by my aunt, *and which* is forty-five years old." In this sentence leave out *and* and use *that* instead of *which*. (See Rule 12 for the comma, under Punctuation.)

Antecedents. This word used as a substantive means those persons or things which

have preceded any person or thing of the same kind in a certain position. Thus the *antecedents* of General Sherman in the army of the United States are General Washington, General Scott, and General Grant. To call the course of a man's life until the present moment his *antecedents* is nearly as absurd a misuse of language as can be compassed. If, instead of "What do you know of his *antecedents*?" it is asked "What do you know of his *previous life*?" or better, "What do you know of his *past*?" there is sense instead of nonsense, and the purpose of the question is fully conveyed.

Anticipate. This word is often used in place of *expect*, or *foresee*. *Anticipate* means to go before, so as to preclude another; to get the start of, or to get ahead of; to enjoy, possess, or suffer, in expectation. It is therefore misused in "By this means it is *anticipated* that the time for Europe will be lessened two days"; and in "Her death is hourly anticipated." It is correctly used in "If not *anticipated*, I shall hereafter make an attempt at a magazine paper on the Philosophy of Point"; and in "Why should we *anticipate* our sorrows? 'Tis like those who die for fear of death." "Were Greeley's movements those that it was *anticipated* (expected), he would make?"

Anxious is often used where *desirous* would better express the meaning. *Anxious* means full of anxiety; suffering from suspense or uncertainty; concerned about the future. "I am not *anxious* to get to Canada" should be "I am not *desirous*," etc. "I am still more *anxious* to have you live in New York" should be still more *desirous*.

Anyhow is permissible in conversation, though incompatible with dignified diction, in which such phrases as "*in any event*," "*be that as it may*," "*at any rate*," and the like, are to be preferred.

Appeals is used in this sentence instead of *drafts*: "There are constant *appeals* upon the resources of the government."

Approach is sometimes improperly used in the sense of *address*, *petition*, *appeal to*; thus, "The teachers have *approached* the Educational Department in some matters that concern their interest."

Apt is often misused for *likely*, and sometimes for *liable*. "What is he *apt* (likely) to be doing?" "Where shall I be *apt* (likely) to find him?" "If you go there you will be *apt* (liable) to get into trouble."

Aren't even in colloquial use is inadmissible. Say *are you not*. I'll, I'm, etc., are good form because they are contractions of the verb only.

As—as; So—as. Use the former in affirmative propositions, and the latter in negative propositions. He is as tall as you are. He was never so happy as now.

Aside is sometimes misused for *apart*. "Words have a potency of association *aside* (*apart*) from their significance as representative signs."

As Though is often used for *as if*. In the sentence, "The child looked as *though* her hair had never been combed," supply the elliptical clause, and you will see the need of using *if* in

place of *though*. The child looked as (she would look) though her hair, etc. The woman looks as (she would look) though (if) she were tired.

At. "They do things differently *in* (not *at*) the South."

At all is superfluous in such sentences as, "She had no friends *at all*"; "I do not want any *at all*"; "If she had any desire *at all* to see, she would have waited."

At Best. At Worst. These phrases require the article or a possessive pronoun used in them. Always say, "I did the best I could," etc. "He was at his worst."

Audience is often used in place of *spectators*. The *audience* hears; the *spectators* see; therefore say "The *spectators* at the ball game," not "the *audience*." The *audience* at the concert, etc.

Avenge and Revenge. We *avenge* the wrong done to others, and *revenge* the wrong done to ourselves.

Avoid is often used in the place of *prevent* or *hinder*, as "There shall be nothing lost if I can *avoid* it." It should be "if I can *prevent* it."

Awful is too frequently used as an intensive. Avoid this use of it; e. g., I was *awfully* glad to see you.

A While Since. Should be *a while ago*.

Bad Cold. Say *a slight* or *a severe* cold. Colds are never good.

Badly is inelegantly used for very much. "I shall miss you *very much*," not "I shall miss you *badly*."

Balance means the *excess of one thing over another*, and should be used in this sense only: hence it is improper to talk about the *balance* of the edition. In this case say *rest* or *remainder*. You may speak of the *balance* of the account.

Beastly. One may properly say "*beastly* drunk" but not "*beastly* weather."

Before is sometimes used in place of *rather than*, as in "War *before* peace at that price" should be "War *rather than* peace at that price."

Between should be used only with reference to two of a kind. When more than two are referred to, use *among*. "The candy was divided *between* the two boys," or "*among* the four children."

When used to express contrast, the word may be correctly used in speaking of more than two; "True, the three boys are brothers, but there is a great difference *between* them."

Black—Blacken. We *black* stoves and *blacken* reputations.

Blame it on is a vulgarism used in place of *accuses* or *suspects*. "He *blames it on* his brother," should be "He *suspects* or *accuses* his brother."

Both is often used in such sentences as "They are *both* alike"; "They *both* ran away from school," etc. Omit *both* from each sentence. It is redundant in "He lost all his fruit — *both* plums, peaches, and pears."

Bound. Should not be made to do service for *doomed*, *determined*, *resolved*, *certain* or *will be compelled*. "He is *bound* to do it" should be "He is *certain*, *resolved*, or *determined* to do it." "He is *bound* to fail," should be "He is *doomed*, *destined*, or *sure* to fail."

But is often misused. "I do not doubt *but*

he will be here" should read "doubt *that*." "I should not wonder *but* he will succeed" should read "wonder *if*." In "I have no doubt *but* that he will go" suppress *but*. Change *but* to *than* in "The mind no sooner entertains any proposition *but* it presently hastens," etc.

But is correctly used in "I have no fear *but* that she will succeed," which means a very different thing from "I have no fear that she will succeed."

By should be *with* in "The room was filled *by* ladies and children"; also in "The ball ended *by* a waltz." There is a difference of meaning in these two sentences: "I know a man *by* the name of Brown," and "I know a man *of* the name of Brown." Which do you mean?

Calamity means in an abstract sense *source of misery or of loss*, but it is often misused to mean *loss*. *Calamities* are causes, *losses* are results. "The fire caused a great *calamity*" should read "caused a great *loss*." It is correctly used in "The falling of the building, which caused the death of two firemen, was a great *calamity*."

Calculate is wrongly used in "He *calculates* to get off to-morrow." "The sentence should read "*Expects, purposes, or intends* to get off."

Caliber is often misused for *order*, as in "His work is of a higher *caliber* than hers is."

Capable is often used in place of *susceptible*. "We need more articles *capable* of illustration" should read "*susceptible* of illustration."

Condone is sometimes misused for *compensate and atone for*. It means to *pardon, to forgive*. "The abolition of the income tax more than *condones* for the turmoil of an election" should read "atones for," etc.

Congregate Together. In "A large number of people *congregated together* in the hall," omit the word *together*, because to *congregate*, unaided means to *collect, or gather together*.

Consequence is sometimes used instead of *importance or moment*; as, "They were all persons of more or less *consequence*": read, "of more or less *importance*." "It is a matter of no *consequence*": read, "of no *moment*."

Consider means, to *meditate, to deliberate, to reflect, to revolve in the mind*; and yet it is made to do service for *think, suppose, and regard*. Thus: "I *consider* his course very unjustifiable" should read "*think his course*." "I have always *considered* it my duty, etc.," should read "*thought it my duty*."

Conversationist. See *Agriculturist*.

Co-operate Together, means *co-operate or operate together*, and can mean no more, which makes it plain that the *co* or the *together* serves no purpose — is a superfluity.

Creditable should not be used instead of *credible*. Say two *credible* witnesses, not *creditable* witnesses. Say I am *credibly* informed, not *creditably* informed.

Crushed out. The rebellion was finally *crushed out*. Out of what? We may crush the life out of a man, or crush a man to death, and crush — not *crush out* — a rebellion.

Dandy. This adjective belongs properly to the "gushers." It is their sole adjective.

He is a *dandy* man; The refreshments were *dandy*; The sunset was *dandy*.

Dangerous is misused in the sentence "He is *dangerous*," when we mean "He is *sick*." Say "He is *not in danger*," or "Not *dangerously* ill."

Dearest. Do not begin a letter "My *dearest* John," unless he is the dearest of three or more Johns with whom you are acquainted.

Deceiving should not be used in place of *trying to deceive*. It is when we do not suspect deception that we are deceived. "He is *deceiving* me" should read "He is *trying to deceive* me."

Deprecate means to endeavor to avert by prayer; and so should not be used in the sense of *disapprove, censure, or condemn*. Do not say "He *deprecates* the whole proceeding."

Desperately. Do not say "He was *desperately* wounded," but "*badly* wounded."

Despite should not be, as it often is, preceded by *in*, and followed by *of*. Say "*Despite* all our efforts," not "In *despite* of all our efforts."

Detect is often misused for *distinguish, recognize, discover, see*. "I did not *detect* anything wrong in his appearance," should be "I did not *discover* anything wrong in his appearance." "I could not *detect* any difference between them," should be "I could not *see* any difference between them."

Die with—from. Man and brute *die of*, and not *with or from*, fevers, old age, and so on.

Differ—Different. The prepositions *from* and *with* are both used with the verb *differ*, but the weight of authority is on the side of using *from*. *Different to* is sometimes used instead of *different from*; but it is incorrect. *Different than* is a Britishism which ought not to be adopted. "She is *different than* you would expect her to be" should be "*different from* what you would expect her to be."

Disremember is vulgarly used in the sense of *forget*.

Dock—Wharf. A *dry dock* is a place where vessels are drawn out of the water for repairs. A *wet dock* is a place where vessels are kept afloat at a certain level, while they are being loaded or unloaded. A *wharf* is a sort of quay built by the side of the water. Vessels lie at *wharfs* and *piers*, not at *docks*.

Don't. This is the contraction for *do not*, and not for *does not*: therefore do not say "He *don't* want it."

Each other is properly applied to two only; *one another* must be used when the number considered exceeds two. Great authors address themselves to *one another*, unless we refer to only two authors.

Effect—Affect. *Effect* means to bring about; as "*To effect* a reform." *Affect* means to influence; as, "His ideas will *affect* the character of the reform."

Elegant. "This is a fine morning," not "This is an *elegant* morning."

Emigrant—Immigrant. These two words are not infrequently confounded. *Emigrants* are persons going out of the country; *immigrants* are persons coming into the country.

Ending of Sentences. Sentences ending with prepositions are always more terse, always quite as idiomatic, and always simpler,

than they would be if differently constructed. "The man I gave it to," not "The man to whom I gave it." "The verb it belongs to," not "The verb to which it belongs," etc.

Enjoy Bad Health. Does anyone *enjoy bad health*? Say, "He is in feeble or delicate health."

Equally as Well. As well, or equally well, expresses quite as much as *equally as well*.

Everlastingly means perpetually, eternally, forever. Do not say, "The horse was *everlastingly* running away."

Every. "Every one of us has this in common," should be, "All of us have this in common."

Except. See *Accept*.

Excessively. Say "The weather is very warm," not *excessively* hot. "My friend was *exceedingly* popular," not *excessively* popular.

Excise Laws. An *excise* is a tax levied on domestic products; it is an internal revenue tax. New York has *license* laws and *license* commissioners, and properly they should be so called. New York's *excise* laws, so called, are properly *license* laws.

Exercise—Exorcise. Do not use these words interchangeably. *Exercise* means a putting into use, action, or practice; *exorcise* to cast or drive out (an evil spirit), by religious or magical formulas or ceremonies.

Expect. We cannot *expect*, backwards. "I expect you thought I would come to see you yesterday" should be, "I *suppose*," etc. "I expect you know all about it" should be "I *suspect* you know," etc.

Experience. "We *experienced* great hardships" should read "We *suffered*."

Extend. "They *showed* me every kindness" is better than "They *extended* every kindness to me."

Farther—Further. Use *farther* for all distances that can be measured either great or small. Use *further* in all other sentences.

Female applies to animals, as well as to women, and so should not be used in such sentences as "With the dislike not unnatural to females," etc.

Fewer—Less. *Fewer* refers to number, and *less* to quantity. Instead of "There were not *less* than twenty scholars absent," we should say "There were not *fewer* than twenty scholars absent." Instead of "There were not *less* than ten chapters in the book," we should say, "There were not *fewer* than ten chapters in the book."

Find. "I thought the firm *found* everything" should be "*supplied* everything."

Fixed. This word is often misused for *arranged*; as, "I must *fix* the books." "Who *fixed* the dishes on the shelves?" It is vulgarly used thus; "I will *fix* him." "The jury was *fixed*." "You must *fix* up, if you go." "You're affairs are in a bad *fix*."

Former—Latter. The less the writer uses these words the better. In the interest of force and clearness their use should be studiously avoided. It is nearly always better to repeat the noun. This avoids the reader's going back to see which is *former* and which is *latter*.

Got—Have. If a man inherits a fortune, you say he *has* money; if he obtains money

through his own effort, you say "He *has* gotten money." "He *has* books" means merely that he *possesses* them; "He *has* gotten his books" means that he *has obtained* them through effort. *Have* shows simple possession; *got* shows possession plus the effort to obtain the thing.

Had Ought. This expression is incorrect because *had* is used with the past participle of the principal verb to form the compound tense. *Ought* is a defective verb and has no participle: therefore it cannot be used with *had*.

Hain't is a very objectionable vulgarism.

Handy should not be used in the sense, *near, near by, close at hand*; as, "The store is *handy*," say "The store is *near*."

Have to Have or Had to Have. Better than "I *have* to have my work done by three o'clock" is "I *should, must, or ought* to have my work," etc. *Got to get* is another unpleasant repetition.

Hence is superfluous in the sentence, "It will be many years *hence*, we apprehend, before he returns."

How. "I have heard *how*, in Italy, one is beset on all sides by beggars," should read, "I have heard *that* in Italy," etc.

However. Use *how*, not *however*, in such a sentence as, "*However* could you tell such a story!"

If. Use *whether* in place of *if* in these sentences; "I doubt *if* the book will suit you"; "Go and see *if* he has come."

Ill—Sick. Almost all British speakers and writers limit the meaning of *sick* to the expression of qualmishness, sickness at the stomach, nausea, and lay the proper burden of the adjective *sick* upon the verb *ill*. They sneer at us for not joining in the robbery and the imposition. Richard Grant White says, "I was present once when a Yankee merchant, receiving in his own house a Yankee youth at a little party, said, in a tone that attracted the attention of the whole room, 'Good evening! We haven't seen you for a long while. Have you been *seek*' (the sneer prolonged the word), 'as you say in your country?' 'No, thank you,' said the other, frankly and promptly, 'I've been *hill*, as they say in yours.'"

In—Into. *In* is sometimes an adverb and sometimes a preposition. As an adverb it is correctly used in these sentences; "Come *in*"; "Go *in*"; as a preposition it should be used with verbs of rest and into with verbs of motion. These words are correctly used in, "He sat *in* his chair"; "He ran *into* the house."

Incite—Insight. *Incite* means to rouse to a particular action; as, "The mob was *incited* to set the house on fire." *Insight* is a noun and means the power or faculty of immediate and acute perception or understanding; "The strongest *insight* we obtain into nature is that which we receive," etc.

In Our Midst is not according to the genius of our language. It should be written *in the midst of us*. Also *in the midst of them*, and not *in their midst*.

Inaugurate should not be used in place of *begin* for the simple things of daily life. It is a big word misused.

Individual should not be used for *person*.

The word is used correctly in "Changes both in *individuals* and communities are often produced by trifles"; incorrectly in "That *individual* left here several hours ago."

Innumerable Number should not be used. Say instead *innumerable times* or *numberless times*.

In so far as. The *in* is superfluous in this phrase. "*In so far as I know*" should be "*So far as I know.*"

Intend is misused for *purpose*, as in "I intend to attend college this winter" should read "I purpose to attend college this winter." We *purpose* seriously; we *intend* vaguely.

Just Going to Go is better expressed by *just about to go*. *Just going to say* by *just about to say*, etc., or *by about to go*.

Just Next. Doesn't "He was *next* me" express as much as "He was *just next* me?"

Kids. It is better usage to speak of one's *gloves*, than of one's *kids*. When silk gloves are meant, we never speak of them as silks.

Kind of. "What *kind* of man is he?" is correct. "What *kind of a* man is he?" is incorrect.

Lady. Address a stranger as *madam*, and not as *lady*. People of culture and refinement will never say, "She is a fine *lady*," a "clever *lady*," etc. Ladies say, "The *women* of America," "women's apparel," etc. In similar instances *men* should be used in place of *gentlemen*.

Lie—Lay. By a vulgar error these verbs have been so confounded as to deserve some notice. *To lie* is neuter, and designates a state: *to lay* is active, and denotes an action on an object; it is properly to cause *to lie*: "A thing *lies* on the table"; "Some one *lays* it on the table"; "He *lies* with his fathers"; "They *laid* him with his fathers." In the same manner, when used idiomatically, we say, "A thing *lies* by us until we bring it into use"; "We *lay* it by for some future purpose."

The confusion arises probably from the fact that *lay* appears in both verbs. The words are correctly used in the following sentences:

I *lay* myself upon the bed (action). I *lie* upon the bed (rest).

I *laid* myself upon the bed (action). I *lay* upon the bed (rest).

I *have laid* myself upon the bed (action). I *have lain* upon the bed (rest).

A hen *lays* an egg (action). A ship *lies* at the wharf (rest).

The murdered Lincoln *lay* in state (rest); The people *laid* the crime upon the rebels (action).

Learn—Teach. The uncultured often change these verbs. *To teach* is to give instruction; *to learn* is to take instruction. "I will learn if you will *teach* me" is correct.

Leave. The vulgar say "Leave me be"; "Leave it alone"; "Leave me see it." Of course *let* is the verb to be used here.

Loan, according to Richard Grant White, is not a verb, but a noun. A *loan* is the completed act of lending, or is the thing lent. It may sound larger to some people to say that they *loaned*, than that they *lent* a thousand dollars—more as if the *loan* were an important

transaction; but that can be only because they are either ignorant or snobbish.

Less. See fewer.

Like—Love. We *like* acquaintances, horses, flowers, pictures, etc. We *love* wives, sweethearts, kinsmen, truth, justice, and country.

Like—As. "He looks *like* you." This sentence may mean either "He looks as you look," or "He resembles you in his appearance." The sentence should read "He looks as you look" or, "He is like you." *Like* is followed by an object only, and does not admit of a verb in the same construction. As must be followed by a verb expressed or understood.

Like is sometimes improperly used in the sense of *as though*, thus: "It looks *like* it was caused by fire."

Loan. See Lend.

Lot—Lots. Very inelegantly used for a *great many*, a *great deal*; "He had a *lot* of money left him"; "*Lots* of trouble came her way."

Lunch. The correct substantive form is *luncheon*.

Make a Visit. We do not *make* visits, we *pay* them.

Malaria. This word is the name of a cause of a disease, and not the name of a disease. We do not suffer *from malaria*, but from the *effect* of *malaria*, which is a noxious exhalation, usually from marshy districts.

Meat. We should ask for another helping, of *veal*, *steak*, *turkey*, etc., and not for another piece of *meat*.

Middling. This word is an adjective, not an adverb, hence we cannot say a thing is *middling* good, or that a thing was *middling* well done.

Mind is often misused for *obey*. *To mind* is to attend to a thing so it will not be forgotten. "Will you *obey* me?" not "Will you *mind* me?"

Mistaken. "If I am *not mistaken*" should be "If I *mistake not*." You are *mistaken* is a correct form of expression; it means you have been led into error.

Most. This word should usually be omitted from conversation and writing. *Very* is the better word in almost every instance. It would *most* (very) seriously affect us. This word is often misused for *almost*; "He comes here *most* every day" should be "He comes here *almost* every day."

Mutual. This word is often confounded with *common*. These words are correctly used in these sentences: "Our *former* correspondence was renewed, with the most hearty expression of *mutual* good will." "We have two friends in *common*." "They met at the house of a *common* friend." "Their *mutual* dislike (not dislike for each other) was well known."

Myself. This pronoun should be used only where increased emphasis is aimed at, as in "I will do it *myself*," etc. It is incorrect to say "Mary and *myself* were satisfied."

Nicely. The very quintessence of popinjay vulgarity is reached when *nicely* is made to do service for *well*, in this wise: "How do you do?" "*Nicely.*" "How are you?" "*Nicely.*"

Numerous is often used in place of *large* or *many*. "We have *numerous* acquaintances" should be "We have *many* acquaintances."

Of All Others. "*Of all others she is the last one you would expect it of.*" Is she one of the others? If not, why class her as such?

Of Any is often used in place of *all*. "*She is the smallest of any I have known*" should be "*The smallest of all,*" etc.

Off of. One of these words should be omitted from the sentence. Say, "*The pears fell off the tree,*" not "*The pears fell off of the tree.*"

On to. "*We get on a horse, on a chair,*" etc., not *on to*.

One. Should be followed by *one* and not by *he*. "*Can one visit his friends there?*" should be "*Can one visit one's friends there?*"

Only. This word is more often misplaced probably than any other word in the language. "*He only sang for us.*" "*He sang only for us.*" The first means that he sang, but did not play for us; the second one means he sang for us and not for any one else. A change in the position of *only* in almost any sentence will effect the meaning of the sentence the same as in this illustration.

Other. This word should not be omitted in sentences like the following: "*He said that his wife was dressed better than any (other) woman there.*"

Ought—Should. *Ought* is the stronger term; "*What we ought to do, we are morally bound to do.*" "*We ought to be truthful and honest, and should be respectful to our elders.*"

Over. Do not use *over* in the sense of *more* than. "*It is over a yard long*" should read "*More than a yard long.*"

Own is often misused in place of *confess*. "*I own I saw her do it,*" should be "*I confess I saw her do it.*"

Pants is a vulgar abbreviation for *pantaloon*s.

Partake is a fine word to use instead of *eat*. Only the uncultured will be guilty of this error.

Party is often used by the ignorant where good taste would use the word *person*. Not, "*The party that I saw,*" but the *person*.

Past. This word is incorrectly used for *last* in such expressions as "*The past three days,*" "*The past year.*"

Pell-mell means mixed or mingled together. It cannot properly be applied to an individual. "*He rushed pell-mell into my arms*" would be to say "*He rushed into my arms mixed together.*"

Per. *Per day, per man, per pound, etc.,* are better expressed by the plain English *a day, a man, a pound, etc.* Ten dollars *per* is the slang for ten dollars a week.

Perform. The short word *play* is to be preferred in "*She performs on the piano beautifully.*" This sentence would be improved by using *well* or *admirably* in place of *beautifully*.

Peruse is often used when the word *read* would be in better taste.

Place is misused for *where* in "*Let's go some place.*" "*I want to go some place.*"

Polite should not be used for *kind* before the word invitation.

Posted is incorrectly used for *inform* in such expressions as, "*The man posted me,*" "*If I had been better posted.*"

Prejudice should not be used in a favorable sense. You cannot say "*The man is prejudiced in his favor.*" We should say "*He is prepossessed in his favor.*"

Prepositions. If you are in doubt what preposition to use after any verb, or with any noun, always consult the dictionary.

Preventive and not **Preventative.** This adjective, in common with *subsequent, independent, relative, antecedent,* and possibly others, is often incorrectly used as an adverb. *Previous* to our visit, should be *previously* to our visit. *Independent* of this reason, should be *independently* of this reason.

Procure is often made to do the work of the Anglo-Saxon word *get*. "*Where did you procure it?*" should be "*Where did you get it?*"

Promise often does duty for *assure*. "*I promise you I was agreeably surprised*" should be "*I assure you,*" etc.

Providing should be *provided* in such sentences as "*He offered to provide a stable and supply the necessities of the company providing the control of the board should be turned over to him.*"

Purchase—Buy. Use *purchase* in reference to great matters, as *The Louisiana Purchase*; use *buy* with reference to ordinary matters, as "*He bought a book, his dinner,*" etc.

Railroad Depot. A *depot* is properly a place where goods or stores of any kind are kept; and the places at which the trains of a railroad—or, better, railway—stop for passengers, or the points they start from or arrive at, are properly the *stations*.

Raise—Rear. We *rear* children and *raise* animals. *Raised* the rent is incorrectly used for *increased* the rent.

Real should not be used for *very* in such phrases as, *real pretty, real nice, real angry.*

Resurrect is still marked colloquial in the recent dictionaries.

Retire. It is only the over nice that *retire* in the sense of *go to bed*.

Sunday is the first day of the week, and **Sabbath** is the last day of the week.

Saw is carelessly used sometimes for *have seen*. "*I never saw anything like it before*" should be "*I have never seen anything like it until now.*" We say properly, "*I never saw anything like it when I was in Paris.*"

Set—Sit. These verbs like *lie* and *lay*, are often confounded in their use. *To set* is transitive; *to sit* is intransitive. "*I set the hen, but she sits on her eggs.*" Incorrectly we speak of a *setting* hen, instead of a *sitting* hen. In Matthew, it was prophesied that Christ should come "*sitting upon an ass*" and, therefore, his disciples took a colt and "*they set him thereon.*" The verb is correctly used in these sentences: "*My dress sits well;*" "*We will sit up,*" that is, will not go to bed; "*Congress sits.*" "*We set down figures,*" but "*We sit down on the ground.*"

An apparent contradiction is found in the sentence, "*The sun sets*"; but the verb *sets* in this sentence has a different origin from the verb *set* that we have been discussing. Long ago they used to say, "*The sun settles*"; but *settle* has been shortened to *set*.

Shall—Will. The radical signification of *will* is purpose, intention, determination; that of *shall* is obligation. *I will do* means, I purpose doing—I am determined to do. *I shall do* means, radically, I ought to do; and as a man is supposed to do that which he ought to do, *I shall do* came to mean, I am about doing—to be, in fact, a mere announcement of future action, more or less remote. Always keep in mind that *I shall*, you *will*, and he *will*, are the forms of the future, and that *I will*, you *shall*, and he *shall*, imply volition on the part of the speaker. *Will* and *shall* in the first person are properly used in the following quotations from "The Absentee," one of Miss Edgeworth's novels:—"Gone! Forever gone from me," said Lord Colambre, as the carriage drove away. "Never shall I see her more—never will I see her more, till she is married."

"We *will* do our best to make you happy, and hope we *shall* succeed."

They are used properly also in, "*I shall be drowned*"; "*We shall have to go*"; "Is the time coming when we *shall* desert Thackery?"

These two words are coming more and more to be used interchangeably, so that one authority says there is no distinction to be made in their use; but this is not yet true. There is determination expressed in *shall* as well as in *will*. Suppose you had put a book upon the table, and had told me not to take it from the table, not to read it. I might say, "*I shall go to the table*"; *I shall* take the book; and *I will* read it." *Shall* here indicates a future action with intention added to the thought; and *will* expresses determination. "*I will go to the table for supper*," indicates that you have been told not to go to the table, but that you will go in spite of this prohibition; while "*I shall go to the table* indicates only futurity of action. Where there is nothing to rouse the will or to show a prohibition, *shall* is often used interchangeably with *will*, as in "*Will you come to the table*?" "Yes, *I will* come to the table," in which sentence *will* expresses futurity, and not determination.

You *shall* do it shows intention on the part of the speaker to make the other person do his will, and not his own will. "You *will* do it," shows simple futurity usually. Still, in the case of the child and its mother; the child says, "*I won't do it*," and the mother puts her will into operation and says, "You *will* do it," meaning *I will* that you will do it.

"He *shall* do it," and "He *will* do it," follow the same rules as the second person.

The words are incorrectly used in "Will I cut myself?" "*I will* drown, and nobody *shall* help me."

Will cannot be used interrogatively in the first person singular or plural, as can be seen by the sentence "*Will* I put some more coal on the fire?"

To determine whether to use *would* or *should*, express your thought, whenever possible, in the present tense, and then use *would* for *will* and *should* for *shall*. These words are used correctly in the following sentences: "*I would* come to you if I could." "*I should* have been sorry if I had gone." "*I would* I were there." "*I should*

go hunting to-day if the weather were good." "*I should* prefer to hear the music."

Sick—Ill. See Ill.

Since when should not be used for *since that time*, or *since what time*, according to the meaning.

Smell of. We *smell* the rose, not *smell of* it.

Splendid. *Splendid*, *awful*, and *dandy* seem to be about the only adjectives some of our superlative young women have in their vocabularies.

Standpoint. This idea is better expressed by *view point* or *point of view*.

Stop for *stay* is a Britishism. *To stop* is to arrest motion; *to stay* is to remain where motion is arrested. We may *stop* at a hotel; but how long we *stay* depends upon circumstances.

Storm. To a *storm* a violent commotion of the atmosphere is indispensable; so say *rains* or *snows*, unless it really *storms*.

Street. We live *in* not *on* a street. Things occur *in* not *on* a street.

Stricken is used when misfortune is implied; as, "He was *stricken* with death. *Struck* is used in all other cases; as, "He was *struck* by a stone."

Such. "I have never seen *such* a small man," should be "I have never seen *so small* a man," as may be seen by transposing the words of the first sentence, which then becomes "I have never seen a man *such* small."

Such a Pretty, Such a Lovely, etc., are incorrect, and should be *so pretty*, *so lovely*, etc.

Sure. "He will *surely* be here," not "He will be here *sure*."

Sustain. We do not *sustain* injuries; we *receive* them.

Teach. See Learn.

That. This word is not an adverb, and so cannot modify an adjective; so, *that* good, *that* worthy, etc., should be *so* good, *so* worthy, etc.

The. See A. "The bill then passed not only raised the barrier against the foreign products of the spindle, and loom, *the* furnace and *the* forge, by increasing," etc.

The should be used before Reverend, Honorable, etc. The Reverend James Smith, D. D.

Thence. Do not use this with the preposition *from*. "He came *thence*," is correct.

Think for. "He hears more than you *think for* is wrong." Omit the *for*.

Those Kind. "*That* kind of shoes is good," not *those* kind. "This sort of people (not *these* sort) will suit you."

To. Never say, "She was *to* my house yesterday." Use *at* in place of *to*.

Try. We make experiments, not *try* them.

Twice Over. The *over* serves no purpose in "He said it *twice over* in different ways."

Under the Circumstances. Better *in the circumstances*.

Universal—All. "He was *universally* praised by *all* who heard him," is better expressed by "He was *universally* praised," or "He was praised by *all* who heard him."

Upon—On. "We call on persons, and speak *on* subjects, and stand *upon* the table."

Use to. Properly *used to*. "We *used to* live there" is correct.

Vocation — Avocation. A man's *vocation* is his profession, his calling, his business; and his *avocations* are the things that occupy him incidentally. Miss Brown's *vocation* is teaching; her *avocations* are enbroidering and painting.

Ways. Wrongly used for *way*; as, "The house is a long way off," should be *way* off.

Well — Why. These two words are used by Americans in almost every sentence. Unless they are absolutely necessary in a sentence leave them out.

Wharf. See Dock.

What. "He would not think but *what* I said it": read, but *that*.

Whence. "*Whence* came ye," not "*From whence* came ye." *Whence* means from what place, source, or cause.

Whole of. "*All of the school*," not the *whole of the school*.

Widow Woman. Are not *widows* always women? Another error of this sort is *brother men*.

Without is a preposition and should not take the place of the connective *unless*; as, "I shall not go *without* my father consents," should read, *unless* my father consents, or, *without* my father's consent. In this last expression *without* is a preposition.

Worst Kind. A vulgarism we sometimes hear used in the sense of *very much*. "I want to go the *worst kind*."

Worst Way. This belongs in the same category with *worst kind*.

FORMS OF LANGUAGE COMPOSITION

The following table includes the principal forms of language composition:—

(I). PROSE.

- (1) NARRATION.— Letters, journals, memoirs, biographies, history, travel, news, fiction.
- (2) DESCRIPTION.— Descriptions of external objects, of character and its development, of intellectual processes.
- (3) EXPOSITION.— Essays, treatises, editorials, reviews, criticism.
- (4) ARGUMENT.— Argumentative essays, debates, briefs, etc.
- (5) PERSUASION OR ORATORY.— Orations, addresses, lectures, sermons.

(II). POETRY.

- (1) EPIC AND NARRATIVE POETRY.— The great epics, metrical romances, metrical tales, ballads, pastorals, idylls, etc.
- (2) DRAMATIC (including all narrative poetry which presents actors as speaking and acting for themselves).— Tragedy, comedy, farce, opera, melodrama, mask, interlude, etc.
- (3) LYRIC.— Odes, sacred and secular songs, elegy, sonnets, simple lyrics.
- (4) DIDACTIC.— Moral essays in verse, satiric poetry, etc.

It is the object of words to convey thought; but in order to present connected thought, words must be properly arranged with a definite end in view. Such an arrangement of words is called a language composition. There are two types of composition, prose and poetry. Prose is the plain language of every-day speech in distinction from the more emotional and artistic language of poetry.

The chief varieties of prose composition are;

narration, description, exposition, argument, persuasion.

Narration presents events in sequence of time, it presents a story; description paints a picture; exposition defines a term or explains a proposition; argument establishes the truth or falsity of a statement; persuasion arouses the emotions, and influences the will. Narration presents events with special reference to time and place and persons, with their attendant motives and circumstances. It is the aim of narration to make the reader an eye-witness of the events related.

Under narration may be classed letters, journals, memoirs, biographies, history, travel, news, fiction, and that great body of literature comprehended under the term "stories."

The sequence of events in narration may be with or without plot. If it be simply a sequence of time, then the narration is said to be without plot, as in letters, diaries, news of the day, journals, memoirs, biographies; but if there be a subtle relation of cause and effect, which binds together the sequence of events, then we have a narrative with a plot, such as stories, and novels, and dramas. A plot has been defined as "any arrangement of the parts of a narrative so that the reader's interest is aroused concerning the result of the series of events detailed."

Letters, books of travel, memoirs, biographies, owe their interest to the charm with which they are told, and the real worth of the successive incidents treated. Letters of Thoreau to his friends, of Emerson, Hawthorne, Channing, Alcott, give us the charm of Concord life in the golden days of those philosophers, and also give us a model of letter-writing in their simple beauty of style, and the value of their subject matter.

Books of Travel have all the personal charm of letters, and added to that the deep interest of new scenes, visited by an appreciative narrator. Travels consist largely of description, which should be well selected and accurate. Stanley's "In Darkest Africa," Roberts' "Forty-one Years in India," Grey's "Travels in Australia," are interesting books of travel.

Memoirs relate chiefly to matters of memory, events that have come under the author's personal experience. Memoirs are related to history, but are less systematic and more conversational in style. "Yesterdays with Authors," by J. T. Fields, is a volume of memoirs of noted literary men he knew.

Biography is a history of an individual life, somewhat more extended than a memoir. An autobiography is a life history written by a person himself. Biographies form a very important branch of history. If one would know the history of a time he must know the men of that time. The Autobiography of Benjamin Franklin furnishes a much better picture of life in his times than pages of our best histories. American Men of Letters series, American Statesmen series, give a fine study of the development of the American nation.

History is a formal and connected account of the life of a nation. Historical narration ex-

plains the sequence of events, their cause and effect, and their bearing on civilization. The historian records truth for the instruction of mankind. It is, therefore, required of him that he make his records with impartiality and accuracy, and with the highest regard for morality. Gibbon's "Decline and Fall of the Roman Empire," Motley's "Rise of the Dutch Republic," are histories written with the charm of romance, because they are narrated with the vividness of an eye-witness and are aglow with human sympathies.

News forms a most important branch of letters. The editorial and the news columns influence more people to-day than any other form of literature. Thousands read with eagerness the daily news, who are utterly unacquainted with books, so the newspaper of to-day has become a popular educator. It is the privilege of the newspaper to present a high standard of pure grammatical English, and of pure morality.

Clearness, brevity, accuracy, are the essential qualities in a news reporter. He must choose language that will convey his exact meaning, and give all essential details in as brief a manner as is consistent with accuracy and clearness. Daily news is read for the information it conveys, and not for beauty of style, yet it is desirable that the news writer cultivate ease and the charm of naturalness in writing up the simplest occurrences of the day, if he can do all this in quick and graphic sentences. News writing differs greatly from the writing of editorials or leaders. The news reporter simply gathers up the facts of the day and presents them without bias of opinion, whereas it is the business of the editor to discuss facts and give opinions. Editorials properly belong under exposition and persuasion, rather than under the division of prose narration.

Fiction from the earliest dawn of literature, has been the favorite form of composition. The mind revels in the creations of the imagination, and myths and folk tales, as the delight of all primitive peoples. Modern fiction has had phenomenal development, and the growth of the short story has been without parallel.

Fiction includes stories, novels, romances, both in prose and verse. The aim of fiction is principally to entertain. The general reader of fiction does not want instruction, he is seeking diversion. Incidentally, however, to the entertainment that is furnished by a modern novel, there is much instruction given by our best writers of historical novels, concerning customs and manners, and domestic and social life, and the history of the time in the midst of which the plot is set; but more valuable than these outer facts of life, is the study of motives and behavior, and development of character, and the insight, which is given into human nature, and the conditions of human society which lie beyond our range of observation. If well selected, and not read to excess, novels form a valuable means of education, as well as of intellectual entertainment. The novels of Dickens, Victor Hugo, Tolstoy, have opened the eyes of the public to unsuspected social conditions. Bunyan, Goldsmith, Eliot, Hawthorne, have given us a deeper insight into human nature. We see how men and women

behave under certain circumstances, and the relation of good and evil conduct.

The Short Story is not, as so often claimed, a creation of recent date. Myths, legends, fables, folk-tales, are all forms of short stories, which were invented when language was young.

Myths are old-world fairy tales, and have for their heroes gods and goddesses, and for their agencies the forces of nature. Homer's "Odyssey," Virgil's "Æneid," Longfellow's "Hiawatha" are poems woven out of mythic fancies.

Fables are stories in which animals and inanimate things are represented as having the attributes of human beings. Æsop's fables have been translated into every language.

Parables are concrete illustrations of spiritual truths, frequently used in the Bible.

Allegories are concrete stories to illustrate abstract truths, but more extended than parables or fables. An allegory gives a detailed description of one thing under the image of another. Spenser's "Færie Queene," Swift's "Tale of a Tub," are good types of allegories. Bunyan's "Pilgrim's Progress" is the best known allegory of modern times.

Legends and Folk-Tales are the stories of daily life and heroic adventure that are common among all people.

The field of the short story writer has been greatly extended in modern times, and now includes every domain of fact and fancy. The short story of domestic life or a brief chapter in personal history, may be said to characterize the modern short story, and is the favorite form of fiction. Newspapers and magazines contribute largely to this form of literature. It is to be greatly regretted that the popularity of the short story has led to its abuse, and so much that is unworthy both in plot and workmanship is found in active circulation. But literature has been enriched by the number of really worthy short-story writers, and American literature is especially rich in the number who have preserved for us tones of local coloring and contemporary characters. Bret Harte, Mark Twain, Frank Stockton, have contributed the riches of their humor, and Nathaniel Hawthorne, Richard Harding Davis, Sarah Orne Jewett, Robert Louis Stevenson, George W. Cable, have added the beauty of their most delicate touch to the creation of the modern short story. A New England Nun" by Mary E. Wilkins, "Story-tell Lib" by Annie Trumbull Slosson, "The Blue Flower" by Henry Van Dyke, "Christmas Stories" by Charles Dickens, and incidents related in story by Maupassant are a few of the long list of excellent short stories.

Description follows narration and has already been included in narration. Every story must contain word pictures of persons or places or objects of interest. Description of external objects is simpler than the delineation of character. In a few strokes of the pen Sir Walter Scott places before us the person of Rebecca, but her thoughts, her feelings, her inner struggles, are revealed to us by a slower process of description. We are quickly introduced to Silas Marner and his home; but the real man

and his nobility of soul, we do not comprehend until he stands before Godfrey Cass and offers to give up to him his daughter. It is because George Eliot can describe such moments as this that she is ranked among the world's greatest novelists. Shakespeare stands first of all writers in his power to describe soul experiences.

Exposition differs from narration or description in this that it does not deal with concrete things, but with ideas, either separately or in combination. Exposition presents definitions, doctrines, principles, or views, with the aim to instruct. Exposition is often introduced into the midst of narration or description for the purpose of explanation, to give a point of view, or to present a situation more fully.

An Essay is a composition which aims to set forth the author's views on a certain subject. It is less elaborate than a treatise, and varies in length from the brief school exercise to the elaborate essays of Macaulay, or Emerson, or Carlyle. *Editorials, Reviews, Criticisms*, are familiar forms of the essay.

An Editorial may be called a short essay, giving the views of the editor on some subject of the day. The editorial is very different from the news item which was classed under narration. The reporter simply records facts without personal comment, whereas it is the business of the editor to record facts and give opinions, explaining where necessary, and commending or condemning as occasion requires. Newspapers set forth social and political problems of a local or national character, and it is the aim of the editorial to shape public thought. Back of the editorial "we" is the personality of the writer; but sometimes the writer himself is lost in the political party or organization which the paper or magazine represents.

Reviews are more elaborate forms of editorials, they deal with the subject at greater length, and are more exhaustive in the discussions. Reviews often treat of literary subjects, as book reviews, music, art, lives of noted men, explorations, etc.

Criticisms are for the purpose of setting forth excellence and defects, and are designed to be constructive rather than destructive, as defects are pointed out that the true principles upon which the work is constructed may be better understood.

Argumentative Discourse is for the purpose of establishing the truth or falsity of a proposition. Its aim is to modify or induce belief. It is assumed that there is reasonable doubt in the minds of the hearers, and by reasonable argument they must be convinced. In the conduct of such a discourse the subject or proposition is first stated briefly and concisely, then follow the arguments drawn up in order and, finally, the conclusion, which consists of a restatement of the proposition reinforced by the strength of the arguments. In the presentation of a debate, both sides must agree on the preliminary statement or proposition, and then each side must furnish proof to establish the truth of the main proposition as presented affirmatively or negatively by that side.

Persuasion is the highest type of argumentative discourse, and includes addresses,

lectures, sermons, orations. The aim of persuasion is so to move upon the feelings of the audience as to influence the will. In exposition and argumentation the appeal is to the will, but the end of oratory has a view to action. Mark Antony, over the dead body of Cæsar, aimed to excite the populace to violence.

Orations are elaborate compositions and are delivered on formal occasions, as Daniel Webster's Bunker Hill oration, Edward Everett's Gettysburg oration, the orations delivered by Burke, and Peel, and Fox. Clearness and force are strong qualities in an oration, but, in addition to these, all the beauties of composition are in place. As oratory is the highest form of prose composition, nothing trivial or low in language or thought should be allowed. The main idea should be clothed upon by language and gesture. Words must be made alive.

Addresses and Speeches are less formal than orations, yet they all admit of the three-fold structure into introduction or exordium, body or argument, and conclusion or peroration. The strength of the discourse depends upon the skill with which each part is handled. Ready and fluent speech are desirable qualities in all public speaking; but the ornate language of an oration would, on ordinary occasions, be out of place.

A Lecture is less formal than an oration, but it demands a scholarly presentation of a subject in a clear and logical manner. The subject presented should be of importance, not too familiar, and presented in such a way as to interest and instruct.

Sermons are the most familiar forms of discourse. They are founded usually upon some passage of Scripture, and are intended for instruction. Besides their expository character, sermons usually contain appeals to the listener, and admonitions. The theme of the sermon is presented in the Bible text; and in addition to this, it is often necessary for the minister to make explanatory remarks before he begins the body of his argument. The introduction must contain a clear putting of the question, all necessary explanation must be made, and usually an outline is given of the plan to be followed in the body of the sermon. It is interesting to note the three kinds of arguments used in the body of a sermon.

First, there is the argument of fact. This is an argument which appeals directly to sense and reason, and not to prejudice. The audience is assumed to be impartial, and concrete questions are presented to their judgment.

Second, argument of principle is also addressed to the reason of the audience, and not to feelings or interests. Arguments of facts establish or disprove some concrete matter of human experience, whereas argument of theory or principles establishes the fundamental law upon which the judgment of those facts is based.

Third, argument of policy aims to persuade by appeals to motives of action. It aims to influence the will to act in harmony with the principles outlined in the previous arguments of fact and theory. What is right is presented as the expedient. The "I ought" becomes an obligation. It is through the medium of the feelings

that most men are moved to action. The conclusion of the sermon sums up the main points of the argument, clearly and concisely. It may at times be done in a single sentence; sometimes it is best done by the repetition of the opening text which has been established.

Poetry differs from prose in form and diction and aim of the poet. The form of poetry is verse. It is arranged in lines of regularly recurring accented and unaccented syllables. The language of poetry differs from prose. Certain privileges are granted to the poet which are called "poetic licenses," and words are chosen for their beauty of sound or association. Figures of speech are more frequent in poetry than in prose, and inverted structure is frequently employed. The essential difference between prose and poetry is, however, in the poet's aim. The chief aim of prose is to instruct and to convince, the aim of poetry is to appeal to the emotions, to touch the heart of the reader, to play upon his sympathies.

Epic Poetry recites some great and heroic enterprise. Epic poetry is the longest and, except the drama, the most complex of all poetic composition. Its theme is noble, plot complicated, one leading hero, many actors, superhuman agencies often introduced, grave and dignified treatment of the plot or story. There are but few great world epics. Homer's "Iliad" and "Odyssey," Virgil's "Æneid," Dante's "Divine Comedy," Tasso's "Jerusalem Delivered," Milton's "Paradise Lost," are the greatest, and their themes are of universal interest.

Metrical Romances and Narrative Poetry are inferior to the epic. They present plot and story, but with less complication of action, and simpler theme. Spenser's "Færie Queene," Scott's "Lay of the Last Minstrel," Longfellow's "Evangeline," Lowell's "Sir Launfal," Mrs. Browning's "Aurora Leigh," are examples of this kind of composition.

The Ballad and the Tale are the simplest forms of metrical romance. Chaucer's "Canterbury Tales," "Chevy Chase," "Robin Hood," Macaulay's "Lays of Ancient Rome," Coleridge's "Rime of the Ancient Mariner," are good illustrations. Narrative poems of a mixed character have been variously classed under minor epics or pastoral poems.

Tennyson's "Idylls of the King," Scott's "Lady of the Lake," Longfellow's "Tales of a Wayside Inn," Whittier's "Snowbound," William Morris's "Earthly Paradise." These classifications are not binding.

Dramatic poetry presents action, what men do and say, and in our greater dramas, motives and the moral train of consequences. Passion is strong, incidents exciting, thought vigorous. Scenery, costume, dialogue, aid in the presentation of the story. The drama lives its life upon the stage.

The main divisions of the drama are tragedy and comedy. Comedy itself has the subordinate divisions, farce, opera, melodrama, mask.

The Greek drama presents to us the highest form of dramatic art before the age of Shakespeare. In the golden age of Pericles we have the tragedies of Æschylus, Euripides, Sophocles, and the comedies of Aristophanes, later we have

the comic plays of Menander. Greek drama, like our own English drama, was written in poetic form.

Tragedy deals with grave topics, and stirs the deepest feelings. It presents the unusual struggle between good and evil. Some crime has been committed, and the consequences of this act are worked out upon the stage in a chain of events which involves many people. The plot becomes more or less complicated, yet in Shakespeare's dramas the skill with which the leading characters and the central theme are presented, preserves for the audience unity of action throughout the play. King Lear, Othello, Macbeth, Hamlet, present the great drama of Good versus Evil, and will make a good beginning for the student who wishes to become acquainted with the drama.

Comedy, unlike tragedy, has a happy ending. The passions of men, love, hate, jealousy, ambition, are still the hidden springs of action, but there is a happy turn in the current of events, and Good triumphs without violence or bloodshed. Browning's "Pippa Passes" presents Good and Evil, and the superior power of the good, but it is not for the stage—it is too analytic. Shakespeare's plays again present to us the best study, "Merchant of Venice," "A Midsummer Night's Dream," "As You Like It," "All's Well that Ends Well," "The Taming of the Shrew," "Merry Wives of Windsor," also Sheridan's "Rivals," Goldsmith's "She Stoops to Conquer," will repay many times reading. Shakespeare's historic dramas may be classed among comedies or tragedies, according to the relation of good and evil working out of the theme. "King Henry, the Eighth," "King John," the "Two Richards" should be studied.

The Farce is a minor comedy, which presents ridiculous and extravagant situations. It is familiar to the modern stage.

The Mask is usually a presentation of some pastoral scene, and introduces supernatural characters. The "Mask of Comus," by John Milton is our best example.

Opera and Melodrama are forms of comedy where music and action are combined. In an opera the parts are entirely sung, while in melodrama singing and speaking are combined. Wagner's operas are the noblest conception we have of the power of music combined with dramatic art.

Lyric Poetry, as the words suggest, is poetry set to music. Originally the voice of the singer was accompanied by some musical instrument, as the harp or lyre, hence lyric. Lyric poems express the personal feeling of the author, and are moved by some fervor of emotion that must sing itself out. Not only are all song-poems, both religious and secular, classed as lyrics, but odes and sonnets belong to this group.

Odes express so wide a range of feeling that it is difficult to form an exact definition. The Greek odes of Pindar and Anacreon differ from our modern conception of the ode, which we regard as more stately and dignified. Examples of odes found in our own English are Milton's "Hymn on the Nativity," Wordsworth's "Intimations of Immortality," Shelley's "Ode to a

Nightingale," Collin's "Ode to Passions," Dryden's "Ode in Honor of St. Cecilia's Day," Tennyson's "Ode to Memory."

Elegy is a reflective poem on some mournful subject, or, as in modern elegies, a eulogy over the dead. Milton's "Lycidas" belongs to this class, also Gray's "Elegy written in a Country Churchyard," Shelley's "Adonais," a tribute to Keats and Tennyson's "In Memoriam," a tribute to his friend Arthur Hallam.

A Sonnet is a complete poem of fourteen lines. The personal element is strong, and the themes are tenderness of emotion, and beauty of thought and expression. The sonnet is the poetic poem. Shakespeare, Spenser, Milton, Wordsworth, Tennyson, Browning, and all our great poets have delighted in this form of verse.

Read "What is a Sonnet?" by Richard Watson Gilder to understand its charm.

Didactic Poetry is the least poetic of all poetic forms. It aims to teach, while the higher aim of poetry is to reveal life and beauty and joy. Pope's "Essay on Man," Cowper's "Task," Dryden's "Absalom" and "Achitophel" are examples of poems which are so didactic that they are little read. Lyric poems like Shelley's "Cloud," Wordsworth's "Daffodils," Longfellow's "Rain in Summer," Burns's "To a Wee Mousie's Nest," Tennyson's "Crossing the Bar," Newman's "Lead Kindly Light," will always remain popular, because they appeal to the emotions and the imagination, rather than to critical thought. The aim of poetry is to arouse the emotions and to give pleasure.

ABBREVIATIONS, CONTRACTIONS, AND DEGREES

A., *a.* Adjective.

A. Alto.

A., *ans.* Answer.

a., *66* (Lat. *ad*). To; At.

d., *dd.* The like quantity of each.

A. A. G. Assistant Adjutant-General.

A. A. S. American Association for the Advancement of Science.

A. A. S. S. (Lat. *Academia Antiquaria Societatis Socius*). Member of the American Antiquarian Society.

A. B. (Lat. *artium baccalaureus*), Bachelor of Arts.

Abbr., *Abbrev.* Abbreviated, Abbreviation.

abl., *ablat.* Ablative.

Abp. Archbishop.

A. B. S. American Bible Society.

A. C. (Lat. *ante Christum*), Before Christ; Analytical Chemist.

Acad. Academy.

A. C. A. American Congregational Association.

Acc., *Accus.* Accusative.

Acc., *Acct.* Account.

A. D. (Lat. *anno Domini*), In the year of our Lord.

A. D. C. Aide-de-camp.

Ad., *adv.* Advertisement.

Adj. Adjective.

Adj. Adjutant.

Adj. Gen. Adjutant General.

Ad lib., *Ad libit.* (Lat. *ad libitum*), At pleasure.

Adm. Admiral.

Admr. Administrator.

Admz. Administratrix.

Adv. Adverb.

Æ., *Æt.* (Lat. *ætatis*), Of Age, Aged.

A. F. A. Associate of the Faculty of Actuaries.

A. G., *Adj. Gen.* Adjutant-General.

Ag. (Lat. *argentum*), Silver.

Agl. Dept. Agricultural Department.

Agr., *Agric.* Agriculture, Agricultural.

Ag. Agent.

A. H. (Lat. *anno Hegiræ*), In the year of the Hegira, or flight of Mohammed.

A. H. S. (Lat. *anno humanæ salutis*), In the year of human salvation.

A. I. A. Associate of the Institute of Actuaries.

A. L. of H. American Legion of Honor.

Al., *Ala.* Alabama.

Alas. Ter. Alaska Territory.

Ald. Alderman.

Alex. Alexander.

Alf. Alfred.

Alg. Algebra.

A. M. (Lat. *anno mundi*), In the year of the world.

A. M. (Lat. *ante meridiem*), Before noon.

A. M. (Lat. *artium magister*), Master of Arts.

Amer., *Amer.* America, American.

Amer. Assn. Sci. American Association for the Advancement of Science.

Amer. Phil. Soc. American Philosophical Society.

Amt. Amount.

A. N. Anglo-Norman.

an. (Lat. *anno*), In the year.

Anal. Analysis.

Anat. Anatomy, Anatomical.

Anc. Ancient.

Anon. Anonymous.

Ans. Answer.

A. N. S. S. Associate of the Normal School of Science.

Ant., *Antiq.* Antiquities, Antiquarian.

Anthrop. Anthropology, Anthropological.

A. O. U. American Ornithologists' Union.

A. O. U. W. Ancient Order of United Workmen.

Ap., *App.* Apostle, Apostles.

A. P. A. American Protestant Association; American Protective Association.

Apoc. Apocalypse, Apocrypha.

Apog. Apogee.

App. Appendix.

approx. Approximate, -ly.

Apr. April.

A. P. S. Associate of the Pharmaceutical Society.

Aq. (Lat. *aqua*), Water.

A. Q. M. Assistant Quartermaster.

A. Q. M. G. Assistant Quartermaster-General.

A. R. (Lat. *anno regni*), In the year of the reign.

Ar. Arab. Arabic, Arabian.

Ar., *Arr.* Arrive, Arrives, Arrived, Arrival.

A. R. A. Associate of the Royal Academy.

Arab. Arabic, Arabian.

Aram. Aramaic.

Arch. Architecture.

Archæol. Archæology.

Archd. Archdeacon.

A. E. H. A. Associate of the Royal Hibernian Academy.

Arith. Arithmetic, Arithmetical.

Ariz. Arizona.

Ark. Arkansas.

Arm. American, Armenian.

Arr. Arrive, Arrives, Arrived, Arrival.

A. R. R. (Lat. *anno regni regis* or *regine*), In the year of the king's (or queen's) reign.

A. R. S. A. Associate of the Royal Scottish Academy.

A. R. S. M. Associate of the Royal School of Mines.

Art. Article.

A. S., *A.-S.* Anglo-Saxon.

Asst. Assistant.

A. S. S. U. American Sunday School Union.

Assyr. Assyrian.

Astrol. Astrology.

Astron. Astronomy, Astronomical.

A. T. S. American Tract Society.

Atty. Attorney.

Atty.-Gen. Attorney-General.

A. U. A. American Unitarian Association.

A. U. C. (Lat. *anno urbis conditæ*), In the year from the building of the city — Rome.

Aug. Augmentative.

Aug. Augustus; August.

Auzil. Auxiliary.

A. V. Authorized Version.

A. V. Artillery Volunteers.

Avoir. Avoirpouits.

B. Bass; Book.

B., *Brit.* British.

b. Born.

B. A. Bachelor of Arts. [*A. B.*]

Bal. Balance.

Balt., *Balto.* Baltimore.

Bank. Banking.

Bap., *Bapt.* Baptist.

Bar. Barrel, Barometer.

Bar., *Bt.* Baronet.

Bat., *Batt.* Battalion.

bbl., *bbls.* Barrel, Barrels.

B. C. Before Christ.

B. Ch. (Lat. *baccalaureus chiurgie*), Bachelor of Surgery.

B. C. L. (Lat. *baccalaureus civilis legis*), Bachelor of Civil Law.

B. D. (Lat. *baccalaureus divinitatis*), Bachelor of Divinity.

Bd. Bound.

Bdls. Bundles.

Bds. Bound in boards.

B. E. Bachelor of the Elements.

Beds. Bedfordshire.

Belg. Belgic, Belgian.

Ben., *Benj.* Benjamin.

Berks. Berkshire.

Bib. Bible, Biblical.

Biog. Biography, Biographical.

Biol. Biology, Biological.

B. L., *B. L. L.* (Lat. *baccalaureus legum*), Bachelor of Laws.

B. ès L. (*P. Bachelier ès Lettres*), Bachelor of Letters.

bis. Bales.

B. M. (Lat. *baccalaureus medicinæ*), Bachelor of Medicine.

B. M., *B. Mus.* (Lat. *baccalaureus musicæ*), Bachelor of Music.

B. O. Branch Office.

B. O. Bachelor of Oratory.
Boh. Bohemian, or Czech.
Boet. Boston.
Bot. Botany, Botanical.
B. O. U. British Ornithologists' Union.
Bp. Bishop.
Br., Bro. Brother.
Bret. Bas-Breton, or Celtic of Brittany.
Brig. Brigade.
Brig.-Gen. Brigadier-General.
Brit. Britain, Britannia, British.
B. S. Bachelor of Surgery; Bachelor of Science.
B. Sc. (Lat. baccalaureus scientiæ), Bachelor of Science.
B. S. L. Botanical Society, London.
Bt. Baronet.
bush. Bushel.
B. V. Blessed Virgin.
B. V. M. Blessed Virgin Mary.
bz., bzs. Box, Boxes.
C. Cent, Cents; Centigrade; Consul; Centime, Centimes; a hundred.
C., Cap. (Lat. caput), Chapter.
C. A. Chartered Accountant.
Cal. California; Calendar.
Cam., Camb. Cambridge.
Cant. Canticle.
Cant. [Cantuar.]
Cantab. (Lat. Cantabrigiensis), Of Cambridge.
Cantuar., Cant. (Mid. Lat. Cantuaria), Canterbury.
Cap. (Lat. caput), Capital; Chapter.
Capa. Capitals.
Capt. Captain.
Card. Cardinal.
Cath. Catharine; Catholic.
C. B. Companion of the Bath.
C. C. Catholic Clergyman, Catholic Curate.
C. D. V. Carte-de-Visite.
C. E. Civil Engineer.
Cel. Celsius.
Celt. Celtic.
Cent. (centum), A hundred; Centigrade.
Centig. Centigrade.
Cert., Certif. Certify; Certificate.
Cf. (Lat. confer), Compare.
Cf. Cubic feet.
C. G. Coastguard; Commissary-General.
C. G. S. Centimetre-Gramme-Second.
C. H. Court House.
Ch. Church; Chapter.
Chal. Chaldron.
Chal., Chald. Chaldee.
Chan. Chancellor.
Chap. Chapter.
Chas. Charles.
Chem. Chemistry, Chemical.
Ch. Hist. Church History.
Chic. Chicago.
Chin. Chinese.
Chr. Christ; Christian; Christopher.
Chron. Chronology, Chronological.
C. I. Order of the Crown of India.
C. I. E. Companion of the Order of the Indian Empire.
Cin. Cinnamon.
Cit. Citation; Citizen.
Civ. Civil.
C. J. Chief Justice.
Cl. Clergyman.
Class. Classical.
clk. Clerk.
c. m. Centimetres.
C. M. Certified Master; Common metre.
C. M. (Lat. chirurgiæ magister), Master in Surgery.
C. M. G. Companion of the Order of St. Michael and George.
C. M. Z. S. Corresponding Member of the Zoological Society.
Co. Company; County.
C. O. D. Cash on delivery; Collect (payment) on delivery.
Cogn. Cognate.

Col. Colonel; Colonial; Colossians; Column; Colorado.
Coll. College.
Collog. Colloquial, Colloquialism, Colloquially.
Com. Commander; Commerce; Commissioner; Committee; Commodity; Common.
Comm. Commentary; Commerce.
Comp. Compare; Comparative; Compound, Compounded.
Compar. Comparative.
Compos. Composition.
Com. ver. Common Version.
Con., contra. (Lat.), Against.
Con. Cr. Contra Credit.
Conch., Conchol. Conchology.
Cong. Congregation, Congregational, Congregationalist; Congress.
Conj. Conjunction.
Conn. Connecticut.
Conn. Sec. Conic Sections.
Contr. Contracted, Contraction.
Cor. Copt. Coptic.
Cor. Corinthians.
Cor. Mem. Corresponding Member.
Corn. Cornwall; Cornish.
Corrupt. Corruption, Corrupted.
Cor. Sec. Corresponding Secretary.
Cos. Cosine.
C. P. Clerk of the Peace; Common Pleas.
C. P. A. Certified Public Accountant.
C. P. C. Clerk of the Privy Council.
C. P. S. (Lat. custos privati sigilli), Keeper of the Privy Seal.
Cr. Credit, Creditor.
C. R. (Lat. Civis Romanus), Roman Citizen.
C. R. (Lat. custos rotulorum), Keeper of the Rolls.
Crea. Crescendo.
Crim. con. Criminal conversation, or adultery.
Crystal., Crystallog. Crystallography.
C. S. A. Confederate States of America.
C. S. Court of Sessions, Clerk to the Signet.
C. S. I. Companion of the Star of India.
Casks. Casks.
Cl. (Lat. centum), A hundred.
Cl. Court.
Conn. Connecticut.
C. T. Certified Teacher.
C. T. A. U. Catholic Total Abstinence Union.
Cu. (Lat. cuprum), Copper.
Cub., Cu. ft. Cubic, Cubic foot.
Cur., Curt. Current — this month.
Cwt. A hundredweight; Hundredweights.
Cyc. Cyclopædia.
D. Deputy.
d. (Lat. denarius, denarii), A penny, Pence.
d. Died.
Dan. Daniel; Danish.
Dat. Dative.
Dav. David.
D. C. (Ital. da capo), From the beginning.
D. C., Dist. Col. District of Columbia.
D. C. L. Doctor of Civil (or Canon) Law.
D. D. (Lat. divinitatis doctor), Doctor of Divinity.
D. D. D. (Lat. dat. dicat, dedicat), He gives, devotes, and consecrates. (The formula by which anything was consecrated to the gods or to religious uses by the Romans; still used in funeral inscriptions.)
D. D. S. Doctor of Dental Surgery.
D. E. Dynamic Engineer.
D. Eng. Doctor of Engineering.
Dec. December.
decim. Decimetre.
Def. Definition.

Def. Defendant.
Deg. Degree, Degrees.
Del. Delaware.
Del. (Lat. delineavit), He (or she) drew.
Dep., Dept. Department.
Dep. Deputy.
Der. Derived, Derivation.
Deut. Deuteronomy.
D. F. Dean of the Faculty; Defender of the Faith.
D. G. (Lat. Dei gratia), By the grace of God.
Dict. Dictionary.
Dim., Dimin. Diminutive.
Dis., Disc. Discount.
Dist. District.
Dist. Att. District Attorney.
Div. Divide; Dividend; Division; Divisor.
D. Lit., D. Litt. Doctor of Literature.
D. L. O. Dead Letter Office.
D. M., D. Mus. Doctor of Music.
D. M. D. Doctor of Dental Medicine.
D. O. Doctor of Osteopathy.
Do. (Ital. ditto), The same.
Doc. Document.
Dols. Dollars.
Dom. Econ. Domestic Economy.
Doz. Dozen.
Dpt. Deponent.
Dr. Debtor; Doctor; Dram, Drama.
Dram. Dramatic, Dramatically.
D. S. (Ital. dal segno), From the sign.
D. Sc. Doctor of Science.
D. T. (Lat. doctor theologia), Doctor of Theology.
Du. Dut., Dutch.
Dub. Dublin.
Duo, 12mo. Duodecimo (twelve folds).
D. V. (Lat. Deo volente), God willing.
D. V. M. Doctor of Veterinary Medicine.
D. V. S. Doctor of Veterinary Surgery.
Dut. (Lat. denarius, an English weight), Pennyweight, Pennyweights.
Dynam. Dynamics.
E. East, Eastern; English; Edinburgh.
Ea. Each.
E. Aram. East Aramæan, generally called Chaldee.
Eben. Ebenezer.
E. C. Eastern Central; Established Church.
Ecl., Eccles. Ecclesiastical.
Eccles., Ecclesiol. Ecclesiology.
Econ. Economy.
Ed. Editor; Edition; Edinburgh.
Ed., Edm. Edmund.
Edin. Edinburgh.
E. D. S. English Dialect Society.
Edw. Edward.
E. E. Errors excepted.
E. E. Electrical Engineer.
e. g. (Lat. exempli gratia), For example.
E. I. East Indies, East Indian.
E. I. C., E. I. Co. East Indian Company.
E. I. C. S. East India Company's Service.
Elec. Elect. Electric, Electricity.
Elis. Elizabeth, Elizabethan.
Emp. Emperor, Empress.
Ency. Encyclo. Encyclopædia.
E. N. E. East-northeast.
Eng. England, English.
Eng. Engin. Engineer, Engineering.
Eng. Dept. Department of Engineers.
Ent., Entom. Entomology, Entomological.
Env. Ext. Envoy extraordinary.
Eph. Ephesians; Ephraim.
Eph. Epiphany.
Epia. Episcopal.
Epist. Epistle, epistolary.
Eq. Equal, equivalent.

Equis. Equivalent.

Esd. Estras.

E. S. E. East-south-east.

Esp., Espec. Especial, especially.

Esq., Esqr. Esquire.

et al. (Lat. *et alibi*). And elsewhere.

et al. (Lat. *et alii, alia, or alia*). And others.

etc., &c. (Lat. *et ceteri, cetera, or cetera*). And others, and so forth.

Eth. Ethiopia, Ethiopian.

Ethnol. Ethnology, ethnological.

et seq. (Lat. *et sequentes, or sequentia*). And the following.

Etym. Etymology.

Ex. Example; Examined; Excep-

tion; Exodus.

Exc. Excellency; Except, excepted.

Exch. Exchange; Exchequer.

Exd. Examined.

Ex. Doc. Executive Document.

Exec. Executor.

Execx. Executrix.

Ex. Gr. (Lat. *exempli gratia*). For example.

Exod. Exodus.

Exon. (Lat. *Exonia*). Exeter.

Exor. Executor.

Ez. Ezra.

Ezek. Ezekiel.

E. & O. E. Errors and omissions excepted.

F. Fellow; Folio; Fahrenheit.

f. Farthing, farthings.

f., fem. Feminine.

f. Franc, francs.

ft. Foot, feet.

Fahr. Fahrenheit.

F. A. S. Fellow of the Society of Arts.

F. & A. M. Free and Accepted Ma-

sons.

F. A. S. E. Fellow of the Antiquarian Society, Edinburgh.

F. B. S. E. Fellow of the Botanical Society of Edinburgh.

F. C. Free Church of Scotland.

Fcp. Free-scap.

F. C. P. S. Fellow of the Philosophical Society, Cambridge.

F. C. S. Fellow of the Chemical Society.

F. D., Fid. Def. (Lat. *Fidei Defensor*). Defender of the Faith.

Feb. February.

Fec. (Lat. *fecit*). He or she did it.

F. E. I. S. Fellow of the Educational Institute of Scotland.

Fem. Feminine.

F. E. S. Fellow of the Entomological Society.

F. F. V. First Families of Virginia.

F. G. S. Fellow of the Geological Society.

F. I. A. Fellow of the Institute of Actuaries.

F. I. C. Fellow of the Chemical Institute.

f. fa. Fieri facias.

Fig. Figure, figures, figurative, figuratively.

Finn. Finnish.

F. K. Q. C. P. I. Fellow of the Kings and Queen's College of Physicians, Ireland.

Fl. Flemish; Florin, florins; Flourished.

Fla. Florida.

Flem. Flemish.

F. L. S. Fellow of the Linnæan Society.

F. M. Field-marshal.

Fo., Fol. Folio.

F. O. Foreign Office; Field-officer.

F. O. B. Free on board.

For. Foreign.

Fort. Fortification.

F. P. Fire-plug.

F. P. S. Fellow of the Philological Society.

Fr. France; French; Francis; Frances.

fr. From.

F. R. A. S. Fellow of the Royal Astronomical Society.

F. R. C. P. Fellow of the Royal College of Physicians.

F. R. C. P. E. Fellow of the Royal College of Physicians, Edinburgh.

F. R. C. S. Fellow of the Royal College of Surgeons.

F. R. C. S. E. Fellow of the Royal College of Surgeons, Edinburgh.

F. R. C. S. I. Fellow of the Royal College of Surgeons, Ireland.

Fred. Frederick.

Freq. Frequentative.

F. R. G. S. Fellow of the Royal Geographical Society.

F. R. H. S. Fellow of the Royal Horticultural Society.

F. R. Hist. S. Fellow of the Royal Historical Society.

Fri. Friday.

Fries. Friesland.

Fris. Frisian.

F. R. Met. S. Fellow of the Royal Meteorological Society.

F. R. M. S. Fellow of the Royal Microscopical Society.

F. R. S. Fellow of the Royal Society.

F. R. S. E. Fellow of the Royal Society, Edinburgh.

F. R. S. L. Fellow of the Royal Society of Literature.

F. R. S. S. Fellow of the Royal Statistical Society.

F. S. A. Fellow of the Society of Arts, or of Antiquaries.

F. S. A. Scot. Fellow of the Society of Antiquaries of Scotland.

f. Foot, feet; Fort.

ft. Fathom.

Fur. Furlong.

Ful. Furlong.

F. Z. S. Fellow of the Zoological Society.

G. Genitive; Guinea, guineas; Gulf.

Ga. Georgia.

G. A. General Assembly.

Gael. Gaelic; Gadhelic.

Gal. Galatians.

Gall. Gallon, gallons.

Galv. Galvanism, galvanic.

G. A. R. Grand Army of the Republic.

G. B. Great Britain.

G. B. & I. Great Britain and Ireland.

G. C. B. Grand Cross of the Bath.

G. C. II. Grand Cross of the Guelphs of Hanover.

G. C. L. II. Grand Cross of the Legion of Honor.

G. C. M. G. Grand Cross SS. Michael and George.

G. C. S. I. Grand Commander of the Star of India.

G. D. Grand Duke, Grand Duchess.

Gen., Genl. General.

Gen. Genesis; Genitive.

Genl. Gender.

Genil. Genitive.

Genl., Gentln. Gentleman, gentlemen.

Geo. George; Georgia.

Geog. Geography, geographical.

Geol. Geology, geological.

Geom. Geometry, geometrical.

Ger., Germ. German.

Gi. Gill, gills.

G. L. Grand Lodge.

Gm. Grammes.

G. M. Grand Master.

Goth. Gothic.

G. O. M. Grand old man (applied to Gladstone).

Gov. Governor.

Gov.-gen. Governor-general.

Govt. Government.

G. P. O. General Post-Office.

Gr. Grain, grains; Great; Greek; Gross.

Gram. Grammar, grammatical.

Gro. Gross.

G. T. Good Templars; Grand Tyler.

Gtt. (Lat. *gutta*), Drops.

Gun. Gunnery.

H. Hour, hours.

Hab. Habakkuk.

Hag. Haggai.

Hants. Hampshire.

H. B. C. Hudson Bay Company.

H. B. M. His (or Her) Britannic Majesty.

H. C. Heralds' College; House of Commons.

H. C. M. His (or Her) Catholic Majesty.

h. e. (Lat. *hoc est, hic est*). This or That is, here is.

Heb., Hebr. Hebrew, Hebrews.

Her. Heraldry, heraldic.

Hf.-bd. Half-bound.

H. G. Horse Guards.

H. H. His (or Her) Highness; His Holiness (the Pope).

Hhd. Hoghead, hogshheads.

H. I. H. His (or Her) Imperial Highness.

Hind. Hindu, Hindustan, Hindustani.

Hist. History, Historical.

H. J., H. J. S. (Lat. *hic jacet, hic jacet sepultus*). Here lies, here lies buried.

H. M. His (or Her) Majesty.

H. M. P. (Lat. *hoc monumentum posuit*). Erected this monument.

H. M. S. His (or Her) Majesty's Service, Ship, or Steamer.

Hon., Honble. Honorable.

Hond. Honored.

Hor., Horol. Horology, horological.

Hort., Hortic. Horticulture, horticultural.

Hos. Hosea.

H. P. Half-pay; High-priest; Horse power.

H. R. House of Representatives.

H. R. E. Holy Roman Empire, or Emperor.

H. R. H. His (or Her) Royal Highness.

H. R. I. P. (Lat. *hic requiescit in pace*). Here rests in peace.

H. S. (Lat. *hic situs*). Here lies.

H. S. H. His (or Her) Serene Highness.

Humb., Humb. Humble.

Hung., Hung. Hungary, Hungarian.

Hund. Hundred.

Hyd., Hydros. Hydrostatics.

Hydraul. Hydraulics.

Hydros. [Hyd.]

Hypoth. Hypothesis, hypothetical.

I. Island.

Ia. Iowa.

ib., Ibid. (Lat. *ibidem*). In the same place.

Icel. Icelandic.

Ich., Ichthy. Ichthyology.

Id. (Lat. *idem*). The same.

Ida. Idaho.

i. e. (Lat. *id est*). That is.

I. H. S. (Lat. *Jesus Salvator Hominum*). Jesus, the Saviour of Men.

Ill. Illinois.

Imp. (Lat. *imperator*), Emperor; Imperial; impersonal.

Imp., Impf. Imperfect.

Imper. Imperative.

In. Inch, inches.

Incog. (Ital. *incognito, incognita*). Unknown.

Ind. India, Indian; Indiana.

Indic. Indicative.

Ind. Ter. Indian Territory.

Inf., Infin. Infinitive.

In lim. (Lat. *in limine*). At the out-

set.

In loc. (Lat. *in loco*). In its place.

I. N. R. I. (Lat. *Jesus Nazarenus Rex Iudæorum*). Jesus of Nazareth, King of the Jews.

Ins. Insurance.

Ins. Gen. Inspector General.

Inst. Instant, the present month; Institute, institution.

Int. Interest.

- Int. Dept.* Department of the Interior.
Intens. Intensive; Intensative.
Interj. Interjection.
Intrans. Intransitive.
In trans. (Lat. *in transitu*), On the passage.
Int. Rev. Internal Revenue.
Introd. Introduction.
Io. Iowa.
I. O. F. Independent Order of Foresters.
I. O. G. T. Independent Order of Good Templars.
I. O. O. F. Independent Order of Oddfellows.
I. O. R. M. Improved Order of Red Men.
I. O. S. M. Independent Order of Sons of Malta.
I. O. U. I owe you.
i. q. (Lat. *idem quod*), The same as.
Ir. Ireland, Irish.
Irreg. Irregular.
Is. *Isa.* Isaiah.
I. S. Irish Society.
Isl. Island.
I. S. M. Jesus Salvator Mundi.
It. *Ital.* Italy; Italic; Italian.
Itin. Itinerary.
J. Judge; Justice.
J. A. Judge-advocate.
Jac. Jacob, Jacobus (= James).
Jan. January.
J. A. G. Judge Advocate General.
Jav. Javanese.
J. C. Jesus Christ.
J. C. D. (Lat. *juris civilis doctor*), Doctor of Civil Law.
J. D. (Lat. *jurum doctor*), Doctor of Laws.
Jer. Jeremiah.
J. G. W. Junior Grand Warden.
J. H. S. [*J. H. S.*].
Jno. John.
Jour. Journey.
Jon., Jona. Jonathan.
Jos. Joseph.
Josh. Joshua.
Jour. Journal.
J. P. Justice of the Peace.
Jr. Juror; Junior.
J. U. D. (Lat. *juris utriusque doctor*), Doctor of both laws (*i. e.*, of civil and canon law).
Jud. Judith.
Jud. Judges.
Jul. July; Julius; Julian.
Jul. Per. Julian Period.
Jun. June.
Jun., Junr. Junior.
Juris. Jurisprudence.
K. King; Knight.
Kan., Kc. Kansas.
K. B. Knight of the Bath.
K. B. King's Bench.
K. C. King's Counsel.
K. C. B. Knight Commander of the Bath.
K. C. H. Knight Commander of the Guelphs of Hanover.
K. C. M. G. Knight Commander of St. Michael and St. George.
K. C. S. I. Knight Commander of the Star of India.
K. E. Knight of the Eagle.
Ken., Ky. Kentucky.
K. G. Knight of the Garter.
K. G. E. Knight of the Golden Eagle.
K. G. C. Knight of the Grand Cross.
K. G. C. B. Knight of the Grand Cross of the Bath.
K. G. F. Knight of the Golden Fleece.
K. G. H. Knight of the Guelphs of Hanover.
Kt. Kings.
Kilog. Kilogramme.
Kilom., Kilo. Kilometre.
Kingd. Kingdom.
K. I. B. Knight of Leopold of Belgium.
- K. L. H.* Knight of the Legion of Honor.
K. M. Knight of Malta.
Kn. N. S. Knight of the Loyal Northern Star (Sweden).
Knicker. Knickerbocker.
Knt. Knight.
K. P. Knight of St. Patrick.
K. of P. Knights of Pythias.
Ks. Kansas.
K. S. Knight of the Sword (Sweden).
Kt. Knight.
K. T. Knight of the Thistle; Knight Templar.
K. T. S. Knight of Tower and Sword (Portugal).
Ky. Kentucky.
L. Latin; Lake; Lord; Lady.
L., l., E. (Lat. *libra*), Pound, pounds (sterling).
L., lb., lb. (Lat. *libra*), Pound, pounds (weight).
La. Louisiana.
L. A. Law Agent; Literate in Arts.
Lam. Lamentations.
Lat. Latin; Latitude.
lb. Pound, pounds (weight).
L. c. Lower case (in printing).
L. c., loc. cit. (Lat. *loco citato*), In the place cited.
L. C. Lord Chamberlain; Lord Chancellor.
L. C. J. Lord Chief-justice.
L. C. P. Licentiate of the College of Preceptors.
Ld. Lord.
Ldp. Lordship.
L. D. S. Licentiate of Dental Surgery.
Leg., Legis. Legislature, legislative.
Leip. Leipsic.
Lev. Leviticus.
Lex. Lexicon.
Lexicog. Lexicography, lexicographer, lexicographical.
L. G. Life Guards.
L. Ger. Low German or Platt Deutsch.
L. H. D. Doctor of Humanities.
L. I. Light Infantry; Long Island.
Lib. (Lat. *liber*), Book.
Lib. Library, librarian.
Lieut., Lt. Lieutenant.
Lieut.-col. Lieutenant-colonel.
Lieut.-gen. Lieutenant-general.
Lieut.-gov. Lieutenant-governor.
lin. Lineal, or right-line measures; *e. g.*, lin. yd.; lin. ft., etc.
Linn. Linneus, Linné, Linnæan.
Liq. Liquor, liquid.
Lit. Literally, literature, literary.
Lit. D., Litt. D. (Lat. *literarum doctor*), Doctor of Literature.
Lith. Lithography.
Liv. Livre.
LL. B. (Lat. *legum baccalaureus*), Bachelor of Laws.
LL. D. (Lat. *legum doctor*), Doctor of Laws.
LL. I. Lord-Lieutenant of Ireland.
LL. M. Master of Laws.
L. M. Long metre.
Lon., Lond. London.
Lon., Long. Longitude.
Loq. (Lat. *loquitur*), He (or she) speaks.
Lou. Louisiana.
Lp. Lordship.
L. P. Lord Provost.
L. S. (Lat. *locus sigilli*), Place of the seal.
L. s. d. (Lat. *libra, solidi, denarii*), Pounds, shillings, pence.
Lt. Lieutenant.
Lt. Inf. Light Infantry
Luth. Lutheran.
m. Married; Masculine; Mètre, mètres; Mile, miles; Minute, minutes.
M. Marquis; Middle; Monday; Morning; Monsieur.
M. (Lat. *mille*), Thousand.
M. (Lat. *meridies*), Meridian, Noon.
- M. A.* (Master of Arts.) [*A. M.*]
Mac., Macc. Maccabees
Mach., Machin. Machine, machinery.
Mad., Madm. Madam.
Mag. Magyar; Magazine.
Maj. Major.
Maj.-gen. Major-general.
Mal. Malachi; Malay, Malayan.
Manuf. Manufactures, manufacturing.
Mar. March; Maritime.
Marq. Marquis.
Mas., Masc. Masculine.
Mass. Massachusetts.
M. Ast. S. Member of the Astronomical Society.
Math. Mathematics, mathematician, mathematical.
Matt. Matthew.
M. B. (Lat. *medicina baccalaureus*), Bachelor of Medicine.
M. B. (Lat. *musica baccalaureus*), Bachelor of Music.
M. C. Member of Congress; Master of Ceremonies.
Mch. March.
M. C. P. Member of the College of Preceptors.
M. D. (Lat. *medicina doctor*), Doctor of Medicine.
Md. Maryland.
Mdlle. (Fr. *mademoiselle*), Miss.
Mdse. Merchandise.
M. E. Most Excellent; Military Engineer; Mining Engineer; Mechanical Engineer.
M. E. Methodist Episcopal.
Me. Maine.
Mech. Mechanics, mechanical.
Med. Medicine, medical; Mediæval.
Med. Lat., Mediæv. Lat. Mediæval Latin.
Mem. Memorandum, memoranda.
Mess. & Docs. Messages and Documents.
Messrs. (Fr. *messieurs*), Gentlemen.
Met. Metaphysics, metaphysical.
Metall. Metallurgy.
Metaph. Metaphysics; Metaphorically.
Meteor. Meteorology, meteorological.
Meth. Methodist.
Meton. Metonymy.
Mex. Mexico.
Mfd., M/s. Manufactured, manufactures.
M. F. H. Master of Foxhounds.
M. H. Most Honorable.
M. H. Ger. Middle High German.
Miss. Mississippi.
Mich. Michig; Michigan.
M. I. C. E. Member of the Institute of Civil Engineers.
Mich. Michaelmas; Michigan.
Mid. Middle; Midshipman.
Mid. Lat. Latin of the Middle Ages.
Mil. Milit. Military.
M. I. M. E. Member of the Institute of Mining Engineers.
Min. Mineralogy, mineralogical; Minute, minutes.
Minn. Minnesota.
Min. Plen. Minister Plenipotentiary.
Miss. Mississippi.
Mlle. (Fr. *mademoiselle*), Miss.
M. L. S. B. Member of the London School Board.
MM. Their Majesties.
MM. (Fr. *messieurs*), Gentlemen.
mm. Millimetres; Micrometres.
Mme. (Fr. *madame*), Madam.
M. P. P. Member of Provincial Parliament.
M. N. A. S. Member of the National Academy of Sciences.
M. N. S. Member of the Numismatic Society.
Mo. Missouri; Month.
Mod. Modern.
Mod. (Ital. *moderato*), Moderately.
Mons. (Fr. *monsieur*), Sir, Mr.
Mont. Montana.

M. P. Member of Parliament.
M. P. S. Member of the Pharmaceutical Society; Member of the Philological Society.
Mr. Master, Mister.
M. R. A. S. Member of the Royal Asiatic Society.
M. R. C. P. Member of the Royal College of Physicians.
M. R. C. S. Member of the Royal College of Surgeons.
M. R. C. V. S. Member of the Royal College of Veterinary Surgeons.
M. R. G. S. Member of the Royal Geographical Society.
M. R. I. Member of the Royal Institution.
M. R. I. A. Member of the Royal Irish Academy.
Mrs. Mistress.
M. R. S. L. Member of the Royal Society of Literature.
M. S. Master of Surgery.
M. S. Master of Science.
M. S. (Lat. *memoria sacrum*), Sacred to the memory of.
M.S. Manuscript.
MSS. Manuscripts.
mo., mth. Month.
Mt., Mts. Mount, mountains.
Mus. Museum; Music, musical.
Mus. B. (Lat. *musica baccalareus*), Bachelor of Music.
Mus. D., Mus. Doc., Mus. Doct. (Lat. *musica doctor*), Doctor of Music.
M. W. G. M. Most Worthy Grand Master.
Myth. Mythology, mythological.
N. Noon; North; Noun; Number; New; Neuter.
N. A. North America, North American.
Nah. Nahum.
Nap. Napoleon.
Nat. Natural; National.
Nat. Hist. Natural History.
Nat. ord. Natural order.
Nat. Phil. Natural Philosophy.
Naut. Nautical.
N. B. New Brunswick; North Britain (= Scotland).
N. B. (Lat. *nota bene*), Note well, take notice.
N. C. North Carolina.
N. D., N. Dak. North Dakota.
N. E. New England; Northeast.
Neb. Nebraska.
Neg. Negative, negatively.
Neh. Nehemiah.
Nem. con. (Lat. *nemine contradicente*), No one contradicting; unanimously.
Nem. diss. (Lat. *nemine dissente*), No one dissenting; unanimously.
Neth. Netherlands.
Neut. Neuter.
Nev. Nevada.
New Test., N. T. New Testament.
N. F. Newfoundland.
N. H. New Hampshire.
N. H. Ger. New High German.
N. J. New Jersey.
N. L., N. Lat. North Latitude.
N. M. New Mexico.
N. N. E. North-northeast.
N. N. W. North-northwest.
N. O. New Orleans.
No. (Lat. *numero*), Number.
not. pro. (noleus prosequi), I am unwilling to prosecute.
Nom., Nomin. Nominative.
Non con. Non-content, dissentient. (The formula in which Members of the House of Lords vote).
Non obst. (Lat. *non obstante*), Notwithstanding.
Non pros. (Lat. *non prosequitur*), He does not prosecute.
Non seq. (Lat. *non sequitur*), It does not follow (as a consequence).
n. o. p. Not otherwise provided for.
Nor., Norm. Norman.

Nor. Fr., Norm. Fr. Norman French.
Norm. [Noa.]
Norw. Norway, Norwegian, Norse.
Noa. Numbers.
Nov. November.
N. P. Notary public.
N. S. New style; Nova Scotia.
n. s. Not specified.
N. S. J. C. (Fr. *Notre Seigneur Jesus Christ*), Our Lord Jesus Christ.
N. T. [New Test.]
Num. Numb. Numbers.
Numis. Numismatic, numismatology.
N. V. M. Nativity of the Virgin Mary.
N. W. Northwest.
N. W. T. Northwest Territory.
N. Y. New York.
N. Z. New Zealand.
O. Ohio; Old.
ob. (Lat. *obit*), He (or she) died.
Obad. Obadiah.
Obd., Ob. Obedient.
Obj. Objective.
Obs. Obsolete.
Oct. October.
Od. Svo. Octavo.
O. F. Odd Fellows.
O. H. Ger. Old High German.
O. H. M. S. On Her Majesty's Service.
O. K. "All correct."
Ok. Oklahoma.
Old Test., O. T. Old Testament.
Olym. Olympiad.
O. M. Old Measurement.
O. M. I. Oblate of Mary Immaculate.
Op. Opposite, opposition.
Opt. Optative; Optics, optical.
Or. Oregon.
Ord. Ordinance.
Orig. Original, originally.
Ornith. Ornithology, ornithological.
O. S. Old Style; Old Saxon.
O. S. A. Order of St. Augustine.
O. S. B. Order of St. Benedict.
O. S. F. Order of St. Francis.
O. T. [OLD TEST.]
O. U. A. M. Order of United American Mechanics.
Oxf. Oxford.
Oxon. (Lat. *Ozonia*, *Ozoniensis*), Oxford; of Oxford.
Oxonien. (Lat. *Ozoniensis*), Of Oxford.
Oz. Ounce. [The *z* in this contraction and in *viz.*, represents an old symbol (3), used to mark a terminal contraction.]
P. Page; Participle; Past; Pole; Port.
Pa. Pennsylvania.
Pa. a., par. a. Participle adjective.
Paint. Painting.
Pal., Palæont. Palæontology, palæontological.
Palæobo. Palæobotany.
Pa. part. Past participle.
Par. Paragraph; Participle.
Parl. Parliament, parliamentary.
Part. Participle.
Particip. Participial.
Pass. Passive.
Pat. Patrick.
Pathol. Pathological.
Payt. Payment.
P. C. (Lat. *patres conscripti*), Conscript Fathers.
P. C. Police-constable; Privy Council; Privy Councillor.
P. C. S. Principal Clerk of Session.
P. D. Paid.
Pd. D. Doctor of Pedagogy.
P. E. Protestant Episcopal.
P. E. I. Prince Edward's Island.
Penn. Pennsylvania.
Pent. Pentecost.
Pers., Pers. Persian; Person, personal.
Per. an. (Lat. *per annum*), Yearly.

Per cent., per ct. (Lat. *per centum*). By the hundred.
Perf. Perfect.
Peri. Perigee.
Pers., Persp. Perspective.
Peruv. Peruvian.
Pet. Peter.
P. G. M. Past Grand Master.
Phar., Pharm. Pharmacy.
Ph. B. (Lat. *philosophia baccalareus*), Bachelor of Philosophy.
Ph. D. (Lat. *philosophia doctor*), Doctor of Philosophy.
Phil. Philip; Philippians; Philosophy, philosophical.
Phil. Trans. Transactions of the Philosophical Society.
Phil., Phila. Philadelphia.
Philem. Philemon.
Philol. Philology.
Philos. Philosophy, philosophical.
Ph. M. Master of Philosophy.
Phenic. Phenician.
Photog. Photography, photographic, photographer.
Phren., phrenol. Phrenology, phrenological.
Phys. Physics, physical; Physiology, physiological.
Physiol. Physiology, physiological.
Pinz., Pat. (Lat. *pinxit*), He (or she) painted it.
Pk. Peck.
Pl. Place; Plate; Plural.
P. L. Poet Laureate.
Piff., Piff. Plaintiff.
Plu. Plural.
Plup. Pluperfect.
Plur. Plural.
P. M. (Lat. *post meridiem*), Afternoon.
P. M. Past Master; Peculiar meter; Postmaster.
P. M. G. Postmaster-General.
P. O. Post-office.
P. & O. Co. Peninsular and Oriental Steam Navigation Company.
Poet. Poetry, poetical.
Pol. Polish.
Polit. Econ. Political Economy.
P. O. O. Post-office order.
Pop. Population.
Port. Portugal, Portuguese.
Poss. Possessive.
Pp. Pages.
P. p. Past participle.
P. P. (Lat. *pater patriæ*), Father of his country.
P. P. Parish priest.
P. P. C. (Fr. *pour prendre congé*), To take leave. [T. T. L.]
Pph. Pamphlet.
Pr. Present; Priest; Prince.
Pr. par. Present participle.
P. R. (Lat. *Populus Romanus*), The Roman people.
P. R. Prize Ring.
P. R. A. President of the Royal Academy.
P. R. C. (Lat. *post Roman conditam*), After the building of Rome. [A. U. C.]
Preb. Prebend.
Pref. Prefix; Preface.
Prep. Preposition.
Pres. President; Present.
Pret. Preterite.
Prim. Primary.
Prin. Principal.
Print. Printing.
Priv. Privative.
Prob. Problem; Probable, probably.
Prof. Professor.
Pron., Pro. Pronoun; Pronounced; Pronunciation.
Pron. a. Pronominal adjective.
Prop. Proposition.
Pros. Prosody.
Pro tem. (Lat. *pro tempore*), For the time being.
Prov. Proverbs, proverbial, proverbially; Provincial, provincially; Provost.

Provinc. Provincial.
Prox. (Lat. *proximo*), Next of or of the next month.
Prs. Pairs.
P. R. S. President of the Royal Society.
P. R. S. A. President of the Royal Scottish Academy.
Prus. Prussia, Prussian.
P. S. (Lat. *post scriptum*), Post-script.
P. S. Privy Seal.
Ps., Psa. Psalm, psalms.
Psychol. Psychology.
Pt. Part; Payment; Point; Port.
P. T. Post-town; Pupil teacher.
Pub. Public; Published, publisher.
Pub. Doc. Public Documents.
P. V. Post-village.
Pwt. Pennyweight.
Pzd. [PINX].
Pyro., Pyrotech. Pyrotechnics.
Q., Qu. Query; Question.
Q. C. Queen's College.
Q. d. (Lat. *quasi dical*), As if he should say.
Q. e. (Lat. *quod est*), Which is.
Q. E. D. (Lat. *quod erat demonstrandum*), Which was to be proved.
Q. E. F. (Lat. *quod erat faciendum*), Which was to be done.
Q. E. I. (Lat. *quod erat invenendum*), Which was to be found out.
Q. l. (Lat. *quantum libet*), As much as you please.
Q. M. Quartermaster.
Q. M. Gen. Quartermaster-General.
Qr. Quarterly; Quire.
Q. S. Quarter Sessions.
Q. s. (Lat. *quantum sufficit*), A sufficient quantity.
Qt. Quart.
Qu. Queen; Query; Question.
Quar., quart. Quarterly.
Quar., 4to. Quarto.
Ques. Question.
Q. v. (Lat. *quod vide*), Which see.
Qy. Query.
R. Railway; Réaumur; River.
R. (Lat. rex), King; (Lat. regina), Queen.
R. (Lat. recipe). Take.
R. A. Royal Academy, Royal Academy; Rear-Admiral; Royal Arch; Royal Artillery.
Rabb. Rabbinical.
Rad. (Lat. radix), Root.
R. A. M. Royal Academy of Music.
R. A. S. Royal Agricultural Society.
R. C. Roman Catholic.
R. D. Rural Dean.
R. E. Royal Engineers; Royal Exchange.
R. E. Reformed Episcopal.
Réaumur. Réaumur.
Rec. Recipe.
Recd. Received.
Recpt. Receipt.
Ref. Reference.
Ref. Ch. Reformed Church.
Ref. Pres. Reformed Presbyterian.
Reg. Regular.
Reg. Regr. Registrar.
Reg. Regt. Regiment, regimental.
Rel. Religion, religious.
Rel. Pron. Relative Pronoun.
Rem. Remark, remarks.
Rep. Report; Representative.
Rep. Repub. Republic; Republican.
Res. Resolution.
Rtd. Returned.
Rev. Revelation; Revenues; Reverend; Review; Revise.
Revd. Reverend.
Revs. Reverends.
Rev. Stat. Revised Statutes.
R. H. A. Royal Horse Artillery.
Rhet. Rhetoric, rhetorical.
R. H. S. Royal Humane Society.
R. I. Rhode Island.
R. I. P. (Lat. *requiescat in pace*), May he (or she) rest in peace.
Riv. River.

R. M. Royal Mail; Royal Marines.
R. M. A. Royal Marine Artillery; Royal Military Asylum.
R. M. L. I. Royal Marine Light Infantry.
R. M. S. Royal Mail Steamer; Royal Mail Service.
R. N. Royal Navy.
R. N. R. Royal Naval Reserve.
R. O. Receiving Office.
Robt. Robert.
Rom. Roman, Romans.
Rom. Cath. Roman Catholic.
R. P. Regius Professor.
R. R. Right Reverend.
R. R. Railroad.
R. S. A. Royal Scottish Academy.
R. S. P. C. A. Royal Society for the Prevention of Cruelty to Animals.
R. S. E. Royal Society of Edinburgh.
R. S. L. Royal Society of London.
R. S. V. P. (Fr. *Répondez s'il vous plaît*), Please reply.
Rt. Right.
Rt. Hon. Right Honorable.
Rt. Rev. Right Reverend.
R. T. R. T. Religious Tract Society.
Rt. Wpful. Right Worshipful.
Russ. Russia, Russian.
R. V. Revised Version; Rifle Volunteers.
R. W. Right Worshipful; Right Worthy.
R. W. D. G. M. Right Worshipful Deputy Grand Master.
R. W. G. M. Right Worshipful Grand Master.
R. W. G. R. Right Worthy Grand Representative.
R. W. G. S. Right Worthy Grand Secretary.
R. W. G. T. Right Worthy Grand Treasurer; Right Worthy Grand Templar.
R. W. G. W. Right Worshipful Grand Warden.
R. W. J. G. W. Right Worshipful Junior Grand Warden.
R. W. S. G. W. Right Worshipful Senior Grand Warden.
Ry. Railway.
S. Saint; Saturday; Section; Shilling; Sign; Signor; Solo; Soprano; South; Sun; Sunday; Sabbath.
s. Second, seconds; See; Singular; Son; Succeeded.
S. A. South Africa; South America.
S. A. (Lat. *secundum artem*), According to the rules of art.
Sab. Sabbath.
Sam., Saml. Samuel.
Sam., Samar. Samaritan.
Sans., Sansc., Sansk. Sanscrit, Sanskrit.
S. A. S. (Lat. *Societatis Antiquariorum Socius*), Fellow of the Society of Antiquaries.
Sat. Saturday.
Sax. Saxon, Saxony.
S. B. South Britain (England and Wales). [N. B.]
S. C. South Carolina.
S. C. (Lat. *senatus consultum*), A decree of the senate.
Sc. [SCIL. SCULL.]
Scan. mag. (Lat. *scandalum magnatum*), Defamatory expressions to the injury of persons of high rank or dignity.
S. caps., Sm. caps. Small capitals. (In printing).
Sc. B. (Lat. *scientia baccalaureus*), Bachelor of Science.
Sc. D. (Lat. *scientia doctor*), Doctor of Science.
Sch. (Lat. *scholium*), A note.
Sch. Schooner.
Sci. Science.
Sci. fa. *Seire facias*.
Scil. Sc. (Lat. *scilicet*), Namely; to wit.
S. C. L. Student in Civil Law.
Sclav. Slavonic.

Scot. Scotland, Scotch, Scottish.
Scr. Scruple, scruples.
Script. Script, scriptural.
Sculp. Sculpture.
Sculp., Sculpt., Sc. (Lat. *sculpsit*), He (or she) engraved it.
S. D. Doctor of Science.
S. D., S. Dak. South Dakota.
S. D. U. K. Society for the Diffusion of Useful Knowledge.
S. E. South-east.
Sec. Second.
Sec., Sed. Section.
Sec., Secy. Secretary.
Sec. Leg. Secretary of Legation.
Sen. Senate, senator.
Sen. Doc. Senate Document.
Sen., Sept. September.
Seq. (Lat. *sequentes, sequentia*), The following or the next.
Serg., Serpt. Sergeant.
Serg. Maj. Sergeant-Major.
Serj., Serjt. Serjeant.
Serv. Servian.
Sess. Session.
S. G. Solicitor-general.
s. g. [Sp. Gr.]
Sh. Shilling, shillings.
Sing. Singular.
S. J. Society of Jesus.
S. J. C. Supreme Judicial Court.
Skr. Sanskrit.
Slav. Slavonic.
Sld. Sailed.
S. M. Sergeant-major.
S. M. Lond. Soc. (Lat. *Societatis Medice Londinensis Socius*), Member of the London Medical Society.
S. N. (Lat. *secundum naturam*), According to nature, naturally.
Soc., Socy. Society.
S. of Sol. Song of Solomon.
Sol.-gen. Solicitor-general.
Sp. Spain, Spanish; Spirit.
s. p. (Lat. *sine prole*), Without issue.
S. P. C. A. Society for the Prevention of Cruelty to Animals.
S. P. C. C. Society for the Prevention of Cruelty to Children.
S. P. C. K. Society for the Promotion of Christian Knowledge.
Spec. Special, specially.
S. P. G. Society for the Propagation of the Gospel.
sp. gr., s. g. Specific gravity.
S. P. Q. R. (Lat. *Senatus Populusque Romanus*), The Senate and the People of Rome.
sq. Square; *sq. ft.* Square foot, feet; *sq. in.* Square inch, inches; *sq. m.* Square mile, miles; *sq. yd.* Square yard; *sq. rd.* Square rod.
Sr. Senior; sir.
S. R. I. (Lat. *Sacrum Romanum Imperium*), The Holy Roman Empire.
S. R. S. (Lat. *Societatis Regiæ Socius*), Fellow of the Royal Society.
SS. Saints.
S. S. Sunday School.
S. S. C. Solicitor before the Supreme Court.
S. S. E. South-south-east.
S. S. W. South-south-west.
St. Saint; Stone; Strait; Street.
st. (Lat. *stet*), Let it stand (in printing).
Stat. Statute, statutes; Statuary.
S. T. Sons of Temperance.
S. T. B. Bachelor of Sacred Theology.
S. T. D. (Lat. *sacra theologia doctor*), Doctor of Divinity.
ster., stg. Sterling.
St. L. St. Louis.
S. T. P. (Lat. *sacra theologia professor*), Professor of Theology.
Str. Steamer, steam vessel.
Subj. Subjunctive.
Subst. Substantive; Substitute.
Suff. Suffix.
Sun., Sund. Sunday.
Sup. Superior; Superlative; Supplement; Supine.

Sup. Ct. Supreme Court.
Supr. Superintendent.
Sur., Surg. Surgeon, surgery.
Sur-gen. Surgeon-general.
Surv. Surveying, surveyor.
Surv-gen. Surveyor-general.
S. v. (Lat. *sub voce*). Under the word or title.
S. W. Senior Warden; South-west.
Sw. Sweden, Swedish.
Switz. Switzerland.
Syn. Synonym, synonymous.
Synop. Synopsis.
Syr. Syria, Syriac; Syrup.
T. Tenor; Ton; Tun; Tuesday.
T. A. B. Total Abstinence Brotherhood.
Tab. Table; Tabular statement.
Tan. Tangent.
Tart. Tartaric.
Tech. Technical, technically.
Ten., Tenn. Tennessee.
Ter. Territory.
Term. Termination.
Teut. Teutonic.
Tex. Texas.
Text. rec. (Lat. *textus receptus*). The received text.
Th. Thomas; Thursday.
Theo. Theodore.
Theol. Theology.
Theor. Theorum.
Thess. Thessalonians.
Tho., Thos. Thomas.
Thu., Thur., Thurs. Thursday.
Tier. Tierce.
Tim. Timothy.
Tit. Title; Titus.
T. O. Turn over.
Tob. Tobit.
Tom. Tome, volume.
Tonn. Tonnage.
Topog. Topography, topographical.
Tp. Township.
Tr. Translation, translator, translated; Transpose; Treasurer; Trustee.
Trans. Transaction; Translation, translator, translated.
Trav. Travels.
Treas. Treasurer.
Trig., Trigon. Trigonometry, trigonometrical.
Trin. Trinity.
Ts. Texas.
T. T. L. To take leave. [P. P. C.]
Tu., Tues. Tuesday.
Turk. Turkey, Turkish.
Typ. Typographer.
Typog. Typography, typographical.
U. C. (Lat. *urbis conditæ*). From the building of the city—Rome [A. U. C.]
Uh. Utah.

U. J. D. [J. U. D.]
U. K. United Kingdom.
U. K. A. Ulster King at Arms; United Kingdom Alliance.
Ult. (Lat. *ultimo*). Last, of the last month.
um. Unmarried.
Unit. Unitarian.
Univ. University.
Up. Upper.
U. P. United Presbyterian.
U. S. United States.
U. S. (Lat. *ul supra*). As above.
U. S. A. United States of America; United States Army.
U. S. L. United States Legation.
U. S. M. United States mail; United States marine.
U. S. M. A. United States Military Academy.
U. S. N. United States Navy.
U. S. N. A. United States Naval Academy.
U. S. S. United States Senate; United States ship or steamer.
U. S. S. Ct. United States Supreme Court.
Usu. Usual, usually.
V. Verb; Verse; Victoria; Violin.
V. (Lat. *versus*). Against.
V. (Lat. *vide*). See.
V. A. Vicar Apostolic; Vice-admiral.
Va. Virginia.
Val. Valve; Value.
Var. Variety.
Vat. Vatican.
V. aux. Verb auxiliary.
V. C. Vice-chancellor; Victoria Cross.
V. def. Verb defective.
V. D. M. (Lat. *Verbum Dei Minister*). Minister of the Word of God.
Ven. Venerable.
V. G. Vicar-General.
V. g. (Lat. *verbi gratia*). For the sake of example.
V. i. Verb intransitive.
Vice-pres. Vice-president.
Vid. (Lat. *vide*). See.
V. imp. Verb impersonal.
V. irr. Verb irregular.
Visc. Viscous.
Viz. (Lat. *videlicet*). Namely; to wit. [Oz.]
V. n. Verb neuter.
Voc. Vocative.
Vol. Volume.
Vols. Volumes.
V. P. Vice-president.
V. r. Verb reflexive.
V. Rev. Very Reverend.
Vs. (Lat. *versus*). Against.
V. S. Veterinary surgeon.
V. t. Verb transitive.
Vt. Vermont.

Vul., Vulg. Vulgate.
Vulg. Vulgar, vulgarly.
vv. ll. (Lat. *varie lectiones*). Various readings.
W. Wednesday; Week; Welsh; West, western.
Wall., Wallach. Wallachian.
Walt. Walter.
Wash. Washington.
w. c. Water closet.
W. C. A. Women's Christian Association.
W. C. T. U. Women's Christian Temperance Union.
Wed. Wednesday.
Wel. Welsh.
w. f. Wrong font (in printing).
Wh. Wharf.
W. I. West Indies; West Indian.
Wis., Wisc. Wisconsin.
Wk. Week.
W. Long. West Longitude.
Wm. William.
W. M. Worshipful Master.
W. N. W. West-north-west.
Wp. Worship.
Wpful. Worshipful.
W. S. Writer to the Signet.
W. S. W. West-south-west.
Wt. Weight.
W. Va. West Virginia.
Wyo. Wyoming.
X. Christ.
Xm., Xmas. Christmas.
Xn. Christian.
Xnty. Christianity.
Xper., Xr. Christopher.
Xt. Christ.
Xtian. Christian.
Y. Year.
Yd. Yard.
Yds. Yards.
Ye. The; Thee.
Y. M. C. A. Young Men's Christian Association.
Y. M. Cath. A. Young Men's Catholic Association.
Y. M. H. A. Young Men's Hebrew Association.
Y. P. S. C. E. Young People's Society of Christian Endeavor.
Yr. Year; Younger; Your.
Ys. Years; Yours.
Y. W. C. A. Young Women's Christian Association.
Zach. Zachary.
Zech. Zechariah.
Zeph. Zephaniah.
Z. G., Zoo. Zoological Gardens.
Zoochem. Zoochemistry, zoochemical.
Zoogeog. Zoogeography, zoogeographical.
Zool. Zoology, zoological.

SLANG

Bret Harte has defined slang as,

"Phrases such as camps may teach,
 Sabre cuts of Saxon speech."

In the middle of the century slang came to signify a word or a phrase used with a meaning not recognized in polite letters, either because it had just been invented, or because it had passed out of memory. Professor Lounsbury says: "Slang is an effort on the part of the users of language to say something more vividly, strongly, concisely, than the language as existing permits. Slang is therefore the source from which the decaying energies of speech are constantly re-furnished." This generous treatment of slang by Professor Lounsbury should not be taken as an intention on his part to license this much condemned mode of speech. Occasionally a word or a phrase by its vigor or piquancy of

meaning may pass from the vocabulary of slang into that of cultured speech, but it is the exception and not the rule.

The best we can say for the use of slang is that only when we have need for an exceptional word of vigor or of force should it be allowed. The habit of using slang should be condemned at all times, for it weakens thought and robs language of its beauty and refinement.

A short list of slang words and phrases in common use is appended here, not to encourage its use, but to explain its meaning, which may often be blind.

A. B. Able seaman.

Abide. I cannot *abide* (suffer) him.

About right. To give it to one *about right* is to give to him well, thoroughly.

Above par. Means something superior or beyond the ordinary.

Adam's ale. Drinking water.

Afoot or on horseback. When a man does not know whether he is the one or the other, he is all broken up (uncertain of his movements).

Against the grain. Contrary, in opposition to one's wishes.

Ahead. To go ahead is colloquial for do it.

All-fired. A mild form of adjuration, probably a Puritan modification of hell-fired.

All hollow. To beat one all hollow is to knock him out entirely.

All-possessed. Affected by evil spirits and carrying on accordingly.

Swearing like *all-possessed*.

All the go, or all the rage. Successful.

All there, or Up to the mark. Means first class.

All to smash. Ruined, gone beyond redemption.

All wool and a yard wide. First class, genuine.

Almighty dollar. Represents the way in which money rules.

Among the missing. Dead, absent.

Ante. In the game of poker the player next to the dealer deposits a "chip" of an agreed value in the pool before the cards are dealt. This is his *ante*, and the other players must "ante-up" (pay up), if they conclude to play: hence, You must ante-up, means that you must pay up.

Anxious seat. In the speech of the conventicle, a seat occupied by those who are "under conviction," but have not yet "found peace."

Apple-pie. Means in good order.

Arab. Street Arabs are the gutter-snipes, boot-blacks, newsboys, and gamins generally.

Astern of the lighter. Means behind time.

Aunty. A common term for an old negress.

Aze to grind. Said of one having purposes of his own to serve.

Azle-grease. Money; especially that used for purposes of bribery.

Baby act, to plead the. To beg off on the ground of youth or inexperience.

Back or batch. Young men living alone and doing their own work are said to batch it.

Back. To get one's back up, to become angry and ready to fight.

Backbone. Grit, sand, courage, moral stamina.

Back-down and back out. Mean to surrender.

Backer. One who backs a horse to win.

Backing water. Means indecision.

Back seat. Making a man take a back seat is setting him back, or giving him an inferior position.

Back talk. An impertinent answer.

Bacon. "To save one's bacon" is to escape from a difficulty.

Bad. To go to the bad is to be ruined.

Bad egg. A rascal.

Bad form. A breach of good taste or good manners.

Bad man. A bully, a thief.

Bad pill. A person of unenviable reputation.

Baggage-smasher. A railroad porter or expressman who takes a reckless delight in damaging trunks.

Bagged. Captured, arrested.

Bamboozle. To delude or cheat.

Bang. To explode with a loud noise.

Bang-up. First rate.

Barking up the wrong tree. A man is said to do

this when his suspicions point in the wrong direction.

Beanpole. A very tall, thin man.

Bear. A Stock Exchange speculator who sells stock short, which he does not possess and who speculates for a decline.

Bearing the market. Trying to depress prices by selling large blocks of stock, gold, grain, or other objects of speculation; or by disseminating reports.

Beat. The ground supposed to be passed over by a policeman on duty.

Beat out. Tired, fagged out.

Beats the Dutch. Something extraordinary. "That beats the Dutch and the Dutch beats the devil" is the superlative.

Bed-rock. He has reached bed-rock; i. e., is at the bottom of the matter.

Bee. A craze. Politicians occasionally get a presidential bee in their bonnet. Also an assembly for work; as, a quilting-bee, etc.

Benedict. A married man. From "Benedict" the husband of Beatrice in "Much Ado about Nothing."

Between hay and grass. Taken from farm language; a season at which there is nothing doing and nothing coming in.

Biddy. An Irish woman.

Big. To talk big is to boast. To look big is to assume an air of importance.

Big bug, or big gun. One who is, or fancies himself to be, an important person.

Biggest toad in the puddle. A consequential person in a small town or in a small affair.

Big head, or swelled head. Said of one who has a great opinion of himself.

Bird of freedom. The American eagle.

Birthday suit. No clothes at all.

Blab. To talk freely, to tell.

Black-eye, to give you a. To inflict harm or damage to any scheme.

Blackguard. A disreputable fellow.

Blatherskite. A wild and foolish talker and boaster.

Blaze. To mark trees with cuts by an ax for the purpose of finding one's way.

Beach. A family washing hung out to dry.

Blind. A pretence or make believe.

Blind-drunk. When a man cannot "see a hole in a ladder."

Blizzard. A storm of wind and snow common on southern prairies.

Block. A city square.

Blow. To brag or boast.

Blowhard. A boaster.

Blow in. To spend one's money.

Blow out. A feast.

Blow up. To scold.

Blue-blood. An aristocrat.

Blue-devils. Delirium tremens.

Blue Grass Country. Kentucky.

Blues, got the. Despondent, miserable.

Bluff. An excuse or a brag.

Bogus. Imitation, fraudulent. Said to be from the name of an Italian swindler named Borghese, who pretended to be a prince, and who defrauded a great many in the United States many years ago.

Bohemian. A literary man, artist, or actor who ignores conventionalities.

Boiled shirt, more often "biled." A white linen shirt.

Bolt. To run away. Also to swallow without chewing.

Bonanza. Originally a very rich mine or deposit of precious metal. Now applied to any extremely well-paying business.

Bones. Made no bones of it; did it without difficulty.

Boodle. Money obtained as a bribe, or in return for crooked or corrupt work.

Book, to make a. To bet against all horses in a race.

Book. To mark out for; as, He is booked for the trip.

Boom. A rush of business. Real estate agents boom their property by advertising.

Boomerang. A story put forth for political purposes, the untruth of which being exposed reacts against its disseminators.

Boost. A push from behind.

Boss. An employer. The chief of a political ring. A Tammany boss.

Bottom dollar. The last of one's money.

Bottom fact. An undoubted fact.

Bounce. To get the grand bounce is to be thrown out of work.

Bracelets. Handcuffs.

Brace up. Pull yourself together; get to business.

Brakes. Put on the brakes, means to go slow.

Brash. Fresh, impertinent.

Breaking the ice. Making a beginning.

Breeches, to wear the. Said of a woman who usurps the control of her husband's affairs.

Brown. Done up brown, deceived or taken in.

Bubble. Automobubble or automobile.

Bud. A young lady in her first season.

Buffer. An old man; a good-humored term.

Bull. A stock exchange speculator who "goes long" on stocks, trusting to a rising market.

Bulldoze. To overawe, to terrify.

Bunco. A swindle generally effected by inducing a greenhorn to play cards.

Burying the hatchet. Ending a feud or difficulty. The aborigines were said to dig up the war hatchet when going on the war path, and to bury it with ceremonies when peace was attained.

Bus. Omnibus.

Bushwacker. During the Civil War there was a sort of irregular cavalry in the South.

Butter-nuts. From their home-spun clothing. A term applied during the Civil War to Southern country people.

Button-holding. Engaging a man in conversation when he would rather be about his own business.

By hook or by crook. By fair means or foul.

By the skin of his teeth. A narrow escape.

Caboodle. The whole lot.

Cackle. To talk.

Cage. A prison.

Cahoots. In company with, or associated together; — Brown and Elwood were in cahoots to rob the bank.

Cain. To raise Cain, is to create trouble.

Call. Occasion; He had no call to say that.

Call. An invitation to a clergyman to accept a pulpit.

Call. On the Stock Exchange, a time-bargain

or speculative contract which entitles the holder to call for certain stock at a certain price.

Canoe. To paddle one's own, is to go it alone; to make one's way in the world without assistance.

Cantankerous. Bad-tempered, litigious.

Canuck. A Canadian.

Cap. To outdo. That caps the climax.

Cap. To set her cap. She set her cap to catch him.

Cape Cod turkey. Salt pork.

Carpet. On the; is there anything on the carpet for to-night [anything doing]?

Carpet-bagger. A term that came into use just after the Civil War. It was applied to Northern men who went into the South to obtain office. Their sole property was the carpet bag or valise which they carried with them.

Carrying water on both shoulders. Playing a double part; agreeing ostensibly with both parties interested.

Carry me out. Is but an interjection of surprise.

Carry-on. To act up.

Cart-wheel. An American silver dollar.

Case. He's a case; i. e., a curious fellow.

Cash up. To pay up.

Castles in Spain. Air castles, or day dreams.

Catch a weasel asleep. A difficult thing to do, because requiring acuteness.

Catch on. To understand the situation.

Caterwaul. To sing loudly and out of tune, as the cats do at night.

Catgut scraper. A fiddler.

Cats and dogs. Descriptive of a rain storm.

Catspaw. One who is made use of.

Caught on the fly. To seize one's opportunity.

Caution. It's a caution how fast she works; i. e., extraordinary.

Cave in. One who caves in, gives up.

Chavort. Prancing in a playful and purposeless fashion.

Chaff. To joke or quiz.

Cheek. Impudence.

Cheek by jowl. Side by side.

Chestnut. An old story.

Chic. The correct thing.

Chicken-hearted. Cowardly, frightened.

Chip in. To contribute to a game or collection.

Chip of the old block. A child resembling a parent.

Chipper. Lively.

Chock-full. Full to the throat. *Chock a block* is used in the same sense.

Cinch. To have a cinch means to be sure of getting what you are after.

Claim jumping. Is to take violent possession of another's mining claim.

Clam. Happy as a; the superlative of happy.

Clean out. Is to ruin. He cleaned him out of his money.

Clip. A blow or stroke with the hand. Hit him a clip.

Coals. To haul one over the coals. To scold hard.

Cock and bull story. A long doubtful story.

Cock of the walk. The master spirit.

Cocksure. Certain.

Codfish aristocracy. The aristocracy of riches and not of brains.

Cold shoulder. To give one the cold shoulder is to treat a friend with less than the usual cordiality.

Cold water. To throw on, is to discourage.

Cold water party. Is the Prohibitionist party.

Contraption. A contrivance.

Cook one's goose. Is to ruin one.

Cop. A policeman. Probably from the brass buttons on his coat.

Copperhead. Applied to Northerners who sympathized with the South during the Civil War.

Counter jumper. A clerk in a store.

Country jake. A man from the rural districts.

Course of sprouts. To put one through, is to initiate him.

Crab. To catch a crab is to fall backwards by missing a stroke in rowing.

Crack up. To praise or boast about.

Crook. A thief.

Crooked stick. An ill-tempered person.

Crowding the mourners. Pressing one too hard.

Cussedness. Malice, spite.

Cut. To cut it means to stop it. To cut one's eye teeth is to be wide-awake.

Cut of his jib. Means a man's appearance.

Cut up didoes. Is to play tricks.

Cut under. Is to sell at a lower price.

Dabster. An expert.

Dago. An Italian of the lower order in the United States.

Daisy. A young girl.

Dan to Beersheba. Means a long distance.

Dark horse. A candidate nominated at the last moment.

Dead broke. Out of money.

Dead horse. Working on the, or to pay for a dead horse is doing work which has been paid for in advance.

Dead loads. In large quantities.

Dickens, The. The devil.

Divy up. To share with another.

Dock. To cut one's wages.

Doctor. To adulterate or to change.

Dog-tired. Tired out as a dog is after a long run.

Do tell. Really, indeed.

Dough-head. A stupid fellow.

Down in the mouth. Disconsolate.

Down on your luck. Unfortunate.

Down to the ground. Entirely.

Draw it mild. Do not exaggerate.

Durned or darned. Is a Puritan oath.

Earth, Wants the. Is said of any greedy person.

Elbow grease. Labor.

Euchre. To euchre him is to cheat him.

Face the music. Is to meet an emergency.

Fair and square. Honorable.

Fair shake. To give one a, is to use him well.

Fake. To swindle. Also a story without foundation.

Faze or phaze. To bother.

F. F. V's. First families of Virginia.

Fishy. A doubtful story.

Flash in the pan. A failure. It was a flash in the pan.

Flyer. A speculation on the Board of Trade; as, a "flyer in corn."

Foot. To put one's foot in it is to make a bad mistake.

Foot it. Is to walk it.

Fork out. Is to pay up.

Freeze to. Is to attach one's self strongly to another.

French leave. To take French leave is to go without permission.

Full blast. In full running order.

Gab. The gift of, too much talk.

Gadabout. One who attends to everybody's business but her own.

Gale. In a perfect. To be full of excitement.

Galore. He has money-galore [in abundance].

Game. He is game [plucky].

Gas-bag or bag of wind. Is applied to a man who unduly extols his own merits.

Get there. He got there means that he was very successful. The superlative is to get there with both feet.

Get up. He was got up regardless, means that he was dressed without regard to expense.

Ghost. The ghost doesn't walk means in theatrical parlance that there is no money to pay the salaries.

Ghost of a chance, Without the. Means no chance of success.

Gilt-edged. The best of its kind.

Give away. One who gives it away, tells what he ought not to.

Globe-trotter. One who goes to many countries in search of contentment.

Goat. To ride the. To be initiated into a secret society.

Go back on a friend. Means to abandon him in any of his undertakings.

Go it or go it strong. Means to keep up the pace.

Gone up Salt River. Is said of defeated politicians.

G. O. P. Grand Old Party, the Republican party.

Go under. To perish.

Graft. Is money given to men in power to buy votes, or to put through the legislature any bill not for the interests of the people.

Great go. Is a success.

Great unwashed. The lower classes.

Green goods. Counterfeit money.

Grief. To come to. Means to meet with an accident.

Grind. Is used of monotonous daily toil. Also of school or college work.

Grip. To lose one's, is to be discouraged, to give up an undertaking well begun.

Grit. Sand, pluck.

Ground floor. To be let in on the, is to go into a speculation with the original projectors, and on the same terms.

Gull. To cheat or deceive.

Gump. A dullard, a foolish man.

Gush. Nonsense, undue flattery.

Guy. To make fun of to his face, to josh.

Half cocked. To go off. Means to start before one is ready.

Hand-me-downs. Second-hand clothes.

Hand-out. A cold lunch given to a beggar.

Happy as a clam. The superlative of happy.

Hard pushed. Means short of money.

Heeler. Usually a *ward heeler*; one who carries out the dictates of the political boss.

High jalutin'. Stuck up, too showy.

High jinks. Full of tricks.

Hill of beans. Not worth a, means utterly worthless.

His nibs. Applied to anyone in authority.

Hoe. He has a hard row to hoe [many difficulties to overcome].

Hold-up. Is used when a man is robbed on the street.

Hoodlum. A street loafer.

Hook or crook, by. By fair means or foul.

Hoodoo. Is applied to one who brings failure upon any undertaking, as *mascot* is applied to one who brings good luck.

Hook, on his own. Is doing business for himself.

Horse sense. More than common sense.

Humble pie, to eat. Is to acknowledge that one has made a mistake.

Hush money. Blackmail.

In. He is in for it means in trouble.

In it. In the swim.

Inside track. Is used to denote that one is in an important position in regard to an undertaking.

Ivories. Teeth.

Jag. A decided drunk.

Jawbreaker. A long word or a difficult one to pronounce.

Jay. A country fellow.

Jew. To beat down in price.

Jim-jams. Delirium tremens.

Job's turkey. He is as poor as Job's turkey [very poor].

Jolly. He jollied her. He spoke well of her or praised her unduly to her face.

Josh. To make fun of.

Kick over the traces. To spend extravagantly; to refuse to be under control.

Knee high. As knee high to a grasshopper, very small in stature.

Knife a person. To do him harm while pretending to be his friend.

Lamb. On the Stock Exchange is the unfortunate one who loses to the clever man.

Laying pipe. Means preparing things so as to insure the passage of a bill.

Lay on thick. Undue flattery.

Left in the cold. Neglected.

Lift. To steal.

Little end of the horn. To come out at the. To fail.

Log-rolling. See laying pipe. Also it is the exchanging of votes by legislators.

Long bow. He drew the long bow [told an extravagant story].

Loud. Showy, flashy, overdressed.

Luck. Down on your luck, in trouble.

Mahogany. I will put my legs under your mahogany on Christmas [sit down to dinner with you].

Make tracks. Get away in a hurry.

Man of straw. One without resources. Applied also to a man that does not exist, except on paper in some "deal."

Mascot. Is applied to one who brings good luck to an undertaking.

Mild. To draw it mild, means not to exaggerate.

Mitten. He got the mitten [was rejected].

Monkey and parrot time. Means to have a fight.

Month of Sundays. An indefinite time.

Moonshiner. A man engaged in the manufacture of illicit whiskey.

Moss-backs. People behind the times.

Much of a muchness. Pretty much alike.

Mud. To throw, means to besmirch the character of another.

Mugwump. Was applied in 1884 to members of the Republican party who preferred Cleveland to Blaine. It is now applied to anyone who sinks his political party and votes for the best candidate.

Mutton-head. A stupid fellow.

Ned. They raised Ned or Hobb [created a great disturbance].

Nerve. Gall, assurance.

Night-cap. A drink taken just before going to bed at night.

Nixey. No.

Nose out of joint. To be supplanted in the affections of another.

Nose. To cut off one's nose to spite one's face is to do something injudicious, something harmful to one's self in order to spite another.

Nose to the grindstone. His nose was on the grindstone for years means that he had to work hard for a bare living.

Nothing to nobody. Nobody's business.

No two ways about it. Means certain, sure.

Nuts. Your visits are nuts to her [give her great pleasure].

Oats. To feel one's, is to feel good, to be in high spirits.

Omnibus bill. Is used to designate a legislative bill that takes up many subjects.

One-horse. Second rate. He runs a one-horse store.

On the fence. Is said of anyone who waits to see how things will turn out before he takes a stand.

Ornery. Used instead of ordinary. Used in a doubtful sense.

Out of kilter. Out of order.

Out of sight. Beyond reach. His work is out of sight.

Over the left. Indicates that what has been said is untrue.

Own up. Confess.

Paddle one's own canoe. Means to make one's own way in the world.

Pan out well. Is applied to any paying venture. The scheme panned out well.

Pasteboards. Is used of calling cards.

Paul Pry. An inquisitive person.

Peddler's French. Is an old expression for slang.

Peg away. To work industriously.

Picayunish. Petty, small.

Pill. He is a bad pill [an immoral man].

Pinch. To arrest.

Pipe-laying. See laying pipe.

Plumb. He struck it plumb on its end [directly on the end].

Pocket. To put up with. One pockets one's anger or one's pride.

Pony up. Pay up.

Posted, well. One who is well posted knows all about a subject.

Pot-boiler. A picture painted or a sketch written rapidly to bring in money for living expenses.

Pot luck. Come to dinner, if you will take pot luck [take things as they come].

Praies. Potatoes.

Primp. To fuss up one's hair, necktie, etc., after he is supposed to be all dressed.

Put one's foot down. Is to insist upon a thing.

Put up job. A swindle arranged in advance.

Queer. To queer a deal is to upset it, to spoil it.

Quiet. To do a thing on the quiet is to do it secretly.

Quitter. He is a quitter; i. e., He does not live up to his agreements.

Racket. What is your racket now? What is your scheme?

Rack. To live at rack and manger, is to live on the best at another's expense.

Raise. A racket, is to be noisy; to kick up a row.

Raise Cain or raise Ned. Is to create a disturbance.

Rake-off. He gets a rake off [a reduction] on everything he buys there.

Rat. To smell a, is to suspect something.

Rattler. He's a rattler [a hustling fellow].

Rattling. He's a rattling good fellow means he is a very pleasant fellow.

Repeater. Is one who is hired to vote early and often at elections.

Rich. That's a rich [entertaining] story.

Rigged out. Well dressed, well got up.

Rights. To have one dead to rights is to even matters up.

Ripsnorter. Is used of a great snow storm, when the wind is high and all transportation is blocked.

Rope in. You can rope him in; that is, swindle him.

Rough it. Is to put up with coarse food and poor accommodations when in the wilds.

Row to hoe. See hoe.

Rub. There's the rub [difficulty].

Rubbing it in. Is saying over and over again a thing that will make another uncomfortable.

Run on a bank. Is when many depositors in a bank make a simultaneous demand for their money.

Run it into the ground. Is to overdo the matter.

Rush it. Hurry it up.

Sack. To get the sack is to be discharged.

Salt down. Is to save money.

Sand. Grit, courage.

Saphead. A stupid person.

Sass. Garden sass is taken from the kitchen garden. It is applied to the vegetables.

Sawbones. A surgeon.

Scab. Is a non-union man.

Scalper. Is a railroad ticket broker or a man who deals in small amounts of stock, usually in an irregular way.

Scare up. If I can scare up [find] a dollar, I'll go.

Scrap. He is always in a scrap [fight].

Screw loose. There's a screw loose somewhere [something is not well adjusted].

Sea-dog. Is an old sailor.

See you later. Means good-bye.

Shank's mare. To ride. Means to go afoot.

Sharper. Is a swindler.

Shave. A close shave is a narrow escape.

Sheep's eyes. He made sheep's eyes [looked lovingly] at her.

Shenanigan. None of your shenanigan [cheating or fooling].

Shine. He outshone [excelled] his friend in his dress.

Ship-shape. And Bristol fashion means in good shape.

Short. I am short [hard up] just now.

Short. On the Stock Exchange, means that you have sold stock you do not possess on the expectation of a drop.

Shucks. It is not worth shucks [is worthless].

Simon pure. Means of the best quality, genuine.

Skied. Used in reference to a picture hung up at an exhibition.

Sky parlor. Attic of the house.

Sky pilot. A minister.

Sky scraper. A very tall building such as are going up in every large city in the United States.

Slab. He is thin as a slab [very thin].

Slate. A list of candidates prepared before the nomination.

Slip up. He slipped up [failed] in that work.

Small potatoes. Applied to anyone that will do contemptible things to injure another.

Smash. He went to smash [failed utterly].

Snake out. His team could snake out two hundred stumps [pull out] in a day.

Snippy. She is snippy [puts on airs].

Snob. Is one that pretends to be what he is not.

Soft soap. Flattery.

Soft thing. He has a soft thing [easy time] of it.

Spanking Breeze. is a fine breeze for sailing.

Spin. To take a spin is to take a bicycle ride.

Spotter. Is one who is hired to report shortcomings of employes on railroads.

Square. He is on the square [honest].

Square up. Is to pay up, to settle accounts.

Stag party. Is one composed entirely of men.

Stand pat. Is to be in on a deal.

Stick up for. He stuck up for [backed] the man.

Stool pigeon. Is a "straw man," used as a decoy in gambling or swindling processes.

Street arabs. Are street gamins.

Struck it rich. Means that he made a great haul.

Stump. He will take the stump for Roosevelt in September, means that he will go out to make political speeches for him.

Stunning. Very large, fine.

Swamped. He is swamped all right, means that he cannot carry through the undertaking.

Swelled head, or big head, means puffed up with vanity.

Swap or swap. To exchange.

T. It suits to a T is it fits to a nicety.

Tabooed. Forbidden.

Tackle. To try one's power, either physical or intellectual.

Take it out of one. To even matters up.

Talking shop. Is talking business out of hours.

Tenderfoot. Is one newly arrived in a mining country.

Ten-strike. He made a ten-strike that day. He made a successful deal.

Terror. A holy terror, a man in passion.

Thin. It is too thin [not to be believed].

Through the mill. Said of one who has learned by bitter experience.

Thunder. He has stolen my thunder; he has stolen my good thoughts.

Tough. A loafer.

Trust. A combination of manufacturers or dealers made to send prices up.

Unwashed, the great. The lower classes of society.

Upper crust. The higher classes of society.

Used up. Tired out, beaten.

Velvet. The other thousand dollars is velvet [clear gain].

Wad. A roll of money.

Walking papers. He was given his walking papers [was discharged].

Warpath, On the. Ready to fight.

Water. To water stock is to increase the stock without receiving any value for it.

Wears the breeches. Is said of a woman who takes the man's place in the home.

Weather eye. A cautious eye.

Wherewithal. He has not the wherewithal [the means].

Whipper-snapper. An insignificant person.

Whistle. Clean as a whistle, cleverly.

Whopper. A big lie.

Wire-puller. A politician who makes plans to carry "jobs" through the legislature.

LETTER WRITING

It would be foolish to waste time on the importance of letter writing. It is the one form of composition that appeals to every one. You may never be called upon to write an essay or a novel or a page of history, but you will often have occasion to write a letter. To be able to write a letter correctly and attractively is an art worth cultivating. It increases one's personality and popularity. Put yourself into a letter and you command those who are at a distance from you. In no art does individuality count for more, yet, as in all arts, the letter writer must conform to a few general principles which have been laid down for those who would write well.

Materials. A careful letter writer gives attention to the minutest details, the sum total of which makes up a good letter. The first consideration is the size and quality of the stationery to be used. White or cream-colored paper, or paper of a light blue tint, may be used for both business and social correspondence. Let it be of good quality, and always have the envelopes to match. Business paper should have a simple, neat heading; if possible, one that will contain an advertisement that may bring in an inquiry, if not an order. Unruled paper is always preferred for all forms of correspondence. The ordinary size of paper for business purposes is about $8\frac{1}{2}$ inches by 11 inches, or about 6 inches by 9 inches. Both sizes may be used with a number 6 $\frac{1}{2}$ envelope. For notes and short letters, 6 by 10 is a suitable size, and for invitations, acceptances, and regrets, 5 $\frac{1}{2}$ by 8. This is not an arbitrary matter, but, in general, adapt the size of the paper to the length of the communication. Two-page paper is preferred for business, and four-page paper for social letters.

Pale ink and illegible writing are inexcusable, so care should be taken to provide good black ink or blue copying ink that turns black with age and a pen that suits the writer.

The Form of a Letter. Convenience and custom have prescribed a certain definiteness of form in the arrangement of a letter. It must consist of the following parts, (1) heading, (2) address, (3) salutation, (4) body, (5) complimentary close, (6) signature.

The Heading. This contains the address of the person written to and the date of the letter. For convenience of reference the address is usually placed in full in the upper right hand corner of the first page and the date written after it either on the same line or the next line below.

Examples showing the proper method of spacing, and the proper punctuation of the heading:

POUGHKEEPSIE, N. Y., July 1, 1908.

123 PAUL MALL, LONDON, ENG.,
Sept. 4, 1908.

The Address. In business correspondence the address of the person to whom the letter is sent should be written on the line below the date and well to the left of the page. In informal letters it may be omitted altogether. Some prefer to place the address of the writer or of the person written to after the signature, but it is usually considered more convenient to have them both precede the body of the letter. As in the heading, the address should be written with every necessary detail, including place of residence, street, and number. In the simplification of capitals the word street or place or avenue may or may not be begun with a capital. This is left to the choice of the writer as custom is not uniform.

The Salutation. The form of the salutation depends upon the relation of the writer to the recipient of the letter. Custom permits a variety of forms even in letters addressed to strangers. Appropriate salutations for formal letters:

My dear Sir, or Dear Sir:
My dear Madam, or Dear Madam:
Gentlemen, or Dear Sirs:

Most formal of all are Sir or Honorable Sir or His Excellency, addressed to persons in high position. The President of the United States is addressed without any complimentary salutation. His high office does not require it, though foreign rulers are usually addressed with very elaborate phrases.

My dear Mr. Jones, or My dear Miss Jones, are proper terms of address between entire strangers, as they are understood to signify respect rather than affection. My dear Mr. Snow is regarded as a rather more formal address than Dear Mr. Snow, though curiously enough if one were writing in England just the opposite would be true. There the pronoun "my" signifies a greater degree of intimacy. These are arbitrary matters, but it is well to note the customs of the place where one is writing.

It was formerly the custom to begin each word of the salutation with a capital, but now

good usage prescribes greater simplicity in the use of capitals and punctuation. No absolute rules can be given as there is great variation among good writers. The first word of every salutation should begin with a capital. If "sir," "sirs," or "madam" is used, you may follow the dictates of your own taste about capitalizing it. If the phrase, "My dear sir," were to occur in the body of the letter, sir would not be capitalized, therefore it need not be in the salutation. General usage prefers the capital, but the modern tendency in writing is to lessen the number of capitals, as well as the number of punctuation marks used. Great freedom is allowed in the punctuation mark which follows the salutation. Some prefer the colon, while others use only the comma. The dash adds nothing, so should be omitted.

The following are good forms for the introduction of a letter:

MR. F. G. ABLE,
Rochester, N. Y.
My dear Sir:

MR. S. P. CRAIG,
27 Windsor Ave., Toledo, Ohio.
My dear Mr. Craig,

The Body of the Letter. The first requisite in good letter writing is a clear, definite knowledge of what you want to say; the second is to say it in such a way that no one can possibly misunderstand what you have said. Most errors of grammar are made because the writer's thought is illogical and confused. One cannot be too careful about the English he uses in his letters. Every letter should be written legibly, properly punctuated, accurately spelled, and divided into suitable paragraphs, each paragraph treating of its subject clearly and definitely.

Do not burden a letter with apologies for not writing. Make your style easy and conversational. It has been said that the best letter writing is like the best conversation. Touches of humor and bright glimpses of thought are very attractive in social letters. A touch of humor, quick and to the point, is attractive in any letter, but care must be taken that in business letters there is no wandering from the point.

The body of the letter may be begun on the same line with the salutation or on the line below. The size and shape of the sheet of paper will determine which is the better arrangement. A uniform margin of one-half inch or more should be reserved at the left-hand side of each page of the letter.

The Complimentary Close. This consists of the concluding words of affection or respect, and indicates the relation in which the writer stands to his correspondent. "Yours truly," or "Very truly yours," are the forms most frequently used in business correspondence to-day. The complimentary close, "Yours respectfully," or "Very respectfully yours," should be used when respect is intended. It is proper in writing to persons older or higher in rank. "Yours sincerely," is common in letters of business between persons who really have some acquaintance with each other. "Your humble servant," "Your obedient servant,"

are entirely out of date as meaningless conventionalities.

The words of the complimentary close should be written on the line below the last line of the letter. The first word should be begun with a capital and the last word should be followed by a comma.

The Signature. The signature should be written on the line below the complimentary close and a little to the right. Except in the most informal letters it should give the full name of the writer in the form which he would use in signing a document. Business men would be saved a great many embarrassments if people were more considerate about signatures.

In writing to a stranger, a lady should sign her name so that there can be no doubt about the proper way to address her. Alma D. Bowen may be written (Miss) Alma D. Bowen if unmarried, or (Mrs.) Alma D. Bowen if married and writing in her own name, or Alma D. Bowen (Mrs. Frank Bowen) if she wishes to be known by her husband's name.

The Superscription. The address on the envelope should contain every item necessary to insure the prompt delivery of the letter. It usually consists of four lines arranged in the following order: name of individual or firm, street and number, city, state. The firm's or person's name should be written in the middle of the envelope, both with reference to the top and bottom, and the right and left edges. Each added line should follow a slant to the right.

Every year millions of letters and packages find their way to the Dead Letter Office because of incorrect or incomplete address. Illegible writing or any deviation from the correct form of addressing a letter may add one more to these millions already counted. Envelopes used for business purposes should have the name and address of the sender either written or printed in the upper left-hand corner.

In punctuating the lines of the superscription it is now considered good form to omit all commas as unnecessary, though they are usually retained in the punctuation of the address in the introduction. It is left to personal judgment whether to retain them or not, though it is along the advance line to prefer the simpler form when there is a choice.

Note the omission of commas in the following superscription:

MR. CLARENCE D. ROXBURY
University Block
Los Angeles
California

Titles. It is sometimes embarrassing in addressing a letter to know what title to give or how to arrange the title. Where there are a number of titles the higher presupposes the lower, as, D. D. or LL. D. extinguishes the A. B. or A. M. It is customary, however, to retain both the higher titles, D. D., LL. D., if one happens to reach them both, and the LL. D. in such a case is written last. Clergymen always have the prefix Rev., and Bishops that of Rt. Rev. When a Bishop has the added title D. D. the two are combined as, D. D., LL. D. Judges, members of Congress, and some other high officers

of government, have the prefix Honorable. With this title the designation Esq. is never affixed, though one may with entire propriety say Hon. Henry Somers, LL. D.

When such prefixes are used as Hon. or Rev., the full name should be given, Hon. James Boyd, not Hon. Judge Boyd. When the full name is not known then it is better to insert the customary title Mr., as Rev. Mr. Jones, not Rev. Jones. It is contrary to American etiquette to address a woman with her husband's title, although it is customary to do so in Europe. Mrs. Dr. Jones is good form in England, but not in America.

Dame Etiquette in some things is very exacting. In a letter addressed by one military man to another, an exact form is prescribed by law. The person written to is addressed at the beginning of the letter simply by his title. Then, at the end of the letter, on the line below the signature of the writer, the name of the person addressed is given, with his full official title, and his location, just as it is to be on the envelope.

HEADQUARTERS, MILITARY DIVISION OF THE MISSISSIPPI,
IN THE FIELD, MANCHESTER, VA., May 9, 1865.

General:

I have joined my army at Manchester, opposite Richmond, and await your orders.

W. T. SHERMAN,
Major-General Commanding.

LIEUT.-GENERAL U. S. GRANT,
Commander-in-Chief,
Washington City.

The following exact form has been prescribed for addressing the President of the United States.

On the outside of the letter:

TO THE PRESIDENT
Executive Mansion
Washington, D. C.

On the inside of the letter:

Mr. President,
I have the honor, etc.

The governor of any State is addressed as "His Excellency."

His Excellency
CHARLES E. HUGHES
Governor of New York

This same title is also applied to ministers to foreign countries. "Honorable" is applied to the Vice-President, members of the cabinet, members of Congress, mayors of cities, judges, consuls, and other high dignitaries.

BUSINESS LETTERS

A business letter should at all times be a model of clearness, conciseness, completeness, good form and courtesy. The reply should be prompt, courteous and definite. As a rule never let a business letter remain more than twenty-four hours without an answer. If you cannot give the man the information he has asked for, drop him a line saying that his letter has been received and will have the proper attention as soon as the information desired can be obtained. Be prompt, evermore, be prompt, and to this add the injunction be brief, evermore, be brief.

In all business letters that answer an order

or an inquiry, the date of the letter you are answering should be mentioned. This can be done anywhere in the first paragraph: e. g., "We regret that we cannot supply you the pattern of wall paper for which you wrote on July 17th;" or, "We are shipping you by fast express to-day the groceries you ordered on the 4th inst."

An Order for Goods.

486 MAIN ST., ROCHESTER, N. Y.,
November 13, 1908.

MILLER, GREINER & CO.,
Wholesale Grocers,
Buffalo, N. Y.

Dear Sirs:

The last invoice of groceries was so satisfactory that we are glad to send you another order. Kindly send at once, by express, the following:

4 bbls. granulated sugar.
3 large boxes of boneless codfish.
300 lbs. of the best Java coffee.
200 lbs. best Mocha coffee.
12 cases of Baker's cocoa.

Trusting you will fill this order as promptly as you did the last one, we remain,

Yours very truly,
THE EASTSIDE MARKET CO.

Acknowledging Receipt of Order.

BUFFALO, N. Y.,
November 14, 1908.

THE EASTSIDE MARKET CO.,
486 Main St., Rochester, N. Y.

Gentlemen:

Your order of the 13th inst. at hand. Inclosed find invoice for same amounting to two hundred forty-eight dollars (\$248).

Trusting that the goods will arrive promptly and in good condition, we are,

Very truly yours,
MILLER, GREINER & CO.,
Wholesale Grocers.

Inclosing Remittance.

468 MAIN ST., ROCHESTER, N. Y.,
November 27, 1908.

MILLER, GREINER & CO.,
Wholesale Grocers,
Buffalo, N. Y.

Gentlemen:

In payment of your invoice of the 14th inst., find Buffalo exchange for two hundred forty-eight dollars (\$248).

Kindly return receipted bill.

Yours truly,
THE EASTSIDE MARKET CO.

Acknowledging Remittance.

BUFFALO, N. Y., November 28, 1908.

THE EASTSIDE MARKET CO.,
486 Main St., Rochester, N. Y.

Gentlemen:

We inclose receipted bill for your payment of two hundred forty-eight dollars (\$248). Accept our thanks for your prompt remittance.

Hoping that we shall have the privilege of serving you again soon, we are,

Sincerely yours,
MILLER, GREINER & CO.,
Wholesale Grocers.

Requesting Payment.

OAKLAND, CALIFORNIA,
January 6, 1908.

MR. JOSEPH W. DUFFY,
Tacoma, Washington.

My dear Sir,

You may have overlooked the fact that your account, amounting to thirty-six dollars and forty-eight cents (\$36.48), is past due. We trust that you will be able to pay in full at once.

Assuring you of our appreciation of past favors, we are, with the wish to serve you,

Sincerely yours,
HENRY HULL & CO.

Apologizing for not Paying an Account When Due.

TACOMA, WASHINGTON, Feb. 1, 1908.
HENRY HULL & Co.,
Oakland, Cal.

My dear Sirs,
I owe you an apology for tardiness in paying my account so long overdue. My only excuse is that my customers have been "slow" with me.

Thank you for the courtesy you have shown. It will be my effort to be more prompt in the future.

Yours truly,
JOSEPH W. DUFFY.

Renewing a Subscription.

92 ELM AVE., WORCESTER, MASS.,
December 20, 1907.

THE OUTLOOK COMPANY,
287 Fourth Ave., New York City.

Gentlemen:
Inclosed you will find money order for two dollars, for which please renew my subscription to "The Outlook."

Yours truly,
WILLIAM WARING.

A Follow-up Letter.

THE LUNDSTRUM SECTIONAL BOOKCASE CO.,
LITTLE FALLS, N. Y., January 6, 1908.

MRS. G. W. BROWN,
486 Norwood Ave.,
Albany, N. Y.

My dear Madam:

Ten days ago, in reply to your inquiry for our catalogue, we mailed one to you. Not having heard from you, we write to learn whether you received it. If not, let us know and we will mail another. If it has been received, kindly advise us whether you find quoted in it anything fitting your needs. If not, write us what you want, and we will quote you prices.

Hoping to hear from you within a few days, we are,
Yours truly,
THE LUNDSTRUM SECTIONAL BOOKCASE CO.

A Reply to a Letter of Complaint.

THE KELLOGG LITHOGRAPH CO., CLEVELAND, O.,
November 22, 1900.

MR. E. DAKIN HOAG,
Security Mutual Life Ins. Co.,
Providence, R. I.

My dear Sir:

We are sorry that you cannot let us have the specifications for your letter headings until the first of the year. We trust, however, that you will let us have the specifications at as early a date as possible so we can order the paper, and get our transferring and printing done in plenty of time to have the headings in your hands by the time you need them.

In your letter you say that the paper is not so good as you formerly had from us. We cannot understand this, as we thought the last lot of stock we received from the mill was of a very good quality, right up to the mark. If you will send us some of the sheets that you think are light weight, we will have them tested; and if we find there is anything wrong with the paper, we will take it up with the mill. So far as we know, the only trouble there has been with any of this "security" paper was with the first lot, where a small portion of the headings had little specks on them. This, you know, we took up with the mill, and they promised to see that the balance of the paper on the contract should be O. K. in every respect. We certainly want to hold them, if this is not the case.

We know that at the present time we should not be able to secure nearly so good a paper as this is at the price you are paying for this lot; and we want to say that you are very fortunate, indeed, in having placed your order when you did, because, if you were to place a contract now, we could not give you nearly so low a price on it on account of the marked advance in price.

Awaiting your reply, we remain,

Yours very truly,
THE KELLOGG LITH. CO.

Letters of Application.

LA PORTE, MO., January 2, 1900.

MESSRS. HOWE & HOWE,
St. Louis, Mo.

Gentlemen: In reply to your advertisement in Tues-

day's "Tribune," I respectfully apply for the position you offer.

I have had two years' experience in the crockery business as salesman and bookkeeper, and I am acquainted with your city, for I lived there three years and worked for the firm of Betz & Co. I refer you to them now should you wish to know more of my fitness for the work. If you decide to hire me, I will work hard to succeed.

Hoping for a favorable answer,

Yours respectfully,
WILLIAM R. STONE.

417 COLLEGE ST., TROY, N. Y.,
January 31, 1907.

MESSRS. WYBURN & Co.,
Spokane, Washington.

Dear Sirs:

My friend, Mr. Bidwell, who is in your office, writes me that you are in need of an expert accountant. I shall be very glad to come West to take the position if you will give me a trial. I am a Yale man, 37 years old, married, and have had five years' experience as an expert accountant with the New York Life Insurance Co., for which I am now working.

If you will write Mr. F. C. Green, who is at the head of the New York Life in Troy, he will tell you of my ability and willingness to work for the interests of the firm that employs me.

Trusting you will send me a favorable answer, I am,
Yours very truly,
SAMUEL H. GORDY.

Notes of Introduction.

MR. CHAS. R. ANDREWS,
Trustee of School District No. 9, Trenton, N. Y.

My dear Sir:

Miss Emily Smith desires to secure a position as assistant in your school. She holds a first-grade certificate and has had three years' successful experience in our school. We regret to lose her, but she prefers your district because it is nearer to her home. I can recommend Miss Smith as an excellent teacher who will be a refining influence in any school.

Very truly yours,
CHARLES J. MAJOR,
Trustee of School District No. 4.

NORTH CORNWALL, VERMONT, July 6, 1908.
MR. WALTER C. STRONG,
84 Arlington Ave., Pittsburg, Pa.

My dear Friend,

It gives me great pleasure to introduce to you my friend, Mr. Weston Beach, who is to become a resident in your city. You will find him a delightful gentleman. I shall greatly appreciate whatever courtesy you may show in helping him to become acquainted.

Cordially yours,
HENRY B. JOHNSON.

Letters of Recommendation. Recommendations are sometimes included in notes of introduction, but often they are written as separate letters. They may be written as general letters addressed "To whom it may concern," or written as special letters to some definite person.

General Recommendations.

To Whom It May Concern:

This is to certify that the bearer of this note, Miss Lillian Glades, was graduated from The Teachers' College, Cumberland University, and has since taught in the schools of this city. For the past three years she has taught in the Straymore school and I have had the opportunity to closely observe her work. I can recommend her as capable of filling any position in a city graded school.

JOHN W. GROVE,
Principal of Straymore School.

To Whom It May Concern:

Mr. Henry Henrys has been in our employ as bookkeeper the past six years. He is a faithful accountant, and in every way has served us well. We regret to part with him. He goes at his own request because he feels that he ought to receive higher salary than we can afford to pay.

We wish him every success.

JONES, JONES & Co.
Troy, New York.

Special Recommendation.

MR. HARVEY W. JONSON,
Superintendent of Public Works,
Topeka, Kansas.

My dear Sir,

We have in our school a young man, Mr. Thomas Redding, who has done excellent work in the engineering department. He is a fine, clean young man and has commanded the respect of instructors and students, alike. His home is in Nebraska and he is anxious, on account of his parents, to get work near home.

I shall greatly appreciate it if you will interest yourself in him and help him to get work.

Very truly yours,

THOMAS BENEDICT.

Lehigh University, Pennsylvania,
January 1, 1909.

Excuse from Absence from School.

Will Miss Stringer kindly excuse Frances for absence from school and greatly oblige her mother?

MRS. SAMUEL PRESCOTT.

Friday morning.

Invitations and Replies. Formal invitations are written in the third person, and for large gatherings are usually engraved or printed and mailed a week or ten days in advance. An invitation sent out by a school, or class in the school, a club, or any group of persons, is usually in the third person and if the invitation be to an entertainment as at a church or a commencement program no formal reply is needed. Formal replies, however, should always be sent where entertainment has been provided for each individual, for the host or hostess will need to know how to provide.

The letters R. S. V. P. are sometimes put in the lower left-hand corner of an invitation. They stand for the French phrase, "Repondez s' il vous plait": Reply, if you please. The English words, "An answer will oblige," are perhaps in better taste.

Invitations to class commencements furnish happy occasions for friends to send notes of congratulation. The feeling of obligation to present gifts is very much to be regretted. No gifts should be expected unless it may be from near family friends. The formal wording of engraved cards can best be left to the engraver, as the form changes slightly from year to year.

The reply to an invitation should follow the form of the note received and should repeat the date and hour mentioned in the invitation. In declining an invitation it is not essential to repeat the hour.

Invitation to Commencement Exercises.

The Senior Class of
Columbia Seminary
requests the pleasure of your presence at the
Commencement Exercises
June fifteenth to eighteenth
nineteen hundred seven
Washington, District of Columbia

The Faculty and Graduating Class
of the
Boston Teachers' Training School
invite you to attend the
Seventeenth Annual Commencement Exercises
Friday evening, April fifteenth, 1909
at half past eight o'clock
Teachers' Training School
1124 Tremont Avenue

Formal Invitation to a Reception and Dance.

The Epsilon Mu Sorority
invites you to be present
at a reception and dance
to be held at the
COLONIAL CLUB

Tuesday evening, April twelfth
at half after eight o'clock

Wedding Invitations and Announcements.

Mr. and Mrs. Joseph Suffolk
request the honor of your presence at the
marriage of their daughter
Mabel Grace

to

Mr. Andrew Jackman
Wednesday afternoon, June seventeenth
at three o'clock
Saint-Mary's-on-the-Hill Church
Baltimore

Announcements.

Mr. Andrew Jackman
Miss Mabel Grace Suffolk
Married
on Wednesday, June the seventeenth
Nineteen hundred and nine
Baltimore

Mrs. George Sampson
announces the marriage of her daughter
Margaret Louise

to

Mr. William Randolph Holmes
of Roxbury, Massachusetts
Wednesday, December the twenty-sixth
nineteen hundred and six
At home, Roxbury, Massachusetts.

For a Formal At-home.

Mrs. Jacques Randolph Stearns
At Home
on Wednesday the fifth of December
from three until six o'clock
1106 Ballston Heights
to meet
Mrs. James Winchell Toynbee

Formal Note of Invitation.

Miss Belle Coe requests the pleasure of Miss Hinman's
company on Thursday evening at eight o'clock.
128 Fremont St., January nine.

The Invitation Accepted.

Miss Hinman accepts with pleasure the invitation for
Thursday evening at eight o'clock.
Wellington Place, January ten.

The Invitation Declined.

Miss Hinman sincerely regrets that she cannot accept
Miss Coe's invitation for Thursday evening at eight
o'clock.
Wellington Place, January ten.

Calling cards are often used for small informal gatherings of friends.

To meet Miss Wells.

MISS ALICE SMYTHE

Friday, May twenty-ninth, at four o'clock.

40 College Street.

Acceptance.

MISS ELLEN YATES.

The Arlington.

Informal Invitation.

My dear Mr. Collier,

Dr. Hartman, who has just returned from Europe, will dine with us on Saturday next at 6 o'clock, and we shall feel highly honored and pleased if we can have your company.

With the greatest respect, I am,

Yours sincerely,

WILLIAM J. LATTIMER.

190 WEST AVE., September 6, 1908.

Acceptance.

My dear Dr. Lattimer,

It will give me great pleasure to dine with you on Saturday and to meet our friend, Dr. Hartman.

Thanking you for the pleasure in store, I am,

Very cordially yours,

RALPH A. COLLIER.

86 Union St., September 7, 1908.

Formal Note with Birthday Gift.

Miss Henry presents her compliments to Miss Brinkman and begs her to accept these flowers with her love and with the wish that she may enjoy many returns of this happy day.

Such a note accompanying a gift that gives so much pleasure will naturally call forth a cordial letter of warm appreciation.

Reply to Note Accompanying Birthday Gift.

My dear Miss Henry,

Your note and beautiful gift of flowers completed a day of perfect happiness. It is good to grow old when friends emphasize the years with increasing kindness. Thank you, dear friend, for the love which has never failed me.

Yours,

CELIA BRINKMAN.

Letters of Condolence. Letters of condolence are always difficult to write. Write only what is in your heart to say. Don't use any stereotyped form to be found in a book on etiquette. There is a tendency to-day to overdo this kind of letter-writing, and the answering of so many letters is becoming a great burden. In many instances the kindest thing is silence. The following letter of sympathy, now preserved in Oxford University, is a model of this kind of expression and appeals to us all.

EXECUTIVE MANSION,

WASHINGTON, November 21, 1864.

Dear Madame: I have been shown on the file of the war department a statement of the Adjutant-General of Massachusetts, that you are the mother of five sons who have died gloriously on the field of battle. I feel how weak and fruitless must be any word of mine which should attempt to beguile you from the grief of a loss so overwhelming, but I cannot refrain from tendering to you the consolation that may be found in the thanks of the republic they died to save. I pray that our Heavenly Father may assuage the anguish of your bereavement and leave only the cherished memory of

the loved and lost, and the solemn pride that must be yours to have laid so costly a sacrifice upon the altar of freedom.

Yours very sincerely and respectfully,

A. LINCOLN.

To Mrs. Barry,
Boston, Mass.

My dear, dear Friend,

A little girl came home from a neighbor's house where her little friend had died. "Why did you go?" questioned the father. "To comfort her mother," said the child. "What could you do to comfort her?" "I climbed up into her lap and I cried with her." "Dear friend, I, too, can weep with you, and I do.

Yours in loving sympathy,

SARAH A. HUME.

To Miss Cornelia Y. Maxon.

Letter of Congratulation. A letter of congratulation is more easy to write. Here again let the letter come from your heart.

My dear Old Jack:

Could anything be finer than the result of yesterday's election? I don't know which to congratulate more, you or the city. The voters were satisfied with your past record, and have endorsed your worth by giving you this greater honor.

Continue to live up to your high ideals, and you will soon go to Washington to protect the people in their rights.

Remember me to the little woman at the head of the house, and accept my warmest congratulations and heartiest wishes for success.

Very sincerely yours,

ANDREW LANGTRY.

November 7, 1908.

Letters of congratulation are often very brief, sometimes only a telegram—just the single message of sympathetic joy and nothing else. Such congratulations are often sent to high officials after an election or following some notable success.

Telegram to William Howard Taft from Governor Charles E. Hughes, sent June 18, 1908:

"I heartily congratulate you upon your nomination. Under your administration the welfare of the country will be assured."

Letters of Friendship. The joy of letter writing is in letters of friendship, for which, most fortunately, there can be no exact rules. Write to your friend as if you were talking—good, bright, happy talk about the things you are both interested in. No friendship can be so close as to excuse one for indifference or carelessness. Models of good letter writing are found in the memoirs of noted men and women. They form a valuable body of literature and will repay the reading.

Letter writing has been rightly called the "gentlest art." It is the art of giving joy to those who are dear to us, yet far away. An interchange of letters between members of the same family or between friends does more than anything else to keep alive the deep affections. Even brothers and sisters drift apart and hopelessly lose sight of each other when they forget to be faithful in their letters. Whatever the pressure of pleasure or of duties, the absent ones should make time for at least one letter every week to those who are left at home. Write cheerfully, never sharply or pettishly. The word once committed to paper may remain when the irritation has passed away. Never write unnecessarily of bad news. Letter writ-

ing, you remember, in its highest mission, is the "blessed art of giving joy." Answer home letters in detail. Many questions are asked which seem trifling, but they tell the very things about your life that the home people want to know.

The chief charm in letters of friendship is their naturalness. They should make the person who receives them feel that he has had a delightful visit with his friend who wrote. The following passage taken from a letter written by Henry W. Longfellow is full of the charm of simplicity: "I have just had the pleasure of receiving your photograph. It is so good, it could hardly be better. I wish the one I send you in return were as good. But that is wishing I were a handsome man, six feet high, and we all know the vanity of human wishes." Again he writes in a letter, "If 'Long Pond' were called Loch Long, it would be a beautiful lake. This and Sebago are country cousins to the Westmoreland lakes in England, quite as lovely, but wanting a little more culture and good society." This is simple language, but the thought is by no means common-place. Our best thoughts belong to our friends whether in conversation or in letters. Of Hawthorne's letters it is said, "They were full of passages of beauty and of details of his own plans and purposes, hopes and disappointments."

Bayard Taylor thus commends a friend for his naturalness in writing: "You somehow manage to bring your own bodily self before me when you write; I see your eyes and the changing expression of your face, as I read, and the sound of your voice accompanies the written word." Who would not, if he could, write letters that by their naturalness recall both face and voice? Charles Dickens thanks a friend for his letter "which is like a pleasant voice coming across the Atlantic, with that domestic welcome in it that has no substitute on earth."

One likes letters written for the very joy of correspondence and not because the time has come and one must write. How welcome this passage must have been in one of Lowell's letters: "Somehow, this cool, beautiful summer day I feel my heart go out towards you all, and am not writing because I ought." Of the closeness and the intimacy of written thoughts that may be exchanged in letters, Lowell again writes: "I think it fortunate to have dear friends far away. For not only does absence have something of the sanctifying privilege of death, but we dare speak in the little closet of a letter what we should not have the face to at the corner of the street."

Playfulness and humor and lack of formality are charming qualities in home letters when they can be naturally introduced. These opening lines taken from a letter written by Benjamin Franklin to his wife, delight us by their very unexpectedness of humor: "I wrote you a few days since by a special messenger and enclosed letters for all our wives and sweethearts, expecting to hear from you by his return,—but he has just now returned without a scrap for poor me." Further on he adds in the same light vein of hidden laughter a postscript: "I

have scratched out the loving words, having written in haste by mistake when I forgot I was angry." How it brightens life to stop in the busy day for such innocent sparkle of fun! It makes one appreciate the great Benjamin Franklin even more because we know of such genial letters sent to those who were dear to him.

Occasions multiply for writing letters to our friends: birthdays, festivals, anniversaries, betrothals, weddings, funerals; any occasion for peculiar joy or sorrow when sympathy and love are called into expression. One of the most pleasing of the growing customs is the writing of letters to friends to accompany them on their journeys. Now-a-days, those who go abroad in ships are showered with "steamer" letters, which keep them mindful of home and friends throughout their long voyage. The brightness and sweetness of such letters enrich a whole lifetime with pleasant memories.

The mission of the letter has been summed up by Whittier in a letter to a friend: "I am thankful every day of my life that God has put it into the hearts of so many whom I love and honor to send me so many messages of good-will and comfort."

In this day of complex living when so much is said but so little realized of the "simpler life," we sometimes forget the joy which these simple "messages of good will and comfort" bring and unnecessarily burden ourselves to overload our friends with purchased gifts: whereas, Christmas letters, birthday letters, any letters into which we put our best selves, are the most acceptable gifts that we can choose. Beyond compare is the joy of such written words as these sent as a Christmas offering by a young girl to an older friend: "What can I wish for you that you have not already? Your heart is so full of good things that it needs no wish. Some day I may tell you just what you have done for me, my dear friend. Many a door have you opened for me, and these things cheapen in the telling."

"A blessed Christmas time to you and a New Year rich with God's best gifts."

The gift of "things" is forgotten but of such words never.

Postal Cards. Postal cards (post cards the English call them) are often very convenient for a word of greeting or for general business matters which anyone may read, but nothing private should ever be committed to them. To write on a postal a term of warm affection or family news or any message which one would not wish to tell at large is very indelicate.

Picture postal cards furnish pleasant exchanges between friends, and postal cards which bear printed sentiments of refinement or the line of bright humor, are pleasant reminders; but the cheap word or picture of coarse fun should be strictly forbidden, not only by the authority of law, but delicacy of thought for one's friend, as well as for one's own self, should never select what is in any way rude or coarse. In this busy world where there is so much need of frequent intercourse, postal cards have their place and their use will multiply, but they should never be used as substitutes for the well-written letter or the note of social obligation.

SYNONYMS

To Abandon, Desert, Forsake, Relinquish. The idea of leaving or separating one's self from an object is common to these terms, which vary in the circumstances of the action; the two former are more positive acts than the two latter. To abandon may be an act of necessity or discretion, as a captain abandons a vessel when it is no longer safe to remain in it. Abandoning is a violation of the most sacred ties, and exposes the object to every misery; desertion is a breach of honor and fidelity; it deprives a person of the assistance or the countenance which he has a right to expect; by forsaking, the kindly feelings are hurt, and the social ties are broken. A bad mother abandons her offspring; a soldier deserts his comrades; a man forsakes his companions. Things as well as persons may be abandoned, deserted, or forsaken; things only are relinquished. To relinquish is an act of prudence or imprudence; men often inadvertently relinquish the fairest prospects in order to follow some favorite scheme which terminates in their ruin.

To Abase, Humble, Degrade, Disgrace, Debase. To abase expresses the strongest degree of self-humiliation. To humble marks a prostration to the ground, and figuratively a lowering of the thoughts and feelings. Abase and humble have regard to persons considered absolutely, degrade and disgrace to their relative situation. To degrade signifies to lower in the estimation of others. It supposes a state of elevation either in outward circumstances or in public opinion. To disgrace, is always attended with circumstances of more or less ignominy. To degrade or disgrace one's self is always a culpable act. The penitent man humbles himself, the contrite man abases himself, the man of rank degrades himself by a too familiar deportment with his inferiors; he disgraces himself by his vices.

To Abhor, Detest, Abominate, Loathe. These terms equally denote a sentiment of aversion. What we abhor is repugnant to our moral feelings; what we detest is opposed to our moral principles; what we abominate does violence to our religious and moral sentiments; what we loathe offends our physical taste. We abhor what is base and ungenerous, we detest hypocrisy; we abominate profanation and open impiety; we loathe food when we are sick.

To Abide, Sojourn, Dwell, Live, Reside, Inhabit. Abide is to make a partial stay. Sojourn signifies to pass the day, that is, a certain portion of one's time, in a place. Dwell conveys the idea of a movable habitation, such as was the practice of living formerly in tents. At present it implies a stay in a place by way of residence, which is expressed in common discourse by the word *Live*, for passing one's life. Reside conveys the full idea of a settlement. Inhabit signifies to have or occupy for a permanency. The length of stay implied in these terms is marked by a certain gradation. Abide denotes the shortest stay; to sojourn is of longer continuance; dwell comprehends the idea of perpetuity in a given place, but reside and inhabit are partial and local—we dwell only in one spot, but we may reside at or inhabit many places.

Ability, Capacity, Faculty, Talent. Ability is to capacity as the genus to the species. Ability comprehends the power of doing in general, without specifying the quality or degree; capacity is a particular kind of ability. Ability may be either physical or mental; capacity, when said of persons, is mental only. Ability respects action, capacity respects thought. Ability always supposes something able to be done; capacity is a mental endowment, and always supposes something ready to receive or hold. Ability relates to human power generally, by which a man is enabled to act; it may vary in degree and quality with times, persons, and circumstances; health, strength, and fortune are abilities; faculty is a gift of nature directed to a certain end, and following a certain rule. Ability may be acquired, and consequently is properly applied to individuals, an ability to speak extempore or an ability to write; but a faculty belongs to the species, as a faculty of speech, or of hearing, etc. Talent imitates but does not originate.

Able, Capable, Capacious. Able is said of that which one can do, as to be able to write or read; capable is said of that which either a person or a thing can take, receive, or hold; a person is capable of an office, or capable of great things; a thing is capable of improvement. Capacious is used only of the property having the amplitude of space, or a power to take in or comprehend. A hall may be said to be capacious, or, figuratively, a man has a capacious mind.

To Accuse, Charge, Impeach, Arraign. The idea of asserting something to the prejudice of another is common to these terms; but accuse is said of acts, charge of moral qualities constituting the character; we accuse a person of murder; we charge him with dis-

honesty. High officials are impeached; criminals are arraigned.

To Acquire, Obtain, Gain, Win, Earn. We acquire by our own efforts; we obtain by the efforts of others as well as ourselves; we gain or win by striving; we earn by labor.

To Act, Do, Make. We always act when we do, but we do not always do when we act. To act is applied either to persons or things, as a spring or a lock acts; to do applies in this sense to persons only. To act is also mostly intransitive or reflective, as to act well or ill in this or that manner; to do is always transitive, as to do right or wrong, to do one's duty. To make is to bring a thing to pass; as to make a pen.

To Act, Work, Operate. A machine works, but each of its parts is said to act; so beer works, and bread works. Sometimes act as well as work is taken in the sense of exerting a power upon other bodies and producing changes, as the sun acts on the plants. Operate is applied to matters of a general nature in science or morals, as a measure operates, or words may operate on the mind, or reasons may operate on the understanding.

To Abolish, Abrogate, Repeal, Revoke, Annul, Cancel. The word abolish conveys the idea of putting a total end to a thing, and is applied properly to those things which have been long in existence, and firmly established; an abolition may be effected either by an act of power, as to abolish an institution, or an order of men, and the like. Or it may be a gradual act, or effected by indirect means, as to abolish a custom, practice, etc. Laws are either repealed or abrogated, but repealing is a term of modern use, applied to the acts of public councils or assemblies, where laws are made or unmade by the consent or open declaration of numbers. Abrogate is a term of less definite import; to abrogate a law is to render it null by any act of the legislature; thus, the making of a new law may abrogate the old one. Revoking is an act of individual authority—edicts are revoked; annulling is an act of discretion, as official proceedings or private contracts are annulled; cancelling is a species of annulling, as in the case of cancelling deeds, bonds, obligations, etc.

Abridgment, Compendium, Epitome, Digest, Summary, Abstract. The first four terms are applied to a distinct work, the two latter to parts of a work. An abridgment is the reduction of a work into a smaller compass. A compendium is a general and concise view of any science, as geography or astronomy. An epitome is a compressed view of all the substantial parts of a thing, or, in other words, the whole of any matter brought into a small compass. A digest is any materials digested in order. A summary comprehends the heads and subdivisions of a work. An abstract includes a brief but comprehensive view of any particular proceeding. It is necessary to make abstracts of deeds or judicial proceedings.

Absolute, Despotie, Arbitrary, Tyrannical. Absolute power is independent of and superior to all other power; an absolute monarch is uncontrolled, not only by men, but things. When this absolute power is assigned to any one according to the constitution of a government, it is despotie. Despotie power is something less than absolute power; a prince is absolute of himself; he is despotie by the consent of others. With arbitrariness is associated the idea of caprice and selfishness. With tyranny is associated the idea of oppression and injustice.

To Abstract, Separate, Distinguish. We abstract what we wish to regard particularly and individually; we separate what we wish not to be united; we distinguish what we wish not to confound. The mind performs the office of abstraction for itself; separating and distinguishing are exerted on external objects. Arrangement, place, time, and circumstances serve to separate; the ideas formed of things, the outward marks attached to them, the qualities attributed to them, serve to distinguish.

To Abuse, Misuse. Everything is abused which receives any sort of injury; it is misused if not used at all, or turned to a wrong use.

Acceptable, Grateful, Welcome. Acceptable signifies worthy to be accepted. Grateful, pleasing, signifies altogether pleasing; it is that which recommends itself. The acceptable is a relative good; the grateful is positive; the former depends upon our external condition, the latter on our feelings and taste; welcome signifies come well or in season for us. It refers to whatever happens according to our wishes. It is a grateful task to be the bearer of welcome intelligence to our friends.

To Accomplish, Effect, Execute, Achieve. To accomplish an object signifies more than simply to effect a purpose, both as to the thing aimed at and the means employed in bringing it about. Extraordinary means are requisite for accomplishing, and ordinary means for effecting. To accomplish is properly said of that which

a person sets before himself; but to effect, execute, and achieve do not relate to the views of a person acting, but to the thing brought about. What is executed is complicated in its nature, as to execute a design or project; what is achieved is grand, as to achieve an enterprise.

Action, Gesture, Gesticulation, Posture, Attitude. All these terms are applied to the state of the body; the three former indicating a state of motion; the two latter a state of rest. Action respects the movements of the body in general; gesture is an action indicative of some particular state of mind; gesticulation is a species of artificial gesture. Raising the arm is an action; bowing is a gesture. Actions may be ungraceful; gestures indecent. Posture and attitude both imply a mode of placing the body, but the posture is either natural or assumed; the attitude is always assumed or represented. We assume a sitting posture or an attitude of prayer.

Active, Diligent, Industrious, Assiduous, Laborious, Busy, Officious. We are active if we are only ready to exert our powers, whether to any end or not; we are diligent when we are active for some specific end; we are industrious when no time is left unemployed in some serious pursuit; we are assiduous if we do not leave a thing until it is finished; we are laborious when the bodily or mental powers are regularly employed in some hard labor. Busy is opposed to leisure. Officious implies being busy without discretion.

Actual, Real, Positive. What is actual has proof of its existence within itself, and may be exposed to the eye; what is real may be satisfactorily proved to exist; and what is positive precludes the necessity of a proof. Actual is opposed to the supposititious, conceived, or reported; real to the feigned, imaginary; positive to the uncertain, doubtful.

To Actuate, Impel, Induce. One is actuated by motives, impelled by passions, and induced by reason or inclination. Whatever actuates is the result of reflection; it is a steady and fixed principle; whatever impels is momentary and vehement, and often precludes reflection; whatever induces is not vehement, though often momentary.

Acute, Keen, Shrewd. In the natural sense, a fitness to pierce is predominant in the word acute; and that of cutting, or a fitness for cutting, in the word keen. The shrewd man exposes follies. Arguments may be acute, reproaches keen, and replies or retorts shrewd. A shrewd understanding is rather quick at discovering new truths, than at distinguishing truth from falsehood.

To Address, Apply. An address may be made for an indifferent purpose or without any express object; but an application is always occasioned by some serious circumstance. An address may be rude or civil; an application may be frequent or urgent. It is impertinent to address any one with whom we are not acquainted, unless we have a reason for making an application to them.

To Adhere, Attach. A thing is adherent by the union which nature produces; it is attached by arbitrary ties which keep it close to another thing. What adheres to a thing is closely joined to its outward surface; but what is attached may be fastened to it by the intervention of a third body.

Adjacent, Adjoining, Contiguous. What is adjacent may be separated altogether by the intervention of some third object; what is adjoining must touch in some part; and what is contiguous must be fitted to touch entirely on one side.

To Admit, Receive. Persons are admitted to the tables, and into the familiarity or confidence of others; they are hospitably received by those who wish to be their entertainers. We admit willingly or reluctantly; we receive politely or rudely.

To Admit, Allow, Permit, Suffer, Tolerate. We admit by simply not refusing or preventing; we allow by positively granting or complying with; we admit that which concerns ourselves, or is done towards ourselves; we allow that which is for the convenience of others, or what they wish to do; what is suffered may be burdensome to the sufferer, if not morally wrong; what is tolerated is bad in itself, and suffered only because it cannot be prevented; no earthly power can permit that which is prohibited by the divine law.

Admittance, Admission. Admittance is properly confined to the receiving a person or a thing into a given place; admission includes in itself the idea not only of receiving, but also the purpose of receiving. Whoever is admitted, or has the liberty of entering any place, whether with or without an object, has admittance; but a person has admission to places of trust, or into offices and the like.

To Adore, Worship, Reverence, Veneration.

Adoration is the service of the heart toward a Superior Being, in which, we acknowledge our dependence and obedience by petition and thanksgiving; worship consists in the outward form of showing reverence to some supposed superior being. Reverence differs from adoration inasmuch as it has a mixture of fear, arising from consciousness of weakness and dependence, or of obligations for favors received. The contemplation of any place rendered sacred by its antiquity awakens veneration.

To Advance, Proceed. To advance is to go toward some point; to proceed is to go onward in a certain course.

Advantage, Benefit, Utility. Advantage respects external or extrinsic circumstances of profit, honor, and convenience; benefit respects the consequences of actions and events; utility respects the good which can be drawn from the use of any object. A large house or a particular situation may have its advantages; suitable exercise is attended with benefit; sun-dials have their utility in ascertaining the hour precisely by the sun.

Adverse, Contrary, Opposite. Adverse respects the feelings and interests of persons; contrary regards their plans and purposes; opposite respects the situation and relative nature of things. Fortune is adverse; an event turns out contrary to what was expected; sentiments are opposite to each other.

Adverse, Inimical, Hostile, Repugnant. We are adverse to a proposition, or circumstances are adverse to our advancement; partisans are inimical to the proceedings of government, and hostile to the possessors of power. In respect to persons, adverse denotes merely the relation of being opposed; inimical, the spirit of the individual in private matters; and hostile, the situation, conduct, and temper of individuals or bodies in public matters. Repugnant means offensive to taste or feelings.

Advice, Counsel, Instruction. Advice flows from superior professional knowledge, or an acquaintance with things in general; counsel regards superior wisdom, or a superior acquaintance with moral principles and practice; instruction respects superior local knowledge in particular transactions. A medical man gives advice to his patients; a father gives counsel to his children; a counselor gives advice to his client in points of law; he receives instructions from him in matters of fact.

Affair, Business, Concern. An affair is what happens; a business is what busies; a concern is what is felt. An affair is general; it respects one, many, or all; every business and concern is an affair, though not vice versa. Business and concern are personal; business is that which engages the attention; concern is that which interests the feelings, prospects, and condition, advantageously or otherwise. To make one's peace with one's Maker is the concern of every individual.

To Affect, Concern. Things affect us which produce any change in our outward circumstances; they concern us if connected with our circumstances in any shape. The price of corn affects the interest of the seller; and therefore it concerns him to keep it up, without regard to the public good or injury.

To Affect, Assume, Pretend. To affect is to use forced efforts to appear to have that which one has not; to assume is to appropriate to one's self that which one has no right to have. One affects to have fine feelings, and assumes great importance. We pretend by making a false declaration. One affects the manners of a gentleman, and pretends to gentility of birth.

Affectionate, Kind, Fond. Affectionate characterizes the feelings; kind has mostly a reference to the action; affectionate is directed to a particular object; kind to objects generally. Fond is a strong liking.

To Affirm, Assert. To affirm is said of facts; to assert, of opinions; we affirm what we know; we assert what we believe.

To Afflict, Distress, Trouble. People are afflicted with grievous maladies. The mariner is distressed for want of water in the midst of the wide ocean; or an embarrassed tradesman is distressed for money to maintain his credit. The mechanic is troubled for want of proper tools, or the head of the family for want of good domestics.

Affliction, Grief, Sorrow. Affliction lies deeper in the soul than grief. It is too deep to be vehement. Continued sickness of our friends will cause affliction; the failure of our favorite schemes will occasion grief; the loss of a game or our own mistake will cause sorrow.

Affront, Insult, Outrage. An affront is a mark of reproach shown in the presence of others; it piques and mortifies; an insult is an attack made with insolence; it irritates and provokes; an outrage combines all that is offensive; it wounds and injures.

Afraid, Fearful, Timorous, Timid. Afraid may be used either in a physical or moral application, either

as it relates to ourselves only or to others; fearful and timorous are applied only physically and personally; timid is mostly used in a moral sense. It is the character of the fearful or timorous person to be afraid of what he imagines would hurt himself. Between fearful and timorous there is little distinction, either in sense or application, except that we say fearful of a thing, not timorous of a thing.

To Aggravate, Irritate, Provoke, Exasperate, Tantalize. The crime of robbery is aggravated by any circumstances of cruelty; whatever comes across the feelings irritates; whatever awakens anger provokes; whatever heightens this anger extraordinarily exasperates; whatever raises hopes in order to frustrate them tantalizes.

To Agree, Accede, Consent, Comply, Acquiesce. To agree is the general term, meaning to fall in with. We accede by becoming a party to a thing; those who accede are on equal terms; one objects to that to which one does not accede; we consent to a thing by authorizing it, we comply with a thing by allowing it; those who consent or comply are not on equal terms with those in whose favor the consent is given or compliance made; consenting is an act of authority, complying an act of good-nature or weakness; to acquiesce is quietly to admit; it is a passive act, dictated by prudence or duty.

Agreeable, Pleasant, Pleasing. Agreeable expresses a feeling less vivid than pleasant; pleasing marks a sentiment less vivid and distinct than either; a pleasing countenance denotes tranquillity and contentment; a pleasant countenance bespeaks happiness.

Aim, Object, End, View. The aim is that which the person has in his own mind; it depends upon the character of the individual whether it be good or bad, attainable or otherwise; the object lies in the thing; it is a matter of choice, it depends upon accident as well as design, whether it be worthy or unworthy; the end is that which follows or terminates any course or proceeding; it depends upon the means taken, whether the end is arrived at or not. It is the aim of the Christian to live peaceably; it is a mark of dullness or folly to act without an object; it is sophistry to suppose that the end will justify the means; the view is, generally speaking, whatever the mind sets before itself, whether by way of opinion or motive; a person's views may be interested or disinterested, correct, or false; the view is a matter rather of contemplation than of practice.

To Aim, Point, Level. Aim expresses more than the other two words, inasmuch as it denotes a direction toward some minute point in an object, and the others imply direction toward the whole objects themselves. We aim at a bird; we point a cannon against a wall; we level a cannon at a wall.

To Aim, Aspire. We aim at a certain proposed point by endeavoring to gain it; we aspire after that which we think ourselves entitled to, and flatter ourselves with gaining. Many men aim at riches and honor; it is the lot of but few to aspire to a throne.

Air, Manner. Air lies in the whole person; manner is confined to the action or the movement of a single limb. A man has the air of a common person; it discovers itself in all his manners. An air is noble or simple, it marks an elevation or simplicity of character; a manner is rude, rustic, or awkward, for want of culture, good society, and good example. We assume an air, and affect a manner.

Air, Mien, Look. Air depends not only on the countenance, but the stature, carriage, and action; mien respects the whole outward appearance, not excepting the dress; look depends altogether on the face and its changes.

Alarm, Terror, Fright, Consternation. Alarm springs from any sudden signal that announces the approach of danger. Terror springs from any event or phenomenon that may serve as a prognostic of some catastrophe; alarm makes us run to our defense, and terror disarms us; fright is a less vivid emotion than either, as it arises from the simple appearance of danger; we may be alarmed or terrified for others, but we are mostly frightened for ourselves; consternation springs from the view of some very serious evil, and commonly affects many; alarm affects the feelings, terror the understanding, and fright the senses; consternation seizes the whole mind, and benumbs the faculties.

Alertness, Alacrity. We proceed with alertness when the body is in its full vigor; we proceed with alacrity when the mind is in full pursuit of an object.

All, Whole. All respects a number of individuals; whole respects a single body with its components.

All, Every, Each. It is not within the limits of human capacity to take more than a partial survey of all the interesting objects which the whole globe contains; all men are not born with the same talent, either in

degree or kind; but every man has a talent peculiar to himself; a parent divides his property among his children, and gives to each his due share.

To Allay, Soothe, Appease, Mitigate, Assuage. All these terms indicate a lessening of something painful. In a physical sense an irritating pain is allayed; a wounded part is soothed by affording ease and comfort. Extreme heat or thirst is allayed; extreme hunger is appeased; a punishment or sentence is mitigated. In a moral sense one allays what is fervid and vehement; one soothes what is distressed or irritated; one appeases what is tumultuous and boisterous; one mitigates the pains of others, or what is rigorous and severe; one assuages grief or afflictions.

To Alleviate, Relieve. A pain is alleviated by making it less burdensome; a necessity is relieved by supplying what is wanted. Alleviate respects our internal feelings only; relieve our external circumstances. That alleviates which affords ease and comfort; that relieves which removes the pain.

Alliance, League, Confederacy. Alliances are formed for the mutual conveniences of parties, as between states to promote commerce; leagues and confederacies are entered into mostly for purposes of self-defense or common safety against the attacks of a common enemy; but a league is mostly a solemn act between two or more states and for general purposes of safety; and may, therefore, be both defensive and offensive; a confederacy is mostly the temporary act of several uniting in a season of actual danger to resist a common adversary.

To Allot, Appoint, Destine. Allot is used only for things, appoint and destine for persons or things. A space of ground is allotted for cultivation; a person is appointed as steward or governor; a youth is destined for a particular profession. Allotments and appointments are made for immediate purposes, destinations for a future purpose.

To Allow, Grant, Bestow. That is allowed which may be expected, if not directly required; that is granted which is desired, if not directly asked for; that is bestowed which is wanted as a matter of necessity. A grant comprehends in it something more important than an allowance, and passes between persons in a higher station; what is bestowed is of less value than either. A boy is allowed money for expenses; a king grants pensions to his officers; relief is bestowed on the indigent.

Allowance, Stipend, Salary, Wages, Hire, Pay. All these terms denote a stated sum paid according to certain stipulations. An allowance is gratuitous; it ceases at the pleasure of the donor; all the rest are the requital for some supposed service; they cease with the engagement made between the parties; a stipend is more fixed and permanent than a salary; and that than wages, hire, or pay; a stipend depends upon the fulfilling of an engagement, rather than on the will of an individual, a salary is a matter of contract between the giver and receiver; an allowance may be given in any form, or at any stated times; a stipend and salary are paid yearly, or at even portions of a year; wages, hire, and pay are estimated by days, weeks, or months, as well as years.

To Allude, Refer, Hint, Suggest. To allude is not so direct as to refer, but it is more clear and positive than either hint or suggest. We allude to a circumstance by introducing something collaterally allied to it; we refer to an event by expressly introducing it into one's discourse; we hint at a person's intentions by darkly insinuating what may possibly happen; we suggest an idea by some poetical expressions relative to it.

Alone, Solitary, Lonely. Alone, compounded of all and one, signifies altogether one, or single; that is, by one's self; alone marks the state of a person; solitary the quality of a person or thing; lonely the quality of a thing only. A person walks alone, or takes a solitary walk in a lonely place.

Ambassador, Envoy, Plenipotentiary, Deputy. Ambassadors, envoys, and plenipotentiaries speak and act in the name of their sovereigns, with this difference, that the first is invested with the highest authority, acting in all cases as the representative; the second appears only as a simple authorized minister acting for another, but not always representing him; the third is a species of envoy used by courts only on the occasion of concluding peace or making treaties; deputies are not deputed by sovereigns, although they may be deputed to sovereigns; they have no power to act or speak but in the name of some subordinate community or particular body. The functions of the three first belong to the minister, those of the latter to the agent.

Ambiguous, Equivocal. An ambiguity arises from a too general form of expression, which leaves the sense of the author indeterminate; an equivocation lies in the power of particular terms used, which admit of a double

interpretation, or an application to two different things; the ambiguity leaves us in entire uncertainty as to what is meant; the equivocation misleads us in the use of a term in the sense which we do not suspect.

To Amend, Correct, Emend, Improve, Mend, Better. Amend, emend, and correct, are all applied to works of the understanding, with this distinction, that amend signifies to remove faults or defects generally; either by adding, taking away, or altering, as to amend a law; to emend is to remove particular faults in any literary work by the alteration of letters or single words; to correct is to remove gross faults, as to correct the press; mend is employed in respect to any works in the sense of putting that right which either is or has become faulty; to improve is said either of persons or things which are made better; as to improve the mind, morals, etc.; to better is mostly applied to the outward condition on familiar occasions.

Amicable, Friendly. Amicable implies a negative sentiment, a freedom from discordance; and friendly a positive feeling of regard, the absence of indifference. We make an amicable accommodation, and a friendly visit.

Ample, Spacious, Capacious. Ample is opposed to scanty, spacious to narrow, capacious to small. What is ample suffices and satisfies; it imposes no constraint; what is spacious is free and open; it does not confine; what is capacious readily receives and contains; it is liberal and generous.

To Amuse, Divert, Entertain. Whatever amuses serves to kill time, to lull the faculties and banish reflection; whatever diverts causes mirth and provokes laughter; whatever entertains acts on the senses, and awakens the understanding.

Anger, Resentment, Wrath, Ire, Indignation, Rage, Fury. Anger is a sudden sentiment of displeasure; resentment is a continued anger; wrath is a heightened sentiment of anger, which is poetically expressed by the word ire; indignation is a sentiment awakened by the unworthy and atrocious conduct of others; as it is exempt from personality, it is not irreconcilable with the temper of a Christian; rage is a vehement ebullition of anger; and fury is an excess of rage.

Animadversion, Criticism, Stricture. Animadversion includes censure and reproof; criticism implies scrutiny and judgment, whether for or against; and stricture comprehends a partial investigation mingled with censure.

To Animate, Inspire, Enliven, Cheer, Exhilarate. To be animated in its physical sense is simply to receive the first spark of animal life in however small a degree; to be animated in the moral sense is to receive the smallest portion of the sentiment or thinking faculty; to inspire, expresses the communication of a strong moral sentiment or passion; to enliven respects the mind; cheer relates to the heart; exhilarate regards the spirits, both animal and mental.

To Announce, Proclaim, Publish. We announce an event that is expected and just at hand; we proclaim an event that requires to be known by all the parties interested; we publish what is supposed likely to interest all who know it.

Answer, Reply, Rejoinder, Response. An answer is given to a question; a reply is made to an assertion; a rejoinder is made to a reply; a response is made in accordance with the words of another. We answer either for the purpose of affirmation, information, or contradiction; we always reply, or rejoin, in order to explain or confute; responses are made by way of assent or confirmation.

Answerable, Responsible, Accountable, Amenable. Answerable and responsible convey the idea of a pledge given for the performance of some act, or the fulfillment of some engagement, a breach of which subjects the defaulter to loss, punishment, or disgrace; a person is accountable to his employer for the manner in which he has conducted any business intrusted to him; to be amenable is to be accountable as far as laws and regulations bind a person; one is amenable to the laws of society, or he is amenable to the rules of the house in which he is only an inmate.

To Apologize, Defend, Justify, Excuse, Plead. We apologize for an error by acknowledging ourselves guilty of it; we defend ourselves against a charge by proving its fallacy; we justify our conduct against any imputation by proving that it was blameless; we excuse ourselves from all blame by proving that we took no part in the transaction; excuse and plea are not grounded on any idea of innocence; a plea is frequently an idle or unfounded excuse, a frivolous attempt to lessen displeasure; we excuse ourselves for a neglect by alleging indisposition.

Apparel, Attire, Array. Apparel is the dress of every one; attire is the dress of the great; array is the dress of particular persons on particular occasions.

Apparent, Visible, Clear, Plain, Obvious, Evident, Manifest. That which is simply an object of sight is visible; that which presents itself to our view in any form, real or otherwise, is apparent; the stars themselves are visible to us; but their size is apparent; what is clear is to be seen in all its parts and in its proper colors; what is plain is seen by a plain understanding; what is obvious presents itself readily to the mind of every one; what is evident is seen forcibly, and leaves no hesitation on the mind; manifest is a greater degree of the evident; it strikes on the understanding and forces conviction.

Applause, Acclamation. These terms express a public demonstration; the former by means of a noise with the hands or feet; the latter by means of shouts and cries; the former being employed as a testimony of approbation; the latter as a sanction, or an indication of respect.

To Appoint, Order, Prescribe, Ordain. To appoint is either the act of an equal or superior; we appoint a meeting with any one at a given time and place; a king appoints his ministers. To order is the act of one invested with a partial authority; a master gives his orders to his servant. To prescribe is the act of one who is superior by virtue of his knowledge; a physician prescribes to his patient. To ordain is an act emanating from the highest authority; kings and councils ordain; but their ordinances must be conformable to what is ordained by the Divine Being.

To Apprehend, Conceive, Suppose, Imagine. To apprehend is simply to take an idea into the mind; thus we may apprehend any object that we hear or see; to conceive is to form an idea in the mind, as to conceive the idea of doing anything, to conceive a design. What one supposes may admit of a doubt, it is frequently only conjectural; what one imagines may be altogether improbable or impossible, and that which cannot be imagined may be too improbable to admit of being believed.

Approach, Access, Admittance. Approach signifies the coming near or toward an object, and consequently is an unfinished act, but access and admittance are finished acts; access is the coming to, that is, as close to an object as is needful; and admittance is the coming into any place, or into the presence or society of any person; an approach may be quick or slow; an access easy or difficult; an admittance free or exclusive.

To Approach, Approximate. To approach denotes simply the moving of an object toward another; but to approximate denotes the gradual moving of two objects toward each other.

To Argue, Evince, Prove. To argue is to serve as an indication amounting to probability; to evince denotes an indication so clear as to remove doubt; to prove marks an evidence so positive as to produce conviction.

Argument, Reason, Proof. An argument serves for defense; a reason for justification; a proof for conviction. Arguments are adduced in support of an hypothesis or proposition; reasons are assigned in matters of belief and practice; proofs are collected to ascertain a fact.

To Arise, or Rise, Mount, Ascend, Climb, Scale. Arise is used only in the sense of simply getting up, but rise is employed to express a continued motion upward; a person arises from his seat or his bed; a bird rises in the air; a person mounts a hill, and ascends a mountain; to climb is to rise step by step, by clinging to a certain body; to scale is to rise by an escalade, or species of ladder, employed in mounting the walls of fortified towns; trees and mountains are climbed; walls are scaled.

Arrogance, Presumption. Arrogance is the act of the great; presumption that of the little; the arrogant man takes upon himself to be above others; the presumptuous man strives to be on a level with those who are above him.

Art, Cunning, Deceit. Art implies a disposition of the mind to use circumvention or artificial means to attain an end; cunning marks the disposition to practice disguise in the prosecution of a plan; deceit leads to the practice of dissimulation and gross falsehood, for the sake of gratifying a desire.

Artist, Artisan, Artificer, Mechanic. The artist ranks higher than the artisan; the former requires intellectual refinement, the latter nothing but to know the common practice of art. The sculptor is an artist; the sign-painter is an artisan. Manufacturers are artificers. The mechanic is that species of artisan who

works at arts purely mechanical. A shoemaker is a mechanic.

To Ask, Inquire, Question, Interrogate. We perform all these actions in order to get information; but we ask for general purposes of convenience; we inquire from motives of curiosity; we question and interrogate from motives of discretion. Indifferent people ask of each other whatever they wish to know; learners inquire the reasons of things which are new to them; masters question their servants, or parents their children, when they wish to ascertain the real state of any case; magistrates interrogate criminals when they are brought before them.

To Assemble, Muster, Collect. Assemble is said of persons only; muster and collect of persons or things. To assemble is to bring together by a call or invitation; to muster is to bring together by an act of authority, or a particular effort, into one point of view at one time, and from one quarter; to collect is to bring together at different times, and from different quarters.

Assent, Consent, Approbation, Concurrence. Assent respects matters of judgment; consent respects matters of conduct. We assent to what we admit to be true; we consent to what we allow to be done. Approbation is a species of assent, concurrence of consent. To approve is not merely to assent to a thing as right, but to determine upon it positively to be so; concurrence is properly the consent of many. Assent is given by equals or inferiors; consent by superiors; approbation by equals or superiors; concurrence by equals.

Association, Society, Company, Partnership. Whenever we habitually or frequently meet together for some common object, it is an association. Whenever association is used in distinction from the others, it denotes that which is partial in its object and temporary in its duration. It is founded on unity of sentiment as well as unity of object; but it is mostly unorganized, and kept together only by the spirit which gives rise to it. A society requires nothing but unity of object, which is permanent in its nature; it is well organized, and commonly set on foot to promote the cause of humanity, literature, or religion. Companies are brought together for the purposes of interest, and are dissolved when that object ceases to exist; their duration depends on the contingencies of profit and loss. Partnerships are altogether of an individual and private nature. As they are without organization and system, they are more precarious than any other association. Their duration depends not only on the chances of trade, but the compatibility of individuals to co-operate in a close point of union.

To Assert, Maintain, Vindicate. We assert anything to be true; we maintain it by adducing proofs, facts, or arguments; we vindicate our own conduct or that of another when it is called in question.

Astronomy, Astrology. The astronomer studies the course and movement of the stars; the astrologer reasons on their influence.

Asylum, Refuge, Shelter, Retreat. An asylum is chosen by him who has no home; a refuge by him who is apprehensive of danger; the fatigues and toils of life make us seek a retreat.

To Atone for, Expiate. Both these terms express a satisfaction for an offense; but atone is general; expiate is particular. We may atone for a fault by any species of suffering; we expiate a crime only by suffering a legal punishment.

To Attack, Assail, Assault, Encounter, Onset, Charge. To attack is to make an approach in order to do some violence to the person; to assail or assault is to make a sudden and vehement attack; to encounter is to meet the attack of another. One assail by means of missile weapons; one assaults by direct personal violence; onset is employed for the commencement of the battle; charge for an attack from a particular quarter.

Attempt, Trial, Endeavor, Effort, Essay. To attempt is to set about a thing with a view of effecting it; to try is to set about a thing with a view of seeing the result; an endeavor is a continued attempt. An effort is to an attempt as a means to an end; it is the act of calling forth those powers which are required in an attempt. An essay is an imperfect attempt, or attempt to do something which cannot be done without difficulty. It is applied either to corporeal or intellectual matters.

To Attend, Harken, Listen. To attend is to have the mind engaged on what we hear; to harken and listen are to strive to hear. People attend when they are addressed; they harken to what is said by others; they listen to what passes between others.

Attentive, Careful. We are attentive in order to

understand and improve; we are careful to avoid mistakes. Attention respects matters of judgment; care relates to mechanical action; we listen attentively; we read or write carefully.

To Attract, Allure, Invite, Engage. That is attractive which draws the thoughts toward itself; that is alluring which awakens desire; that is inviting which offers persuasion; that is engaging which takes possession of the mind.

To Augur, Presage, Forebode, Betoken, Portend. Augur signifies either to serve or make use of as an augury; to forebode, and presage, is to form a conclusion in one's own mind; to betoken or portend is to serve as a sign. Persons or things augur; persons only forebode or presage; things only betoken or portend. Auguring is a calculation of some future event, in which the imagination seems to be as much concerned as the understanding; presaging is rather a conclusion or deduction of what may be from what is; it lies in the understanding more than in the imagination; foreboding lies altogether in the imagination. Things are said to betoken, which present natural signs; those are said to portend which present extraordinary or supernatural signs.

Auspicious, Propitious. Those things are auspicious which are casual, or only indicative of good; persons are propitious to the wishes of others who listen to their requests and contribute to their satisfaction.

Austere, Rigid, Severe, Rigorous, Stern. The austere man mortifies himself; the rigid man binds himself to a rule; the manners of a man are austere when he refuses to take part in any social enjoyments; his probity is rigid, that is, inaccessible to the allurements of gain, or the urgency of necessity. Severe is used with reference to conduct; he is severe in the restraints he imposes, and the punishments he inflicts; rigor is a species of great severity, namely, in the infliction of punishment. Sternness is a species of severity more in manner than in direct action; a commander may issue his commands sternly, or a despot may issue his stern decrees.

Avaricious, Miserly, Parsimonious, Niggardly. An avaricious man shows his love of money in his ordinary dealings; but the miser lives upon it, and suffers every privation rather than part with it. The avaricious man indulges his passion for money by parsimony, that is, by saving out of himself, or by niggardly ways in his dealings with others.

To Awaken, Excite, Provoke, Rouse, Stir Up. We awaken by a simple effort; we excite by repeated efforts or forcible means; we provoke by words, looks, or actions. The tender feelings are awakened; affections, or the passions in general, are excited; the angry passions are commonly provoked; we are roused from an extraordinary state by extraordinary means; we are stirred up from an ordinary to an extraordinary state.

Awe, Reverence, Dread. Awe and reverence both denote a strong sentiment of respect, mingled with some emotions of fear; but the former marks the much stronger sentiment of the two; dread is an unmingled sentiment of fear for one's personal security.

Awkward, Clumsy, Crooked, Perverted, Untoward, Cross. Awkward respects outward deportment; clumsy the shape and make of the object; a person has an awkward gait; is clumsy in his whole person; what is crooked springs from a perverted judgment; what is untoward is independent of human control; crossness is a partial irritation resulting from the state of the humors, physical and mental.

Axiom, Maxim, Aphorism, Apophthegm, Saying, Adage, Proverb, By-word, Saw. The axiom is a truth of the first value; a self-evident proposition which is the basis of other truths. A maxim is a truth of the first moral importance for all practical purposes; an aphorism is a truth set apart for its pointedness and excellence; apophthegm is, in respect to the ancients, what saying is in regard to the moderns; it is a pointed sentiment pronounced by an individual, and adopted by others; adage and proverb are vulgar sayings, the former among the ancients, the latter among the moderns; the by-word is a casual saying, originating in some local circumstance; the saw, which is a barbarous corruption of saying, is the saying formerly current among the ignorant.

To Babble, Chatter, Chat, Prattle, Prate. Babbling denotes rapidity of speech, which renders it unintelligible; chatter is an imitation of the noise of speech properly applied to magpies or parrots, and figuratively to a corresponding vicious mode of speech in human beings; the winter's fireside invites neighbors to assemble and chat away many an hour which might otherwise hang heavy on hand, or be spent less inoffensively; the prattling of babes has an interest for every feeling mind, but for parents it is one of their highest enjoyments;

prating, on the contrary, is the consequence of ignorance and childish assumption; a prattler has all the unaffected gaiety of an uncontaminated mind; a prater is forward, obtrusive, and ridiculous.

Badly, Ill. These terms are both employed to modify the actions or qualities of things, but badly is always annexed to the action, and ill to the quality; as to do anything badly, the thing is badly done, an ill-judged scheme, an ill-contrived measure, an ill-disposed person.

Band, Company, Crew, Gang. All these terms denote a small association for a particular object; a band is an association where men are bound together by some strong obligation, whether taken in a good or bad sense, as a band of soldiers, a band of robbers; a company marks an association for convenience, without any particular obligation, as a company of travelers, a company of strolling players; crew marks an association collected together by some external power, or by coincidence of plan and motive; in the former case it is used for a ship's crew, in the latter and bad sense of the word it is employed for any number of evil-minded persons met together from different quarters, and co-operating for some bad purpose; gang is used in a bad sense for an association of thieves, murderers, and depredators in general, or in a technical sense for those who work together.

To Banish, Exile, Expel. Banishment follows from a decree of justice; exile either by the necessity of circumstances or an order of authority; banishment is a disgraceful punishment inflicted by tribunals upon delinquents; exile is a disgrace incurred without dishonor; exile removes us from our country; banishment drives us from it ignominiously.

Bare, Scanty, Destitute. Bare respects what serves for ourselves; scanty that which is provided by others. A subsistence is bare; a supply is scanty; destitute is said generally of whatever one wants. One is destitute of friends, of resources, or of comforts.

To Be, Exist, Subsist. We say of qualities, of forms, of actions, of arrangement, of movement, and of every different relation, whether real, ideal, or qualitative, that they are; we say of matter, of spirit, of body, and of all substances, that they exist. Man is man, and will be man under all circumstances and changes of life; he exists under every known climate and variety of heat or cold in the atmosphere. Everything which subsists depends for its existence upon the chances and changes of life.

To Be, Become, Grow. Be is positive; become is relative; a person is what he is without regard to what he was; he becomes that which he was not before; to grow is to become by a gradual process; a man may become a good man from a vicious one, in consequence of a sudden action on his mind; but he grows in wisdom and virtue by means of an increase in knowledge and experience.

To Bear, Yield. Bear conveys the idea of creating within itself; yield, that of giving from itself. Animals bear their young; inanimate objects yield their produce.

To Beat, Defeat, Overpower, Rout, Overthrow. A general is beaten in important engagements; he is defeated and may be routed in partial attacks; he is overpowered by numbers, and overthrown in set engagements.

Beautiful, Fine, Handsome, Pretty. When taken in relation to persons, a woman is beautiful who, in feature and complexion, possesses a grand assemblage of graces; a woman is fine who, with a striking figure, unites shape and symmetry; a woman is handsome who has good features; and pretty if with symmetry of feature be united delicacy. Beautiful, fine, and pretty are applied indifferently to works of nature and art; handsome mostly to those of art only; a beautiful picture, a fine drawing, a pretty cap, and handsome furniture.

Becoming, Comely, Graceful. Becoming respects the decorations of the person, and the exterior deportment; comely respects natural embellishments; graceful, natural or artificial accomplishments; manner is becoming; figure is comely; air, figure or attitude is graceful.

To Beg, Desire. To beg marks the wish; to desire, the will and determination. Beg is the act of an inferior, or one in a subordinate condition; desire is the act of a superior; we beg a thing as a favor; we desire it as a right.

To Beg, Beseech, Solicit, Entreat, Supplicate, Implore, Crave. To beg denotes a state of want; to beseech, entreat, and solicit, a state of urgent necessity; supplicate, and implore, a state of abject distress; crave, the lowest state of physical want. One begs with importunity; beseeches with earnestness; entreats by the force of reasoning and strong representation; one solicits by virtue of one's interest; supplicates by an humble

address; implores by every mark of dejection and humiliation.

To Begin, Commence, Enter Upon. To begin respects the order of time; to commence, the exertion of setting about a thing. Begin is opposed to end; commence to complete; a person begins a thing with a view of ending it; he commences a thing with a view of completing it; to enter upon denotes that of first doing what has not been tried before.

Belief, Credit, Trust, Faith. Belief and credit are particular actions or sentiments; trust and faith are permanent dispositions of the mind. Things are entitled to our belief; persons are entitled to our credit; but people repose a trust in others; or have a faith in others. Belief is purely speculative; and trust and faith are operative: the former operates on the mind; the latter on the outward conduct. Trust in God serves to dispel all anxious concern about the future.

Benevolent, Bountiful or Bounteous, Munificent, Generous, Liberal. The sincere well-wisher to fellow-creatures is benevolent according to his means; he is bountiful in providing for the comfort and happiness of others; he is munificent in dispensing favors; he is generous in imparting his property; he is liberal in all he does. Benevolence and bounty are characteristics of the Deity as well as of his creatures.

Benevolence, Benignity, Humanity, Kindness, Tenderness. Benevolence lies in the will; benignity in the disposition or frame of mind; humanity lies in the heart; kindness and tenderness in the affections; benevolence indicates a general good-will to all mankind; benignity, particular goodness or kindness of disposition; humanity is a general tone of feeling; kindness and tenderness are particular modes of feeling.

To Bereave, Deprive, Strip. To bereave expresses more than deprive, but less than strip, which denotes a total and violent bereavement; one is bereaved of children, deprived of pleasures, and stripped of property; we are bereaved of that on which we set most value; the act of bereaving does violence to our inclination: we are deprived of the ordinary comforts and conveniences of life; they cease to be ours; we are stripped of the things which we most want; we are thereby rendered, as it were, naked.

Besides, Except. Besides (v. moreover), which is here taken as a preposition, expresses the idea of addition; except expresses that of exclusion. There were many there besides ourselves; no one except ourselves will be admitted.

Bishopric, Diocese. Both these words describe the extent of an episcopal jurisdiction; the first with relation to the person who officiates, the second with relation to the charge. There may, therefore, be a bishopric either where there are many dioceses or no diocese; but according to the import of the term, there is properly no diocese where there is no bishopric.

To Blame, Censure, Condemn, Reprove, Reproach, Upbraid. To blame is simply to ascribe a fault to; to censure is to express disapprobation: the former is less personal than the latter. The thing more than the person is blamed; the person more than the thing is censured. A person may be blamed for his good nature, and censured for his negligence; that which is condemned is of a more serious nature, and produces a stronger and more unfavorable expression of displeasure or disapprobation, than that which is blamed; reprove is even more personal than censure. A reproof passes from one individual to another, or to a certain number of individuals; reproaching and upbraiding are as much the acts of individuals as reproof, but the former denote the expression of personal feelings, and may be just or unjust; the latter is presumed to be divested of all personal feelings.

Blemish, Stain, Spot, Speck, Flaw, Defect, Fault. Whatever takes off from the seamliness of appearance is a blemish. In works of art the slightest dimness of color, or want of proportion, is a blemish. A stain or spot sufficiently characterizes itself, as that which is superfluous and out of its place; a speck is a small spot; and a flaw, which is confined to hard substances, mostly consists of a faulty induration on the outer surface. A blemish tarnishes; a stain spoils; a spot, speck, or flaw disfigures; defect consists in the want of some specific propriety in an object; fault conveys the idea not only of something wrong, but also of its relation to the author. There is a blemish in fine china; a defect in the springs of a clock; and a fault in the contrivance.

To Blot Out, Expunge, Rase or Erase, Efface, Cancel, Obliterate. Letters are blotted out, so that they cannot be seen again; they are expunged, so as to signify that they cannot stand for anything; they are erased, so that the space may be reoccupied with writing; efface does not designate either the manner or the object:

inscriptions on stone may be effaced, which are rubbed off so as not to be visible; cancel is principally confined to written or printed characters; they are cancelled by striking through them with the pen; letters are obliterated which are in any way made illegible.

Bold, Fearless, Intrepid, Undaunted. Boldness is a positive characteristic of the spirit; fearlessness is a negative state of the mind, that is, simply an absence of fear. A person may be bold through fearlessness, but he may be fearless without being bold; he may be fearless where there is no apprehension of danger or no cause for apprehension, but he is bold only when he is conscious or apprehensive of danger, and prepared to encounter it. A man is intrepid who has no fear where the most fearless might tremble; he is undaunted whose spirit is unabated by that which would make the stoutest heart yield.

Booty, Spoil, Prey. Booty and spoil are used as military terms in attacks on an enemy, prey in cases of particular violence. The soldier gets his booty; the combatant his spoils; the carnivorous animal his prey. Booty respects what is of personal service to the captor; spoils whatever serves to designate his triumph; prey includes whatever gratifies the appetite and is to be consumed.

To Bound, Limit, Confine, Circumscribe, Restrict. Bound applies to the natural or political divisions of the earth: countries are bounded by mountains and seas; limit applies to any artificial boundary: as landmarks in fields serve to show the limits of one man's ground from another. To confine is to bring the limits close together; to part off one space absolutely from another: in this manner we confine a garden by means of walls. To circumscribe is literally to surround; in this manner a circle may circumscribe a square; to restrict is to exercise a strong degree of control; a person is restricted by his physician to a certain portion of food in a day.

Boundless, Unbounded, Unlimited, Infinite. The ocean is a boundless object so long as no bounds to it have been discovered; desires are often unbounded which ought always to be bounded; power is sometimes unlimited which would be better limited; nothing is infinite but that Being from whom all finite beings proceed.

Brave, Gallant. Gallantry is extraordinary bravery or bravery on extraordinary occasions: the brave man goes willingly where he is commanded; the gallant man leads on with vigor to the attack. Bravery is common to vast numbers and whole nations; gallantry is peculiar to individuals or particular bodies.

Bravery, Courage, Valor. Bravery lies in the blood; courage lies in the mind; the latter depends on the reason, the former on the physical temperament: the first is a species of instinct; the second is a virtue: a man is brave in proportion as he is without thought; he has courage in proportion as he reasons or reflects. Valor is a higher quality than either bravery or courage, and seems to partake of the grand characteristics of both; it combines the fire of bravery with the determination and firmness of courage.

Breach, Break, Gap, Chasm. A breach and a gap are the consequence of a violent removal, which destroys the connection; a break and a chasm may arise from the absence of that which would form a connection. A breach in a wall is made by means of cannon; gaps in fences are commonly the effect of some violent effort to pass through; a break is made in a page of printing by leaving off in the middle of a line; a chasm is left in writing when any words in the sentence are omitted.

To Break, Bruise, Squeeze, Pound, Crush. Break always implies the separation of the component parts of a body; bruise denotes simply the destroying the continuity of the parts. Hard brittle substances, as glass, are broken; soft pulpy substances, as flesh or fruits, are bruised; squeeze is used for soft substances or a gentle compression. To pound is properly to bruise in a mortar, so as to produce a separation of parts; to crush is the most violent and destructive of all operations, which amounts to the total dispersion of all the parts of a body.

To Break, Burst, Crack, Split. To break does not specify any particular manner or form of action; what is broken may be broken in two or more pieces, broken short or lengthwise, and the like: to burst is to break suddenly and with violence, frequently also with noise. To crack and split are modes of breaking lengthwise: the former in application to hard or brittle objects, as clay, or the things made of clay; the latter in application to wood, or that which is made of wood.

Breeze, Gale, Blast, Gust, Storm, Tempest, Hurricane. A breeze is gentle; a gale is brisk, but steady: we have breezes in a calm summer's day; the

mariner has favorable gales, which keep the sails on the stretch. A blast is impetuous; the exhalations of a trumpet, the breath of bellows, are blasts. A gust is sudden and vehement; storm, tempest, and hurricane include other particulars besides wind. A storm throws the whole atmosphere into commotion; it is a war of the elements, in which wind, rain, hail, and the like, conspire to disturb the heavens. Tempest is a species of storm which has also thunder and lightning to add to the confusion. Hurricane is a species of storm which exceeds all the rest in violence and duration.

Brightness, Luster, Splendor, Brilliance. Brightness and luster are applied properly to natural lights; splendor and brilliance have been more commonly applied to that which is artificial or unusual; there is always more or less brightness in the sun or moon; there is an occasional luster in all the heavenly bodies when they shine in their unclouded brightness; there is splendor in the eruptions of flame from a volcano or an immense conflagration; there is brilliancy in a collection of diamonds.

To Bring, Fetch, Carry. To bring is simply to take with one's self from the place where one is; to fetch is to go first to a place and then bring a thing; to fetch, therefore, is a species of bringing; whatever is near at hand is brought; whatever is at a distance must be fetched; to carry respects always a motion directly from the place or at a distance from the place; he carries a parcel from home.

Bulky, Massive. Whatever is bulky has a prominence of figure; what is massive has compactness of matter.

Burial, Interment, Sepulture. We bury in order to conceal; interment and sepulture are accompanied with religious ceremonies. Bury is confined to no object or place; interment may be used when a body is deposited in a vault; sepulture is an abstract term confined to particular cases, as in speaking of the rites and privileges of sepulture.

Business, Occupation, Employment, Engagement, Avocation, Vocation. Business occupies all a person's thoughts as well as his time and powers; occupation and employment occupy only his time and strength: the first is mostly regular, it is the object of our choice; the second is casual, it depends on the will of another. Engagement is a partial employment, avocation a particular engagement; vocation is applied to one's regular work; and avocation to the occupation or pleasures that call one away from the regular routine of work.

Business, Trade, Profession, Art. Buying and selling of merchandise is inseparable from trade; but the exercise of one's knowledge and experience for purposes of gain constitutes a business; when learning or particular skill is required, it is a profession; and when there is a peculiar exercise of art, it is an art.

Bustle, Tumult, Uproar. Bustle has most of hurry in it; tumult most of disorder and confusion; uproar most of noise: the hurried movements of one, or many, cause a bustle; the disorderly struggles of many constitute a tumult; the loud elevation of many opposing voices produces an uproar; uproar is the consequence either of general anger or mirth.

To Buy, Purchase, Bargain, Cheapen. Buy may always be substituted for purchase without impropriety; but purchase would be sometimes ridiculous in the familiar application of buy: the necessities of life are bought; luxuries are purchased; to cheapen is not only to lower the price asked, but to deal in such things as are cheap.

Calamity, Disaster, Misfortune, Mischance, Mishap. A calamity is a great disaster or misfortune; a misfortune a great mischance or mishap; whatever is attended with destruction is a calamity; whatever occasions mischief to the person, defeats or interrupts plans, is a disaster; whatever is accompanied with a loss of property, or the deprivation of health, is a misfortune; whatever diminishes the beauty or utility of objects is a mischance or mishap.

To Calculate, Reckon, Compute, Count. To calculate denotes any numerical operation in general, but is particularly applicable to the abstract science of figures; the astronomer calculates the motions of the heavenly bodies; the mathematician makes algebraic calculations; to reckon is to enumerate and set down things in detail; reckoning is applicable to the ordinary business of life; tradesmen keep their accounts by reckoning; children learn to reckon by various simple processes. Calculation is therefore the science, reckoning the practical art of enumerating. To compute is to come at the result by calculation; we count one by one; we count the minutes.

Calendar, Almanac, Ephemeris. The calendar

is a book which registers events under every month; the almanac is a book which registers times, or the divisions of the year; and an ephemeris is a book which registers the planetary movements every day.

To Call, Cry, Exclaim. Call is used on all ordinary occasions in order to draw a person to a spot, or for any other purpose, when one wishes to be heard; to cry is to call loudly on particular occasions; a call draws attention; a cry awakens alarm. To exclaim is the expression of some particular feeling.

To Call, Invite, Bid, Summon. In the act of calling, any sounds may be used; we may call by simply raising the voice: inviting may be a direct or indirect act; we may invite by looks or signs as well as by words, by writing as well as by speaking. To bid and summon require the express use of words; the former is always directly addressed to the person, the latter may be conveyed by an indirect channel. To summon is an act of authority, as to summon witnesses.

Calm, Composed, Collected. These terms agree in expressing a state; but calm respects the state of the feelings, composed the state of the thoughts and feelings, and collected the state of the thoughts more particularly. Calmness is peculiarly requisite in seasons of distress, and amidst scenes of horror; composure, in moments of trial, disorder, and tumult; collectedness in moments of danger.

Calm, Placid, Serene. Calm and serene are applied to the elements; placid only to the mind. Calmness respects only the state of the winds, serenity that of the air and heavens; the weather is calm when it is free from agitation: it is serene when free from noise and vapor. Calm respects the total absence of all perturbation; placid the ease and contentment of the mind; serene, clearness and composure of the mind. We speak of calm state of mind, and of a serene temper.

Can, May. Can denotes possibility, may liberty and probability; he who has sound limbs can walk; but he may not walk in places which are prohibited.

Candid, Open, Sincere. Candor obliges us to acknowledge even that which may make against ourselves; it is disinterested: openness impels us to utter whatever passes in the mind; it is unguarded; sincerity prevents us from speaking what we do not think; it is positive.

Capacity, Capaciousness. Capacity is an indefinite term designating the property of being fit to hold or receive, as applied to bodies generally; but capaciousness denotes a fullness of this property as belonging to a particular object in a great degree. Measuring the capacity of vessels belongs to the science of mensuration: the capaciousness of a room is to be observed by the eye.

Captious, Cross, Peevish, Petulant, Fretful. Captious marks a readiness to be offended; cross indicates a readiness to offend or come across the wishes of others; peevish expresses a strong degree of crossness; fretful a complaining impatience; petulant a quick or sudden impatience. Captiousness is the consequence of misplaced pride; crossness of ill-humor; peevishness and fretfulness of a painful irritability; petulance is either the result of a naturally hasty temper or of a sudden irritability.

Capture, Seizure, Prize. A capture is made by force of arms; a seizure by direct and personal force; prize relates only to the thing taken, and its value to the captor.

Care, Solitude, Anxiety. Care is the most indefinite of the three; it may be accompanied with pain or not, according to the nature of the object or the intensity of the application: solitude and anxiety are accompanied with a positive degree of pain, the latter still more than the former. Care may be exercised with or without feeling; solitude has desire, mixed with fear; anxiety has distress for the present, mixed with fear for the future.

Care, Charge, Management. Care will include both charge and management; but, in the strict sense, it comprehends personal labor: charge involves responsibility; management includes regulation and order. A gardener has the care of a garden; a nurse has the charge of children; a steward has the management of a farm.

Careful, Cautious, Provident. Careful, or full of care, that is, having care, is the general term; to be cautious is to be careful in guarding against danger; to be provident is to be careful in preventing straits and difficulties. The term careful is applied for the most part to present matters, but provident only to that which is future. One is careful of his money, but provident toward a time of need.

Carnage, Slaughter, Massacre, Butchery. Carnage respects the number of dead bodies made; it is the consequence of any impetuous attack from a power-

ful enemy; slaughter respects the act of taking away life, and the circumstances of the agent; massacre and butchery respect the circumstances of the objects who are the sufferers of the action; the latter three are said of human beings only; defenseless women and children are commonly butchered by the savage furies who are most active in this work of blood.

Carriage, Gait, Walk. Carriage is here the most general term; it respects the manner of carrying the body, whether in a state of motion or rest; gait is the mode of carrying the limbs and body whenever we move; walk is the manner of carrying the body when we move forward to walk.

Case, Cause. The case is matter of fact; the cause is matter of question; a case involves circumstances and consequences; a cause involves reasons and arguments; a case is something to be learned; a cause is something to be decided.

Cast, Turn, Description. Cast, as applicable to persons, respects that which they are made by circumstances; turn that which they are by themselves: thus there are religious casts in India, that is, men cast in a certain form of religion; and men of a particular moral cast, that is, such as are cast in a particular mold as respects their thinking and acting: so in like manner men of a particular turn; that is, as respects their inclinations and tastes; the description is that by which a man is described or made known to others.

Cause, Reason, Motive. Cause respects the order and connection of things; reason the movements and operations of the mind; motives the movements of the mind and body. Cause is said of all inanimate objects; reason and motive of rational agents; whatever happens in the world happens from some cause mediate or immediate; the primary or first cause of all is God: whatever opinions men hold, they ought to be able to assign a substantial reason for them; and for whatever they do, they ought to have a sufficient motive. As the cause gives birth to the effect, so does the reason give birth to the conclusion, and the motive gives birth to the action.

To Cause, Occasion, Create. What is caused seems to follow naturally; what is occasioned follows incidentally, or what occasions may be incidental, but necessary; what is created receives its existence arbitrarily. A wound causes pain; accidents occasion delay; busy bodies create mischief.

Cautious, Wary, Circumspect. We must be cautious on all occasions where there is danger, but we must be wary where there is great danger. A tradesman must be cautious in his dealings with all men, but he must be wary when he has to deal with designing men; circumspect is used in reference to matters of theory or contemplation, when the mind is principally employed; a man must be circumspect when he transacts business of particular importance and delicacy.

To Cease, Leave Off, Discontinue. Cease is used either for particular actions or general habits; leave off more usually and properly for particular actions; discontinue for general habits. A restless spoiled child never ceases crying until it has obtained what it wants; it is a mark of impatience not to cease lamenting when one is in pain. A laborer leaves off his work at any given hour. A delicate person discontinues his visits when they are found not to be agreeable.

To Celebrate, Commemorate. Everything is celebrated which is distinguished by any marks of attention, without regard to the time of the event, whether present or past; but nothing is commemorated but what has been past.

Celestial, Heavenly. Celestial is applied mostly in the natural sense of the heavens; heavenly is employed more commonly in a spiritual sense. Hence, we speak of the celestial globe as distinguished from the terrestrial; and of the celestial bodies. But, on the other hand, of the heavenly habitation, of heavenly joys or bliss, of heavenly spirits, and the like.

To Censure, Carp, Cavil. To censure respects positive errors; to carp and cavil have regard to what is trivial or imaginary: the former is employed for errors in persons; the latter for supposed defects in things. Carping and caviling are resorted to only to indulge ill-nature or self-conceit: party politicians carp at the measures of administration; infidels cavil at the evidences of Christianity, because they are determined to disbelieve.

Certain, Sure, Secure. Certain and sure have regard to a person's convictions; secure to his interests or condition: one is certain from actual knowledge or from a belief in others; one is sure from a reliance upon others; one is secure when free from danger. We can be certain of nothing future but death; we may be sure that God will fulfill His promises in His own way; we may be

secure against any loss or mischief if we use proper precautions.

Cessation, Stop, Rest, Intermission. To cease respects the course of things; whatever does not go on has ceased; things cease of themselves: stop respects some external action or influence; nothing stops but what is supposed to be stopped or hindered by another; rest is a species of cessation that regards labor or exertion; whatever does not move or exert itself is at rest: intermission is a species of cessation only for a time or at certain intervals. That which ceases or stops is supposed to be at an end; rest or intermission supposes a renewal.

Chance, Fortune, Fate. Chance applies to all things, personal or otherwise; fortune and fate are mostly said of that which is personal. Chance neither forms, orders, nor designs; neither knowledge nor intention is attributed to it; its events are uncertain and variable: fortune forms plans and designs, but without choice; we attribute to it an intention without discernment; it is said to be blind: fate forms plans and chains of causes; intention, knowledge, and power are attributed to it; its views are fixed, its results decisive.

Chance, Hazard. Both these terms are employed to mark the course of future events, which is not discernible by the human eye. With the Deity there is neither chance nor hazard: His plans are the result of omniscience: but the designs and actions of men are all dependent on chance or hazard. Chance may be favorable or unfavorable, more commonly the former: hazard is always unfavorable; it is properly a species of chance.

To Change, Exchange, Barter, Substitute. To change in respect to persons is to take one for another, without regard to whether they are alike or different, as a king changes his ministers; any person may change his servants: to exchange is to take one person in return for another who is in like condition, as prisoners are exchanged in time of war. In respect to things, to change is to take anything new or fresh, whether alike or different. Clothes may be changed; to exchange is to take one thing for another, that is, either of the same kind or equivalent in value, as to exchange one commodity for another. To change may often be the result of caprice, but to exchange is always an act either of discretion or necessity. To barter is the giving of any commodity for other commodities. To substitute is to put one person in the place of another for the purpose of doing any service or filling any office, as to substitute one for another who has been drawn for the militia.

Change, Variation, Vicissitude. Change consists simply in ceasing to be the same: variation consists in being different at different times; vicissitude in being alternately or reciprocally different and the same.

Character, Letter. Character is any written or printed mark that serves to designate something; a letter is a species of character which is the constituent part of a word.

Character, Reputation. Character lies in the man; it is the mark of what he is: it shows itself on all occasions: reputation depends upon others; it is what they think of him.

To Chasten, To Chastise. Chasten has most regard to the end, chastise to the means; the former is an act of the Deity, the latter a human action: God chastens His faithful people, to cleanse them from their transgressions; parents chastise their children, to prevent the repetition of faults.

To Cheat, Defraud, Trick. One cheats by direct and gross falsehood or artifice; one defrauds by a settled plan or contrivance; one tricks by a sudden invention.

To Check, Chide, Reprimand, Reprove, Rebuke. A person is checked that he may not continue to do what is offensive; he is chidden for what he has done, that he may not repeat it. People are checked by actions and looks, as well as words; they are chidden by words only: a person may chide or reprimand in anger, he reprove and rebukes with coolness: great offenses call forth chidings; omissions or mistakes occasion or require a reprimand: irregularities of conduct give rise to reproof; and improprieties of behavior demand rebuke.

To Check, Stop. Check signifies to impede the course of a body in motion, that is, to cause it to move slowly; to stop (v. cessation), is to cause it not to move at all.

To Cheer, Encourage, Comfort. To cheer regards the spirits; to encourage the resolution: the sad require to be cheered; the timid to be encouraged. To cheer and comfort have both regard to the spirits, but the latter differs in degree and manner: to cheer expresses more than to comfort; the former signifying to produce a lively sentiment, the latter to lessen or remove a painful one: we are cheered in the moments of dependency, whether from real or imaginary causes; we are comforted in the hour of distress.

Chief, Principal, Main. Chief respects order and rank; principal has regard to importance and respectability; main to degree or quantity. We speak of a chief clerk; a commander-in-chief; the chief person in a city; but the principal people in a city; the principal circumstances in a narrative, and the main object.

Chief, Leader, Chieftain, Head. Chief respects precedence in civil matters; leader regards the direction of enterprises: chieftain is a species of leader; and head is the superior in general concerns.

To Choose, Prefer. To choose is to take one thing from among others; to prefer is to take one thing before or rather than another.

To Choose, Pick, Select. We may choose whatever comes in our way without regard to the number of the objects to be chosen from, but we pick or select out of a number only; as to pick or select books from a library: we may pick one or many out of a number, but we mostly select a number. We select with even greater care than we pick.

Circuit, Tour, Round. A circuit is made for a specific end of a serious kind; a tour is always made for pleasure; a round, like a circuit, is employed in matters of business, but of a more familiar and ordinary kind.

To Circumscribe, Inclose. The extent of any place is drawn out to the eye by a circumscription; its extent is limited to a given point by an inclosure. A garden is circumscribed by any ditch, line, or posts, that serve as its boundaries; it is inclosed by wall or fence.

Circumstance, Situation. Circumstance is to situation as a part to a whole; many circumstances constitute a situation: a situation is an aggregate of circumstances. A person is said to be in circumstances of affluence who has an abundance of everything essential for his comfort; he is in an easy situation when nothing exists to create uneasiness.

Circumstance, Incident, Fact. Incident is what happens; fact is what is done; circumstance is not only what happens and is done, but whatever is or belongs to a thing. To everything are annexed circumstances, either of time, place, age, color, or other collateral appendages, which change its nature. Everything that moves and operates is exposed to incidents; effects are produced, results follow, and changes are brought about; these are incidents: whatever moves and operates, does, and what it produces is done or is the fact.

Circumstantial, Particular, Minute. Circumstantial expresses less than particular, and that less than minute. A circumstantial account contains all leading events; a particular account includes every event and movement, however trivial; a minute account omits nothing as to person, time, place, figure, form, and every other trivial circumstance connected with the events.

To Cite, Quote. To cite is employed for persons or things; to quote for things only; authors are cited, passages from their works are quoted: we cite only by authority; we quote for general purposes of convenience.

Civil, Polite. These two epithets are employed to denote different modes of acting in social intercourse; polite expresses more than civil; it is possible to be civil without being polite. Civility is contented with pleasing when the occasion offers; politeness seeks the opportunity to please; it prevents the necessity of asking by anticipating the wishes; it is full of delicate attentions, and is an active benevolence in the minor concerns of life.

Civil, Obliging, Complaisant. Civil applies to words or manner as well as to the action; obliging to the action only. As civil is indefinite in its meaning, so it is indiscriminate in its application; obliging, on the other hand, is confined to what passes between particular persons or under particular circumstances. Civil and obliging both imply a desire to do a kindness; complaisant signifies the desire of receiving pleasure, which is a refined mode of doing a kindness.

Clandestine, Secret. To do a thing clandestinely is to elude observation; to do a thing secretly is to do it without the knowledge of any one: what is clandestine is unallowed, which is not necessarily the case with what is secret.

To Clasp, Hug, Embrace. To clasp makes the act of enclosing another in one's arms when it is performed with the warmth of true affection; hug is a ludicrous sort of clasping, which is the consequence of ignorance or extravagant feeling; embrace is simply a mode of ordinary salutation.

To Class, Arrange, Range. The general qualities and attributes of things are to be considered in classing; their fitness to stand by each other must be considered in arranging; their capacity for forming a line is the only thing to be attended to in ranging. Classification serves the purposes either of public policy or science; arranging

is a matter of convenience to the individual himself; ranging is a matter of convenience for others.

Clean, Cleanly, Pure. Clean expresses a freedom from dirt or soil; cleanly the disposition or habit of being clean. A person who keeps himself clean is cleanly. Pure is used in a moral sense; the heart should be pure.

Clear, Lucid, Bright, Vivid. A mere freedom from stain or dullness constitutes the clearness; the return of light, and consequent removal of darkness, constitutes lucidity; brightness supposes a certain strength of light; vividness a freshness combined with the strength, and even a degree of brilliancy.

Clearly, Distinctly. That is seen clearly of which one has a clear view independent of anything else; that is seen distinctly which is seen so as to distinguish it from other objects. We see the moon clearly whenever it shines; but we cannot see the spots in the moon distinctly without the help of glasses.

Clearness, Perspicuity. These epithets denote qualities equally requisite to render a discourse intelligible. Clearness respects our ideas, and springs from the distinction of the things themselves that are discussed; perspicuity respects the mode of expressing the ideas, and springs from the good qualities of style.

Clever, Skillful, Expert, Dexterous, Adroit. Cleverness is mental power employed in the ordinary concerns of life: a person is clever in business. Skill is both a mental and corporeal power, exerted in mechanical operations and practical sciences: a physician, a lawyer, and an artist, is skillful: one may have a skill in divination, or a skill in painting. Expertness and dexterity require more corporeal than mental power exerted in minor arts and amusements: one is expert at throwing the quoit; dexterous in the management of horses.

Cloister, Convent, Monastery. The proper idea of cloister is that of seclusion; the proper idea of convent is that of community; the proper idea of a monastery is that of solitude. One is shut up in a cloister, put into a convent, and retires to a monastery. Whoever wishes to take an absolute leave of the world shuts himself up in a cloister; whoever wishes to attach himself to a community that has renounced all commerce with the world goes into a convent; whoever wishes to shun all human intercourse retires to a monastery. In the cloister our liberty is sacrificed; in the convent our worldly habits are renounced, and those of a regular religious community being adopted, we submit to the yoke of established orders: in a monastery we impose a sort of voluntary exile upon ourselves; we live with the view of living only to God.

Close, Near, Nigh. Close is more definite than near, houses stand close to each other which are almost joined; men stand close when they touch each other; objects are near which are within sight; persons are near each other when they can converse together. Near and nigh, which are but variations of each other in etymology, admit of little or no difference in their use.

To Close, Shut. To close signifies simply to put close together; shut to stop or prevent admittance; closing is therefore a partial shutting, and shutting a complete closing.

To Close, Conclude, Finish. We may close at any point by simply ceasing to have any more to do with it; but we conclude in a definite and positive manner. To conclude is to bring to an end by determination; to finish is to bring to an end by completion: what is settled by arrangement and deliberation is properly concluded; what is begun on a certain plan is said to be finished.

Coarse, Rough, Rude. In the proper sense coarse refers to the composition and materials of bodies, as coarse bread, coarse meat, coarse cloth; rough respects the surface of bodies, as rough wood and rough skin; rude respects the make or fashion of things, as a rude bark, a rude utensil. Coarse is opposed to fine, rough to smooth, rude to polished.

Cogent, Forceful, Strong. Cogency applies to reasons individually considered: force and strength to modes of reasoning or expression: cogent reasons impel to decisive conduct; strong conviction is produced by forcible reasoning conveyed in strong language.

Colleague, Partner. Colleague is more noble than partner: men in the highest offices are colleagues; tradesmen, mechanics, and subordinate persons, are partners: every Roman Consul had a colleague; every workman has commonly a partner. Colleague is used for community of office; partner for community of interest.

Colorable, Specious, Ostensible, Plausible, Feasible. The first three of these words are figures of speech drawn from what naturally pleases the eye; plausible is drawn from what pleases the ear; feasible takes its significance from what meets the judgment or conviction. What is colorable has an aspect or face upon it that lulls

suspicion and affords satisfaction; what is specious has a fair outside when contrasted with that which it may possibly conceal; what is ostensible is that which presents such an appearance as may serve for an indication of something real.

To Combat, Oppose. A person's positions are combated, his interests or his measures are opposed.

To Come, Arrive. Persons or things come; persons only, or what is personified, arrive. To come specifies neither time nor manner: arrival is employed with regard to some particular period or circumstances.

Comfort, Pleasure. The grand feature in comfort is substantiality; in that of pleasure is warmth. Pleasure is quickly succeeded by pain; it is the lot of humanity that to every pleasure there should be an alloy: comfort is that portion of pleasure which seems to lie exempt from this disadvantage; it is the most durable sort of pleasure. Comfort must be sought for at home; pleasure is pursued abroad.

Command, Order, Injunction, Precept. A command is an exercise of power or authority; it is imperative and must be obeyed: an order serves to direct; it is instructive and must be executed. A sovereign issues his commands: orders may be given by a subordinate or by a body; as orders of a court. Order is applied to the common concerns of life; injunction and precept to the moral conduct or duties of men. Injunction imposes a duty by virtue of the authority which enjoins: the precept lays down or teaches such duties as already exist.

To Commission, Authorize, Empower. We commission in matters where our own will and convenience are concerned; we authorize in matters where our personal authority is requisite; and we empower in matters where the authority of the law is required.

Commodious, Convenient. Commodious is mostly applied to that which contributes to the bodily ease and comfort; convenient to whatever suits the purposes of men in their various transactions.

Commonly, Generally, Frequently, Usually. What is commonly done is an action common to all; what is generally done is the action of the greatest part; what is frequently done is either the action of many, or an action many times repeated by the same person; what is usually done is done regularly by one or many.

To Communicate, Impart. A thing may be communicated directly or indirectly, and to any number of persons; as to communicate intelligence by signal or otherwise. Impart is a direct action that passes between individuals; as to impart instruction.

Communions, Converse. Both these terms imply a communication between minds; but the former may take place without corporeal agency, the latter never does; spirits hold communion with each other; people hold converse.

Comparison, Contrast. Likeness in the quality and difference in the degree are requisite for a comparison; likeness in the degree and opposition in the quality are requisite for a contrast.

Compatible, Consistent. Compatibility has principally a reference to plans and measures; consistency to character, conduct, and station. Everything is compatible with a plan which does not interrupt its prosecution; everything is consistent with a person's station by which it is neither degraded nor elevated.

To Compel, Force, Oblige, Necessitate. To compel denotes rather moral than physical force; but to force is properly applied to the use of physical force or a violent degree of moral force. A man may be compelled to walk if he have no means of riding; he may be forced to go at the will of another; oblige expresses only an indirect influence, which may be resisted or yielded at discretion; we are compelled to do that which is repugnant to our will and our feelings; that which one is obliged to do may have the assent of the judgment if not of the will; we are necessitated by circumstances, or by anything which puts it out of our power to do otherwise.

Compensation, Amends, Satisfaction, Recompense, Remuneration, Regaltil, Reward. A compensation is a return for a loss or damage sustained; amends is a return for anything that is faulty in ourselves or toward others; satisfaction is that which satisfies the individual requiring it—it is given for personal injuries; a recompense is a voluntary return for a voluntary service; it is made from a generous feeling; remuneration is estimated rather according to the condition of the person and the dignity of the service, than its positive worth. Authors often receive a remuneration for their works according to the reputation they have previously acquired, and not according to the real merit of the work. A reward conveys no idea of an obligation on the part of the person making it; whoever rewards acts optionally. When evil is

returned for good, that is a bad requital, and, as a proof of ingratitude, wounds the feelings.

Competent, Fitted, Qualified. Competency mostly respects the mental endowments and attainments; fitness, the disposition and character; qualification, the artificial acquirements or natural qualities.

To Complain, Lament, Regret. Complaint marks most of dissatisfaction; lamentation most of grief; regret most of pain; complaint is expressed verbally; lamentation either by words or signs; regret may be felt without being expressed. Complaint is made of personal grievances; lamentation and regret may be made on account of others as well as ourselves. We complain of our ill health, of our inconveniences, or of troublesome circumstances; we lament our inability to serve another; we regret the absence of one whom we love.

Complaint, Accusation. A complaint is mostly made in matters that personally affect the complainant; an accusation is made of matters in general, but especially those of a moral nature. A complaint is made for the sake of obtaining redress; an accusation is made for the sake of ascertaining a fact or bringing to punishment.

Complaisance, Deference, Condescension. Complaisance signifies the act of complying with, or pleasing others; deference marks the inclination to defer, or acquiesce in the sentiments of another in preference to one's own; condescension marks the act of condescending from one's own height to yield to the satisfaction of others, rather than rigorously to exact one's rights. The necessities and the allurements of society and of intimacy, lead to complaisance; it makes sacrifices to the wishes, tastes, and personal feelings of others. Complaisance is the act of an equal; deference that of an inferior; condescension that of a superior.

Complete, Perfect, Finished. That is complete which has no deficiency; that is perfect which has positive excellence; and that is finished which has no omission in it.

To Complete, Finish, Terminate. The characteristic idea of completing is that of making a thing altogether what it ought to be; that of finishing, the doing all that is intended to be done toward a thing; and that of terminating, simply putting an end to a thing.

To Comply, Conform, Yield, Submit. Compliance is an act of the inclination; conformity an act of the judgment; compliance is altogether optional; we comply with a thing or not, at pleasure; conformity is binding on the conscience; it relates to matters in which there is a right and a wrong; to yield is to give way to another, either with one's will, judgment, or outward conduct; submission is the giving up of one's self altogether; it is the substitution of another's will for one's own.

Compliant, Yielding, Submissive. A compliant person may want command of feeling; a yielding person may want fixedness of principle; a submissive person may want resolution; a too compliant disposition will be imposed upon by the selfish and unreasonable; a too yielding disposition is most unfit for commanding; a too submissive disposition exposes a person to the exactions of tyranny.

To Compose, Settle. We compose that which has been disjoined and separated, by bringing it together again; we settle that which has been disturbed and put in motion, by making it rest.

Composed, Sedate. Composed is opposite to ruffled or hurried, and is a temporary state; sedate is opposed to buoyant or volatile, and is a permanent habit of the mind or body.

To Compound, Compose. Compound is used in the physical sense only; compose in the proper or the moral sense. A medicine is compounded of many ingredients; society is composed of various classes.

Comprehensive, Extensive. Comprehensive respects quantity; extensive regards space. A comprehensive view of a subject includes all branches of it; an extensive view of a subject enters into minute details; the comprehensive is associated with the concise; the extensive with the diffuse.

To Comprise, Comprehend, Embrace, Contain, Include. A library comprises a variety of books; the whole is comprised within a small compass; laws comprehend a number of cases; a discourse embraces a variety of topics; a society contains very many individuals; it includes none but of a certain class; or it includes some of every class.

To Conceal, Dissemble, Disguise. To conceal is simply to abstain from making known what we wish to keep secret; to dissemble and disguise signify to conceal, by assuming some false appearance. We conceal facts; we dissemble feelings; we disguise sentiments.

To Conceal, Hide, Secrete. Concealing has simply the idea of not letting come to observation; hiding, that of putting under cover; secreting, that of setting at a distance or in unfrequented places.

Concealment, Secrecy. Concealment has to do with what concerns others; secrecy with that which concerns ourselves. What is concealed is kept from the observation of others; what is secret is known only to ourselves.

Conceit, Fancy. Conceit applies only to internal objects; it is mental in the operation and the result; it is a species of invention; fancy is applied to external objects, or whatever acts on the senses. Nervous people are subject to strange conceits; timid people fancy they hear sounds or see objects in the dark, which awaken terror.

To Conceive, Understand, Comprehend. Conception is the simplest operation of the three: when we conceive we may have but one idea; when we understand or comprehend we have all the ideas which the subject is capable of presenting. The builder conceives plans, the scholar understands languages, the metaphysician attempts to explain many things which are not to be comprehended.

Conception, Notion. Conception is the mind's own work, what it pictures to itself from the exercise of its own powers; notion is the representation of objects as they are drawn from observation. Conceptions are the fruit of the understanding and imagination; notions are the result of experience and information.

To Concert, Contrive, Manage. There is a secret understanding in concerting; invention in contriving; execution in managing. Measures are concerted; schemes are contrived; affairs are managed.

To Conciliate, Reconcile. The conciliator gets the good-will and affections for himself; the reconciler unites the affections of two persons to each other.

Conclusion, Inference, Deduction. Conclusions are drawn from real facts; inferences are drawn from the appearances of things; deductions only from arguments or assertions. Conclusions are practical; inferences ratiocinative; deductions are final.

Conclusive, Decisive, Convincing. Conclusive applies either to practical or argumentative matters; decisive to what is practical only; convincing to what is argumentative only. It is necessary to be conclusive when we deliberate, and decisive when we command; an argument is convincing, a chain of reasoning conclusive.

Concord, Harmony. Concord is generally employed for the union of wills and affections; harmony respects the aptitude of minds to coalesce. Harmony may be used in the sense of adaptation to things generally.

Condition, Station. Condition has most relation to circumstances, education, birth, and the like; station refers rather to the rank, occupation, or mode of life which is marked out.

To Conduce, Contribute. To conduce signifies to serve the full purpose; to contribute signifies only to serve a secondary purpose. Exercise conduces to the health; it contributes to give vigor to the frame.

To Conduct, Manage, Direct. Conducting requires most wisdom and knowledge; managing most action; direction most authority. A lawyer conducts the cause intrusted to him; a steward manages the mercantile concerns for his employer; a superintendent directs the movements of all the subordinate agents.

Confederate, Accomplice. A confederate is a partner in a plot or secret association; an accomplice is a partner in some active violation of the laws.

To Confer, Bestow. Confering is an act of authority; bestowing that of charity or generosity. Princes and men in power confer; people in a private station bestow.

To Confide, Trust. Confidence is an extraordinary trust, but trust is always ordinary unless the term be otherwise qualified. Confidence involves communication of a man's mind to another, but trust is confined to matters of action.

Confident, Dogmatical, Positive. Confidence implies a general reliance on one's abilities in whatever we undertake; dogmatism implies a reliance on the truth of our opinions; positivity a reliance on the truth of our assertions. A confident man is always ready to act, as he is sure of succeeding; a dogmatical man is always ready to speak, as he is sure of being heard; a positive man is determined to maintain what he has asserted, as he is convinced that he has made no mistake.

To Confirm, to Corroborate. What confirms serves to confirm the mind; what corroborates gives weight to the thing. An opinion or a story is confirmed; an evidence or the representation of a person is corroborated.

To Confirm, Establish. To confirm is applied to what is partial, if not temporary; to establish to that which is permanent and of importance: as to confirm a report, to establish a reputation, to confirm a treaty or alliance, to establish a trade or a government.

Conformable, Agreeable, Suitable. Conformable is employed for matters of obligation; agreeable for matters of choice; suitable for matters of propriety and discretion. What is conformable accords with some prescribed form or given rule of others; what is agreeable accords with the feelings, tempers, or judgments of ourselves or others; what is suitable accords with outward circumstances.

To Confound, To Confuse. A person confounds one thing with another; objects become confused, or a person confuses himself. It is a common error among ignorant people to confound names, and among children to have their ideas confused on commencing a new study.

To Confront, Face. Confront implies to set face to face; and face signifies to set the face toward any object. Witnesses are confronted; a person faces danger.

Confusion, Disorder. Confusion supposes the absence of all order; disorder the derangement of order where it exists, or is supposed to exist.

To Confute, Refute, Disprove, Oppugn. To confute respects what is argumentative; refute what is practical and personal; disprove whatever is represented or related; oppugn what is held or maintained. An argument is confuted by proving its fallacy; a charge is refuted by proving the innocence of the party charged; an assertion is disproved by proving that it is incorrect; a doctrine is oppugned by a course of reasoning.

To Connect, Combine, Unite. What is connected and combined remains distinct, but what is united loses all individuality. Things the most dissimilar may be connected or combined; things of the same kind only can be united. Houses are connected by means of a common passage; the armies of two nations are combined; two armies of the same nation are united.

Connection, Relation. Families are connected with each other by the ties of blood or marriage; persons are connected with each other in the way of trade or business; objects stand in a certain relation to each other, as persons stand in the relation of giver and receiver, or of debtor and creditor.

Conqueror, Victor. A conqueror is always supposed to add something to his possessions; a victor gains nothing but the superiority. Those who take possession of other men's lands by force of arms make a conquest; those who excel in any trial of skill are the victors.

To Consent, Permit, Allow. As the act of an equal we consent to that in which we have a common interest with others; we permit or allow what is for the accommodation of others; we allow by abstaining to oppose; we permit by a direct expression of our will; contracts are formed by the consent of the parties who are interested; the proprietor of an estate permits his friends to sport on his grounds; he allows of a passage through his premises; a parent consents to the establishment of his children; he permits them to read certain books; he allows them to converse with him familiarly.

Consequence, Effect, Result, Issue, Event. A consequence is that which follows of itself, without any qualification or restriction; an effect is that which is effected or produced, or which follows from the connection between the thing effecting, as a cause, and the thing effected; a result is general, following from a whole; there may be many consequences from the same thing, and but one result only; we speak of the issue of a negotiation or a battle, and the event of a war. The fate of a nation sometimes hangs on the issue of a battle; the measures of government are often unjustly praised or blamed according to the event.

To Consider, To Reflect. Consideration is employed for practical purposes; reflection for matters of speculation or moral improvement. Common objects call for consideration; the workings of the mind itself, or objects purely spiritual, occupy reflection.

To Consider, Regard. There is more caution or thought in considering; more personal interest in regarding. To consider is to bear in mind all that prudence or propriety suggests; to regard is to bear in mind all that our wishes or interests suggest.

Consideration, Reason. The consideration influences particular actions; the reason determines a line of conduct.

Consonant, Accordant, Consistent. Consonant is employed in matters of representation; accordant in matters of opinion or sentiment; consistent in matters of conduct.

Constancy, Stability, Steadiness, Firmness. Constancy respects the affections; stability the opinions;

steadiness the action, or the motives of action; firmness the purpose or resolution.

To Constitute, Appear, Depute. To constitute is the act of a body; to appoint and depute, either of a body or an individual; a community constitutes any one their leader; a monarch appoints his ministers; whoever is deputed has private and not public authority; his office is partial, often confined to the particular transaction of an individual, or a body of individuals.

To Consult, Deliberate. Consultations always require two persons at least; deliberations may be carried on either with a man's self or with numbers; an individual may consult with one or many; assemblies commonly deliberate.

Consummation, Completion. Wishes are consummated; plans are completed.

Contagion, Infection. We consider contagion as to the manner of spreading from one body to another; we consider infection as to the act of its working itself into the system. Whatever acts by contagion acts immediately by direct personal contact; whatever acts by infection acts gradually and indirectly, or through the medium of a third body, as clothes, or the air when infected.

Contagious, Epidemical, Pestilential. The contagious applies to that which is capable of being caught, and ought not, therefore, to be touched; the epidemical to that which is already caught or circulated, and requires, therefore, to be stopped; the pestilential to that which may breed an evil, and is, therefore, to be removed; diseases are contagious or epidemical; the air or breath is pestilential.

To Contaminate, Defile, Pollute, Taint, Corrupt. Whatever is impure contaminates; what is gross and vile in the natural sense defiles, and in the moral sense pollutes; what is contagious or infectious corrupts; and what is corrupted may taint other things.

To Contemplate, Meditate, Muse. Different species of reflection are marked by these terms. We contemplate what is present or before our eyes; we meditate on what is past or absent. The heavens and all the works of the Creator are objects of contemplation; the ways of Providence are fit subjects for meditation. One muses on events or circumstances which have been just passing.

Contemptible, Contemptuous. Contemptible is applied to the thing deserving contempt; contemptuous to that which is expressive of contempt. A production is contemptible; a sneer or look is contemptuous.

To Contemn, Despise, Scorn, Disdain. Contemn signifies to pollute or render worthless, which is the cause of contempt. Despise signifies to look down upon, which is a strong mark of contempt; scorn signifies stripped of all honors and exposed to derision, which situation is the cause of scorn; disdain signifies to hold altogether unworthy.

To Contend, Contest, Dispute. To contend is simply to exert a force against a force; to contest is to struggle together for an object; to dispute, according to its original meaning, applies to opinions only, and is distinguished from contend in this, that the latter signifies to maintain one's own opinion, and the former to call in question the opinion of another.

Contentment, Satisfaction. Contentment lies in ourselves; satisfaction is derived from external objects. One is contented when one wishes for no more; one is satisfied when one has obtained all one wishes; contentment is within the reach of the poor man, to whom it is a continual feast; but satisfaction has never been procured by wealth, however enormous, or ambition, however boundless.

Continual, Perpetual, Constant. What is continual admits of no interruption; what is perpetual admits of no termination. There may be an end to that which is continual, and there may be intervals in that which is perpetual. Constant, like continual, admits of no interruption, and it also admits of no change; what is continual may not always continue in the same state; but what is constant remains in the same state.

Continual, Continued. What is continual may have frequent pauses; what is continued ceases only to terminate.

Continuance, Continuation, Duration. The continuance is said of that which itself continues; the continuation of that which is continued by some other agency; as the continuance of the rain; the continuation of a history, work, line, etc.; things are of long or short duration by comparison.

To Continue, Remain, Stay. To continue is associated with a state of action; to remain with a state of rest; we are said to continue to speak, or do anything, to remain stationary, or in a position; stay is a voluntary act; as to stay at a friend's, or with a friend.

Continue, Persevere, Persist. We continue from habit or casualty; we persevere from reflection and the exercise of our judgment; we persist from attachment. A child perseveres in a new study until he has mastered it; he persists in making a request until he has obtained the object of his desire.

Contracted, Confined, Narrow. Contracted signifies drawn into a smaller compass than it might otherwise be in, and confined signifies brought within unusually small bounds, are said of that which is made or becomes so by circumstances. Narrow, which is a variation of near, denotes a quality belonging naturally or otherwise to a material body. A limb is said to be contracted which is drawn up by disease; a situation is confined which has not the necessary or usual degree of open space; a road or a room is narrow.

Contradict, Deny. One contradicts in direct terms by asserting something contrary; one denies by advancing arguments, or suggesting doubts or difficulties. These terms may, therefore, both be used in reference to disputations. We may deny the truth of a position by contradicting the assertions that are advanced in its support.

To Controvert, Dispute. To controvert has regard to speculative points; to dispute respects matters of fact; there is more of opposition in controversy; more of doubt in disputing; a sophist controverts; a sceptic disputes.

Contumacy, Rebellion. The contumacious resist only occasionally; the rebel resists systematically: the contumacious stand only on certain points, and oppose the individual; the rebel sets himself up against the authority itself.

Convenient, Suitable. Convenient regards the circumstances of the individual; suitable respects the established opinions of mankind, and is closely connected with moral propriety: nothing is convenient which does not favor one's purpose; nothing is suitable which does not suit the person, place, and thing.

Conversant, Familiar. A person is conversant in matters that come frequently before his notice; he is familiar with such as form the daily routine of his business.

Conversation, Dialogue, Conference, Colloquy. A conversation is always something actually held between two or more persons; a dialogue is mostly fictitious, and written as if spoken; any number of persons may take part in a conversation, but a dialogue always refers to the two persons who are expressly engaged; a conference is always specifically appointed and is mostly on public concerns; the colloquy has the same character as the dialogue but is not confined to two people.

Convert, Proselyte. Convert is more extensive in its sense and application than proselyte: convert in its full sense includes every change of opinion, without respect to the subject; proselyte, in its original application, denoted changes only from one religious belief to another; proselyte now means a new convert to a religion, a religious sect or to some particular system or party.

To Convict, Detect. A person is convicted by means of evidence; he is detected by means of ocular demonstration. One is convicted of having been the perpetrator of some evil deed; one is detected in the very act of committing the deed.

To Convict, Convince, Persuade. A person may be convicted of heresy, if it be proved to the satisfaction of others; he may be convinced that the opinion which he has held is heretical. So a person may be convicted who is involuntarily convinced of his error, but he is convinced if he is made sensible of his error without any force on his own mind. What convinces binds; what persuades attracts; our persuasion respects matters of belief or practice.

Convivial, Social. The prominent idea in convivial is that of sensual indulgence; the prominent idea in social is that of enjoyment from an intercourse with society. We speak of convivial meetings, convivial enjoyments, or the convivial board; but social intercourse, social pleasure, social amusements, and the like.

To Copy, Transcribe. To copy respects the matter; to transcribe respects simply the act of writing. What is copied must be taken immediately from the original, with which it must exactly correspond; what is transcribed may be taken from the copy, but not necessarily in an entire state; a copier should be very exact; a transcriber should be a good writer.

Copy, Model, Pattern, Specimen. The term copy is applied to that which is delineated, as writings or pictures, which must be taken faithfully and literally; a model is that which may be used as a guide or rule; the pattern regards solely the outward form or color of

anything that is made or manufactured; the specimen is any portion of a material which serves to show the quality of that of which it forms a part.

Coquet, Jilt. The coquet makes a traffic of her own charms by seeking a multitude of admirers; the jilt sports with the sacred passion of love, and barters it for the gratification of any selfish propensity.

Correct, Accurate. What is done by the exercise of the judgment is said to be correct, as a correct style, a correct writer; what is done by the effort of the individual is more properly accurate, as accurate observations, an accurate survey.

Correction, Discipline, Punishment. As correction and discipline have commonly required punishment to render them efficacious, custom has affixed to them a strong resemblance in their application, although they are distinguished from each other by obvious marks of difference. The prominent idea in correction (v. to correct) is that of making right what has been wrong. In discipline, the leading idea is that of instructing or regulating. In punishment, the leading idea is that of inflicting pain. We remove an evil by correction; we prevent it by discipline.

Correspond, Answerable, Suitable. Things that correspond must be alike in size, shape, color, and every minute particular; those that answer must be fitted for the same purpose; those that suit must have nothing disproportionate or discordant. In the moral application, actions are said not to correspond with professions; the success of an undertaking does not answer the expectation; particular measures do not suit the purpose of individuals.

Cost, Expense, Price, Charge. The cost is what a thing costs, or what is to be laid out for it; the expense is that which a person actually lays out; the price is that which a thing may fetch or which it may be worth; the charge is that which a person or thing is charged with; we do a thing at our own cost, but at another's expense; we can never set a price on anything until we have ascertained what it has cost us; nor can we know or defray the expense until the charge be made. In the moral acceptance, the attainment of an object is said to cost much pains; a thing is persisted in at the expense of health, of honor, or of life. The sacrifice of a man's quiet is the price which he must pay for the gratification of his ambition.

To Cover, Hide. The ruling idea in the word cover is that of throwing or putting something over a body; in the word hide is that of keeping carefully to one's self, from the observation of others.

Cover, Shelter, Screen. Cover includes the idea of concealing; shelter comprehends that of protecting from some immediate or impending evil; screen includes that of warding off some trouble.

To Countenance, Sanction, Support. Persons are countenanced; things are sanctioned; persons or things are supported; persons are countenanced in their proceedings by the apparent approbation of others; measures are sanctioned by the consent or approbation of others who have due authority; measures or persons are supported by every means which may forward the object.

Courage, Fortitude, Resolution. Courage respects action, fortitude respects passion; a man has courage to meet danger, and fortitude to endure pain; resolution simply marks the will not to recede; we require resolution not to yield to the first difficulties that offer.

Credit, Favor, Influence. These terms mark the state we stand in with regard to others as flowing out of their sentiments toward ourselves; credit arises out of esteem; favor out of good-will or affection; influence out of either credit or favor, or external circumstances; influence is employed in directing others: weak people easily give their credit, or bestow their favor, by which an influence is gained over them to bend them to the will of others.

Crime, Vice, Sin. A crime is a social offense; a vice is a personal offense; every action which does injury to others, either individually or collectively, is a crime; that which does injury to ourselves is a vice. Crime consists in a violation of human laws; vice in a violation of the moral law; sin in a violation of the Divine Law.

Criminal, Culprit, Malefactor, Felon, Convict. When we wish to speak in general of those who by offenses against the laws or regulations of society have exposed themselves to punishment, we denominate them criminals; when we consider them as already brought before a tribunal, we call them culprits; when we consider them in regard to the moral turpitude of their character, as the promoters of evil rather than of good, we entitle them malefactors; when we consider them as offending by the grosser violations of the law, they are termed

felons; when we consider them as already under the sentence of the law, we denominate them convicts.

Criterion, Standard. The criterion is employed only in matters of judgment; the standard is used in the ordinary concerns of life. The former serves for determining the characters and qualities of things; the latter for defining quantity and measure.

Cruel, Inhuman, Barbarous, Brutal, Savage. A person is cruel who neglects the creature he should protect and take care of; he is inhuman if he withhold from him the common marks of tenderness or kindness which are to be expected from one human being to another; he is barbarous if he find amusement in inflicting pain; he is brutal or savage according to the circumstances of aggravation which accompany the act of torturing.

To Cry, Weep. Crying arises from an impatience in suffering corporeal pains; weeping is occasioned by mental grief.

Cultivation, Culture, Civilization, Refinement. Cultivation is with more propriety applied to the thing that grows; culture to that in which it grows. The cultivation of flowers will not repay the labor unless the soil be prepared by proper culture. Civilization is the first stage of cultivation; refinement is the last; we civilize savages by divesting them of their rudeness, and giving them a knowledge of such arts as are requisite for civil society; we refine them by the introduction of the liberal arts.

To Cure, Heal, Remedy. To cure is employed for what is out of order; to heal for that which is broken; diseases are cured, wounds are healed; the former is a complex, the latter is a simple process. Whatever requires to be cured is wrong in the system; whatever requires to be healed is occasioned externally by violence, and requires external applications. To remedy, in the sense of applying remedies, has a moral application; an omission, a deficiency, or a mischief, requires to be remedied.

Cure, Remedy. A cure is performed by the application of a remedy.

Curious, Inquisitive, Prying. Curiosity is directed to all objects that can gratify the inclination, taste, or understanding; inquisitiveness to such things only as satisfy the understanding; a prying temper is unceasing in its endeavors to get acquainted with the secrets of others.

Cursory, Hasty, Slight, Desultory. An author will take a cursory view of those points which are not necessarily connected with his subject; an author who takes a hasty view of a subject will mislead by his errors; he who takes a slight view will disappoint by the shallowness of his information. Between cursory and desultory there is the same difference as between running and leaping; we run in a line, but we leap from one part to another; so remarks that are cursory have still more or less connection, but remarks that are desultory are without any coherence.

Custom, Habit. Custom is a frequent repetition of the same act; habit the effect of such repetition. Custom supposes an act of the will; habit implies an involuntary movement; a custom is followed; a habit is acquired.

Custom, Fashion, Manner, Practice. Custom is authoritative; it stands in the place of law, and regulates the conduct of men in the most important concerns of life; fashion is arbitrary and capricious, it decides in matters of trifling import; manners are rational; they are the expressions of moral feelings; practice signifies actual doing or the thing done; it may be the practice of a person to do acts of charity, as the occasion requires; but, when he uniformly does a particular act of charity at any given period of the year, it is properly denominated his custom.

Daily, Diurnal. Daily is the colloquial term which is applicable to whatever passes in the daytime; diurnal is the scientific term, which applies to what passes within or belongs to the astronomical day.

Danger, Peril, Hazard. Danger signifies the chance of a loss; peril signifies either to go over or to perish; a critical situation, a rude trial, which may terminate in one's ruin. In all walks of life we are in danger; the explorer undergoes perils. Hazard respects the possibility of either good or evil. When we run the hazard of a battle, we may either win or lose.

Daring, Bold. He who is daring provokes resistance and courts danger; but the bold man is contented to overcome the resistance that is offered to him; a man may be bold in the use of words only, he must be daring in actions; he is bold in the defense of truth; he is daring in military enterprise.

Dark, Obscure, Dim, Mysterious. Dark is opposed to light; obscure to bright; what is dark is

altogether hidden; what is obscure is not to be seen distinctly, or without an effort. Dim expresses a degree of darkness, but it is employed more in relation to the person seeing than to the object seen; any intricate affair, which involves the characters and conduct of men, may be mysterious.

Deadly, Mortal, Fatal. Deadly is applied to what is productive of death; mortal to what terminates in or is liable to death; fatal applies not only to death, but everything which may be of great mischief.

To Debate, Deliberate. These terms equally mark the acts of pausing or withholding the decision, whether applicable to one or many. To debate (v. to argue, dispute) supposes always a contrariety of opinion; to deliberate (v. to consult, deliberate) supposes simply the weighing or estimating the value of the opinion that is offered.

Debility, Infirmary, Imbecility. Debility is constitutional, or otherwise; imbecility is always constitutional; infirmity is accidental, and results from sickness or a decay of the frame. Debility may be either general or local; infirmity is always local; imbecility always general.

Debt, Due. Debt is commonly applied to that which is owing from the person spoken of; due is always applied to that which is owing to the person; to pay one's debts, and receive one's due.

Decay, Decline, Consumption. What is decayed is fallen or gone; what declines leads toward a fall, or is going; consumption (v. to consume) implies a rapid decay.

Deceit, Deception. A person is said to be guilty of deceit who has sought to deceive another for his own purposes; but deceptions may be practiced in a diversity of ways, and from a diversity of motives. Deceitful and deceptive are employed with this distinction: a person is said to be deceitful, and a thing deceptive.

Deceit, Fraud, Guile. Deceit is practiced only in private transactions; fraud is practiced toward bodies as well as individuals, in public as well as private. A child practices deceit toward its parents; frauds are practiced upon government; guile marks a strong degree of moral turpitude in the individual; guileless is applied to characters which are the most diametrically opposed to, and at the greatest possible distance from, that which is false.

Deceiver, Impostor. A deceiver is any one who practices any sort of deception; but an impostor is a deceiver who studiously deceives by putting on a false appearance.

Decency, Decorum. Decency respects a man's conduct; decorum, his behavior.

Decided, Determined, Resolute. A man who is decided (v. to decide) remains in no doubt; he who is determined is uninfluenced by the doubts or questions of others; he who is resolute (v. to determine, resolve) is uninfluenced by the consequences of his actions.

Decided, Decisive. Decided marks that which is actually decided; decisive that which appertains to decision. A person's aversion or attachment is decided; a sentence, a judgment, or a victory, is decisive.

Decision, Judgment, Sentence. A decision has no respect to the agent; it may be said of one or many; it may be the decision of the court, of the nation, of the public, of a particular body of men, or of a private individual; but a judgment is given in a public court, or among private individuals; a sentence is passed in a court of law, or at the bar of the public.

Decalm, Inveigh. Decalm signifies literally to cry aloud in a set form of words; inveigh (v. abuse, invective). Public men and public measures are subjects for the declaimer; private individuals afford subjects for inveighing against.

To Declare, Publish, Proclaim. In declaring, the leading idea is that of speaking out that which passes in the mind; in publishing, the leading idea is that of making public or common; in proclaiming, the leading idea is that of crying aloud. Facts and opinions are declared; events and circumstances are published; the measures of government are proclaimed.

Decree, Edict, Proclamation. A decree is a more solemn and deliberative act than an edict; on the other hand, an edict is more authoritative than a decree. A decree is the decision of one or many; an edict speaks the will of an individual: councils and senates, as well as princes, make decrees; despotic rulers issue edicts. An edict is peculiar to a despotic government; a proclamation is common to a monarchical and aristocratic form of government.

To Dedicate, Devote, Consecrate, Hallow. There is something more solemn in the act of dedicating than in that of devoting; but less so than in that of consecrating. To dedicate and devote may be employed in

both temporal and spiritual matters; to consecrate and hallow only in the spiritual sense: we may dedicate or devote anything that is at our disposal to the service of some object; but the former is employed mostly in regard to superiors, and the latter to persons without distinction of rank. We dedicate a house to the service of God; or we devote our time to the benefit of our friends, or the relief of the poor; we may dedicate or devote ourselves to an object; but the former always implies a solemn setting apart springing from a sense of duty; the latter an entire application of one's self from zeal and affection. To consecrate is a species of formal dedication by virtue of a religious observance. The church is consecrated; particular days are hallowed.

Deduction, Abatement. Both these words imply a taking off from something. A person may make a deduction in an account for various reasons, but he makes an abatement in a demand when it is objected to as excessive.

To Deface, Disfigure, Deform. To deface is an act of destruction; it is the actual destruction of that which has before existed; to disfigure is either an act of destruction or an erroneous execution, which takes away the figure; to deform is altogether an imperfect execution, which renders the form what it should not be.

Defective, Deficient. Defective expresses the quality or property of having a defect; deficient is employed with regard to the thing itself that is wanting. A book may be defective, in consequence of some leaves being deficient. A deficiency is, therefore, often what constitutes a defect.

To Defend, Protect, Vindicate. A person may be defended in any particular case of actual danger or difficulty; he is protected from what may happen as well as what does happen. Defense respects the evil that threatens; protection involves the supply of necessities and the affording comforts; to vindicate is a species of defense only in the moral sense of the word. Acts of importance are defended; those of trifling import are commonly vindicated.

Defendant, Defender. The defendant defends himself (v. to defend); the defender defends another.

Defender, Advocate, Pleader. A defender exerts himself in favor of one that wants support; an advocate signifies one who is called to speak in favor of another; he exerts himself in favor of any cause that offers; a pleader, from plea or excuse, signifies him who pleads in behalf of one who is accused or in distress.

Definite, Positive. Definite signifies that which is defined, or has the limits drawn or marked out; positive that which is placed or fixed in a particular manner; definite is said of things as they present themselves or are presented to the mind, as a definite idea, a definite proposal; positive is said of a person's temper of mind; a person is positive as to his opinions, or an assurance is positive which serves to make one positive.

Deity, Divinity. Deity signifies a divine person; divinity signifies the divine essence or power.

Dejection, Depression, Melancholy. Depression is but a degree of dejection; slight circumstances may occasion a depression; distressing events occasion a dejection; the death of a near and dear relative may be expected to produce dejection in persons of the greatest equanimity; melancholy is a disease which nothing but clear views of religion can possibly correct.

To Delegate, Depute — Delegate, Deputy. To delegate is applied to the power or office which is given; depute to the person employed. Parents delegate their office to the instructor; persons are deputed to act for others. A delegate is the person commissioned, who is bound to act according to his commission; the deputy is the person deputed, who acts in the place of another, but may act according to his own discretion or otherwise, as circumstances require.

To Deliver, Rescue, Save. One may be delivered from any evil, whether great or small, and in any manner; to rescue is to deliver from a great impending danger or immediate evil; as to rescue from the hands of robbers, or from the jaws of a wild beast; to save signifies to keep from evil.

To Demand, to Require. We demand that which is owing and ought to be given; we require that which we wish and expect to have done. The creditor makes a demand on the debtor; the master requires a certain portion of duty from his servant.

To Demur, Hesitate, Pause. We demur from doubt or difficulty; we hesitate from an undecided state of mind; we pause from circumstances. Demurring is a matter of prudence, it is always grounded on some reason; hesitating is rather a matter of feeling, and is oftener faulty than otherwise; when a request of a dubious nature is made to us, we hesitate in complying with it.

Demur, Doubt, Hesitation, Objection. Demurs often occur in matters of deliberation; doubt in regard to matters of fact; hesitation in matters of ordinary conduct; and objections in matters of common consideration. Artabanus made many demurs to the proposed invasion of Greece by Xerxes. Doubts have been suggested respecting the veracity of Herodotus as a historian. It is not proper to ask that which cannot be granted without hesitation. There are but few things which we either attempt to do or recommend to others that are not liable to some kind of an objection.

To Denote, Signify. Denote is employed with regard to things and their characters; signify with regard to the thoughts or movements. A letter or character may be made to denote any number, as words are made to signify the intentions and wishes of the person.

To Deny, Refuse. To deny respects matters of fact or knowledge; to refuse, matters of wish or request. We deny what immediately relates to ourselves; we refuse what relates to another.

To Deplore, Lament. Deplore is a much stronger expression than lament; the former calls forth tears from the bitterness of the heart; the latter excites a cry from the warmth of feeling. Deploping indicates despair; to lament marks only pain or distress.

Depravity, Depravation, Corruption. All these terms are applied to objects which are contrary to the order of Providence, but the term depravity characterizes the thing as it is; the terms depravation and corruption designate the making or causing it to be so; depravity, therefore, excludes the idea of any cause; depravation always carries us to the cause or external agency; hence we may speak of depravity as natural, but we speak of depravation as the result of circumstances. There is a depravity in man which nothing but the grace of God can correct; the introduction of obscenity on the stage tends greatly to the depravation of morals; bad company tends to the corruption of a young man's morals.

Deponent, Evidence, Witness. All these words are properly applied to judicial proceedings, where the deponent deposes generally to facts either in causes or otherwise; the evidence consists either of persons or things, which are brought before the court for the purpose of making a doubtful matter clear; the witness is always a person who bears witness to any fact for or against another.

Deposit, Pledge, Security. The term deposit has most regard to the confidence we place in another; pledge has most regard to the security we give for ourselves; security is a species of pledge. A security is whatever makes a person secure against a loss, and in the ordinary acceptance consists of any instrument or written document which legally binds a person.

Depth, Profundity. Depth is indefinite in its signification; and profundity is a positive and considerable degree of depth. Moreover, the word depth is applied to objects in general; profundity is confined in its application to moral objects.

To Derive, Trace, Deduce. The act of deriving is immediate and direct; that of tracing a gradual process; that of deducing a ratiocinative process. We discover causes and sources by derivation; we discover the course, progress, and commencement of things by tracing; we discover the grounds and reasons of things by deduction.

Desert, Merit, Worth. Desert is taken for that which is good or bad; merit for that which is good only. We deserve praise or blame; we merit a reward; worth is that which is absolutely valuable; it must be sought for on its own account.

Design, Purpose, Intend, Mean. A design supposes something studied and methodical, it requires reflection; a purpose is the thing proposed or set before the mind; an intention is the thing to which the mind bends or inclines. We purpose seriously; we intend vaguely; we set about that which we purpose; we may delay that which we have only intended. Mean, which is a term altogether of colloquial use, differs but little from intend, except that it is used for matters requiring but little thought.

To Desire, Wish, Long for, Hanker after, Covet. Desire is imperious, it demands gratification; wish is less vehement, it consists of a strong inclination; longing is an impatient and continued species of desire; hankering is a desire for that which is set out of one's reach; coveting is a desire for that which belongs to another, or what it is in his power to grant.

To Desist, Leave Off. To desist is voluntary or involuntary; to leave off voluntary. We are frequently obliged to desist; but we leave off at our option; he who annoys another must be made to desist; he who does not wish to offend will leave off when requested.

Despair, Desperation, Despondency. Despair is

a state of mind produced by the view of external circumstances; desperation and despondency may be the fruit of the imagination; the former, therefore, always rests on some ground, the latter are sometimes ideal. Desperation marks a state of vehement and impatient feeling; despondency is a disease of the mind, which nothing but a firm trust in the goodness of Providence can obviate.

Destiny, Fate, Lot, Doom. Destiny is used in regard to one's station and walk in life; fate in regard to what one suffers; lot in regard to what one gets or possesses; and doom is the final destiny which terminates unhappily, and depends mostly upon the will of another; destiny is marked out; fate is fixed; a lot is assigned; a doom is passed.

Destiny, Destination. Destiny is the point or line marked out in the walk of life; destination is the place fixed upon in particular; as every man has his peculiar destiny, so every traveler has his particular destination. Destiny is altogether set above human control; destination is, however, the specific act of an individual, either for himself or another.

To Destroy, Consume, Waste. To destroy is to reduce to nothing that which has been artificially raised or formed; as to destroy a town or a house; to consume is to use up; as to consume food, or to consume articles of manufacture.

Destruction, Ruin. Destruction is an act of immediate violence; ruin is a gradual process; a thing is destroyed by some external action upon it; a thing falls to ruin of itself.

To Detect, Discover. Detect is always taken in a bad sense; discover in an indifferent sense. A person is detected in what he wishes to conceal; a person or a thing is discovered that has unintentionally lain concealed.

To Determine, Resolve. We determine how or what we shall do; this requires examination and choice; we resolve that we will do what we have determined upon; this requires a firm spirit.

To Deviate, Wander, Swerve, Stray. Deviate always supposes a direct path which is departed from; wander includes no such idea. The act of deviating is commonly faulty; that of wandering is indifferent. To swerve is to deviate from that which one holds right; to stray is to wander in the same bad sense. Men swerve from their duty to consult their interest; the young stray from the path of rectitude to seek that of pleasure.

To Devise, Bequeath. In the technical sense, to devise is to give lands by a will duly attested according to law; to bequeath is to give personality after one's death by a less formal instrument.

To Dictate, Prescribe. Dictate, from the Latin "dictatus" and "dictum" (a word), signifies to make a word for another; and prescribe literally signifies to write down for another (v. to appoint), in which sense the former of these terms is used technically for a principal who gets his secretary to write down his words as he utters them; and the latter for a physician who writes down for his patient what he wishes him to take as a remedy. They are used figuratively for a species of counsel given by a superior; to dictate is, however, a greater exercise of authority than to prescribe. He who dictates speaks with an adventitious authority; he who prescribes has the sanction of reason.

Dictate, Suggestion. Dictate signifies the thing dictated, and has an imperative sense; suggestion signifies the thing suggested, and conveys the idea of its being proposed secretly or in a gentle manner. These terms are both applied with this distinction to acts of the mind. When conscience, reason, or passion present anything forcibly to the mind, it is called a dictate; when anything enters the mind in a casual manner, it is called a suggestion.

Dictionary, Encyclopædia. The definition of words, with their various changes, modifications, uses, acceptations, and applications, are the proper subjects of a dictionary; the nature and properties of things, with their construction, uses, powers, etc., etc., are the proper subjects of an encyclopædia.

Dictionary, Lexicon, Vocabulary, Glossary, Nomenclature. Lexicon is a species of dictionary appropriately applied to the dead languages. Dictionary is applied to the words of a modern language. A vocabulary is a partial kind of dictionary, which may comprehend a simple list of words, with or without explanation, arranged in order or otherwise. A glossary is an explanatory vocabulary, which commonly serves to explain the obsolete terms employed in any old author. A nomenclature is literally a list of names, and in particular a reference to proper names.

To Die, Expire. Die designates in general the extinction of being. Expire designates the last action of

life in certain objects. Plants and trees die. The flame of a lamp expires.

Difference, Variety, Diversity, Medley. Difference and variety seem to lie in the things themselves; diversity and medley are created either by accident or design; a difference may lie in two objects only; a variety cannot exist without an assemblage; a difference is discovered by means of a comparison which the mind forms of objects to prevent confusion; variety strikes on the mind, and pleases the imagination with many agreeable images; diversity arises from an assemblage of objects naturally contrasted; a medley is produced by an assemblage of objects so ill suited as to produce a ludicrous effect.

Difference, Distinction. Difference (v. difference), lies in the thing; distinction is the act of the person; the former is, therefore, to the latter as the cause to the effect; the distinction rests on the difference; those are equally bad logicians who make a distinction without a difference, or who make no distinction where there is a difference. A difference is either external or internal; a distinction is always external; the former lies in the thing, the latter is designedly made: we have differences in character, and distinction in dress.

Difference, Dispute, Altercation, Quarrel. A difference, as distinguished from the others, is generally of a less serious and personal kind; a dispute consists not only of angry words, but much ill blood and unkind offices; an altercation is a wordy dispute, in which difference of opinion is drawn out into a multitude of words on all sides; quarrel is the most serious of all differences, which leads to every species of violence.

Different, Distinct, Separate. Difference is opposed to similitude; there is no difference between objects absolutely alike; distinctness is opposed to identity; there can be no distinction where there is only one and the same being; separation is opposed to unity; there can be no separation between objects that coalesce or adhere.

Different, Unlike. Different is positive, unlike is negative: we look at what is different and draw a comparison; but that which is unlike needs no comparison; a thing is said to be different from every other thing, or unlike to anything seen before.

Difficulties, Embarrassments, Troubles. These terms are all applicable to a person's concerns in life; but difficulties relate to the difficulty of conducting a business. Embarrassments relate to the confusion attending a state of debt; and trouble to the pain which is the natural consequence of not fulfilling engagements or answering demands.

Difficulty, Obstacle, Impediment. Difficulty signifies not easy to be done; obstacle signifies the thing that stands in the way between a person and the object he has in view; impediment signifies something that entangles the feet; a difficulty interferes with the completion of any work; an obstacle interferes with the attainment of any end; an impediment interrupts the progress, and prevents the execution of one's wishes.

Diffuse, Prolix. Both mark defects of style opposed to brevity. The diffuse is properly opposed to the precise; the prolix to the concise or laconic. A diffuse writer is fond of amplification, the prolix writer is fond of circumlocution, minute details, and trifling particulars.

To Digress, Deviate. Both in the original and the accepted sense, these words express going out of the ordinary course; we digress only in a narrative, whether written or spoken; we deviate in actions as well as in words, in our conduct as well as in writings.

To Dilate, Expand. A bladder dilates on the admission of air, or the heart dilates with joy; knowledge expands the mind, or a person's views expand with circumstances.

Diligent, Expeditious, Prompt. Diligent marks the interest one takes in doing something; he is diligent who loses no time, who keeps close to the work from inclination; expeditious marks the desire one has to complete the thing begun. Prompt marks one's desire to get ready; he is prompt who sets about a thing without delay, so as to make it ready.

Direction, Address, Superscription. A direction may serve to direct to places as well as to persons: an address is never used but in direct application to the person; a superscription has more respect to the thing than the person: a direction is given to such as go in search of persons and places; an address is put either on a card and a letter, or in a book; a superscription is placed at the head of other writings, or over tombs and pillars.

Direction, Order. Direction contains most of instruction in it; order most of authority. Directions should be followed; orders obeyed.

Disaffection, Disloyalty. Disaffection may be said

with regard to any form of government; disloyalty only with regard to monarchy. Many were disaffected to the usurpation of Oliver Cromwell, because they would not be disloyal to their king.

To Disappear, Vanish. A thing disappears either gradually or suddenly; it vanishes on a sudden; it disappears in the ordinary course of things; it vanishes by an unusual effort, a supernatural or a magic power.

To Disapprove, Dislike. Disapprove is an act of the judgment; dislike is an act of the will or the affection. To approve or disapprove is peculiarly the part of a superior, or one who determines the conduct of others; to dislike is altogether a personal act, in which the feelings of the individual are consulted.

Disbelief, Unbelief. Disbelief properly implies the believing that a thing is not, or refusing to believe that it is. Unbelief expresses properly a believing the contrary of what one has believed before: disbelief is most applicable to the ordinary events of life; unbelief to serious matters of opinion.

To Disclaim, Disown. To disclaim is to throw off a claim, as to disown is not to admit as one's own.

Discord, Strife. Discord consists most in the feeling; strife consists most in the outward action. Discord evinces itself in various ways; by looks, words, or actions strife displays itself in words or acts of violence.

To Discover, Manifest, Declare. We discover by any means direct or indirect; we manifest by unquestionable marks; we declare by express words: talents and dispositions discover themselves; particular feelings and sentiments manifest themselves; facts, opinions, and sentiments are declared.

Discredit, Disgrace, Reproach, Scandal. Discredit interferes with a man's credit or respectability; disgrace marks him out as an object of unfavorable distinction; reproach makes him a subject of reproachful conversation; scandal makes him an object of offense or even abhorrence.

To Discuss, Examine. Discuss signifies to shake asunder or to separate thoroughly so as to see the whole composition; examine is used where the judgment holds the balance in examining. Discussion is altogether carried on by verbal and personal communication; examination proceeds by reading, reflection, and observation.

Disgust, Loathing, Nausea. Disgust is less than loathing, and that than nausea. When applied to sensible objects we are disgusted with dirt; we loathe the smell of food if we have a sickly appetite; we nauseate medicine; and when applied metaphorically, we are disgusted with affectation; we loathe the endearments of those who are offensive; we nauseate all the enjoyments of life, after having made an intemperate use of them, and discovered their inanity.

Dishonest, Knavish. What is dishonest violates the established laws of man; what is knavish supposes peculiar art and design in the accomplishment.

Dishonor, Disgrace, Shame. Dishonor deprives a person of those outward marks of honor which men look for according to their rank and station; disgrace deprives a man of the favor and kindness which he has heretofore received from others; shame is occasioned by direct moral turpitude or that of which one ought to be ashamed.

To Disjoint, Dismember. A limb of the body may be disjointed if it be so put out of the joint that it cannot act; but the body itself is dismembered when the different limbs or parts are separated from each other.

Dislike, Disinclination. Dislike applies to what one has or does; disinclination only to what one does.

To Dismay, Daunt, Appall. We are dismayed by alarming circumstances; we are daunted by terrifying circumstances; we are appalled by horrid circumstances.

Disorder, Disease, Distemper, Malady. In general sense disorder is altogether indefinite; but in its restricted sense it expresses less than all the rest: it is the mere commencement of a disease: disease comprehends every serious and permanent disorder in the animal economy, and is, therefore, of universal application. The disorder is slight, partial, and transitory; the disease is deep-rooted and permanent. The disorder may lie in the extremities; the disease lies in the humors and the vital parts. Distemper is used for such particularly as throw the animal frame most completely out of its temper or course, and is consequently applied properly to virulent disorders, such as the small-pox. Malady has less of a technical sense than the other terms; it refers more to the suffering than to the state of the body.

Disparity, Inequality. Disparity applies to two objects which should meet or stand in coalition with each other; inequality is applicable to those that are compared with each other; the disparity of age, situation, and circumstances is to be considered with regard to persons entering into a matrimonial connection; the in-

equality in the portion of labor which is to be performed by two persons is a ground for the inequality of their recompense.

Dispassionate, Cool. Dispassionate is taken negatively, it marks merely the absence of passion; cool is taken positively, it marks an entire freedom from passion: when we meet with an angry disputant it is necessary to be dispassionate, in order to avoid quarrels; in the moment of danger our safety often depends upon our coolness.

To Dispel, Disperse. Dispel is a more forcible action than to disperse; we destroy the existence of a thing by dispelling it; we merely destroy the junction dispersing it.

To Dispense, Distribute. Dispense is an indiscriminate action; distribute is a particularizing action; we dispense to all; we distribute to each individually.

Displeasure, Anger, Disapprobation. Displeasure is always a softened and gentle feeling; anger is always a harsh feeling, and sometimes rises to vehemence and madness. Displeasure is always produced by some adequate cause, real or supposed; but anger may be provoked by every or any cause, according to the temper of the individual; displeasure is an act of the will, it is an angry sentiment; disapprobation is an act of the judgment, it is an opposite opinion.

Disposal, Disposition. Disposal is a personal act; it depends upon the will of the individual; disposition is an act of the judgment; it depends upon the nature of the things. The removal of a thing from one's self is involved in a disposal; the good order of the things is comprehended in their disposition.

To Dispose, Arrange, Digest. We may dispose ordinary matters by simply assigning a place to each; in this manner trees are disposed in a row, but we arrange and digest by an intellectual effort; in the first case by putting those together which ought to go together; and in the latter case by both separating that which is dissimilar, and bringing together that which is similar; in this manner books are arranged in a library according to their size or their subject; the materials for a literary production are digested.

Disposition, Temper. Disposition is permanent and settled; temper may be transitory and fluctuating. The disposition comprehends the springs and motives of actions; the temper influences the action of the moment: it is possible and not infrequent to have a good disposition with a bad temper, and vice versa.

Disposition, Inclination. We may always expect a man to do that which he is disposed to do; but we cannot always calculate upon his executing that to which he is merely inclined. We indulge a disposition; we yield to an inclination. The disposition comprehends the whole state of the mind at the time; an inclination is particular, referring always to a particular object.

To Disregard, Neglect, Slight. We disregard the warnings, the words, or opinions of others; we neglect their injunctions or their precepts. To disregard results from the settled purpose of the mind; to neglect from a temporary forgetfulness or oversight; slight is altogether an intentional act toward an individual.

Dissension, Contention, Discord. A collision of opinions produces dissension; a collision of interests produces contention; a collision of humors produces discord.

Distant, Far, Remote. Distant is used to designate great space; far only that which is ordinary; astronomers estimate that the sun is ninety-four millions of miles distant from the earth; a person lives not very far off, or a person is far from the spot; remote expresses the relative idea of being gone out of sight.

To Distinguish, Discriminate. To discriminate is in fact to distinguish specifically; hence we speak of a distinction as true or false, but of a discrimination as nice; we distinguish by means of the senses as well as the understanding; we discriminate by the understanding only.

Distinguished, Conspicuous, Noted, Eminent, Illustrious. A thing is distinguished in proportion as it is distinct or separate from others; it is conspicuous in proportion as it is easily seen; it is noted in proportion as it is widely known; eminent applies to those things which set a man high in the circle of his acquaintance; illustrious applies to that which makes him shine before the world.

Distress, Anxiety, Anguish, Agony. Distress is the pain felt when in a strait from which we see no means of extricating ourselves; anxiety is that pain which one feels on the prospect of an evil. Distress always depends upon some outward cause; anxiety often lies in the imagination; anguish arises from the reflection on the evil that is past; agony springs from witnessing that which is immediate or before the eye.

To Distress, Harass, Perplex. A person is distressed either in his outward circumstances or his feelings; he is harassed mentally or corporeally; he is perplexed in his understanding, more than in his feelings; a deprivation distresses; provocations and hostile measures harass; stratagems and ambiguous measures perplex.

Distrust, Suspicion, Diffidence. Distrust is said either of ourselves or others; suspicion is said only of others; diffidence only of ourselves: to be distrustful of a person is to impute no good to him; to be suspicious of a person is to impute positive evil to him. As regards one's self, a person may distrust his own powers for the execution of a particular office, or have a distrust of himself in company; he has a general diffidence, or he is naturally diffident.

To Disturb, Interrupt. We may be disturbed either inwardly or outwardly; we are interrupted only outwardly: our minds may be disturbed by disquieting reflections, or we may be disturbed in our rest or in our business by unseasonable noises.

To Divide, Separate, Part. That is said to be divided which has been or is conceived to be a whole, that is separated which might be joined: an army may be divided into two or three divisions or portions; the divisions are frequently separated in their march; to divide is properly to make any whole into two parts.

To Divide, Distribute, Share. We divide the thing; we distribute to the person. To share is to make into parts, the same as divide, and it is to give those parts to some persons, the same as distribute; but the person who shares takes a part himself; he who distributes gives it all to others.

Doctrine, Precept, Principle. A doctrine requires a teacher; a precept requires a superior with authority; a principle requires only a maintainer or holder. A doctrine is always framed by some one; a precept is enjoined or laid down by some one; a principle lies in the thing itself. A doctrine is composed of principles; a precept rests upon principles or doctrines.

Doctrine, Dogma, Tenet. A doctrine rests on the authority of the individual by whom it is framed; the dogma on the authority of the body by whom it is maintained; a tenet rests on its own intrinsic merits. A tenet is a species of principles maintained in matters of opinion by persons in general.

To Doubt, Question. Doubt lies altogether in the mind; it is a less active feeling than question; by the former we merely suspend decision; by the latter we actually demand proofs in order to assist us in deciding. We may doubt in silence; we cannot question without expressing it, directly or indirectly; we doubt the truth of a position; we question the veracity of an author.

Doubt, Suspense. Doubt respects that which we should believe; suspense that which we wish to know or ascertain. We are in doubt for the want of evidence; we are in suspense for the want of certainty. Doubt interrupts our progress in the attainment of truth; suspense impedes us in the attainment of our objects.

To Draw, Drag, Haul, or Hale, Pull, Pluck, Tug. Draw expresses here the idea common to the first three terms, namely, of putting a body in motion from behind one's self or toward one's self; to drag is to draw a thing with violence, or to draw that which makes resistance; to haul is to drag it with still greater violence. To pull signifies only an effort to draw without the idea of motion; horses pull very long sometimes before they can draw a heavily laden cart uphill. To pluck is to pull with a sudden twitch in order to separate; to tug is to pull with violence.

Dream, Reverie. Dreams and reveries are alike opposed to the reality, and have their origin in the imagination; but the former commonly passes in sleep, and the latter when awake.

Dull, Gloomy, Sad, Dismal. When applied to natural objects, dull and gloomy denote the want of necessary light or life: in this sense metals are more or less dull according as they are stained with dirt: the weather is dull when the sun is obscured by clouds, and gloomy when the atmosphere is darkened by fogs or thick clouds; dismal denotes not merely the want of that which is necessary, but also the presence of that which is repugnant to the senses; as a glare of light or a sound may be dismal. Sad is not applied so much to sensible as moral objects; the loss of a parent is sad.

Durable, Lasting, Permanent. Durable is naturally said of material substances; and lasting of those which are spiritual; although in ordinary discourse sometimes they exchange offices: permanent applies more to the affairs of men. That which perishes quickly is not durable; that which ceases quickly is not lasting; that which is only for a time is not permanent.

Durable, Constant. What is durable is so from its inherent property; what is constant is so by the

power of the mind. No durable connections can be formed where avarice or lust prevails.

Duty, Obligation. Duty has to do with the conscience, and arises from the natural relations of society; an obligation arises from circumstances, and is a species of duty. He who guarantees to pay a sum of money contracts an obligation. He who marries contracts new duties.

Ease, Quiet, Rest, Repose. Ease and quiet respect action on the body; rest and repose respect the action of the body; ease denotes an exemption from any painful agency in general; quiet denotes an exemption from that in particular which noise, disturbance, or the violence of others may cause; rest simply denotes the cessation of motion; repose is that species of rest which is agreeable after labor.

Easy, Ready. Easy marks the freedom of being done; ready the disposition or willingness to do; the former refers mostly to the thing or the manner, the latter to the person.

To Eclipse, Obscure. Heavenly bodies are eclipsed by the intervention of other bodies between them and the beholder; things are in general obscured which are in any way rendered less striking or visible. So, figuratively, real merit is eclipsed by the intervention of superior merit; it is often obscured by an ungracious exterior in the possessor, or by his unfortunate circumstances.

Education, Instruction, Breeding. Instruction and breeding are to education as parts to a whole; instruction respects the communication of knowledge and breeding respects the manners or outward conduct; but education comprehends not only both these, but the formation of the mind, the regulation of the heart, and the establishment of the principles: good instruction makes one wiser; good breeding makes one more polished and agreeable; good education makes one really good.

To Effect, Produce, Perform. To produce signifies to bring something forth or into existence; to perform to do something to the end; to effect is to produce an effect by performing; whatever is effected is the consequence of a specific design; it always requires, therefore, a rational agent to effect: what is produced may follow incidentally, or arise from the action of an irrational agent or an inanimate object; what is performed is done by specific efforts.

Effusion, Ejaculation. An effusion commonly flows from a heated imagination uncorrected by the judgment; it is, therefore, in general not only incoherent but extravagant and senseless: an ejaculation is produced by the warmth of the moment, but never without reference to some particular circumstance. Enthusiasts are full of extravagant effusions; contrite sinners will often express their penitence in pious ejaculations.

Elderly, Aged, Old. The elderly man has passed the meridian of life; the aged man is fast approaching the term of our existence; the old man has already reached this term, or has exceeded it.

Eligible, Preferable. What is eligible is desirable in itself, what is preferable is more desirable than another.

To Embarrass, Perplex, Entangle. Embarrassments depend altogether on ourselves; the want of prudence and presence of mind is the common cause; perplexities depend on extraneous circumstances as well as on ourselves; extensive dealings with others are mostly attended with perplexities; entanglements arise mostly from the evil designs of others.

Emissary, Spy. Both these words designate a person sent out by a body on some public concern among their enemies; but they differ in their office according to the etymology of the words. The emissary is sent so as to mix with the people to whom he goes, to be in all places, and to associate with every one individually as may serve his purpose; the spy, takes his station wherever he can best perceive what is passing; he keeps himself at a distance from all but such as may particularly aid him in the object of his search. The emissary is generally employed by those who have some illegitimate object to pursue; spies, on the other hand, are employed by all regular governments in a time of warfare.

Empire, Reign, Dominion. As empire signifies command, or the power exercised in commanding, it properly refers to the country or people commanded; and as reign signifies the act of reigning, it refers to the individual who reigns. Dominion may be applied in the proper sense to the power which man exercises over the brutes or inanimate objects, and figuratively to the power of the passions.

To Employ, Use. We employ whatever we take into our service, or make subservient to our convenience for a time; we use whatever we entirely devote to our purpose.

Encomium, Eulogy, Panegyric. We bestow encomiums upon any work of art or production of genius, without reference to the performer; we bestow eulogies on the exploits of a hero, who is of another age or country; but we write panegyrics either in a direct address, or in direct reference to the person who is panegyricized; the encomium is produced by merit, real or supposed; the eulogy may spring from admiration of the person eulogized; the panegyric may be mere flattery, resulting from servile dependence.

To Encourage, Embolden. To encourage is to give courage, and to embolden to make bold; the former impelling to action in general, the latter to that which is more difficult or dangerous.

To End, Terminate, Close. To end is indefinite in its meaning and general in its application; terminate and close are modes of ending; to terminate is to end finally; to close to end gradually. Whatever is begun will end, and it may end in any way; but what terminates is that which has been designedly brought to an end; a string, a line, a verse, etc., may end, but a road is said properly to terminate.

To Endeavor, Aim, Strive, Struggle. An endeavor springs from a sense of duty; we endeavor to do that which is right, and avoid that which is wrong: aiming is the fruit of an aspiring temper; the object aimed at is always something superior either in reality or imagination; striving is the consequence of an ardent desire; the thing striven for is always conceived to be of importance; struggling is the effect of necessity; it is proportioned to the difficulty of attainment; the thing struggled for is indispensably necessary.

Endeavor, Effort, Exertion. Endeavor expresses little more than this common idea, being a term of general import; effort and exertion are particular modes of endeavor; the former being a special strong endeavor, the latter a continued strong endeavor.

Energy, Force, Vigor. With energy is connected the idea of activity; with force that of capability; with vigor that of health; energy lies only in the mind; force and vigor are the property of either body or mind.

To Enlarge, Increase, Extend. Enlarge is applied to dimension and extent; increase, is applicable to quantity, signifying to become greater in size by the junction of other matter; extend, signifies to make greater in space. We speak of enlarging a house, a room, premises, or boundaries; of increasing an army, or property, capital, expense, etc.; of extending the boundaries of an empire.

Enmity, Animosity, Hostility. Enmity lies in the heart; it is deep and malignant; animosity, from animus, a spirit, lies in the passions; it is fierce and vindictive; hostility, from hostis, a political enemy, lies in the action; it is mischievous and destructive. Enmity is altogether personal; hostility respects public or private measures; enmity often lies concealed in the heart, and does not betray itself by any open act of hostility.

Enormous, Prodigious, Monstrous. The enormous contradicts our rules of estimating and calculating; the prodigious raises our minds beyond their ordinary standard of thinking; the monstrous contradicts nature and the course of things. What is enormous excites our astonishment; what is prodigious excites our surprise or amazement; what is monstrous does violence to our senses and understanding.

Enough, Sufficient. He has enough whose desires are satisfied; he has sufficient whose wants are supplied. Enough, is in German *genug*, which comes from *genügen*, to satisfy. Sufficient, in Latin *sufficiens*, principle of sufficio, compounded of *sub* and *facio*, signifies made or suited to the purpose.

Enterprising, Adventurous. The enterprising character conceives great projects, and pursues objects that are difficult to be obtained; the adventurous character is contented with seeking that which is new, and placing himself in dangerous and unusual situations.

Epithet, Adjective. Epithet is the technical term of the rhetorician; adjective that of the grammarian. The same word is an epithet as it qualifies the sense; it is an adjective as it is a part of speech; thus, in the phrase "Alexander the Great," great is an epithet, inasmuch as it designates Alexander in distinction from all other persons; it is an adjective as it expresses a quality in distinction from the noun Alexander, which denotes a thing.

Equal, Even, Equable, Like, or Alike, Uniform. Equal is said of degree, quantity, number, and dimensions, as equal in years; even is said of the surface and position of bodies; a board is made even with another board; like is said of accidental qualities in things, as alike in color or in feature; uniform is said of things only as to their fitness to correspond; those which are unlike in color, shape, or make, are not uniform, and

cannot be made to match as pairs; equable is used only in the moral acceptance, in which all the others are likewise employed.

Error, Mistake, Blunder. Error in its universal sense is the general term, since every deviation from what is right in rational agents is termed error. Into whatever we attempt to do or think error will be sure to creep. The other terms designate modes of error, which mostly refer to the common concerns of life; mistake is an error of choice; blunder an error of action.

Error, Fault. Error respects the act; fault respects the agent; an error may lay in the judgment, or in the conduct; but a fault lies in the will or intention.

Eruption, Explosion. Eruption is the coming into view, by a sudden bursting; explosion signifies bursting out with a noise: hence of flames there will be properly an eruption, but of gunpowder an explosion.

To Estimate, Compute, Rate. To estimate is to obtain the aggregate sum in one's mind, either by an immediate or a progressive act; to compute is to obtain the sum by the gradual process of putting together items; to rate is to fix the relative value in one's mind by deduction and comparison; a builder estimates the expense of building a house on a given plan; a proprietor of houses computes the probable diminution in the value of his property in consequence of wear and tear; the surveyor rates the present value of lands or houses.

Eternal, Endless, Everlasting. The eternal is set above time; the endless lies within time. That is properly eternal which has neither beginning nor end; that is endless which has a beginning, but no end; that which is everlasting has neither interruption nor cessation.

To Evade, Equivoicate, Prevaricate. We evade by artfully turning the subject or calling off the attention of the inquirer; we equivoicate by the use of equivocal expressions; we prevaricate by the use of loose and indefinite expressions; we avoid giving satisfaction by evading; we give a false satisfaction by equivocating; we give dissatisfaction by prevaricating.

Event, Incident, Accident, Adventure, Occurrence. These terms are expressive of what passes in the world, which is the sole signification of the term event; while to that of the other terms are annexed some accessory ideas; an incident is a personal event; an accident an accidental event which happens by the way; an adventure an extraordinary event; an occurrence an ordinary or domestic event. Event, in its ordinary and limited acceptance, excludes the idea of chance; accident excludes that of design; incident, adventure, and occurrence are applicable in both cases.

Exact, Extort. To exact is to demand with force, it is commonly an act of injustice; to extort is to get with violence, it is an act of tyranny.

Exact, Nice, Particular, Punctual. To be exact is to arrive at perfection; to be nice is to be free from faults; to be particular is to be nice in certain particulars; to be punctual is to be exact in certain points. We are exact in our conduct or in what we do; nice and particular in our mode of doing it; punctual as to the time and season for doing it.

Example, Pattern, Ensample. The example must be followed generally; the pattern must be followed particularly, not only as to what, but how a thing is to be done; the former serves as a guide to the judgment; the latter to guide the actions; the ensample is a species of example, the word being employed only in the solemn style.

Example, Instance. The example is set forth by way of illustration or instruction; the instance is adduced by way of evidence or proof.

To Excite, Incite, Provoke. To excite is said more particularly of the inward feelings; incite is said of the external actions; provoke is said of both. A person's passions are excited; he is incited by any particular passion to a course of conduct; a particular feeling is provoked, or he is provoked by some feeling to a particular step.

Excursion, Ramble, Tour, Trip, Jaunt. Excursion signifies going out of one's course; a ramble is a going without any course or regular path (from room); a tour, from the word *turn* or *return*, is a circuitous course; a trip means to go on the toes like a dancer, is properly a pedestrian excursion or tour, or any short journey that might be made on foot; those who have no better means of spending their time make jaunts.

To Excuse, Pardon. We excuse a person or thing by exempting him from blame; we pardon by giving up the punishment of the offense one has committed. We excuse a small fault; we pardon a great fault: we excuse that which personally affects ourselves; we pardon that which offends against morals.

To Execute, Fulfill, Perform. To execute is to bring about an end; it involves active measures, and is peculiarly applicable to that which is extraordinary, or that which requires particular spirit and talents; schemes of ambition are executed; to fulfill is to satisfy a moral obligation. We fulfill the duties of citizens; to perform is to carry through by simple action or labor; it is more particularly applicable to the ordinary and regular business of life; we perform a work or a task.

To Exercise, Practice. We exercise in that where the powers are called forth; we practice in that where frequency and habitude of action is requisite.

Exigency, Emergency. The exigency is more common, but less pressing; the emergency is imperious when it comes, but comes less frequently. A prudent traveler will never carry more money with him than what will supply the exigencies of his journey; and in case of an emergency will rather borrow of his friends than risk his property.

To Exonerate, Exculpate. The first is the act of another; the second is one's own act. We exonerate him upon whom a charge has lain, or who has the load of guilt; we exculpate ourselves when there is any danger of being blamed; circumstances may sometimes tend to exonerate; the explanation of some person is requisite to exculpate.

Expedient, Resource. The expedient is an artificial means; the resource is a natural means. A cunning man is fruitful in expedients; a fortunate man abounds in resources.

Expedient, Fit. The expediency of a thing depends altogether upon the outward circumstances; the fitness is determined by a moral rule.

To Explain, Expound, Interpret. Single words or sentences are explained; a whole work, or considerable parts of it, are expounded; the sense of any writing or symbolical sign is interpreted.

To Explain, Illustrate, Elucidate. To explain is simply to render intelligible; to illustrate and elucidate are to give additional clearness. Everything requires to be explained to one who is ignorant of it; but the best informed will require to have abstruse subjects illustrated, and obscure subjects elucidated.

To Expostulate, Remonstrate. We expostulate in a tone of authority; we remonstrate in a tone of complaint. He who expostulates passes a censure, and claims to be heard; he who remonstrates presents his case and requests to be heard.

Extraneous, Extrinsic, Foreign. The extraneous is that which forms no necessary or natural part of anything; the extrinsic is that which forms a part or has a connection, but only in an indirect form; it is not an inherent or component part; the foreign is that which forms no part whatever, and has no kind of connection.

Extraordinary, Remarkable. The extraordinary is that which is out of the ordinary course, but it does not always excite remark, and is not, therefore, remarkable, as when we speak of an extraordinary loan; on the other hand, when the extraordinary conveys the idea of what deserves notice, it expresses much more than remarkable.

Extravagant, Prodigious, Lavish, Profuse. The extravagant man spends his money without reason; the prodigious man spends it in excesses. One may be extravagant with a small sum where it exceeds one's means; one can be prodigious only with large sums; lavish and profuse are properly applied to particular actions, the former to denote an expenditure more or less wasteful or superfluous, the latter to denote a full supply without any sort of scant.

Exuberant, Luxuriant. These terms are both applied to vegetation in a flourishing state; but exuberance expresses the excess, and luxuriance the perfection.

Facetious, Conversable, Pleasant, Jocular, Jocular. Facetious may be employed either for writing or conversation; the rest only in conversation. The facetious man deals in that kind of discourse which may excite laughter; a conversable man may instruct as well as amuse; the pleasant man says everything in a pleasant manner; his pleasantry even on the most delicate subject is without offense; the person speaking is jocular; the thing said, or the manner of saying it, is jocular.

Factious, Seditious. Factious is an epithet to characterize the tempers of men; seditious characterizes their conduct. The factious man attempts to raise himself into importance, he aims at authority, and seeks to interfere in the measures of government; the seditious man attempts to excite others, and to provoke their resistance to established authority; the first wants to be a law-giver; the second does not hesitate to be a law-breaker.

Fair, Clear. Fair is used in a positive sense; clear in a negative sense: there must be some brightness in what is fair; there must be no spots in what is clear. The weather is said to be fair, which is not only free from what is disagreeable, but somewhat enlivened by the sun; it is clear when it is free from clouds or mists.

Faith, Creed. These words are synonymous when taken for the thing trusted in or believed; but they differ in this, that faith has always a reference to the principle in the mind; creed only respects the thing which is the object of faith.

Faith, Fidelity. Faith here denotes a mode of action, namely, in acting true to the faith which others repose in us; fidelity, a disposition of the mind to adhere to that faith which others repose in us. We keep our faith; we show our fidelity.

Faithful, Trusty. Faithful respects the principle altogether; it is suited to all relations and stations, public and private; trusty includes not only the principle, but the mental qualifications in general; it applies to those in whom particular trust is to be placed. It is the part of a Christian to be faithful to all his engagements; it is a particular excellence in a servant to be trusty.

Faithless, Perfidious, Treacherous. A faithless man is faithless only for his own interest; a perfidious man is expressly so to the injury of another. Perfidy may lie in the will to do; treachery lies altogether in the thing done. A friend is perfidious whenever he evinces his perfidy; but he is said to be treacherous only in the particular instance in which he betrays the confidence and interests of another.

Fall, Downfall, Ruin. Fall applies to that which is erect; downfall to that which is elevated. Everything which is set up, although as trifling as a stick, may have a fall; but we speak of the downfall of the loftiest trees or the tallest spires. A man may recover from his fall, but his downfall is commonly followed by the entire ruin of his concerns, and often of himself.

Fallacious, Deceitful, Fraudulent. The fallacious has respect to falsehood in opinion; deceitful to that which is externally false; our hopes are often fallacious; the appearances of things are often deceitful. Fallacious, as characteristic of the mind, excludes the idea of design; deceitful excludes the idea of mistake; fraudulent is a gross species of the deceitful.

Fame, Reputation, Renown. Fame may be applied to any object, good, bad, or indifferent; reputation is applied only to real eminence in some department; renown is employed only for extraordinary men and brilliant exploits.

Fame, Report, Rumor, Hearsay. Fame serves to form or establish a character either of a person or a thing; it will be good or bad, according to circumstances; the fame of our Saviour's miracles went abroad through the land; a report serves to communicate information of events; it may be more or less correct according to the veracity or authenticity of the reporter; a rumor serves the purposes of fiction; it is more or less vague according to the temper of the times and the nature of the events; the hearsay serves for information or instruction, and is seldom so incorrect as it is familiar.

Famous, Celebrated, Renowned, Illustrious. Famous signifies literally having fame or the cause of fame; it is applicable to that which causes a noise or sensation; to that which is talked of, written upon, discussed, and thought of; to that which is circulated among all ranks and orders of men; celebrated signifies literally kept in the memory by a celebration or memorial, and is applicable to that which is praised and honored with solemnity; renowned signifies literally possessed of a name, and is applicable to whatever extends the name, or causes the name to be often repeated; illustrious signifies literally what has or gives a luster; it is applicable to whatever confers dignity.

Fanciful, Fantastical, Whimsical, Capricious. Fanciful is said of that which is irregular in the taste or judgment; fantastical is said of that which violates all propriety, as well as regularity; the former may consist of a simple deviation from rule; the latter is something extravagant; whimsical is a species of the fanciful in regard to one's likes or dislikes; capricious respects errors of temper, or irregularities of feeling.

Fancy, Imagination. The fancy only employs itself about things without regarding their nature; but the imagination aims at tracing a resemblance, and getting a true copy. The fancy consequently forms combinations, either real or unreal, as chance may direct; but the imagination is seldom led astray. The fancy is busy in dreams, or when the mind is in a disordered state; but the imagination is supposed to act when the intellectual powers are in full play.

Fatigue, Weariness, Lassitude. Fatigue is an

exhaustion of the animal or mental powers; weariness is a wearing out the strength, or breaking the spirits; lassitude is a general relaxation of the animal frame.

Fearful, Dreadful, Frightful, Tremendous, Terrible, Terrific, Horrible, Horrid. A contest is fearful when the issue is important, but the event doubtful; the thought of death is dreadful to one who feels himself unprepared; the frightful is less than the tremendous; the tremendous than the terrible; the terrible than the horrible; shrieks may be frightful; thunder and lightning may be tremendous; the roaring of a lion is terrible; the glare of his eye terrific; the actual spectacle of killing is horrible or horrid. We may speak of a frightful, dreadful, terrible, or horrid dream; or frightful, dreadful, or terrible tempest; dreadful, terrible, or horrid consequences.

To Feel, be Sensible, Conscious. To feel is said of the whole frame, inwardly and outwardly: it is the accompaniment of existence; to be sensible is said only of the senses. It is the property of all living creatures to feel pleasure and pain in a greater or less degree: those creatures which have not the sense of hearing will not be sensible of sounds; one is conscious only of what passes inwardly; we are conscious of having fallen short of our duty.

To Feign, Pretend. One feigns in order to gain some future end: a person feigns sickness in order to be excused from paying a disagreeable visit; one pretends in order to serve a present purpose; a child pretends to have lost his book who wishes to excuse himself for his idleness.

To Felicitate, Congratulate. Felicitate signifies to make happy, and is applicable only to ourselves; congratulate is applicable either to ourselves or others; we felicitate ourselves on having escaped the danger; we congratulate others on their good fortune.

Female, Feminine, Effeminate. In the female character we expect to find that which is feminine. The female dress, manners, and habits, have engaged the attention of all essayists, from the time of Addison to the present period. The feminine is natural to the female; the effeminate is unnatural to the male.

Ferocious, Fierce, Savage. Ferocity marks the untamed character of a cruel disposition: fierceness has a greater mixture of pride and anger in it; savageness marks a more permanent, but not so violent a sentiment of either cruelty or anger as the two former. Ferocity and fierceness are in common applied to the brutes, to designate their natural tempers: savage is mostly employed to designate the natural tempers of man, when uncontrolled by the force of reason and a sense of religion.

Fervor, Ardor. The affections are properly, fervent; the passions are ardent: we are fervent in feeling, and ardent in acting.

Final, Conclusive. Final designates simply the circumstance of being the last; conclusive the mode of finishing or coming to the last: a determination is final which is to be succeeded by no other; a reasoning is conclusive that puts a stop to farther question.

To Find, Find Out, Discover, Invent. The merit of finding or inventing consists in newly applying or modifying the materials, which exist separately; the merit of discovering consists in removing the obstacles which prevent us from knowing the real nature of the thing: imagination and industry are requisite for finding or inventing; acuteness and penetration for discovering. Find is applicable to the operative arts; invent to the mechanical; discover to the speculative.

To Find Fault With, Blame, Object To. We find fault with a person for his behavior; we find fault with our house or servant; we blame a person for his temerity or his improvidence; we object to a measure that is proposed. We find fault with or blame that which has been done; we object to that which has been or is to be done.

Fine, Delicate, Nice. Fine, in the natural sense, denotes smallness in general. Delicate denotes a degree of fineness that is agreeable to the taste. Thread is said to be fine; silk is said to be delicate, when its fineness of texture it adds softness; nice is said of what is agreeable to the appetite.

Finite, Limited. Finite is the natural property of things; and limited is the artificial property: the former is opposite only to the infinite; but the latter, which lies within the finite, is opposed to the unlimited or the infinite. This world is finite, and space infinite; the power of a prince is limited.

Firm, Fixed, Solid, Stable. Firm (v. constancy). Fixed denotes the state of being fixed; solid, in Latin *solidus*, comes from *solum*, the ground, which is the most solid thing existing; stable (v. constancy). That is firm which is not easily shaken; that is fixed which is fastened to something else, and not easily torn; that is

solid which is able to bear, and does not easily give way; that is stable which is able to make a stand against resistance, or the effects of time.

Fit, Apt, Meet. A house is fit or the accommodation of the family according to the plan of the builder; the young mind is apt to receive either good or bad impressions; meet is a term of rare use, except in spiritual matters or in poetry: it is meet to offer our prayers to the Supreme Disposer of all things.

Flatterer, Sycophant, Parasite. The flatterer is one who flatters by words; the sycophant and parasite is therefore always a flatterer, and something more, for the sycophant adopts every mean artifice by which he can ingratiate himself, and the parasite submits to every degradation and servile compliance by which he can obtain his base purpose.

Flexible, Pliable, Pliant, Supple. Flexible is used in a natural or moral sense; pliable in the familiar sense only; pliant in the higher and moral application only: what can be bent in any degree as a stick is flexible; what can be bent as wax, or folded like cloth, is pliable; supple, whether in a proper or a figurative sense, is an excess of pliability; what can be bent backward and forward, like osier twig, is supple.

To Fluctuate, To Waver. To fluctuate conveys the idea of strong agitation; to waver, that of constant motion backward and forward: when applied in the moral sense, to fluctuate designates the action of the spirits or the opinions; to waver is said only of the will or opinions.

To Follow, Succeed, Ensur. Follow and succeed is said of persons and things; ensue of things only: follow, in respect of persons, denotes the going in order; succeed denotes the going or being in the same place immediately after another: many persons may follow one another at the same time; but only one individual properly succeeds another; ensue is used in specific cases; quarrels too often ensue from the conversations of violent men who differ either in religion or politics.

To Follow, Pursue. The idea of going after any object in order to reach or obtain it is common to these terms, but under different circumstances: to follow a person is mostly with a friendly intention; to pursue with a hostile intention.

Follower, Adherent, Partisan. A follower is one who follows a person generally; an adherent is one who adheres to his cause; a partisan is the follower of a party.

Folly, Foolery. Folly is the abstract of foolish, and characterizes the thing; foolery the abstract of fool, and characterizes the person: young people are perpetually committing follies if not under proper control; fashionable people lay aside one foolery only to take up another.

Fool, Idiot, Buffoon. Fool is doubtless connected with our word foul, in German foul, which is either nasty or lazy, and the Greek word, which signifies worthless or good for nothing. Idiot comes from the Greek word signifying either a private person or one that is rude and unskilled in the ways of the world; buffoon, in French "bouffon," is in all probability connected with our word beef, buffalo, and bull, signifying a senseless fellow. The fool is either naturally or artificially a fool; the idiot is a natural fool; the buffoon is an artificial fool; whoever violates common-sense in his actions is a fool; whoever is unable to act according to common-sense is an idiot; whoever intentionally violates common-sense is a buffoon.

Foolhardy, Adventurous, Rash. The foolhardy man ventures in defiance of consequences; the adventurous man ventures from a love of the arduous and the bold; the rash man ventures for want of thought.

Force, Violence. The arm of justice must exercise force in order to bring offenders to a proper account; one nation exercises violence against another in the act of carrying on war; force is mostly conformable to reason and equity; violence is always resorted to for the attainment of that which is unattainable by law; force is always something desirable; violence is always something hurtful. We ought to listen to arguments which have force in them; we endeavor to correct the violence of all angry passions.

Forefathers, Progenitors, Ancestors. Forefathers signifies our fathers before us, and includes our immediate parents; progenitors signifies those begotten before us, exclusive of our immediate parents; ancestors is said of those from whom we are remotely descended.

To Foretell, Predict, Prophecy, Prognosticate. We may foretell common events, although we cannot predict or prophesy anything important: one foretells by a simple calculation or guess; to predict and prophesy are extraordinary gifts; one predicts by a supernatural power, real or supposed; one prophesies by means of inspiration. To prognosticate is an act of the under-

standing; it is guided by outward symptoms as a rule; a physician prognosticates the crisis of a disorder by the symptoms discoverable in the patient.

Forgetfulness, Oblivion. Forgetfulness characterizes the person, or that which is personal; oblivion the state of the thing: the former refers to him who forgets; the latter to that which is forgotten.

To Forgive, Pardon, Absolve, Remit. Individuals forgive each other personal offenses; they pardon offenses against law and morals: the former is an act of Christian charity; the latter an act of clemency; remission is the consequence of the crime; it has more particular regard to the punishment; it is granted either by the prince or magistrates; it arrests the execution of justice. Absolution is pronounced either by the civil judge or the ecclesiastical minister; and it re-establishes the accused or the penitent in the rights of innocence.

To Form, Fashion, Mold, Shape. As everything respects a form when it receives existence, so to form conveys the idea of producing. When we wish to represent a thing as formed in any distinct or remarkable way, we may speak of it as fashioned. God formed man out of the dust of the ground; he fashioned him after his own image. When we wish to represent a thing as formed according to a precise rule, we should say it was molded; thus the habits of a man are molded at the will of a superior. When we wish to represent a thing as receiving the accidental qualities which distinguish it from others, we talk of shaping it.

Form, Ceremony, Rite, Observance. Form respects all determinate modes of acting and speaking, that are adopted by society at large, in every transaction of life; ceremony respects those forms of outward behavior which are made the expressions of respect and deference; rite and observance are applied to national ceremonies in matters of religion. Every country has adopted certain rites founded upon its peculiar religious faith, and prescribed certain observances by which individuals can make a public profession of their faith.

Formidable, Dreadful, Terrible, Shocking. The formidable acts neither suddenly nor violently; the dreadful may act violently, but not suddenly; thus the appearance of an army may be formidable; but that of a field of battle is dreadful. The terrible and shocking act both suddenly and violently; but the former acts both on the senses and the imagination, the latter on the moral feelings: thus, the glare of a tiger's eye is terrible; the unexpected news of a friend's death is shocking.

Forsaken, Forlorn, Destitute. To be forsaken (v. to abandon) is to be deprived of the company and assistance of those we have looked to; to be forlorn is to be forsaken in time of difficulty, to be without a guide in an unknown road; to be destitute is to be deprived of the first necessities of life.

To Forswear, Perjure, Suborn. To forswear is applied to all kinds of oaths; to perjure is employed only for such oaths as have been administered by the civil magistrate. A soldier forswears himself who breaks his oath of allegiance by desertion; a man perjures himself in a court of law who swears to the truth of that which he knows to be false; suborn signifies to make to forswear: a perjured man has all the guilt upon himself; but he who is suborned shares his guilt with the suborner.

To Foster, Cherish, Harbor, Indulge. These terms are all employed here in the moral acceptation, to express the idea of giving nourishment to an object; to foster in the mind is to keep with care and positive endeavors; as when one fosters prejudices by encouraging everything which favors them: to cherish in the mind is to hold dear or set a value upon; as when one cherishes good sentiments, by dwelling upon them with inward satisfaction; to harbor is to allow room in the mind, and is generally taken in the worst sense, for giving admission to that which ought to be excluded; as when one harbors resentment by permitting it to have a resting-place in the heart; to indulge in the mind is to give the whole mind to it, to make it the chief source of pleasure; as when one indulges an affection, by making the will and the outward conduct bend to its gratifications.

Foundation, Ground, Basis. A report is said to be without any foundation which has taken its rise in mere conjecture, or in some arbitrary cause independent of all fact; a man's suspicion is said to be without ground which is not supported by the shadow of external evidence: both foundation and basis are the lowest parts of any structure; but the former lies under ground, the latter stands above: the foundation supports some large and artificially erected pile; the basis supports a simple pillar.

Fragile, Frail, Brittle. Man, corporeally considered is a fragile creature, his frame is composed of fragile materials; mentally considered, he is a frail creature, for he is liable to every sort of frailty; fragile applies to what-

ever will break from the effects of time; brittle to that which will not bear a temporary violence.

Frank, Candid, Ingenious, Free, Open, Plain. The frank man is under no constraint; his thoughts and feelings are both set at ease, and his lips are ever ready to give utterance to the dictates of his heart: the candid man has nothing to conceal; he speaks without regard to self-interest or any partial motive; he speaks nothing but the truth: the ingenious man throws off all disguise; he scorns all artifice, and brings everything to light; he speaks the whole truth; free, open, and plain have not so high an office as the first three; the frank, free, and open men all speak without constraint; but the frank man is not impertinent like the free man, nor indiscreet like the open man; the frank man speaks only of what concerns himself; the free man speaks of what concerns others; the open man says all he knows and thinks, from the inconsiderate levity of his temper; the plain man speaks plainly but truly; he gives no false coloring to his speech.

Free, Liberal. To be free signifies to act or think at will; to be liberal is to act according to the dictates of an enlarged heart and an enlightened mind.

Free, Familiar. To be free is to be disengaged from all the constraints which the ceremonies of social intercourse impose; to be familiar is to be upon the footing of a familiar, of a relative, or one of the same family.

Free, Exempt. Free is applied to everything from which any one may wish to be free; but exempt, on the contrary, to those burdens which we should share with others.

Freedom, Liberty. Freedom is personal and private; liberty is public. The freedom of the city is the privilege granted by the city to individuals; the liberties of the city are the immunities enjoyed by the city.

To Frequent, Resort To, Haunt. Frequent is more commonly used of an individual who goes often to a place; resort and haunt of a number of individuals; a man may frequent a theater, a club, or any other social meeting, innocent or otherwise; people from different quarters may resort to a fair, a church, or any other place where they wish to meet for a common purpose; but those who haunt any place go to it in privacy for some bad purpose.

To Frighten, Intimidate. The danger that is near or before the eyes frightens; that which is seen at a distance intimidates.

Funeral, Obsequies. We speak of the funeral as the last sad office which we perform for a friend; it is accompanied by nothing but by mourning and sorrow; we speak of obsequies as the greatest tribute of respect which can be paid to the person of one who was high in station or public esteem.

To Gape, Stare, Gaze. Gape and stare are taken in a bad sense; the former indicating the astonishment of gross ignorance; the latter not only ignorance but impertinence: gaze is taken always in a good sense, as indicating a laudable feeling, of astonishment, pleasure, or curiosity.

To Gather, Collect. To gather signifies to bring things of a sort together; to collect annexes also the idea of binding or forming into a whole; we gather that which is scattered in different parts: thus stones are gathered into a heap; vessels are collected so as to form a fleet.

General, Universal. What is general includes the greater part or number; what is universal includes every individual or part.

Gentle, Polite. Gentility respects rank in life; politeness the refinement of the mind and outward behavior. A gentle education is suited to the station of a gentleman; a polite education fits for polished society and conversation, and raises the individual among his equals.

Gentle, Tame. Any unbroken horse may be gentle, but not tame; a horse that is broken in will be tame, but not always gentle. Gentle signifies literally well-born, and is opposed either to the fierce or the rude; tame, is opposed either to the wild or the spirited.

Gift, Present, Donation. The gift is an act of generosity or condescension; it contributes to the benefit of the receiver; the present is an act of kindness, courtesy or respect; it contributes to the pleasure of the receiver. The gift is private, and benefits the individual; the donation is public, and serves some general purpose; what is given to relieve the necessities of any poor person is a gift; what is given to support an institution is a donation.

To Give, Grant, Bestow. The idea of communicating to another what is our own, or in our power, is common to these terms; this is the whole signification of give. To grant is to give at one's pleasure; to bestow is to give from a certain degree of necessity. We give money, clothes, food, or whatever is transferable;

granting is confined to such objects as afford pleasure or convenience; bestowing is applied to such objects only as are necessary to supply wants, which always consist of that which is transferable.

To Give, Present, Offer, Exhibit. We give to our domestics; we present to princes; we offer to God; we give to a person what we wish to be received; we present to a person what we think agreeable; a poem is said to exhibit marks of genius.

To Give Up, Abandon, Resign, Forego. To give up is applied to familiar cases; abandon to matters of importance: one gives up an idea, an intention, a plan, and the like; one abandons a project, a scheme, a measure of government. A man gives up his situation by a positive act of his choice; he resigns his office when he feels it inconvenient to hold it: so, likewise, we give up expectations, and resign hopes; we resign that which we have, and we forego that which we might have.

Glaring, Barefaced. Glaring designates the thing; barefaced characterizes the person: a glaring falsehood is that which strikes the observer in an instant to be falsehood; a barefaced lie or falsehood betrays the effrontery of him who utters it.

Glimpse, Glance. A glimpse is the action of the object appearing to the eye; a glance is the action of the eye seeking the object: one catches a glimpse of an object; one casts a glance at an object.

Glorious, Honor. Glorious is something dazzling and widely diffused; honor is something splendid, but more solid; glory impels to extraordinary efforts and to great undertakings; honor induces to a discharge of one's duty.

To Glory, Boast, Vaunt. To glory is to hold as one's glory; to boast is to set forth to one's advantage; to vaunt, is to set one's self up before others; to glory is more particularly the act of the mind, the indulgence of the internal sentiment; to boast denotes rather the expression of the sentiment; to vaunt is properly to proclaim praises aloud, and is taken either in an indifferent or bad sense.

Godlike, Divine, Heavenly. Godlike is a more expressive, but less common term than divine; the former is used only as an epithet of peculiar praise for an individual; divine is generally employed for that which appertains to a superior being, in distinction from that which is human; a heavenly being denotes the angels or inhabitants of heaven, in distinction from earthly beings. As divine is opposed to human, so is heavenly to earthly.

Good-Natured, Good-Humor. Good-nature and good-humor both imply the disposition to please and be pleased; but the former is habitual and permanent, the latter is temporary and partial; the former lies in the nature and frame of the mind, the latter in the state of the humors or spirits.

To Govern, Rule, Regulate. The exercise of authority enters more or less into the signification of these terms; but to govern implies the exercise likewise of judgment and knowledge. To rule implies rather the unqualified exercise of power, the making the will the rule; a king governs his people by means of wise laws and an upright administration; a despot rules over a nation according to his arbitrary decision; regulate is a species of governing simply by judgment; the word is applicable to things of minor moment, where the force of authority is not so requisite: one governs the affairs of a nation, or a large body where great interests are involved; we regulate the concerns of an individual.

Government, Administration. Both these terms may be employed either to designate the act of governing and administering, or the persons governing and administering. In both cases government has a more extensive meaning than administration; the former includes every exercise of authority; while administration implies only that exercise of authority which consists in putting the laws or will of another in force. When we speak of the government, as it respects the persons, it implies the whole body of constituted authorities; and the administration, only that part which puts in execution the intentions of the whole.

Grace, Charm. Grace is altogether corporeal; charm is either corporeal or mental: the grace qualifies the action of the body; the charm is an inherent quality in the body itself. A lady moves, dances, and walks with grace; the charms of her person are equal to those of her mind. A graceful figure is rendered so by the deportment of the body. A comely figure has that in itself which pleases the eye. Grace is a quality pleasing to the eye; but elegance is a quality of a higher nature, that inspires admiration; elegant is applicable, like graceful, to the motion of the body, or like comely to

the person, and is extended in its meaning also to language, and even to dress.

To Gratify, Indulge, Humor. To gratify is a positive act of the choice; to indulge, is a negative act of the will, a yielding of the mind to circumstances. One gratifies his desires or appetites; and indulges his humors, or indulges in pleasures. We gratify and indulge others as well as ourselves, and mostly in the good sense; to gratify is for the most part in return for services; it is an act of generosity; to indulge is to yield to the wishes or be lenient to the infirmities of others; it is an act of kindness or good-nature. To humor is mostly taken in a bad sense.

Gratuitous, Voluntary. Gratuitous is opposed to that which is obligatory; voluntary is opposed to that which is compulsory, or involuntary.

Grave, Serious, Solemn. Grave expresses more than serious; it does not merely bespeak the absence of mirth, but that heaviness of mind which is displayed in all the movements of the body; seriousness, on the other hand, bespeaks no depression, but simply steadiness of action, and a restraint from all that is jocular; a judge pronounces the solemn sentence of condemnation in a solemn manner; a preacher delivers many solemn warnings to his hearers.

Great, Large, Big. Great is applied to all kinds of dimensions in which things can grow or increase; large signifies to give freely, it is properly applied to space, extent, and quantity; big denotes great as to expansion or capacity. A house, a room, is great or large; an animal or a mountain is great or big; a road, a city, a street, and the like, is termed rather great than large. We may speak of a large portion; or of a mind big with conception.

Great, Grand, Sublime. These terms are synonymous only in their moral application; great simply designates extent; grand includes likewise the idea of excellence and superiority. A great undertaking characterizes only the extent of the undertaking; a grand undertaking bespeaks its superior excellence; sublime designates the dimensions of height. A scene may be either grand or sublime; it is grand as it fills the imagination with its immensity; it is sublime as it elevates the imagination beyond the surrounding and less important objects.

To Groan, Moan. Groan is a deep sound produced by hard breathing; moan is a plaintive, long-drawn sound produced by the organs of utterance. The groan proceeds involuntarily as an expression of severe pain, either of body or mind; the moan proceeds often from the desire of awakening attention or exciting compassion.

Gross, Coarse. These terms are synonymous in the moral application. Grossness of habit is opposed to delicacy; coarseness to softness and refinement. A person becomes gross by an unrestrained indulgence of his sensual appetites, particularly in eating and drinking; he is coarse from the want of polish either as to his mind or manners.

To Guard, Defend, Watch. To guard, in its largest sense, comprehends both watching and defending, that is, both the preventing the attack and the resisting it when it is made. In the restricted sense, to guard is properly to keep off an enemy; to defend is to drive him away when he makes the attack. Watch, like guard, consists in looking to the danger, but it does not necessarily imply the use of any means to prevent the danger; he who watches may only give an alarm.

Guard, Guardian. The guard only guards against external evils; the guardian takes upon him the office of parent, counselor, and director.

To Guess, Conjecture, Divine. We guess that a thing actually is; we conjecture that which may be; we guess that it is a certain hour; we conjecture as to the meaning of a person's actions. To guess and to conjecture are natural acts of the mind; to divine, in its proper sense, is a supernatural act; in this sense impostors in our time presume to divine in matters that are set above the reach of human comprehension. The term is, however, employed to denote a species of guessing in different matters, as to divine the meaning of a mystery.

Guest, Visitor, or Visitant. Guest signifies one who is entertained; visitor or visitant is the one who pays the visit; the visitor simply comes to see the person, and enjoy social intercourse; but the guest partakes also of hospitality.

Guise, Habit. The guise is that which is unusual, and often only occasional; the habit is that which is usual among particular classes; a person sometimes assumes the guise of a peasant, in order the better to conceal himself; he who devotes himself to the clerical profession puts on the habit of a clergyman.

Happy, Fortunate. Happy and fortunate are

both applied to the external circumstances of a man; but the former conveys the idea of that which is abstractedly good; the latter, implies rather what is agreeable to one's wishes. A man is happy in his marriage or children.

To Happen, Chance. Happen respects all events, without including any collateral idea; chance comprehends likewise the idea of the cause and order of events; whatever comes to pass happens, whether regularly in the course of things, or particularly and out of the order; whatever chances happens altogether without concert, intention, and often without relation to any other thing.

Happy, Fortunate. Both words are applied to the external circumstances of a man; but the former conveys the idea of that which is abstractedly good, the latter implies rather what is agreeable to one's wishes. A man is happy in his marriage; he is fortunate in his trading concerns. Happy excludes the idea of chance; fortunate excludes the idea of personal effort.

Harbor, Haven, Port. The idea of a resting-place for vessels is common to these terms. Harbor, carries with it little more than the common idea of affording a resting or anchoring place; haven, conveys the idea of security; port, conveys the idea of an enclosure. A haven is a natural harbor; a port is an artificial harbor.

Hard, Firm, Solid. That is hard which will not yield to a closer compression; that is firm which will not yield so as to produce a separation. Ice is hard, as far as it respects itself, when it resists every pressure; it is firm, with regard to the water which it covers, when it is so closely bound as to resist every weight without breaking. Hard and solid respect the internal constitution of bodies, and the adherence of the component parts; but hard denotes a much closer degree of adherence than solid; the hard is opposed to the soft; the solid to the fluid.

Hardly, Scarcely. Where the idea of practicability predominates, hardly seems most proper; and where the idea of frequency predominates, scarcely seems preferable. One can hardly judge of a person's features by a single and partial glance; we scarcely ever see men lay aside their vices from a thorough conviction of their enormity.

To Hasten, Accelerate, Speed, Expedite, Dispatch. To hasten expresses little more than the general idea of quickness in moving toward a point; thus, he hastens who runs to get to the end of his journey; accelerate expresses, moreover, the idea of bringing something to a point; thus, every mechanical business is accelerated by the order and distribution of its several parts. The word speed includes not only quick but forward movement. He who goes with speed goes effectually forward, and comes to his journey's end the soonest. This idea is excluded from the term haste, which may often be a planless, unsuitable quickness. Hence the proverb, "The more haste, the worse speed." Expedite and dispatch are terms of higher import, in application to the most serious concerns in life; but to expedite expresses a process, a bringing forward toward an end; dispatch implies a putting an end to, a making a clearance. We do everything in our power to expedite a business; we dispatch a great deal of business within a given time.

To Hasten, Hurry. To hasten and hurry both imply to move forward with quickness in any matter; but the former may proceed with some design and good order, but the latter always supposes perturbation and irregularity.

To Hate, Detest. To hate (v. antipathy) is a personal feeling directed toward the object independently of its qualities; to detest (v. to abhor) is a feeling independent of the person, and altogether dependent upon the nature of the thing. One hates, but not detests, the person who has done an injury to one's self; and that one detests, rather than hates, the person who has done injuries to others.

Hateful, Odious. Hateful is properly applied to whatever violates general principles of morality; lying and swearing are hateful vices; odious is more commonly applied to such things as affect the interests of others, and bring odium upon the individual.

Haughtiness, Disdain, Arrogance. Haughtiness is founded on the high opinion we entertain of ourselves; disdain, on the low opinion we have of others; arrogance is the result of both, but if anything, more of the former than the latter. Haughtiness and disdain are properly sentiments of the mind, and arrogance a mode of acting resulting from a state of mind.

To Have, Possess. To have is sometimes to have in one's hand or within one's reach; but to possess is to have as one's own; a clerk has the money which he has fetched for his employer; the latter possesses the money, which he has the power of turning to his use.

To Hazard, Risk, Venture. He who hazards an opinion or an assertion does it from presumptuous feelings and upon slight grounds; chances are rather against him than for him that it may prove erroneous; he who risks a battle does it often from necessity; he chooses the least of two evils; although the event is dubious, yet he fears less from a failure than from inaction; he who ventures on a mercantile speculation does it from a love of gain.

Healthy, Wholesome, Salubrious, Salutory. Healthy is applied to exercise, to air, situation, climate, and most other things but food, for which wholesome is commonly substituted: the life of a farmer is reckoned the most healthy; and the simplest diet is the most wholesome. Healthy and wholesome are rather negative in their sense; salubrious and salutory are positive; that is healthy and wholesome which does no injury to the health; that is salubrious which serves to improve the health; and that is salutory which serves to remove a disorder.

To Heap, Pile, Accumulate, Amass. To heap is an indefinite action; it may be performed with or without order: to pile is a definite action done with design and order; thus we heap stones, or pile wood. To accumulate is properly to bring or add heap to heap, which is a gradual and unfinished act; to amass is to form into a mass, which is a single complete act: a man may accumulate guineas or anything else in small quantities, but he properly amasses wealth.

Hearty, Warm, Sincere, Cordial. There are cases in which it may be peculiarly proper to be hearty, as when we are supporting the cause of religion and virtue; there are other cases in which it is peculiarly proper to be warm, as when our affections ought to be roused in favor of our friends; in all cases we ought to be sincere, when we express either a sentiment or a feeling; it is peculiarly happy to be on terms of cordial regard with those who stand in any close relation to us. The man himself should be hearty; his heart should be warm; professions should be sincere; a reception cordial.

Heed, Care, Attention. Heed (v. to attend) applies to matters of importance to one's moral conduct; care (v. care, solicitude) to matters of minor import: a man is required to take heed; a child is required to take care: the former exercises his understanding in taking heed; the latter exercises his thoughts and his senses in taking care. We speak of giving heed and paying attention; but the former is applied only to that which is conveyed to us by another, in the shape of a direction, a caution, or an instruction; but the latter is said of everything which we are said to perform.

Heinous, Flagrant, Flagitious, Atrocious. A crime is heinous which seriously offends against the laws of men; a sin is heinous which seriously offends against the will of God; an offense is flagrant which is in direct defiance of established opinions and practice; it is flagitious if a gross violation of the moral law, or coupled with any grossness; a crime is atrocious which is attended with any aggravating circumstances.

To Help, Assist, Aid, Succor, Relieve. Help signifies to do good to; assist signifies to place one's self by another so as to give him our strength; aid signifies to profit toward a specific end; succor signifies to run to the help of anyone; relieve signifies to alleviate. We help a person to prosecute his work, or help him out of a difficulty; we assist in order to forward a scheme, or we assist a person in the time of his embarrassment; we aid a good cause, or we aid a person to make his escape; we succor a person who is in danger; we relieve him in time of distress.

To Hesitate, Falter, Stammer, Stutter. A person who is not in the habit of public speaking, or of collecting his thoughts into a set form, will be apt to hesitate even in familiar conversation; he who first addresses a public assembly will be apt to falter; children who first begin to read will stammer at hard words; and one who has an impediment in his speech will stutter when he attempts to speak in a hurry.

Heterodoxy, Heresy. To be of a different persuasion is heterodoxy; to have a faith of one's own is heresy.

High, Tall, Lofty. High expresses the idea of extension upward, which is common to them all; what is tall is high, but what is high is not always tall; that which attains considerable height by growing is tall; a thing may be high because on a pedestal; lofty is said of that which is extended in breadth as well as in height; we say that a house is high, a chimney tall, a room lofty.

To Hinder, Stop. We are hindered from proceeding by something that draws us back; to stop refers simply to the cessation of motions.

To Hold, Keep, Detain, Retain. To hold is a physical act; it requires a degree of bodily strength,

or at least the use of the limbs; to keep is simply to have by one at one's pleasure; detain and retain are modes of keeping; the former signifies keeping back what belongs to another; the latter signifies keeping a long time for one's own purpose.

To Hold, Occupy, Possess. We hold a thing for a long or a short time; we occupy it for a permanence; we hold it for ourselves or others; we occupy it only for ourselves; we hold it for various purposes; we occupy only for the purpose of converting it to our private use. To occupy is only to hold under a certain compact; but to possess is to hold as one's own.

Holiness, Sanctity. Holiness is to the mind of a man what sanctity is to his exterior; with this difference, that holiness to a certain degree ought to belong to every man professing Christianity; but sanctity, as it lies in the manners, the outward garb, and deportment, is becoming only to certain persons, and at certain times.

Hollow, Empty. Hollow, a cavity formed by taking material out; as a hollow tree. That which has nothing in it is empty; as an empty chair.

Holy, Sacred, Divine. Whatever is most intimately connected with religion and religious worship, in its purest state, is holy, unhallowed by a mixture of inferior objects, and elevated in the greatest possible degree, so as to suit the nature of an infinitely perfect and exalted Being; the sacred derives its sanction from human institutions, and is connected rather with our moral than our religious duties; what is holy is altogether spiritual, and abstracted from the earthly; the divine is often contrasted with the human; but there are many human things which are denominated divine. What is divine, therefore, may be so superlatively excellent as to be conceived of as having the stamp of inspiration from the Deity.

To Honor, Reverence, Respect. To honor is only an outward act; to reverence is either an act of the mind or the outward expression of a sentiment; to respect is mostly an act of the mind, though it may admit of being expressed by some outward act. We honor God by adoration and worship; we honor our parents by obeying them and giving them our personal service; we reverence our Maker by cherishing in our minds a dread of offending him; we respect a person or thing that is lofty, worthy, or honorable.

Hot, Flery, Burning, Ardent. In the figurative application, a temper is said to be hot or fiery; rage is burning; the mind is ardent in pursuit of an object. Zeal may be hot, fiery, burning, and ardent; but in the first three cases it denotes the intemperance of the mind when heated by religion or politics; the latter is admissible so long as it is confined to a good object.

Human, Humane. The human race or human beings are opposed to the irrational part of the creation; a humane race or a humane individual is opposed to one that is cruel and fond of inflicting pain.

Humble, Modest, Submissive. A man is humble from a sense of his comparative inferiority to others in point of station and outward circumstances; or he is humble from a sense of his imperfections, and a consciousness of not being what he ought to be; he is modest, inasmuch as he sets but little value on his qualifications, acquirements, and endowments. Between humble and submissive there is this prominent feature of distinction, that the former marks a temper of mind, the latter a mode of action: we may be submissive because we are humble; but we may likewise be submissive from fear, from interested motives, and the like.

Humor, Temper, Mood. The humor is so fluctuating that it varies in the same mind perpetually; but the temper is so far confined that it always shows itself to be the same whenever it shows itself at all. The humor makes a man different from himself; the temper makes him different from others; hence we speak of the humor of the moment; of the temper of youth or of old age. Humor and mood agree in denoting a particular and temporary state of feeling; but they differ in the cause: the former being attributable rather to the physical state of the body, and the latter to the moral frame of the mind; mood is a temporary or capricious state or condition of the mind in regard to passion or feeling. There is no calculating on the humor of a man; it depends upon his mood whether he performs ill or well.

Hurtful, Pernicious, Noxious, Noisome. Between hurtful and pernicious there is the same distinction as between hurting and destroying: that which is hurtful may hurt in various ways; but that which is pernicious necessarily tends to destruction; confinement is hurtful to the health; bad company is pernicious to the morals; noxious and noisome are species of the hurtful; that which is noxious inflicts a direct injury;

that which is noisome inflicts it indirectly; noxious insects are such as wound; noisome vapors are such as tend to create disorders.

Idea, Thought, Imagination. The idea is the simple representation of an object; the thought is the reflection; and the imagination is the combination of ideas: we have ideas of the sun, the moon, and all material objects; we have thoughts on moral subjects; we have imaginations drawn from the ideas already existing in the mind.

Ideal, Imaginary. The ideal is not directly opposed to, but abstracted from, the real; the imaginary, on the other hand, is directly opposed to the real; it is the unreal thing formed by the imagination. Ideal happiness is the happiness which is formed in the mind without having any direct and actual prototype in nature; the imaginary is that which is opposite to some positive existing reality; the pleasure which a lunatic derives from the conceit of being a king is altogether imaginary.

Idle, Lazy, Indolent. One is termed idle who will do nothing useful; one is lazy who will do nothing at all without great reluctance; one is indolent who does not care to do anything or set about anything.

To Illuminate, Illumine, Enlighten. We illuminate by means of artificial lights; the sun illuminates the world by its own light; preaching and instruction enlighten the minds of men. Illumine is but a poetic variation of illuminate.

Imminent, Impending, Threatening. All these terms are used in regard to some evil that is exceedingly near; imminent conveys no idea of duration; impending excludes the idea of what is momentary. A person may be in imminent danger of losing his life in one instant, and the danger may be over the next instant; but an impending danger is that which has been long in existence and gradually approaching; a threatening evil gives intimations of its own approach: we perceive the threatening tempest in the blackness of the sky.

To Impair, Injure. To impair is a progressive mode of injuring; an injury may take place either by degrees or by an instantaneous act: straining of the eyes impairs the sight, but a blow injures rather than impairs the eye.

Imperious, Lordly, Domineering, Overbearing. A person's temper or his tone is denominated imperious; his air or deportment is lordly; his tone is domineering; overbearing is employed for men in the general relations of society, whether superiors or equals. A man of an imperious temper and some talent will frequently be so overbearing in the assemblies of his equals as to awe the rest into silence.

To Implicate, Involve. Implicate, from plico, to fold, denotes to fold into a thing; and involve, from volvo, to roll, signifies to roll into a thing: by which explanation we perceive that to implicate marks something less entangled than to involve; for that which is folded may be folded only once, but that which is rolled is turned many times. In application, therefore, to human affairs, people are said to be implicated who have taken ever so small a share in a transaction; but they are involved only when they are deeply concerned.

To Impugn, Attack. He who impugns may sometimes proceed insidiously and circuitously to undermine the faith of others; he who attacks always proceeds with more or less violence. When there are no arguments wherewith to impugn a doctrine, it is easy to attack it with ridicule and scurrility.

Inability, Disability. The inability lies in the nature of the thing, and is irremediable; the disability lies in the circumstances, and may sometimes be removed.

Inadvertency, Inattention, Oversight. Anyone may be guilty of inadvertencies, since the mind that is occupied with many subjects equally serious may be turned so steadily toward some that others may escape notice; but inattention, which designates a direct want of attention, is always a fault, and belongs only to the young, or such as are thoughtless by nature; an oversight is properly a species of inadvertency, which arises from looking over, or passing by, a thing; we must be guarded against oversights in business, as their consequences may be serious.

Inclination, Tendency, Propensity, Proneness. All these terms are employed to designate the state of the will toward an object; inclination denotes its first movement toward an object; tendency is a continued inclination; propensity denotes a still stronger leaning of the will; and prone characterizes an habitual and fixed state of the will toward an object. Propensity and proneness both designate a downward direction, and consequently refer only to that which is bad and low; a person has a propensity to drinking, and a proneness to lying.

To Inclose, Include. A yard is inclosed by a wall; particular goods are included in a reckoning.

To Inconvenience, Annoy, Molest. We inconvenience in small matters, or by omitting such things as might be convenient; we annoy or molest by doing that which is positively painful; we are inconvenienced by a person's absence; we are annoyed by his presence if he renders himself offensive; we are molested by that which is weighty and oppressive; the rude insults of ill-disposed persons may molest.

To Increase, Grow. To increase is either a gradual or an instantaneous act; to grow is a gradual process; a stream increases by the addition of other waters; but if we say that the river or stream grows, it is supposed to grow by some regular and continual process of receiving fresh water, as from the running in of different rivulets or smaller streams.

Indebted, Obligated. Indebted is more binding and positive than obliged; we are indebted to whoever confers an essential service; we are obliged to him who does us any service. A man is indebted to another for the preservation of his life; he is obliged to him for an ordinary act of civility.

Indifferent, Unconcerned, Regardless. Indifferent respects only the will, unconcerned either the will or the understanding, regardless the understanding only; we are indifferent about matters of minor consideration; we are unconcerned or regardless about serious matters that have remote consequences; an author will seldom be indifferent about the success of his work; he ought not to be unconcerned about the influence which his writings may have on the public, or regardless of the estimation in which his own character as a man may be held.

Indubitable, Unquestionable, Indisputable, Undeniable, Incontrovertible, Irrefragable. When a fact is supported by such evidence as admits of no kind of doubt, it is termed indubitable; when the truth of an assertion rests on the authority of a man whose character for integrity stands unimpeached, it is termed unquestionable authority; when a thing is believed to exist on the evidence of every man's senses, it is termed undeniable; when a sentiment has always been held as either true or false, without dispute, it is termed indisputable; when arguments have never been controverted, they are termed incontrovertible; and when they have never been satisfactorily answered, they are termed irrefragable.

Indulgent, Fond. Indulgence lies more in forbearing from the exercise of authority; fondness in the outward behavior and endearments; they may both arise from an excess of kindness or love; an indulgent parent is seldom a prudent parent; but a fond parent does not rise above a fool; all who have the care of young people should occasionally relax from the strictness of the disciplinarian and show an indulgence where a suitable opportunity offers; a fond mother takes away from the value of indulgences by an invariable compliance with the humors of her children.

Infamous, Scandalous. Infamous and scandalous are both said of that which is calculated to excite great displeasure in the minds of all who hear it, and to degrade the offenders in the general estimation; but the infamous seems to be that which produces greater publicity, and more general reprehension, than the scandalous; consequently it is that which is more serious in its nature, and a greater violation of good morals.

Instruct, Teach. To inform is the act of persons in all conditions; to instruct and teach are the acts of superiors, either on one ground or another: one informs by virtue of an accidental superiority or priority of knowledge; one instructs by virtue of superior knowledge or superior station; one teaches by virtue of superior knowledge, rather than of station.

Information, Intelligence, Notice, Advice. Information signifies the thing of which one is informed; intelligence, to understand, signifies that by which one is made to understand; notice is that which brings a circumstance to our knowledge; advice signifies that which is made known.

Ingenuity, Wit. Ingenuity comprehends invention; wit is the fruit of the imagination, which forms new and sudden conceptions of things. One is ingenious in matters either of art or science; one is witty only in matters of sentiment.

Ingenious, Ingenious. We love the ingenious character on account of the qualities of his heart; we admire the ingenious man on account of the endowments of his mind. One is ingenious as a man, or ingenious as an author: a man confesses an action ingenuously; he defends it ingeniously. The ingenious man is frank, candid; the ingenious man is clever, skillful.

Injustice, Injury, Wrong. The violation of justice,

or a breach of the rule of right, constitutes the injustice; but the quantum of ill which falls on the person constitutes the injury; a wrong partakes both of injustice and injury; it is, in fact, an injury done by one person to another in express violation of justice.

Inside, Interior. The term inside may be applied to bodies of any magnitude, small or large; interior is peculiarly appropriate to bodies of great magnitude. We may speak of the inside of a nutshell, but not of its interior. The interior of the church was beautifully decorated.

To Insinuate, Ingratiate. A person who insinuates adopts every art to steal into the good-will of another; but he who ingratiates adopts unartificial means to conciliate good-will.

Insinuation, Reflection. An insinuation always deals in half words; a reflection is commonly open. They are both leveled at the individual with no good intent; but the insinuation is general, and may be employed to convey any unfavorable sentiment; the reflection is particular, and commonly passes between intimates and persons in close connection.

To Insist, Persist. Both these terms being derived from the Latin "sisto," to stand, express the idea of resting or keeping to a thing; but insist signifies to rest on a point, and persist signifies to keep on with a thing, to carry it through. We insist on a matter by maintaining it; we persist in a thing by continuing to do it.

Insolvency, Failure, Bankruptcy. Insolvency is a state; failure, an act flowing out of that state; and bankruptcy an effect of that act. Insolvency is a condition of not being able to pay one's debts; failure is a cessation of business, from the want of means to carry it on; and bankruptcy is a legal surrender of all one's remaining goods into the hands of one's creditors, in consequence of a real or supposed insolvency.

Instant, Moment. A dutiful child comes the instant he is called; a prudent person embraces the favorable moment. When they are both taken for the present time, instant expresses a much shorter space than moment.

Insurrection, Sedition, Rebellion, Revolt. There may be an insurrection against usurped power, which is always justifiable; but sedition and rebellion are leveled against power universally acknowledged to be legitimate. Insurrection is always open; it is a rising up of many in a mass; but it does not imply any concerted, or any specifically active measure; rebellion is the consummation of sedition; the scheme of opposition which has been digested in secrecy breaks out into open hostilities, and becomes rebellion; revolt is mostly taken either in an indifferent or a good sense for resisting a foreign dominion which has been imposed by force of arms.

Intellect, Genius, Talent. Intellect is the intellectual power improved and exalted by cultivation and exercise; in this sense we speak of a man of intellect, or a work that displays great intellect; genius is the particular bent of the intellect which is born with a man, as a genius for poetry, painting, music, etc.; talent is a particular mode of intellect which qualifies its possessor to do some things better than others, as a talent for learning languages, a talent for the stage, etc.

Interchange, Exchange, Reciprocity. Interchange is an act; reciprocity is an abstract property; by an interchange of sentiment, friendships are engendered; the reciprocity of good services is what renders them doubly acceptable to those who do them, and to those who receive them.

Interest, Concern. We have an interest in whatever touches or comes near to our feelings or our external circumstances; we have a concern in that which demands our attention; interest is that which is agreeable; concern, on the other hand, is something involuntary or painful.

Interval, Respite. The term interval respects time only; respite includes the idea of ceasing from action for a time; intervals of ease are a respite to one who is oppressed with labor.

Intervention, Interposition. The light of the moon is obstructed by the intervention of the clouds; the life of an individual is preserved by the interposition of a superior.

To Intrude, Obtrude. It is intrusion to go into any society unasked and undesired; it is obtruding to put one's self in the way of another by joining the company and taking a part in the conversation without invitation or consent.

Invalid, Patient. An invalid is so denominated from his wanting his ordinary share of health and strength, but the patient is one who is laboring under some bodily suffering.

To Invest, Endue, or Endow. One is invested with that which is external; one is endued with that which

is internal. We invest a person with an office or a dignity: a person is endued with good qualities; endow is but a variation of endue, and yet it seems to have acquired a distinct office: we may say that a person is endued or endowed with a good understanding; but as an act of the imagination endow is not to be substituted for endue: for we do not say that it endows but endues things with properties.

Irrational, Foolish, Absurd, Preposterous. Irrational is applicable more frequently to the thing than to the person; to the principle than to the practice; foolish, on the contrary, is commonly applicable to the person as well as the thing; to the practice rather than the principle; foolish is applied to anything, however trivial, which in the smallest degree offends our understanding; the conduct of children is therefore often foolish, but not absurd and preposterous; it is absurd for a man to persuade another to do that which he is in like circumstances would object to do himself; it is preposterous for a man to expose himself to the ridicule of others, and then be angry with those who will not treat him respectfully.

Irreligious, Profane, Impious. All men who are not positively actuated by principles of religion are irreligious; profanity and impiety are, however, of a still more heinous nature; they consist not in the mere absence of regard for religion, but in a positive contempt of it and open outrage against its laws; the profane man treats what is sacred as if it were profane; the impious man is directly opposed to the pious man; the former is filled with defiance and rebellion against his Maker, as the latter is with love and fear.

Jealousy, Envy, Suspicion. We are jealous of what is our own; we are envious of what is another's. Jealousy fears to lose what it has; envy is pained at seeing others have that which it wants for itself; suspicion denotes an apprehension of injury, has more of distrust in it than jealousy; the suspicious man is altogether fearful of the intentions of another.

Journey, Travel, Voyage. Journey signifies the course that is taken in the space of a day, or in general any comparatively short passage from one place to another; travel signifies such a course or passage as requires labor, and causes fatigue; in general any long course; voyage is now confined to passages by sea.

Joy, Gladness, Mirth. What creates joy and gladness is of a permanent nature; that which creates mirth is temporary; joy is the most vivid sensation in the soul; gladness is the same in quality, but inferior in degree; joy is awakened in the mind by the most important events in life.

Judgment, Discretion, Prudence. Judgment is conclusive; it decides by positive inference; it enables a person to discover the truth; discretion is intuitive; it discerns or perceives what is in all probability right; a person is prudent who does not inconsiderately expose himself to danger; a measure is prudent that guards against the chances of evil; the impetuosity of youth naturally impels them to be imprudent.

Justness, Correctness. We estimate the value of remarks by their justness, that is, their accordance to certain admitted principles; correctness of outline is of the first importance in drawing; correctness of dates enhances the value of a history.

To Keep, Preserve, Save. The idea of having in one's possession is common to all these terms; which is, however, the simple meaning of keep; to preserve signifies to keep with care, and free from all injury; to save, from safe, is to keep laid up in a safe place, and free from destruction.

Keeping, Custody. The keeping amounts to little more than having purposely in one's possession, but custody is a particular kind of keeping, for the purpose of preventing an escape; inanimate objects may be in one's keeping; but a prisoner, or that which is in danger of getting away, is placed in custody.

To Know, Be Acquainted With. We may know things or persons in various ways; we may know them by name only; or we may know their internal properties or characters, etc.; one is acquainted with either a person or a thing, only in a direct manner, and by an immediate intercourse in one's own person.

Knowledge, Science, Learning, Erudition. Knowledge is a general term which simply implies the thing known; science is a systematic species of knowledge which consists of rule and order; learning is that species of knowledge which one derives from schools, or through the medium of personal instruction; erudition is scholastic knowledge obtained by profound research.

Land, Country. The term land, in its proper sense, excludes the idea of habitation; the term country excludes that of the earth, or the parts of which it is composed; hence we speak of the land, as rich or poor, ac-

cording to what it yields: of a country, as rich or poor, according to what its inhabitants possess.

Large, Wide, Broad. A field is said to be wide both from its figure and the extent of its space in the cross directions; in like manner, a house is large from its extent in all directions; it is said to be wide from the extent which it runs in front; what is broad is in sense, and mostly in application, wide; large is opposed to small; wide to close; broad to narrow.

Laudable, Praiseworthy, Commendable. Things are laudable in themselves; they are praiseworthy or commendable in this or that person; that which is laudable is entitled to encouragement and general approbation; an honest endeavor to be useful to one's family or one's self is at all times laudable; what is praiseworthy obtains the respect of all men.

To Lay or Take Hold Of, Catch, Seize, Snatch, Grasp, Grip. To lay or take hold of is here the generic expression; it denotes simply getting into one's possession, which is the common idea in the signification of all these terms, which differ in regard to the motion in which the action is performed; to catch is to lay hold of with an effort; to seize is to lay hold of with violence; to snatch is to lay hold of by a sudden effort.

To Lead, Conduct, Guide. One leads by helping a person onward in any manner, as to lead a child by the hand; to conduct and guide are different modes of leading, the former by virtue of one's office or authority, the latter by one's knowledge or power; as to conduct an army; to guide a traveler in an unknown country.

To Lean, Incline, Bend. In the proper sense, lean and incline are both said of the position of bodies; bend is said of the shape of bodies; that which leans rests on one side, or in a sideward direction; that which inclines, leans or turns only in a slight degree; that which bends forms a curvature.

To Leave, Quit, Relinquish. We leave that to which we may intend to return; we quit that to which we return no more; we relinquish it unwillingly; we leave persons or things; we quit and relinquish things only.

Leavings, Remains. Leavings are the consequence of a voluntary act; they signify what is left; remains are what follow in the course of things; they are what remains.

Letter, Epistle. Letter is a term altogether familiar; it may be used for whatever is written by one friend to another; even those which were written by the ancients, as the letters of Cicero, Pliny, and Seneca; but in strict propriety those are entitled epistles, as a term most adapted to whatever has received the sanction of ages, and by the same rule, likewise, whatever is peculiarly solemn in its contents has acquired the same epithet, as the epistles of St. Paul.

To Lie, Lay. To lie is nester, and designates a state; to lay is active, and denotes an action on an object; it is properly to cause to lie; a thing lies on the table; some one lays it on the table.

To Lift, Heave, Hoist. We lift with or without an effort; we heave and hoist always with an effort; we lift a child up to let him see anything more distinctly; workmen heave the stones or beams which are used in a building; sailors hoist the long-boat into the water.

Likeness, Resemblance, Similarity, or Similitude. Likeness respects either external or internal properties; resemblance respects only the external properties; similarity respects the circumstances or properties; we speak of a likeness between two persons; of a resemblance in the cast of the eye; of a similarity in age and disposition. Similitude is a higher term than similarity when used in a moral sense.

To Linger, Tarry, Loiter, Lag, Saunter. To linger is to stop altogether, or to move but slowly forward; to tarry is properly to suspend one's movements; the former proceeds from reluctance to leave the spot on which we stand; the latter from motives of discretion; to loiter is to move slowly and reluctantly; to lag is to move slower than others; to saunter is altogether the act of an idler; those who have no object in moving either backward or forward will saunter if they move at all.

Little, Small, Diminutive. What is little is so in the ordinary sense in respect to size; it is properly opposed to great; the small is that which is less than others in point of bulk; it is opposed to the large; the diminutive is that which is less than it ought to be; as a person is said to be diminutive in stature who is below the ordinary stature.

Living, Benefice. We speak of a living as a resource immediately derived from the parish, in distinction from a curacy, which is derived from an individual; we speak of a benefice in respect to the terms by which it is held, according to the ecclesiastical law.

Lodgings, Apartments. A lodging, or a place to

lodge or dwell in, comprehends single rooms, or many rooms, or in fact any place which can be made to serve the purpose; apartments respect only suites of rooms.

Look, Glance. We speak of taking a look, or catching a glance.

To Look, Appear. The look of a thing respects the impressions which it makes on the senses, that is, the manner in which it looks; its appearance implies the simple act of its coming into sight.

To Lose, Miss. What is lost is supposed to be entirely and irrecoverably gone; but what is missed may be only out of sight or not at hand at the time when it is wanted.

Madness, Phrensy, Rage, Fury. Madness is a confirmed derangement in the organ of thought; phrensy is only a temporary derangement from the violence of any disease or other cause. Rage refers more immediately to the agitation that exists within the mind; fury refers to that which shows itself outwardly; a person contains or stifles his rage; but his fury breaks out into some external mark of violence.

Magnificence, Splendor, Pomp. Magnificence lies not only in the number and extent of the objects presented, but in their degree of richness as to their coloring and quality; splendor is but a characteristic of magnificence, attached to such objects as dazzle the eye by the quantity of light, or the beauty and strength of coloring; pomp, signifies in general formality and ceremony.

To Make, Form, Produce, Create. To make is the most general and unqualified term; to form signifies to give a form to a thing, that is, to make it after a given form; to produce is to bring forth into the light, to call into existence; to create is to bring into existence by an absolute exercise of power.

Malevolent, Malignous, Malignant. Malevolence has a deep root in the heart, and is a settled part of the character; we denominate the person malevolent, to designate the ruling temper of his mind; maliciousness may be applied as an epithet to particular parts of a man's character or conduct; one may have a malicious joy or pleasure in seeing the distresses of another; malignity is not so often employed to characterize the person as the thing; the malignity of a design is estimated by the degree of mischief which was intended to be done.

Manly, Manful. Manly, or like a man, is opposed to juvenile, and of course applied properly to youths; but manful, or full of manhood, is opposed to effeminate, and is applicable more properly to grown persons.

Manners, Morals. Manners (v. air, manner) respect the minor forms of acting with others and toward others; morals include the important duties of life. By an attention to good manners we render ourselves good companions; by an observance of good morals we become good members of society.

Mark, Trace, Vestige, Footstep, Track. The mark is said of a fresh and uninterrupted line; the trace is said of that which is broken by time; a carriage in driving along the sand leaves marks of the wheels, but in a short time all traces of its having been there will be lost. The vestige is a species of mark or trace caused by the feet of men, or, which is the same thing, by the works of active industry; as the vestiges of buildings. Footstep is employed only for the steps of an individual. The track is made by the steps of many.

Martial, Warlike, Military, Soldier-like. We speak of martial array, martial preparations, martial law, a court martial; but of a warlike nation, meaning a nation, which is fond of war; a warlike spirit or temper, also a warlike appearance, inasmuch as the temper is visible in the air and carriage of a man; we speak of military in distinction from naval, as military expeditions, military movements, and the like; the conduct of an individual is soldier-like or otherwise.

Meeting, Interview. Meeting is the act of meeting or coming into the company of anyone; interview, is a personal view of each other; a meeting is an ordinary concern and its purpose familiar; meetings are daily taking place between friends; an interview is extraordinary and formal.

Memory, Remembrance, Recollection, Reminiscence. Memory is the power of recalling images once made on the mind; remembrance is the exercise of memory in a conscious agent; it may be the effect of repetition or habit; recollection carries us back to distant periods; reminiscence is altogether an abstract exercise of the memory, which is employed on purely intellectual ideas in distinction from those which are awakened by sensible objects; the mathematician makes use of reminiscence in deducing unknown truths from those which he already knows.

Mercantile, Commercial. Mercantile, from merchandise, respects the actual transaction of business,

or a transfer of merchandise by sale or purchase; commercial comprehends the theory and practice of commerce; hence we speak in a peculiar manner of a mercantile house, a mercantile situation, and the like; but of a commercial education, a commercial people, and the like.

Minister, Agent. The minister gives his counsel, and exerts his intellectual powers in the service of another; but the agent executes the orders or commissions given him; a minister is employed by government in political affairs; an agent is employed by individuals in commercial and pecuniary affairs.

To Mix, Mingle, Blend, Confound. Mix is here a general and indefinite term, signifying simply to put together; but we may mix two or several things; we mingle several objects; things are mixed so as to lose all distinction; but they may be mingled and yet retain a distinction; to blend is only partially to mix, as colors blend which fall into each other; to confound is to mix in a wrong way, as objects of sight are confounded when they are erroneously taken to be joined.

Modest, Bashful, Diffident. Modesty is a proper distrust of ourselves; bashfulness is a state of feeling which betrays itself in a downcast look or a timid air; diffidence is a culpable distrust; diffidence altogether unmans a person, and disqualifies him for his duty.

Moisture, Humidity, Dampness. Moisture is used in general to express any small degree of infusion of a liquid into a body; humidity is employed scientifically to describe the state of having any portion of such liquid; hence we speak of the moisture of a table, the moisture of paper, but the humidity of the air, or of a wall that has contracted moisture of itself. Dampness is that species of moisture that arises from the gradual contraction of a liquid in bodies capable of retaining it; in this manner a cellar is damp.

Money, Cash. Money is applied to everything which serves as a circulating medium; cash is, in a strict sense, put for coin only.

Motion, Movement. We speak of a state of motion as opposed to a state of rest, of perpetual motion, the laws of motion, and the like; on the other hand, we say, to make a movement when speaking of an army, a general movement when speaking of an assembly.

Moving, Affecting, Pathetic. The good or bad feelings may be moved; the tender feelings only are affected. A field of battle is a moving spectacle; the death of a friend is an affecting spectacle; the pathetic applies only to what is addressed to the heart; hence an address is pathetic.

Mutual. This word is often confounded with common. Mutual is used in referring to a thing that belongs to only two people; as, John and I have a mutual dislike; he dislikes me and I dislike him. We cannot say John and I have a mutual dislike for Mary. Common is used with reference to a third object or person; as, Mary is our common friend; she is your and my friend. It is wrong to say Mary is our mutual friend. Dickens's use of this word in "Our Mutual Friend" is condemned by many good authorities.

To Name, Call. Name is employed for distinguishing or addressing one by name. To call signifies properly to address one loudly, consequently we may name without calling, when we only mention a name in conversation; and we may call without naming.

Native, Natural. Of a person we may say that his worth is native, to designate that it is some valuable property which is born with him, that it is natural, as opposed to that which is acquired or otherwise.

Necessities, Necessaries. Necessity is the mode or state of circumstances, or the thing which circumstances render necessary; the necessary is that which is absolutely and unconditionally necessary. Habit and desire create necessities; nature only requires necessities.

To Neglect, Omit. What we neglect ought not to be neglected; but what we omit may be omitted or otherwise, as convenience requires. We neglect an opportunity, we neglect the means, the time, the use, and the like; we omit a word, a sentence, a figure, and the line may be omitted or otherwise, as convenience requires.

Neighborhood, Vicinity. Neighborhood, is employed in reference to the inhabitants, or in regard to inhabited places, to denote nearness of persons to each other or to objects in general; but vicinity is employed to denote nearness of one object to another, whether person or thing.

New, Novel, Modern, Fresh, Recent. All these epithets are applied to what has not long existed; new expresses this idea simply without any qualifications; novel is something strange or unexpected; the modern is the thing of to-day, as distinguished from that which

existed in fore times; the fresh is that which is so new as not to be the worse for use, or that which has not been before used or employed; the recent is that which is so new as to appear as if it were just made or done.

News, Tidings. News is unexpected; it serves to gratify idle curiosity; tidings are expected; they serve to allay anxiety. In time of war the public are eager after news; and they who have relatives in the army are anxious to have tidings of them.

To Nominate, Name. To nominate and to name are both to mention by name; but the former is to mention for a specific purpose; the latter is to mention for general purposes; persons only are nominated; things as well as persons are named; one nominates a person in order to propose him, or appoint him, to an office; but one names a person casually, in the course of conversation, or one names him in order to make some inquiry respecting him. We remark things as matters of fact; we observe them in order to judge of, or draw conclusions from, them.

To Notice, Remark, Observe. To notice is a more cursory action than to remark; we may notice a thing by a single glance, or on merely turning one's head; but to remark supposes a reaction of the mind on an object. We observe things in order to judge of, or draw conclusions from, them.

Numeral, Numerical. Numeral, or belonging to number, is applied to a class of words in grammar, as a numeral adjective or a numeral noun; numerical, or containing number, is applied to whatever other objects respect number; as a numerical difference, where the difference consists between any two numbers, or is expressed by numbers.

Obedient, Submissive, Obedient. One is obedient to command, submissive to power or the will, obsequious to persons. Obedience is always taken in a good sense.

To Object, Oppose. To object to a thing is to propose or start something against it; but to oppose it is to set one's self up steadily against it.

Obnoxious, Offensive. In the sense of giving offense, obnoxious implies as much as hateful, offensive little more than displeasing; a man is obnoxious to a party, whose interest or principles he is opposed to; he may be offensive to an individual merely on account of his manners or any particular actions.

To Observe, Watch. We observe a thing in order to draw an inference from it; we watch anything in order to discover what may happen; we observe with coolness; we watch with eagerness.

Occasion, Opportunity. The occasion is that which determines our conduct, and leaves us no choice; it amounts to a degree of necessity; the opportunity is that which invites to action; it tempts us to embrace the moment for taking the step.

Occasional, Casual. Occasional carries with it more the idea of infrequency, and casual that of unfixedness, or the absence of all design. Our acts of charity may be occasional; but they ought not to be casual.

Oeconomical, Economical, Saving, Sparing, Thrifty, Penurious, Niggardly. To be economical is a virtue in those who have but narrow means; he who is saving when young will be avaricious when old; sparing is keeping out of that which ought to be spent; thrifty is accumulating by means of saving; penurious is suffering as from penury by means of saving; niggardly is not spending or letting go but in the smallest possible quantities.

Offender, Delinquent. Those who go into a wrong place are offenders; those who stay away when they ought to go are delinquents.

Offspring, Progeny, Issue. Offspring is a familiar term applicable to one or many children; progeny is employed only as a collective noun for a number; issue is used in an indefinite manner without particular regard to number. When we speak of the children themselves we denominate them the offspring; when we speak of the parents, we denominate the children their progeny. The issue is said only in regard to a man that is deceased; his property descends to his male issue in a direct line.

Omen, Prognostic, Presage. The omen and prognostic are both drawn from external objects; the presage is drawn from one's own feelings; the omen is drawn from objects that have no necessary connection with the thing they are made to represent; it is the fruit of the imagination, and rests on superstition; the prognostic on the contrary, is a sign which partakes in some degree of the quality of the thing denoted.

Opinated or Opinative, Conceited, Egoistical. An opinated man is not only fond of his own opinion, but full of his own opinion; he has an opinion on everything, which is the best possible opinion; a conceited man has a conceit or an idle fond opinion of his own

talent; it is not only high in competition with others, but it is so high as to be set above others; the egoistical man makes himself the darling theme of his own contemplation; he admires and loves himself to that degree that he can talk and think of nothing else; the option or the power of choosing is given; the choice itself is made; hence we say a thing is at a person's option, or it is his own option, or the option is left to him, in order to designate his freedom of choice more strongly than is expressed by the word choice itself.

Orifice, Perforation. These terms are both scientifically employed to designate certain cavities in the human body; but the former respects that which is natural, the latter that which is artificial; all the vessels of the human body have their orifices, which are so constructed as to open or close of themselves. Surgeons are frequently obliged to make perforations into the bones.

Outward, External, Exterior. Outward, or inclined to the out, after the manner of the out, indefinitely describes the situation; external is employed only in regard to such objects as are conceived to be independent of man as a thinking being; hence, we may speak of the outward part of a building, of a board, and the like; but of external objects acting on the mind, or of an external agency; when we speak of anything which has two coats, it is usual to designate the outermost by the name of the exterior.

To Paint, Depict. To paint is employed either literally to represent figures on paper, or to represent circumstances and events by means of words; to depict is used only in this latter sense, but the former word expresses a greater exercise of the imagination than the latter; it is the art of the poet to paint nature in lively colors; it is the art of the historian or narrator to depict a real scene of misery in strong colors.

Part, Piece, Patch. Things may be divided into parts without any express separation; but when divided into pieces they are actually cut asunder; hence we may speak of a loaf as divided into twelve parts when it is conceived only to be so; and divided into twelve pieces when it is really so; the patch is that which is always broken and disjointed, a something imperfect; many things may be formed out of a piece; but the patch only serves to fill up a chasm.

Particular, Individual. Particular is much more specific than individual; the particular confines us to one object only of many; but individual may be said of any one object among many.

Peace, Quiet, Calm, Tranquillity. Peace implies an exemption from public or private broils; quiet implies a freedom from noise or interruption; calm is a species of quiet, which respects objects in the natural or the moral world; it indicates the absence of violent motion as well as violent noise; it is that state which more immediately succeeds a state of agitation; tranquillity expresses the situation as it exists in the present moment, independently of what goes before or after; it is sometimes applicable to society, sometimes to natural objects, and sometimes to the mind.

Pellucid, Transparent. Pellucid is said of that which is pervious to the light, or of that into which the eye can penetrate; transparent is said of that which is throughout bright; a stream is pellucid; it admits of the light so as to reflect objects but it is not transparent for the eye.

To Perpetrate, Commit. One may commit offenses of various degrees and magnitude; but one perpetrates crimes only, and those of the more heinous kind.

Pillar, Column. The word pillar is the most general in its application to any structure, whether rude or otherwise; the term column, on the other hand, is applied to whatever is ornamental, as the Grecian order of columns.

Piteous, Doleful, Woful, Rueful. Piteous is applicable to one's external expression of bodily or mental pain; a child makes piteous lamentations when it suffers for hunger, or has lost its way; doleful applies to those sounds which convey the idea of pain; there is something doleful in the tolling of a funeral bell or in the sound of a muffled drum; woful applies to the circumstances and situations of men; a scene is woful in which we witness a large family of young children suffering under the complicated horrors of sickness and want; rueful applies to the outward indications of inward sorrow depicted in the looks or countenance.

Pity, Compassion. Pity is excited principally by the weakness or degraded condition of the subject; compassion by his uncontrollable and inevitable misfortunes.

Playful, Gamesome, Sportive. Playful is applicable to youth or childhood, when there is the greatest disposition to play. Gamesome and sportive are applied to persons of maturer years; the former in the bad sense, and the latter in the good sense. A person may

be said to be gamesome who gives in to idle jests, or sportive who indulges in harmless sport.

To Poise, Balance. To poise is properly to keep the weight from pressing on either side; to balance is to keep the balance even. The idea of bringing into an equilibrium is common to both terms, but a thing is poised as respects itself; it is balanced as respects other things.

Poison, Venom. A poison must be administered inwardly to have its effect; a venom will act by an external application: the juice of the hellebore is a poison; the tongue of the adder and the tooth of the viper contain venom.

Polite, Polished, Refined. Politeness and polish do not extend to anything but externals; refinement applies as much to the mind as the body: rules of conduct, and good society, will make a man polite; lessons in dancing will serve to give a polish; refined manners or principles will naturally arise out of refinement of men.

Position, Posture. The position is that in which a body is placed in respect to other bodies; as the standing with one's face or back to an object is a position; but a posture is that position which a body assumes in respect to itself, as a sitting or reclining posture.

To Pour, Spill, Shed. We pour with design; we spill by accident: we pour water over a plant or a bed; we spill it on the ground; to shed is done in great quantities.

Powerful, Potent, Mighty. Powerful is applicable to strength as well as power: a powerful man is one who by size and make can easily overpower another; and a powerful person is one who has much in his power: potent is used only in this latter sense, in which it expresses a larger extent of power: a potent monarch is much more than a powerful prince: mighty expresses a still higher degree of power; might is power unlimited by any consideration or circumstance; a giant is called mighty in the physical sense, and genius is said to be mighty which takes everything within its grasp.

To Press, Squeeze, Pinch, Gripe. The forcible action of one body on another is included in all these terms. In the word press this is the only idea; the rest differ in the circumstances; we may press with the foot, the hand, or any particular limb; one squeezes commonly with the hand; one pinches either with the fingers or an instrument constructed in a similar form; one gripes with teeth, claws, or any instrument that can gain hold of the object.

Presumptive, Presumptuous, Presuming. A presumptive heir is one presumed or expected to be heir; presumptive evidence is evidence founded on some presumption or supposition; so likewise presumptive reasoning; but a presumptuous man, a presumptuous thought, a presumptuous behavior, all indicate an unauthorized presumption in one's own favor; a man is presuming, inasmuch as he shows himself disposed to presume.

To Prevent, Anticipate. To prevent is literally to come beforehand and anticipate to take beforehand: the former is employed for actual occurrences; the latter as much for calculations as for actions; to prevent is the act of a person toward other persons or things; to anticipate is the act of a being either toward himself or another. In this sense God is said to prevent man with his favor by interposing so as to direct his purposes to the right object.

Previous, Preliminary, Preparatory, Introductory. Previous applies to actions and proceedings in general; as a previous question, a previous inquiry, a previous determination: preliminary is employed only for matters of contract: a preliminary article, a preliminary condition, are what precede the final settlement of any question: preparatory is employed for matters of arrangement; the disposing of men in battle is preparatory to an engagement; introductory is employed for matters of science or discussion; as remarks are introductory to the main subject in question.

Principle, Motive. The principle lies in conscious and unconscious agents; the motive only in conscious agents; all nature is guided by certain principles; man is put into action by certain motives.

Privacy, Retirement, Seclusion. Privacy is opposed to publicity; he who lives in privacy is one who follows no public line, who lives so as to be little known: retirement is opposed to openness or freedom of access; he who lives in retirement, withdraws from the society of others, he lives by himself: seclusion is the excess of retirement; he who lives in seclusion bars all access to himself; he shuts himself from the world.

Proceeding, Transaction. Proceeding signifies literally the thing that proceeds; and transaction the thing transacted: the former is, therefore, of something that is going forward; the latter of something that is already

done; we are witnesses to the whole proceeding; we inquire into the whole transaction.

Production, Performance, Work. The term production cannot be employed without specifying or referring to the source from which it is produced, or the means by which it is produced; as the production of art, the production of the inventive faculty; a performance cannot be spoken of without referring to the individual by whom it has been performed; hence we speak of this or that person's performance. When we wish to specify anything that results from work or labor, it is termed a work: in this manner we speak either of the work of one's hands, or a work of the imagination.

Profligate, Abandoned, Reprobate. A profligate man has lost all by his vices, and consequently to his vices alone he looks for the regaining those goods of fortune which he has squandered; as he has nothing to lose, and everything to gain in his own estimation, by pursuing the career of his vices, he surpasses all others in his unprincipled conduct: an abandoned man is altogether abandoned to his passions, which, having the entire sway over him, naturally impel him to every excess; the reprobate man is one who has been reprobated until he becomes insensible to reproof, and is given up to the malignity of his own passions.

Prominent, Conspicuous. What is prominent is, in general, on that very account conspicuous; but many things may be conspicuous which are not expressly prominent: nothing is prominent but what projects beyond a certain line; everything is conspicuous which may be seen by many.

Promise, Engagement, Word. In promises the faith of an individual is admitted upon his word, and built upon as if it were a deed; in engagements the intentions of an individual for the future are all that are either implied or understood; as a promise and engagement can be made only by words, the word is often put for either, or for both, as the case requires.

Proportionate, Commensurate, Adequate. Proportionate is here a term of general use; the others are particular terms, employed in a similar sense, in regard to particular objects: that is proportionate which rises as a thing rises, and falls as a thing falls; that is commensurate which is made to rise to the same measure or degree; that is adequate which is made to come up to the height of another thing.

To Provide, Procure, Furnish, Supply. Provide and procure are both actions that have a special reference to the future; furnish and supply are employed for that which is of immediate concern; one provides a dinner in the contemplation that some persons are coming to partake of it; one procures help in the contemplation that it may be wanted; we furnish a room, as we find it necessary for the present purpose; one supplies a family with any article of domestic use.

To Publish, Promulgate, Divulge, Reveal, Disclose. To publish is the most general of these terms, conveying in its extended sense the idea of making known; but it is in many respects indefinite: we may publish to many or few; but to promulgate is always to make known to many. We may publish that which is a domestic or a national concern; we promulgate properly only that which is of general interest; we divulge things mostly not to be known; we commonly divulge the secrets or the crimes of another; we reveal the secret or the mystery of a transaction; we disclose the whole affair from beginning to end, which has never been properly known or accounted for.

To Put, Place, Lay, Set. One puts things generally, but the way of putting is not defined; we may put a thing into one's room, one's desk, one's pocket, and the like; but to place is to put in a specific manner, and for a specific purpose; one places a book on a shelf; to lay and set are still more specific than place; the former being applied only to such things as can be made to lie; and set only to such as can be made to stand: a book may be said to be laid on the table when placed in a downward position, and set on a shelf when placed on one end.

Qualification, Accomplishment. The qualification serves the purpose of utility; the accomplishment serves to adorn: by the first we are enabled to make ourselves useful; by the second we are enabled to make ourselves agreeable.

Quarrel, Broil, Feud. Quarrel is the general and ordinary term; broil and feud, including active hostility, are particular terms. The idea of a variance between two or more parties is common to these terms; but the former respects the complaints and charges which are reciprocally made; broil respects the confusion and entanglement which arises from a contention and collision of interests; feud respects the hostilities which arise out of the variance.

Question, Query. Questions and queries are both

put for the sake of obtaining an answer; but the former may be for a reasonable or unreasonable cause; a query is mostly a rational question; idlers may put questions from mere curiosity; learned men put queries for the sake of information.

Radiance, Brilliancy. Radiance denotes the emission of rays, and is, therefore, peculiarly applicable to bodies naturally luminous, like the heavenly bodies; and brilliancy denotes the whole body of light emitted, and may, therefore, be applied equally to natural and artificial light.

Rashness, Temerity, Hastiness, Precipitancy. Rashness is a general and indefinite term, in the signification of which an improper celerity is the leading idea; in the signification of temerity, the leading idea is want of consideration, springing mostly from an overweening confidence, or a presumption of character; hastiness and precipitancy are but modes or characteristics of rashness, and consequently employed only in particular cases, as hastiness in regard to our movements, and precipitancy in regard to our measures.

Rapacious, Ravenous, Voracious. Rapacious is the quality peculiar to beasts of prey, or what is like beasts of prey. A lion is rapacious when it seizes on its prey; it is ravenous in the act of consuming it. The word ravenous respects the haste with which one eats; the word voracious respects the quantity which one consumes: a ravenous person is loath to wait for the dressing of his food; he consumes it without any preparation: a voracious person not only eats in haste, but he consumes great quantities, and continues to do so for a long time.

Ready, Apt, Prompt. Ready is in general applied to that which has been intentionally prepared for a given purpose; prompt is applied to that which is at hand so as to answer the immediate purpose; apt is applied to that which is fit, or from its nature has a tendency to produce effects.

To Reclaim, Reform. Reclaim signifies to call back to its right place that which has gone astray; reform signifies to form anew that which has changed its form; they are allied only in their application to the moral character. A man is reclaimed from his vicious courses by the force of advice or exhortation; he may be reformed by various means, external or internal.

To Recline, Repose. When we recline we put ourselves into a particular position; but when we repose we put ourselves into that position which will be most easy.

To Recover, Retrieve, Repair, Recruit. We repair that which has been injured; we recruit that which has been diminished; we recover property from those who wish to deprive us of it; we retrieve our misfortunes, or our lost reputation.

Recovery, Restoration. Recovery (v. to recover) is the regaining of any object which has been lost or missing; restoration is the getting back what has been taken away, or that of which one has been deprived. What is recovered may be recovered with or without the use of means; the restoration is effected by foreign agency.

Reform, Reformation. Whatever undergoes such a change as to give a new form to an object occasions a reform; when such a change is produced in the moral character, it is termed a reformation: the concerns of a state require occasional reform; those of an individual require reformation.

To Relax, Remit. In regard to our attempts to act, we may speak of relaxing our endeavors, and remitting our labors or exertions; in regard to our dealings with others, we may speak of relaxing in discipline, relaxing in the severity or strictness of our conduct, of remitting a punishment or a sentence.

To Refuse, Decline, Reject, Repel, Rebuff. We refuse what is asked of us, for want of inclination to comply; we decline what is proposed from motives of discretion; we reject what is offered to us, because it does not fall in with our views; to repel is to reject with violence; to rebuff is to refuse with contempt, or what may be considered as such.

To Repeat, Recite, Rehearse, Recapitulate. To recite is to repeat in a formal manner; to rehearse is to repeat or recite by way of preparation; to recapitulate is to repeat the chapters or principal heads of any discourse.

To Repress, Restrain, Suppress. To repress is to press back or down; to restrain is to strain back or down; the former is the general, the latter the specific term. We always repress when we restrain, but not vice versa. Repress is used mostly for pressing down, so as to keep that inward which wants to make its appearance; restraint is an habitual repression by which a thing is kept in a state of lowness; to suppress, which is to

keep under, or keep from appearing or being perceptible, is also said in respect of ourselves or others: as to repress one's feelings; to suppress laughter, sighs, etc.

Reproach, Contumely, Obloquy. The idea of contemptuous or angry treatment of others is common to all these terms; but reproach is the general, contumely and obloquy are the particular terms. Reproach is either deserved or undeserved; the name of Puritan is applied as a term of reproach to such as affect greater purity than others; contumely is always undeserved; it is the insolent swelling of a worthless person against merit in distress; obloquy is always supposed to be deserved or otherwise; it is applicable to those whose conduct has rendered them objects of general censure, and whose name, therefore, has almost become a reproach.

Restore, Return, Repay. We restore upon a principle of equity; we return upon a principle of justice and honor; we repay upon a principle of undeniable right. We cannot always claim that which ought to be restored; but we cannot only claim, but enforce the claim in regard to what is to be returned or repaid.

To Retard, Hinder. We retard or make slow the progress of any scheme toward completion; we hinder or keep back the person who is completing the scheme; we retard a thing, therefore, often by hindering the person; but we frequently hinder a person without expressly retarding.

Right, Claim, Privilege. Right, in its full sense, is altogether an abstract thing which is independent of human laws and regulations; claims and privileges are altogether connected with the establishments of civil society. We have often a claim to a thing which is not in our power to substantiate; and, on the other hand, claims are set up in cases which are totally unfounded on any right; privileges are rights granted to individuals, depending either upon the will of the grantor, or the circumstances of the receiver, or both; privileges are, therefore, partial rights transferable at the discretion of persons individually or collectively.

Royal, Regal, Kingly. Royal signifies belonging to a king, in its most general sense; regal signifies appertaining to a king, in its particular application; kingly signifies properly like a king. A royal carriage, a royal residence, royal authority, all designate the general and ordinary appurtenances of a king; regal government, regal state, regal power denote the peculiar properties of a king; kingly always implies what is becoming a king, or after the manner of a king: a kingly crown is such as a king ought to wear.

Rural, Rustic. Rural applies to all country objects except man; it is, therefore, always connected with the charms of nature; rustic applies only to persons, or what is personal, in the country, and is, therefore, always associated with the want of culture.

Safe, Secure. We may be safe without using any particular measures; but none can reckon on any degree of security without great precaution: a person may be very safe on the top of a coach, in the daytime; but if he wish to secure himself, at night, from falling off, he must be fastened.

Salute, Salutation, Greeting. A salute may consist either of a word or an action; salutations pass from one friend to another: the salute may be either direct or indirect; the salutation is always direct and personal; guns are fired by way of a salute; bows are given in the way of a salutation; greeting is frequently a particular mode of salutation adopted on extraordinary occasions, indicative of great joy or satisfaction in those who greet.

To Satisfy, Please, Gratify. What satisfies is not always calculated to please; nor is that which pleases that which will always satisfy: plain food satisfies a hungry person, but does not please him when he is not hungry; to gratify is to please in a high degree, to produce a vivid pleasure: we may be pleased with trifles; but we are commonly gratified with such things as act strongly either on the senses or the affections.

Seaman, Waterman, Sailor, Mariner. All these words denote persons occupied in navigation: the seaman, as the word implies, follows his business on the sea; the waterman is one who gets his livelihood on fresh water; the sailor and the mariner are both specific terms to designate the seaman: every sailor and mariner is a seaman; although every seaman is not a sailor or mariner; the former is one who is employed about the laborious part of the vessel; the latter is one who traverses the ocean to and fro, who is attached to the water, and passes his life upon it.

Secret, Hidden, Latent, Occult, Mysterious. What is secret is known to some one; what is hidden may be known to no one: it rests in the breast of an individual to keep a thing secret; it depends on the course of things if anything remains hidden. The latent is the secret or concealed, in cases where it ought to be

open: a latent motive is that which a person intentionally, though not justifiably, keeps to himself; an occult science is one that is hidden from the view of persons in general, which is attainable but by few; occult causes or qualities are those which lie too remote to be discovered by the inquirer; the operations of Providence are said to be mysterious, as they are altogether past our finding out.

To See, Perceive, Observe. The eye sees when the mind is absent; the mind and the eye or other senses perceive in conjunction; hence, we may say that a person sees, but does not perceive; we observe not merely by a simple act of the mind, but by its positive and fixed exertion.

To Seem, Appear. Seem is said of that which is dubious, contingent, or future; appear, of that which is actual, positive, and past. A thing seems strange which we are led to conclude as strange from what we see of it; a thing appears clear when we have a clear conception of it.

Sensualist, Voluptuary, Epicure. The sensualist lives for the indulgence of his senses; the voluptuary is devoted to his pleasures, and, as far as these pleasures are the pleasures of sense, the voluptuary is a sensualist; the epicure is one who makes the pleasures of sense his god, and in this sense he is a sensualist and a voluptuary. In the application of these terms, however, the sensualist is one who is a slave to the grossest appetites; the voluptuary is one who studies his pleasures so as to make them the most valuable to himself; the epicure is a species of voluptuary who practices more than ordinary refinement in the choice of his pleasures.

Sequel, Close. When a work is published in distinct parts, those which follow at the end may be termed the sequel; if it appears all at once, the concluding pages are the close.

Servant, Domestic, Menial, Drudge. In the term servant is included the idea of the service performed; in the term domestic, the idea of one belonging to the house or family; in the word menial is included the idea of labor; and the term drudge, that of drudgery.

Shade, Shadow. Both these terms express that darkness which is occasioned by the sun's rays being intercepted by any body; but shade simply expresses the absence of the light, and shadow signifies also the figure of the body which thus intercepts the light.

Sharp, Acute, Keen. The general property expressed by these epithets is that of sharpness, or an ability to cut. The term sharp, in German, etc., scharf, from scheren, to cut, is generic and indefinite; the two others are modes of sharpness differing in the circumstance or the degree; the acute is not only more than sharp in the common sense, but signifies also sharp-pointed; a knife may be sharp; but a needle is properly acute. Things are sharp that have either a long or a pointed edge; but the keen is applicable only to the long edge; and that in the highest degree of sharpness; a common knife may be sharp; but a razor or a lancet are properly said to be keen.

Short, Brief, Concise, Succinct, Summary. We may term a stick, a letter, or a discourse, short; but we speak of brevity only in regard to the mode of speech; conciseness and succinctness as to the matter of speech; summary as to the mode either of speaking or acting; the brief is opposed to the prolix; the concise and succinct to the diffuse; the summary to the circumstantial or ceremonious.

Show, Exhibition, Representation, Sight, Spectacle. The show consists of that which merely pleases the eye; it is not a matter either of taste or art, but merely of curiosity; an exhibition, on the contrary, presents some effort of talent or some work of genius; and a representation sets forth the image or imitation of something by the power of art: hence we speak of a show of wild beasts; an exhibition of paintings; and a theatrical representation; sights and spectacles present themselves to view. Whatever is to be seen to excite notice is a sight; a spectacle, on the contrary, is that species of sight which has something in it to interest either the heart or the head of the observer: processions are sights; but battles or bull-fights are spectacles.

Sick, Sickly, Diseased, Morbid. Sick denotes a partial state, sickly a permanent state, of the body, a proneness to be sick; he who is sick may be made well; but he who is sickly is seldom really well. Sickly expresses a permanent state of indisposition unless otherwise qualified; but diseased expresses a violent state of derangement without specifying its duration; sickly and morbid are applied to the habitual state of the feelings or character; a sickly sentimentality; a morbid sensibility. Morbid is used in no other, except in a technical sense.

Sign, Signal. The sign enables us to recognize an

object; it is, therefore, sometimes natural; signal serves to give warning; it is always arbitrary.

Simple, Single, Singular. We may speak of a simple circumstance as independent of anything; of a single instance or circumstance as unaccompanied by any other; and a singular instance as one that rarely has its like.

Simulation, Dissimulation. Simulation is the making one's self like what one is not; and dissimulation is the making one's self appear unlike what one really is. The hypocrite puts on the semblance of virtue to recommend himself to the virtuous; the dissembler conceals his vices when he wants to gain the simple or ignorant at his side.

Slack, Loose. Slack is said only of that which is tied, or that with which anything is tied; while loose is said of any substances, the parts of which do not adhere closely.

To Slant, Slope. Slant is said of small bodies only; slope is said indifferently of all bodies, large and small: a book may be made to slant by lying in part on another book on a desk or a table; but a piece of ground is said to slope.

To Slip, Slide, Glide. To slip is an involuntary, and slide a voluntary, motion; those who go on the ice in fear will slip: boys slide on the ice by way of amusement. To slip and slide are lateral movements of the feet; but to glide is the movement of the whole body, and just that easy motion which is made by slipping, sliding, flying, or swimming: a person glides along the surface of the ice when he slides; a vessel glides along through the water.

To Soak, Drench, Steep. A person's clothes are soaked in rain when the water has penetrated every thread; he himself is drenched in the rain when it has penetrated, as it were, his very body; to steep is a species of soaking employed as an artificial process; to soak is, however, a permanent action by which hard things are rendered soft; to steep is a temporary action by which soft bodies become penetrated with a liquid; thus salt meat requires to be soaked; fruits are steeped in brandy.

Social, Sociable. Social people seek others; sociable people are sought for by others.

Solicitation, Importunity. Solicitation is general; importunity is particular: it is importunate or troublesome solicitation. Solicitation is itself indeed that which gives trouble to a certain extent, but it is not always unreasonable: there may be cases in which we may yield to the solicitations of friends, to do that which we have no objection to be obliged to do; but importunity is that solicitation which never ceases to apply for that which it is not agreeable to give.

Solitary, Desert, Desolate. Solitary simply denotes the absence of all beings of the same kind: thus a place is solitary to a man where there is no human being but himself; desert conveys the idea of a place made solitary by being shunned, from its unfitness as a place of residence; desolate conveys the idea of a place made solitary, or bare of inhabitants, and all traces of habitation, by violent means.

Sound, Sane, Healthy. Sound is extended in its application to all things that are in the state in which they ought to be, so as to preserve their vitality; thus, animals and vegetables are said to be sound when in the former there is nothing amiss in their breath, and in the latter in their root. Healthy expresses more than either sound or sane: we are healthy in every part, but we are sound in that which is essential for life. He who is sound may live, but he who is healthy enjoys life; sane is applicable to human beings, in the same sense, but with reference to the mind; a sane person is opposed to one that is insane.

To Speak, Say, Tell. To speak may simply consist in uttering an articulate sound; but to say is to communicate some idea by means of words: a child begins to speak the moment it opens its lips to utter any acknowledged sound; but it will be some time before it can say anything; to say is to communicate that which passes in our own minds, to express our ideas and feelings as they rise; to tell is to communicate events or circumstances respecting ourselves or others.

To Spread, Expand, Diffuse. To spread may be said of anything which occupies more space than it has done, whether by a direct separation of its parts, or by an accession to the substance; but to expand is to spread by means of extending or unfolding the parts: a mist spreads over the earth; a flower expands its leaves; diffusion is that process of spreading which consists literally in pouring out in different ways.

Staff, Stay, Prop, Support. Anything may be denominated a staff which holds up after the manner of a staff, particularly as it respects persons: bread is said to be the staff of life; the stay makes a thing stay for

the time being, it keeps it in its place; the prop keeps a thing up for a permanency: every pillar on which a building rests is a prop; support is a general term, and in its most general sense comprehends all the others as species: whatever supports, that is, bears the weight of an object, is a support, whether in a state of motion like a staff, or in a state of rest like a stay or prop.

To Stain, Soil, Sully, Tarnish. All these terms imply the act of diminishing the brightness of an object, but the term stain denotes something grosser than the other terms, and is applied to inferior objects: things which are not remarkable for purity or brightness may be stained, as hands when stained with blood; nothing is sullied or tarnished but what has some intrinsic value: a fine picture or piece of writing may be easily soiled by a touch of the finger; the finest glass is the soonest tarnished: hence, in the moral application, a man's life may be stained by the commission of some gross immorality: his honor may be sullied, or his glory tarnished.

State, Realm, Commonwealth. The ruling idea in the sense and application of the word state is that of government in its most abstract sense; affairs of state may either respect the internal regulations of a country, or they may respect the arrangements of different states with each other. The term realm is employed for the nation at large, but confined to such nations as are monarchical and aristocratical; the term commonwealth refers rather to the aggregate body of men and their possessions, than to the government of a country: it is the business of the minister to consult the interests of the commonwealth.

To Stir, Move. We may move in any manner, but to stir is to move so as to disturb the rest and compose either of the body or mind.

Story, Tale. The story is either an actual fact or something feigned; the tale is always feigned; stories are circulated respecting the accidents and occurrences which happen to persons in the same place; tales of distress are told by many merely to excite compassion.

Stream, Current, Tide. All rivers are streams, which are more or less gentle according to the nature of the ground through which they pass; the force of the current is very much increased by the confinement of any water between rocks, or by means of artificial impediments: the tide is high or low, strong or weak, at different hours of the day; when the tide is high, the current is strongest.

To Strengthen, Fortify, Invigorate. Whatever adds to the strength, be it in ever so small a degree, strengthens; exercise strengthens either body or mind: whatever gives strength for a particular emergency fortifies; religion fortifies the mind against adversity; whatever adds to the strength, so as to give a positive degree of strength, invigorates; morning exercise in fine weather invigorates.

Strict, Severe. He who has authority over others must be strict in enforcing obedience, in keeping good order, and a proper attention to their duties; but it is possible to be very severe in punishing those who are under us, and yet very lax in all matters that our duty demands of us.

Strife, Contention. Strife is mostly used for verbal strife, where each party strives against the other by the use of contumelious or provoking expressions; contention is used for an angry striving with others, either in respect to matters of opinion or matters of claim, in which each party seeks to get the better of the other.

Successive, Alternate. The successive may be accidental or intentional; the alternate is always intentional; it may rain for three successive days, or a fair may be held for three successive days: trees are placed sometimes in alternate order, when every other tree is of the same size and kind.

To Surround, Encompass, Environ, Encircle. We may surround an object by standing at certain distances all round it; in this manner a person may be surrounded by other persons; a garden is surrounded by a wall. To encompass is to surround in the latter sense, and applies to objects of a great or indefinite extent: the earth is encompassed by the air. To surround is to go round an object of any form, whether square or circular, long or short; but to environ and to encircle carry with them the idea of forming a circle round an object; thus a town or a valley may be environed by hills, a basin of water may be encircled by trees, or the head may be encircled by a wreath of flowers.

Sympathy, Compassion, Commiseration, Condolence. Sympathy has the literal meaning of fellow-feeling, that is, a kindred or like feeling, or feeling in company with another; compassion, commiseration, condolence signify a like suffering, or a suffering in company; sympathy preserves its original meaning in its applica-

tion, for we laugh or cry by sympathy. Compassion is altogether a moral feeling, which makes us enter into the distresses of others: we may, therefore, sympathize with others, without essentially serving them; but, if we feel compassion, we naturally turn our thoughts toward relieving them. Commiseration is awakened toward those who are in an abject state of misery; condolence supposes an entire equality, and is often produced by some common calamity.

Taste, Genius. Taste seems to designate the capacity to derive pleasure from an object; genius designates the power we have for accomplishing any object.

To Tease, Vex, Taunt, Tantalize, Torment. To tease is applied to that which is most trifling; torment to that which is most serious. We are teased by a fly that buzzes in our ears; we are vexed by the carelessness and stupidity of our servants; we are taunted by the sarcasms of others; we are tantalized by the fair prospects which only present themselves to disappear again; we are tormented by the importunities of troublesome beggars.

Tenacious, Pertinacious. To be tenacious is to hold a thing close, to let it go with reluctance: to be pertinacious is to hold it out in spite of what can be advanced against it. A man of a tenacious temper insists on trifles that are supposed to affect his importance; a pertinacious temper insists on everything which is apt to affect his opinions.

Tenet, Position. The tenet is the opinion which we hold in our minds; the position is that which we lay down for others. Our tenets may be hurtful, our positions false.

Thankfulness, Gratitude. Our thankfulness is measured by the number of our words; our gratitude is measured by the nature of our actions. A person appears very thankful at the time who afterward proves very ungrateful.

Thick, Dense. We speak of thick in regard to hard or soft bodies, as a thick board or thick cotton; solid or liquid, as a thick cheese or thick milk; but the term dense mostly in regard to the air in its various forms, as a dense air.

To Think, Suppose, Imagine, Believe, Deem. We think a thing right or wrong; we suppose it to be true or false; we imagine it to be real or unreal. In regard to moral points, in which case the word deem may be compared with the others, to think is a conclusion drawn from certain premises. I think that a man has acted wrong; to suppose is to take up an idea arbitrarily or at pleasure; to imagine is to take up an idea by accident, or without any connection with the truth or reality; to deem is to form a conclusion; things are deemed hurtful or otherwise in consequence of observation; we think as the thing strikes us at the time; we believe from a settled deduction.

Threat, Menace. We may be threatened with either small or great evils; but we are menaced only with great evils.

Timely, Seasonable. The former signifies within the time, that is, before the time is past; the latter according to the season, or what the season requires. A timely notice prevents that which would otherwise happen; a seasonable hint seldom fails of its effect because it is seasonable.

Torment, Torture. Torture is an excess of torment. We may be tormented by a variety of indirect means; but we are mostly said to be tortured by the direct means of the rack, or similar instrument.

To Transfigure, Transform, Metamorphose. Transfigure is to make to pass over into another figure; transform and metamorphose is to put into another form: the former being said only of spiritual beings, and particularly in reference to our Saviour; the other two terms being applied to that which has a corporeal form. Transformation is commonly applied to that which changes its outward form; in this manner a harlequin transforms himself into all kinds of shapes and likenesses. Metamorphosis is applied to the form internal as well as external, that is, to the whole nature.

Trembling, Tremor, Trepidation. Trembling expresses any degree of involuntary shaking of the frame, from the affection either of the body or the mind; cold, nervous affections, fear, and the like, are the ordinary causes of trembling; tremor is a slight degree of trembling, which arises mostly from a mental affection; when the spirits are agitated, the mind is thrown into a tremor by any trifling incident: trepidation is more violent than either of the two, and springs from the defective state of the mind; it shows itself in the action, or the different movements of the body, rather than in the body.

Trouble, Disturb, Molest. Trouble is the most general in its application; we may be troubled by the want of a thing, or troubled by that which is unsuitable;

we are disturbed and molested only by that which actively troubles. Pecuniary wants are the greatest troubles in life. Trouble may be permanent; disturbance and molestation are temporary, and both refer to the peace which is destroyed; a disturbance ruffles or throws out of a tranquil state; a molestation burdens or bears hard either on the body or the mind.

Truth, Veracity. Truth belongs to the thing; veracity to the person; the truth of the story is admitted upon the veracity of the narrator.

To Turn, Bend, Twist, Distort, Wring, Wrest, Wrench. We turn a thing by moving it from one point to another; thus we turn the earth over; to bend is simply to change its direction; thus a stick is bent, or a body may bend its direction to a certain point; to twist is to bend many times, to make many turns; to distort is to turn or bend out of the right course; thus the face is distorted in convulsions. To wring is to twist with violence; thus linen which has been wetted is wrung; to wrest or wrench is to separate from a body by means of twisting; thus a stick may be wrested out of the hand, or a hinge wrenched off the door.

To Turn, Wind, Whirl, Twirl, Writhe. Wind is to turn a thing round in a regular manner; whirl, to turn it round in a violent manner; twirl, to turn it round in any irregular and unmeaning way; writhe, to turn round in convulsion within itself.

Unbelief, Infidelity, Incredulity. The Jews are unbelievers in the mission of our Saviour; the Turks are infidels, inasmuch as they do not believe in the Bible; Deists and Atheists are likewise infidels, inasmuch as they set themselves up against Divine revelation; well-informed people are always incredulous of stories respecting ghosts and apparitions.

Understanding, Intellect, Intelligence. Understanding is employed to describe a familiar and easy power or operation of the mind in forming distinct ideas of things. Intellect is employed to mark the same operation in regard to higher and more abstruse objects. The understanding applies to the first exercise of the rational powers; it is therefore aptly said of children and savages that they employ their understandings on the simple objects of perception. Intellect, being a matured state of the understanding, is most properly applied to the efforts of those who have their powers in full vigor; we speak of understanding as the characteristic distinction between man and brute; intellect is applied merely to human power, and intelligence to the spiritual power of higher beings; as the intelligence of angels; so, when applied to human beings, it is taken in the most abstract sense for the intellectual power; hence we speak of intelligence as displayed in the countenance of a child whose looks evince that he has exerted his intellect, and thereby proved that it exists.

Unless, Except. Unless, which is equivalent to if less, if not, or if one fail, is employed only for the particular case; but except has always a reference to some general rule, of which an exception is hereby signified; I shall not do it unless he asks me; no one can enter except those who are provided with tickets.

Unspeakable, Ineffable, Unutterable, Inexpressible. The unspeakable is said of objects in general, particularly of that which is above human conception, and surpasses the power of language to describe; as the unspeakable goodness of God; ineffable is said of such objects as cannot be painted in words with adequate force; as the ineffable sweetness of a person's look; unutterable and inexpressible are extended in their signification to that which is incommunicable by signs from one being to another; thus grief is unutterable which it is not in the power of the sufferer by any sounds to bring home to the feelings of another; grief is inexpressible which is not to be expressed by looks, or words, or any sign.

Unworthy, Worthless. Unworthy is a term of less reproach than worthless; for the former signifies not to be worthy of praise or honor; the latter signifies to be without all worth, and consequently in the fullest sense bad. There are many unworthy members in every religious community; but every society that is conducted upon proper principles will take care to exclude worthless members.

Usage, Custom, Prescription. The usage is what one has been long used to do; custom (v. custom) is what one generally does; prescription is what is prescribed by usage to be done. The usage acquires force and sanction by dint of time; the custom acquires sanction by the frequency of its being done or the numbers doing it; the prescription acquires force by the authority which prescribes.

To Utter, Speak, Articulate, Pronounce. Utter from out, signifies to put out; that is, to send forth a sound; this, therefore, is a more general term than

speak, which is to utter an intelligible sound. We may utter a groan; we speak words only, or that which is intended to serve as words. To speak, therefore, is only a species of utterance; a dumb man has utterance, but not speech. Articulate and pronounce are modes of speaking; to articulate, from articulum, a joint, is to pronounce distinctly the letters or syllables of words; to pronounce is the first effort of a child beginning to speak. To pronounce, is a formal mode of speaking.

To Value, Prize, Esteem. To value is to set any value, real or supposititious, relative or absolute, on a thing; in this sense men value gold above silver, or an appraiser values goods. Prize and esteem are taken only as mental actions; the former in reference to sensible or moral objects, the latter only to moral objects; we may value books according to their market price, or we may value them according to their contents; we prize books only for their contents, in which sense prize is a much stronger term than value.

Venial, Pardonable. Venial is applied to what may be tolerated without express disparagement to the individual, or direct censure; but the pardonable is that which may only escape severe censure, but cannot be allowed; garrulity is a venial offense in old age; levity in youth is pardonable in single instances.

View, Survey, Prospect. We take a view or survey; the prospect presents itself; the view is of an indefinite extent; the survey is always comprehensive in its nature. Ignorant people take but narrow views of things; the capacious mind of a genius takes a survey of all nature; our prospects are very delusive. Sometimes our prospects depend upon our views, at least in matters of religion; he who forms erroneous views of a future state has but a wretched prospect beyond the grave.

Violent Furious, Boisterous, Vehement, Impetuous. A man is violent in his opinions, violent in his measures, violent in his resentments; he is furious in his anger, or has a furious temper; he is vehement in his affections or passions, vehement in love, vehement in zeal, vehement in pursuing an object; violence transfers itself to some external object on which it acts with force; but vehemence respects that species of violence which is confined to the person himself; we may dread violence, because it is always liable to do mischief. Impetuosity is rather the extreme of violence or vehemence; an impetuous attack is an excessively violent attack; an impetuous character is an excessively vehement character. Boisterous is said of the manner and the behavior rather than the mind.

Wakeful, Watchful, Vigilant. Wakefulness is an affair of the body, and depends upon the temperament; watchfulness is an affair of the will, and depends upon the determination: some persons are more wakeful than they wish to be; few are as watchful as they ought to be. Vigilance expresses a high degree of watchfulness: a sentinel is watchful who on ordinary occasions keeps good watch; but it is necessary for him, on extraordinary occasions, to be vigilant, in order to detect whatever may pass.

To Want, Need, Lack. To want is to be without that which contributes to our comfort, or is an object of our desire; to need is to be without that which is essential for our existence or our purposes; to lack expresses little more than the general idea of being without, unaccompanied by any collateral idea; it is usual to consider what we want as artificial, and what we need as natural and indispensable: what one man wants is a superfluity to another; but that which is needed by one is in like circumstances needed by all.

Wave, Billow, Surge, Breaker. Those waves which swell more than ordinarily are termed billows; those waves which rise higher than usual are termed surges; those waves which dash against the shore, or against vessels, with more than ordinary force, are termed breakers.

Weak, Feeble, Infirm. We may be weak in body or mind; but we are commonly feeble and infirm only in the body; we may be weak from disease, or weak by nature, it equally conveys the gross idea of a defect; but the terms feeble and infirm are qualified expressions for weakness: an old man is feeble from age; the latter may likewise be infirm in consequence of sickness.

Weight, Burden, Load. A person may sink under the weight that rests upon him; a platform may break down from the weight upon it; a person sinks under his burden or load; a cart breaks down from the load.

Whole, Entire, Complete, Total, Integral. Whole excludes subtraction; entire excludes division; complete excludes deficiency: a whole orange has had nothing taken from it; an entire orange is not yet cut; and a complete orange is grown to its full size; total is the opposite of partial; integral is applied now to parts or numbers not broken.

Wicked, Iniquitous, Nefarious. It is wicked to deprive another of his property unlawfully, under any circumstances; but it is iniquitous if it be done by fraud and circumvention; and nefarious if it involves any breach of trust.

To Will, Wish. We can will nothing but what we can effect; we may wish for many things which lie above our reach.

Wisdom, Prudence. Wisdom directs all matters present or to come; prudence, which acts by foresight, directs what is to come. Rules of conduct are framed by wisdom, and it is the part of prudence to apply these rules to the business of life.

Wonder, Miracle, Marvel, Prodigy, Monster. Wonders are natural; miracles are supernatural. The whole creation is full of wonders; the Bible contains an account of the miracles which happened in those days. Wonders are real; marvels are often fictitious; prodigies are extravagant and imaginary; monsters are violations of the laws of nature. The production of a tree from a grain of seed is a wonder; but the production of a calf with two heads is a monster.

Work, Labor, Toil, Drudgery, Task. Every member of society must work for his support, if he is not in independent circumstances: the poor are obliged to labor for their daily subsistence; some are compelled to

toil incessantly for the pittance which they earn: drudgery falls to the lot of those who are the lowest in society. A man wishes to complete his work; he is desirous of resting from his labor; he seeks for a respite from his toil; he submits to drudgery. Task is a work imposed by others, and is, consequently, more or less burdensome.

Writer, Author. Writer refers us to the act of writing; author to the act of inventing. There are, therefore, many writers, who are not authors; but there is no author of books who may not be termed a writer: compilers and contributors to periodical works are properly writers, though not always entitled to the name of authors. Poets and historians are properly termed authors rather than writers.

Youthful, Juvenile, Puerile. Youthful signifies full of youth, or in the complete state of youth; juvenile signifies the same; but puerile signifies literally boyish. Hence the first two terms are taken in an indifferent sense; but the latter in a bad sense, or at least always in the sense of what is suitable to a boy only: thus we speak of youthful vigor, youthful employments, juvenile performances, juvenile years, and the like: but puerile objections, puerile conduct, and the like. We expect nothing from a youth but what is juvenile; we are surprised and dissatisfied to see what is puerile in a man.

WORDS AND PHRASES FROM THE CLASSIC AND MODERN LANGUAGES

GREEK AND LATIN

ab extrâ, From without.

ab incûndibîlis, From the cradle.

ab initio, From the beginning.

ab origine, From the origin or commencement.

ab ovo, From the egg; from the very beginning.

ab ovo usque ad mala (lit., from the egg to the apples, a term borrowed from Roman banquets, which began with eggs and ended with fruit), From beginning to end; from first to last.

abens hæres nōn erit (The absent one will not be the heir), Out of sight, out of mind.

abest invidia, Let there be no ill-will; envy apart.

ab uno disce omnes (From one example judge of the rest), From a single instance infer the whole.

ab urbe condita, From the building of the city, i. e., Rome. [A. U. C.]

a capite ad calcem, From head to heel.

a cruce salus, Salvation by or from the cross.

ad arbitrium, At will, at pleasure.

ad calendâs græcâs, At the Greek calends, i. e., never. The Greeks had no calends.

ad captandûm vulgus, To attract or please the rabble.

a Deo et rége, From God and the king.

ad extrémum, To the extreme; at last.

ad gustum, To one's taste,

ad hominûm, Personal; to the individual.

a die, From that day.

ad interneciōnem, To extermination.

ad libitum, At pleasure.

ad modum, In the manner of.

ad multos annos, For many years.

ad nauseam, So as to disgust or nauseate.

ad patrês, Gathered to his fathers; dead.

ad rem, To the purpose; to the point.

adscriptus glêbâ, attached to the soil.

adsum, I am present; I am here.

ad summum, To the highest point or amount.

ad unguem, To a nicety, exactly.

ad unum omnes, To a man.

ad utrumque paratûs, Prepared for either event or case.

ad vitum, Like life; to the life.

agrescît medendo, It becomes worse from the remedies employed.

æquabiliter et diligenter, Equally and diligently.

æquo animo, With a calm mind.

ætatis suæ, Of his or her age.

a fortiôri, For the stronger reason.

age quod agis, Do what you are doing; attend to your business.

alere flammam, To feed the flame.

alioi kamon, alioi onanto (Gr.), Some toil, others reap the advantage.

alma mater, Kind or benign mother.

alter ego, Another self.

alter idem, Another, exactly similar.

alter ipse amicus, A friend is another self.

alterum tantum, As much more.

amantium iræ amoris integratio, Lovers' quarrels are the renewing of love.

a maximâ ad minimâ, From the greatest to the least.

amicus humani generis, A friend of the human race.

amicus usque ad aras, A friend even to the altar (of sacrifice), i. e., To the last extremity.

amor patriæ, Love of country; patriotism.

ananka' d' oude theoi machontai (Gr.), Not even the gods can fight against necessity.

andrôn, epiphânôn pasa gē taphos (Gr.), All the world is a burial-place for illustrious men.

anēr ho pheugôn kai palin machētai (Gr.), The man who flies shall fight again. (A line said to have been written by Demosthenes as an excuse for his running away and leaving his shield behind him at the battle of Cheronea, 338 B. C.)

anguis in herbâ, A snake in the grass; a false friend; an unforeseen danger.

animo et fide, Courageously and faithfully.

anno ætatis sue, In the year of his or her age.

anno Christi, In the year of Christ. [A. C.]

anno humanâ salutis, In the year of man's redemption. [A. H. S.]

anno salutis, In the year of redemption. [A. S.]

anno urbis conditæ, In the year from the time the city—i. e., Rome—was built.

annus mirabilis, A year of wonders. (Often applied in English History to the year 1666, noteworthy for the war with the Dutch, the Plague, and the Great Fire of London. See Dryden's poem "Annus Mirabilis.")

ante bellum, Before the war.

ante lucem, Before daybreak.

ante meridiem, Before noon.

a posse ad esse, From possibility to reality.

a posteriori, From what follows.

a priori, From what goes before.

aptestos pūthos (Gr.), A cask that will never fill; an endless job. The allusion is to the Danaides, who, for the murder of their husbands, were condemned to draw water in sieves.

arbiter elegantiarum, A judge or authority in matters of taste.

arcana cœlestia, Celestial secrets.

arcana imperiî, State secrets.

ardentia verba, Words that burn.

argumentum ad crumēnam (An argument to the purse), An appeal to one's interests.

argumentum ad invidiam (An argument to envy), An appeal to low passions.

argumentum ad iudiciûm, An argument appealing to the judgment.

argumentum baculitum, The argument of the cudgel; an appeal to force.

ariston men hodor (Gr.), Water is the chief of the elements, i. e., as being the origin of all things. In the Theogony of Hesiod, Oceanus and Thetis are regarded as the parents of all the deities who presided over Nature.

ara est cœlâre artem, True art is to conceal art.

ara longa, vita brevis, Art is long, life is short.

artium magister, Master of arts.

asinus ad lyram (lit., an ass at the lyre), An awkward fellow.

ad spes non fracta, But hope is not yet crushed.

audi alteram partem, Hear the other side.

aurea mediocritas, The golden mean.
aut Cæsar aut nullus, Either Cæsar or nobody; either in the first place or nowhere.
aut vincere aut mori, To conquer or die; death or victory.
auxilium ab alto, Help from on high.
a verbis ad verbera, From words to blows.
avito vires honore, He flourishes on the honors of his ancestors.
beatâ memoriâ, Of blessed memory.
bella horrida bella, War! horrid war!
bella matribus detestata, War, so detested by mothers.
bellum interecium, A war of extermination.
bene òrdasse est bene studuisse, To have studied well is to have prayed well.
bis dat qui cito dat, He gives twice who gives quickly or opportunely.
bis peccare in bello non licet, One must not blunder twice in war.
bis pueri senes, Old men are twice boys.
bondâ fide, In good faith.
bona fide, Good faith.
brevi manu (With a short hand), Offhand, extempore, summarily.
brevia esse laboro obscûrus fio, If I labor to be brief, I become obscure.
cadit quæstio, The question falls to the ground; there is no discussion.
cæca est invidia, Envy is blind.
cætera deunt, The rest is wanting.
cæteris paribus, Other things being equal.
candida Pax, White-robed Peace.
cantâbis vacuus coram latrone viator, The penniless traveler will sing in the presence of the highwayman; a man who has nothing has nothing to lose.
cantâte Domino, Sing unto the Lord. (The opening words of many Psalms. *Vulgate*.)
carpe diem, Usually explained, according to popular ideas of Epicurean philosophy, as—Enjoy the present day; but capable of higher interpretation—Seize the present opportunity; improve time.
câsus belli, A cause justifying war; a ground of war.
causa sine quâ nōn, An indispensable cause.
cedant arma toga, Let arms yield to the gown; let violence give place to law.
chrēmāl anēr, Money makes the man.
circulus verborum, A circumlocution.
circulus in probando, A circle in the proof; the fallacy of using the conclusion as one of the premisses; a vicious circle.
clārior e tenebris, Brighter from obscurity.
clārum et venerabilē nōmen, An illustrious and venerable name.
coq̃ito, ergo sum, I think, therefore I exist.
comitas inter gentes, Comity between nations.
commune bonum, A common good.
communibus annis, On the annual average; one year with another.
communi consensû, By common consent.
conditio sine quâ nōn, An indispensable condition.
conjunctis viribus, With united powers.
consensus facit lēgem, Consent makes the law—i. e., if two persons make an agreement in good faith and with full knowledge, the law will insist on its being carried out.
consilio et animis, By wisdom and courage.
consilio et prudentiâ, By wisdom and prudence.
constantia et virtute, By constancy and virtue.
consuetudo pro lēge servatur, Custom is held as law. (The English common law is based on immemorial usage.)
contrâ bonos mores, Contrary to good morals.
cōpia verborum, A plentiful supply of words; flow of language.
cōram nobis, In our presence.
cōram non iudice, Before a person who is not a judge; not before the proper tribunal.
crāmbe repetitâ, Cabbage warmed up the second time; hence used proverbially for any tedious repetition of a truism, an old story, etc.
crēdat Jūdæus Apella, Let the (superstitious) Jew Apella believe it; tell that to the marines.
crēde quod habēs, et habēs, Believe that you have it, and you have it.
crēdo, quia absurdum, (Corrupted from a passage in Tertullian), I believe it, because it is absurd.
credula res amor est, Love is ready to believe.
crescūt amor nummī, quantum ipsa pecūnia crescūt, The love of money grows as our wealth increases.
crescūt eundo, It increases as it goes.
crescūt sub pondere virtus, Virtue increases under every oppression.
crētâ an carbōne notandam, To be marked with chalk or

charcoal. (The Romans marked lucky days with white, and unlucky ones with black.)
cruz, A cross, a difficulty, a stumbling-block, a puzzle; e. g., *cruz criticōrum*, *cruz mathematicōrum*, *cruz medicōrum*, The puzzle of critics, mathematicians, physicians.
 cuculus non facit monachum, The cowl does not make the monk; Don't trust to appearances.
cui bono? (A maxim of Cassius, quoted by Cicero), For whose advantage? Generally used, however, as—What is the good of it?
cui Fortuna ipsa cedit, To whom Fortune herself yields.
culpam pama premit comes, Punishment follows hard on crime.
cum grāno, cum grāno salis, With a grain of salt; with some allowance or modification.
cum privilēgio, With privilege.
cum tacent, clamant, Although they keep silence, they cry aloud; their silence is more expressive than words.
cursōsa felicitas, Nice felicity of expression (applied by Petronius Arbitr, cxviii, 5, to the writings of Horace); happy knack.
currente calamo, With a running pen; offhand.
da locum meliōribus, Give place to your betters.
dammant quod nōn intelligunt, They condemn what they do not understand.
dare pondus fūmo, To give weight to smoke; to impart value to that which is worthless; to attach importance to trifles.
data et accepta, Expenses and receipts.
date obolum Belisārio, Give an obolus to Belisarius. It is said that this general, when old and blind, was neglected by Justinian, and obliged to beg. Gibbon treats the story as a fable.
Dāvus sum, nōn Œdipus, I am Davus, not Œdipus. I am no conjurer; I am a bad hand at riddles.
deceptio viūs, An optical illusion.
decori decus addit avito, He adds honor to the ancestral honors.
de die in diem, From day to day.
de quistibus nōn est disputandum, There is no disputing about tastes.
Dei grātiâ, By the grace of God.
de jure, By the law; by right.
de lānâ caprinâ, About goat's wool, hence about any worthless object.
delenda est Carthāgo, Carthage must be utterly destroyed. (A phrase with which Cato the Elder urged the Roman people to the destruction of Carthage, which he looked on as a dangerous rival to Rome.)
de minimis nōn cūrat lex, The law does not concern itself with trifles.
de mortuis nil nisi bonum, Let nothing be said of the dead but what is good.
de nihilo nihil, in nihilum nil posse reverti, From nothing nothing is made, and nothing that exists can be reduced to nothing. (The doctrine of the eternity of matter.)
de novo, Anew.
de omnibus rebus, et quibusdam aliis, About everything, and something more besides. Applied ironically to an immature literary production, in which very many subjects are treated.
Deo adiuvante, nōn timendum, With the help of God, there is nothing to be afraid of.
Deo dūce, With God for a leader.
Deo favente, With the favor of God.
Deo grātias, Thanks be to God. [D. G.]
Deo iuvante, With the help of God.
Deo monente, God giving warning.
Deo, nōn fortunâ, From God, not from Chance.
Deo volente, God willing.
de profundis, Out of the depths. (The first words of Ps. cxix—*Vulg.*)
dēsini in piscem mulier formōsa superne, A woman, beautiful above, has a fish's tail. (A description of an incongruous style.)
dis crāmbe thanatos, Cabbage, twice over, is death; repetition is tedious.
dii maiōrum gentium, The gods of the superior houses; the twelve superior gods.
dii penates, Household gods.
disiecta membra, Scattered remains.
docendo discimus, We learn by teaching.
Dominus vobiscum, The Lord be with you. (The words in which the priest blesses the people in the Roman Church.)
domus et placens | uxor, Home and the good wife.
do ut dēs, I give that you may give; the principle of reciprocity.
dramatis personæ, The characters of the play,

dulce est dēsipere in loco, It is pleasant to play the fool at times.
dulce et decōrum est pro patriā mori, It is sweet and glorious to die for one's country.
dum spiro spēro, While I breathe, I hope.
dum vivimus, vivāmus, Let us live while we live; i. e., Let us enjoy life.
durante viā, During life.
ecce homo, Behold the man; — indicative of the giving up of Christ to the people by Pilate.
e flammā cibum petere, To seek food from the flames; to pick the remnants of food from the funeral pyre; to be reduced to the last extremity.
ego et rex meus, My king and I. (An expression attributed to Cardinal Wolsey, and unjustly made the subject of a charge against him, as if he had written "I and my King.")
cheu! fugātes lābuntur anni, Alas! our fleeting years pass away.
ēlāpo tempore, The time having elapsed.
en nūkti bouē, In the night there is counsel; sleep on it.
en oīnō alētheia, In wine there is truth.
eo animo, With that design.
eo nōmine, By that name.
e plūribus unum, One out of, or composed of, many. (The motto of the United States of America.)
epulis accumbere divūm, To sit down at the banquets of the gods.
e re nātā, According to the exigency.
esse quam vidēris, To be, rather than to seem.
est modus in rēbus, There is a middle course in all things.
esto perpetua, Let it endure forever.
esto quod esse vidēris, Be what you seem to be.
ē tan, ē epi tan, Either this, or upon this; either bring this back, or be brought home, dead, upon it. The words of a Spartan mother when she gave a shield to her son going on military service.
et cātera, And the rest.
et id genus omne, And everything of the sort.
et sequentes, et sequētia, And those that follow.
et sic de cāteris, And so of the rest.
et sic de similibus, And so of similar things.
et tu, Brūtel And thou also, Brutus. (Usually given as the last words of Julius Cæsar, when he saw Brutus amongst his murderers.)
eventus stultōrum magister, Fools must be taught by experience.
ex abundantia, Out of the abundance.
ex adverso, From the opposite side.
ex aquo et bono, According to what is right and good.
ex animo, Heartily, sincerely.
ex capite, From the head, from memory.
ex cathedra, From the chair or pulpit; spoken with authority; by virtue of office.
excellentior, Higher; more elevated.
exceptio probat regulam, The exception proves the rule; for if the case in point were not an exception, there would be no rule.
exceptis excipienda, Due exceptions (or allowances) having been made.
ex concessio, From what has been conceded.
ex cūrd, Out of court.
ex delicto, From the crime.
exegi monumentum ære perennius, I have reared a monument more lasting than brass. (A prophetic estimate by Horace of the value of his poems.)
exempla sunt odiōsa, Examples are offensive.
exempli grātia, By way of example. [E. G.]
exerunt, They go out.
exerunt omnes, All go out.
ex facto ius oritur, The law arises from the fact. Till the nature of the offense is known, the law cannot be set in motion.
exū, He (or she) goes out.
exitus acta probat, The result justifies the deed.
ex merā grātia, Through mere favor.
ex mero mōu, Of his own free will.
ex necessitate rei, From the urgency of the case.
ex officio, By virtue of office.
ex parte, On one part or side.
ex pede Herculem, You may judge of Hercules by his foot; the whole by the part.
experientia docet stultos, Experience teaches even fools.
experimentum crucis, The experiment of the cross; a decisive experiment; a crucial test.
experto crēde, Believe one who has tried it, or who speaks from experience; *experto crēde Roberto*, Believe Robert, who has tried it, or who speaks from experience.
expertus metui, Having had experience of it, he dreads it; a burnt child dreads the fire.
ex post facto, After the deed is done; retrospective.
expressis verbis, In express terms.
ex quocunque capite, For whatever reason.

ex tacito, Tacitly.
ex tempore, Off hand; without preparation.
extinctus amābilitur idem, This same man will be loved after his death.
extrā mūros, Outside the walls.
ex uque leōnem, You may tell the lion by his claws.
faber quisque fortūnæ suæ, Every man is the architect of his own fortune; hence, *faber fortūnæ suæ* = a self-made man.
facile est inventis addere, It is easy to improve what has been already invented.
facil princeps, The acknowledged chief; one who stands undoubtedly first.
facilis est descensus Averni, The descent to hell is easy; it is easy enough to get into trouble.
fac simile, An exact imitation.
faeces populi, fæx populi, The scum of the population.
fama clamōsa, A current scandal.
fama nihil est celerius, Nothing travels more swiftly than scandal.
fama semper vivat, May his fame last forever.
fas est et ab hoste doceri, It is right to be taught even by an enemy; you may get a hint from the other side.
fata obstant, The Fates oppose.
fata viam inveniunt, The Fates will find out a way.
fax mentis incendium glōriæ, The passion for glory is the torch of the mind.
felicitas multos habet amicos, Prosperity has many friends.
felo de se, One who commits self-felony; a suicide.
fere natura, Of a wild nature; applied to wild beasts.
festina lente, Make haste slowly; don't be impetuous.
fiat experimentum in corpore vili, Let the experiment be made on a body of no value.
fiat iustitia ruat cælum, Let justice be done though the heavens should fall.
fiat lux, Let there be light.
fide et amore, By faith and love.
fide et fiduciā, By fidelity and confidence.
fide et fortitudine, By fidelity and fortitude.
fidei cotícula cruz, The cross is the touchstone of faith.
fidei defensor, Defender of the faith.
fide, non armis, By faith, not by force of arms.
fide, sed cui, vide, Trust, but see whom you are trusting.
fides et iustitia, Fidelity and justice.
fides Pūnica, Punic faith; treachery. (Among the Romans the bad faith of the Carthaginians was notorious.)
fidus Achates, Faithful Achates, the companion of Æneas; a true friend.
fidus et audax, Faithful and bold.
feri facias, A legal paper authorizing execution on the goods of a debtor.
filius nullius, A son of nobody; an illegitimate son, because he has no legal rights as a son in respect to the inheritance of property.
filius terræ, A son of the earth; one of low origin.
finis coronat opus, The end crowns the work.
flagrante bello, While the war was raging; during hostilities.
flagrante delicto, In the commission of the crime; in the very act.
flamma fumo est proxima, Flame is akin to fire; where there's smoke there's fire.
flecti, non frangi, To be bent, not broken.
flosculi sententiārum, Flowers of fine thoughts.
funum habet in cornu, He has hay on his horn (the mark put on a bull to show he was savage); beware of him.
fons et origo malōrum, The source and origin of our miseries.
forensis strepitus, The clamor of the forum; "Brawling courts, and dusty parlours of the Law."
forte scutum salus dūcum, A strong shield is the safety of leaders.
fortes fortūna iuvat, Fortune favors the brave.
forti et fideli nihil difficile, Nothing is difficult to the brave and faithful.
fortiter et recte, With fortitude and rectitude.
fortiter, fideliter, feliciter, Boldly, faithfully, successfully.
fortiter in re, With firmness in action.
fortūna favet fatuis, Fortune favors fools.
fortūna filius, A spoiled child of Fortune.
frangas, non flectas, You may break me, but you shall not bend me.
fraus pia, A pious fraud.
fronti nulla fides, There is no trusting the features; don't trust to appearances.
fruges consumere nātū, Born to consume the fruits of the earth; born only to eat.
fugā irreparabile tempus, Irrecoverable time glides away.
fuimus Trōes, We once were Trojans; we have seen better days.
fuit ilium, There once was a Troy; Troy was, but is no more; the place is gone.

fūmum et opes, strepitumque Rōmæ, The smoke, the show, the rattle, of the town (Rome).
functus officio, Having discharged his duties; hence, out of office.
furor arma ministrat, Rage provides arms; one uses any weapon in a rage.
furor loquendi, A rage for speaking.
furor poeticus, Poetical fire.
furor scribendi, A rage for writing.
gaudeo, In French.
gaudeamus igitur, Therefore, let us rejoice. (The burden of a Macaronic song.)
gaudet tenāmine virtus, Virtue rejoices in temptation.
genius loci, The genius or presiding spirit of the place.
gens togata, Applied first to Roman citizens, as wearing the toga, the garment of peace; hence, civilians generally.
glaukas eis Athēnas, Owls to Athens. The owl was sacred to Minerva, the guardian divinity of Athens; hence, owls were abundant, so that the proverb = to carry coals to Newcastle.
glōssa diplē, A double tongue.
glōria in excelsis Deo, Glory to God in the highest.
glōria Patri, Glory be to the Father.
gnōthi seauton, Know thyself. A precept inscribed in gold letters over the portico of the temple at Delphi. Its authorship has been ascribed to Pythagoras, to several of the wise men of Greece, and to Phemonœ, a mythical Greek poetess. According to Juvenal, this precept descended from heaven.
gradu diverso, via ūna, The same road by different steps.
gradus ad Parnassum, A step to Parnassus; aid in writing Latin poetry; a work on Latin verse-making containing rules and examples.
grātia placendi, For the sake of pleasing.
grātia dictum, Mere assertion.
graviōra manent, Greater afflictions are in store; the worst is yet to come.
graviōra quædam sunt remedia periculis, Some remedies are worse than the disease.
grex venālimus, A venal throng.
gutta cavat lapidem, non vi, sed sæpe cadendo, The drop hollows out the stone by frequent dropping, not by force; constant persistence gains the end.
haud longis intervallis, At frequent intervals.
hē glōss' omōmoch', hē de phrēn anōmotos, My tongue has sworn, but my mind is unsworn; I have said it, but don't mean to do it.
hēluo librōrum, A devourer of books; a bookworm.
hēu pietas! hēu prisca fides, Alas! for piety! Alas! for our ancient faith.
hiātus valde defendendus, A gap or deficiency greatly to be deplored; words employed to mark a blank in a work, but often used of persons whose performances fall short of their promises.
hic et ubique, Here and everywhere.
hic jacet, Here lies; SEPULTUS, buried.
hic labor, hic opus est, Here is labor, here is toil.
hic sepultus, Here [lies] buried.
hinc illæ lacrimæ, Hence these tears; this is the cause of the trouble.
hodie mihi, cras tibi, It is my lot to-day, yours to-morrow. (A line often found in old epitaphs.)
hoi polloi, The many, the common people.
homo factus ad unguem, Usually quoted thus, though the proper form is *ad unguem* | *factus homo*, A highly polished, accomplished man. (The expression is borrowed from the practice in sculptors, who, in modeling, give the finishing touch with the nail; or from joiners, who test the accuracy of joints in wood by the nail.)
homo multarum literarum, A man of many letters; a man of extensive learning.
homo solus aut deus aut demon, A man to live alone must be either a god or devil.
homo sum; humani nihil a me alienum puto, I am a man; and I consider nothing that concerns mankind a matter of indifference to me.
hon hoi theoi philousin apothnēskēi neos, A fragment from Menander; He whom the gods love dies young.
honores mutant mōres, Honors change manners.
honos habet onus, Honor is burdened with responsibility.
horæ canonicæ, Canonical hours; prescribed times for prayers.
horresco referens, I shudder as I tell the story.
hortus siccus, A dry garden; a collection of dried plants; an herbarium.
hos ego vericulus feci, tulit alter honores (Virgil, on the occasion when some verses he had written on the shows at Rome were unjustly claimed by Bathyllus, who was rewarded for them). I wrote these lines, another has borne away the honor.
humānum est errāre, To err is human.
hunc tu caveto, Beware of him.

id genus omne, All that class. (A contemptuous expression for the dregs of the population.)
ignorantia non excusat legem, Ignorance is no plea against the law.
ignoratio elenchi, Ignorance of the point in dispute; the logical fallacy of arguing to the wrong point.
ignōti nulla cupidō, There is no desire for that which is unknown; your wants are increased by knowledge.
ignōtum per ignōtius, (To explain) a thing not understood by one still less understood.
Ilīas malorum, An Iliad of woes; a host of evils. (From the fact that the siege of Troy lasted ten years.)
imulātōres, servum pecus, Ye imitators; a servile herd.
immedicabile vulnus, An incurable wound; an irreparable injury.
imo pectore, From the bottom of one's heart.
impari Marte, With unequal military strength.
impedimenta, Luggage; the baggage of an army.
imperium in imperio, A government existing within another. (Said of a power set up against constituted authority.)
implicite, By implication.
impos animi, Of weak mind.
in actu, In the very act; in reality.
in æternum, For ever.
in articulo mortis, At the point of death.
in camerā, In the judge's chamber; in secret.
in capite, In chief.
in calo quies, There is rest in heaven.
incrēdulus idi, Being incredulous, I cannot endure it.
in cūria, In court.
inde ira, Hence this resentment.
in dubio, In doubt.
in æquilíbrio, In equilibrium.
in esse, In being.
in extenso, At length.
in extremis, In very bad circumstances; at the point of death.
infandum, regina, jubes renovare dolorem, You command me, O Queen, to revive unspeakable grief.
in flagrante delicto, In the commission of the act.
in forma pauperis, As a poor man.
infrā dig., infrā dignitatem, Beneath one's dignity.
in futuro, In future, henceforth.
in hoc signo vinces, In this sign thou shalt conquer. (The motto is said to have been adopted by Constantine after his vision of a cross in the heavens just before his decisive battle with Maxentius, A. D. 312.)
in limine, On the threshold; preliminarily.
in loco, In the place; upon the spot; in the place of.
in loco parentis, In the place of a parent.
in medias res, In the very midst of the business.
in memoriā, In memory of.
in nōmine, In the name of.
in nūbibus, In the clouds; hence, undefined, uncertain, vague.
in nuce, In a nutshell.
in omnia parātus, Prepared for all things.
inopem cōpia fecit, Abundance has made him poor.
in pace, In peace.
in perpetuam rei memoriā, In everlasting remembrance of the event.
in perpetuum, For ever.
in pleno, In full.
in posse, In possible existence.
in propria pēsona, In one's own person.
in puris naturalibus, In a state of nature; stark naked.
in re, In the matter of.
in rerum naturā, In the nature of things.
in sæcula sæculorum, For ever.
in scitū est | adversum stimulum calces, It is mere folly to kick against the spur.
in situ, In its proper position.
in statu quo, In its former state.
in suspensio, In suspense.
in te, Domine, sperāvi (Ps. xxxi, Vulg.), In thee, O Lord, have I put my trust.
inter alia, Among other things.
inter arma lēges silent, In the time of war the laws are silent.
inter canem et lupum, Between the dog and the wolf; twilight.
interdum vulgus rectum videt, Sometimes the rabble see what is right.
inter nos, Between ourselves.
inter pocula, At one's cups.
in terrōrem, In terror; as a warning.
inter se, Amongst themselves.
inter spem et metum, Between hope and fear.
in totidem verbis, In so many words.
in tōto, In the whole; entirely.
intrā muros, Within the walls.

in transitu, On the passage.

intrā parietes, Within the walls; private.

in ūtroque Delphini, For the use of the Dauphin.

in ūtroque fideles, Faithful in both.

in vacuo, In a vacuum.

in verbis magistri iurare, To swear to a master's words;

to accept opinions upon authority.

inverso ordine, In an inverse order.

in vino veritas, In wine there is truth. When a person is under the influence of wine he shows himself in his true colors.

invitā Minervā, Minerva (Goddess of Wisdom) being unwilling; hence, without genius.

ipse dixit, He himself has said it; a mere assertion.

ipsissima verba, The identical words.

ipso facto, By the fact itself.

ipso iure, By the law itself.

ira furor brevis est, Anger is a brief madness.

ita est, It is so.

ita lex scripta est, Such is the written law.

italice, In Italian characters.

jacta ālea est, (The exclamation of Julius Cæsar when he passed the Rubicon. The die is cast.)

jam redit et Virgo, redeunt Saturnia regna, Now the Virgin and the Saturnian age return. (Of the reign of Astræa, the Goddess of Justice, in the Golden Age.)

jānuis clausis, With closed doors; in secret.

joci causā, For the sake of a joke.

jubilāte Deo (Ps. c. 1), O be joyful in the Lord.

juvendi acti labōres, The remembrances of past labor is sweet.

judicium Dei, The judgment of God.

judicium parium aut leges terræ (Magna Charta), The judgment of our peers or the laws of the land.

jūre divino, By divine law.

jūre humano, By human law.

jūris peritus, One learned in the law.

jūris utriusque doctor, Doctor of both laws, i. e., of canon and civil laws.

jūs canonicum, Canon law.

jūs civile, The civil law.

jūs divinum, The divine law.

jūs et norma loquendi, The law and rule of speech.

jūs gentium, The law of nations.

jūs gladii, The right of the sword.

jūs possessionis, The right of possession.

jūs proprietatis, The right of property.

jūs summum sæpe summa malitia est, Extreme law is often extreme wrong.

kairon gnōthi, Know your opportunity. A saying of Pittacus, one of the Wise Men of Greece.

kai' exochen, Pre-eminently.

labitur et labetur in omne volūbilis ævum, It glides on, and will glide on for ever.

laborāre est orāre, Work is prayer.

labor ipse voluptas, Labor itself is a pleasure.

labor omnia vincit, Labor overcomes all difficulties.

laborum dulce lenimen, The sweet solace of our labors.

lapis philosophorum, The philosophers' stone.

lapeus calami, A slip of the pen.

lapeus lingue, A slip of the tongue.

lapeus memoriæ, A slip of the memory.

lares et penates, Household gods.

lateat scintilla forsan, Perchance some small spark may lie concealed. (The motto of the Royal Humane Society.)

latine dictum, Spoken in Latin.

laudāri a viro laudato, To be praised by a man who deserves praise, i. e., by an eminent man.

laudatōnes eorum qui sunt ab Homēro laudati, Praises from those who were themselves praised by Homer.

laudator temporis acti, One who praises the good old days.

laudem immensa cupido, An insatiable desire for praise.

laus Deo, Praise to God.

lector benevole, Kind, or gentle, reader.

legatus a latere (A legate from the side [of the Pope]), A papal legate.

lex loci, The law of the place.

lex non scripta, The unwritten law; the common law.

lex scripta, The written or statute law.

lex talionis, The law of retaliation.

lex terra, The law of the land.

licentia eorum, The license allowed to poets.

lima labor et mora, The labor and delay of the file; the slow and laborious polish of a literary work.

lis litem general, Strife begets strife.

litem lite solvere, To settle strife by strife; to end one controversy by another.

litem pendente, During the trial.

littera scripta manet, The written character remains.

loci communes, Common places.

loco citato, In the place quoted.

locus classicus, A classical passage; the acknowledged place of reference.

locus criminis, The scene of the crime.

locus in quo, The place in which.

longo intervallo, By or with a long interval.

lucidus ordo, A perspicuous arrangement.

lucris causa, For the sake of gain.

lupum auribus teneo, I hold a wolf by the ears; I have caught a Tartar.

lupus est homo homini, Man is a wolf to his fellow-man; one man preys on another.

lupus in fabulā, The wolf in the fable; talk of the devil and he will appear.

lūsus nātūra, A freak of nature; a deformed animal or plant.

magister cēremoniārum, A master of the ceremonies.

magna civitas, magna solitudo, A great city is a great solitude.

magna spes altera Romæ, A second hope of mighty Rome; used of any young man of promise.

magna est veritas et prævalēbit, Truth is mighty, and will prevail.

magna est vis consuetudinis, Great is the power of habit.

magnas inter opes inops, Poor in the midst of great wealth.

magnum bonum, A great good.

magnum opus, A great undertaking; the great work of a man's life.

magnum veditigal est parsimonia, Thrift is itself a good income.

malā fide, With bad faith; treacherously.

malī exempli, Of a bad example.

malī principii malus finis, The bad end of a bad beginning.

malis avibus, With unlucky birds, i. e., with bad omens.

malo modo, In an evil manner.

malus pudor, False shame.

manibus pedibusque, With hands and feet; tooth and nail.

manu forti, With a strong hand.

manu propria, With one's own hand.

mare clausum, A closed sea, a bay.

mare gravius sub pæce latet, A more serious warfare is concealed by seeming peace.

māteriem superābat opus, The workmanship was more valuable than the raw material.

mediocria firma, Moderate things are surest.

medio tūstissimus ibis, You will travel safest in a middle course.

mega biblion mega kakon (Adapted from a maxim of Calimachus), A big book is a big nuisance.

megale polis megale erēmia, A great city is a great solitude.

mēden agan, Not too much of anything.

me iudice, I being the judge; in my opinion.

memor et fidelis, Mindful and faithful.

memoria in aeternā, In eternal remembrance.

mens agitat mōlem, A mind informs the mass. Used by Virgil in a pantheistic sense of the world; often applied to an unwieldy, dull-looking person.

mens sana in corpore sano, A sound mind in a healthy body.

mens sibi conscia recti, A mind conscious of its own rectitude.

meo periculo, At my own risk.

meo voto, At my own wish.

metron aristot, Moderation is best. (A favorite saying of the philosopher Cleobulus.)

mia chelidōn iar ou poiē, One swallow does not make a spring.

mihī cura futuri, My care is for the future.

mirābile dictu, Wonderful to relate.

mirābile visu, Wonderful to see.

modo et forma, In manner and form.

modus operandi, The manner of working.

molliora tempora laudi, The favorable moment for speaking.

mōre majorum, After the manner of our ancestors.

mōre suo, In his usual manner.

mors jānuis illa, Death is the gate of [everlasting] life.

mors omnibus commūnis, Death is common to all men.

mos pro lege, Usage has the force of law.

motu proprio, Of his own accord.

multum in parvo, Much in little.

mūnus Apolline dignum, A gift worthy the acceptance of Apollo.

mūtātā mūtandis, The necessary changes being made.

mūtātō nōmine, de te fabulā narrātūr, With a mere change of name the story is applicable to you.

nascimur poētæ, āmus orādores, We are born poets, we become orators by training.

nātālē solum, The land of one's birth.

nātūram expellas jūrcā, tamen uaque recurrit, Though you may drive out Nature with a pitchfork, she will always come back; inborn character is ineradicable.

ne cede malis, sed contrā audentior iis, Do not yield to misfortunes; on the contrary, go more boldly to meet them.
necessitas non habet legem, Necessity knows no law.
nec mora, nec requies, Neither delay, nor rest; without intermission.
nec plūribus impar, No unequal match for many. The motto assumed by Louis XIV. when he planned the subjugation of Europe.
nec prece, nec pretio, Neither by entreaty nor bribery; neither by paying nor paying.
nec scire fas est omnia, We are not allowed to know all things.
nec semere, nec timide, Neither rashly nor timidly.
nefasti dies, Days on which judgment could not be pronounced nor public assemblies be held; hence, unlucky days.
ne fronti crēde, Don't trust to appearances.
nēmīne contrādicente, No one contradicting.
nēmīne dissente, No one dissenting.
nemo fuit repente turpissimus, No man becomes a villain all at once.
nemo me impūne lacessit, No one provokes me with impunity. The motto of the Order of the Thistle.
nemo mortālium omnibus hōis sapi, No man is wise at all times; the wisest may make mistakes.
nemo sōlus satis sapi, No man is sufficiently wise of himself.
ne (non) plus ultrā, Nothing further; the uttermost point; perfection.
ne puero gladium, Do not entrust a sword to a boy.
ne quid dētrimenti respublica capiat, Lest the State suffer any injury. The injunction given to the Dictator when invested with supreme authority.
neri bellī pecūnia, Money is the sinews of war.
ne sūlor ultrā crepidam, The shoemaker should not go beyond his last. (A Latin version of a rebuke said to have been addressed by Apelles to a shoemaker who pointed out some errors in the painting of a slipper in one of the artist's works, and then began to criticise other parts of the picture.)
ne tenēs, aut perice, Do not attempt, or carry it out thoroughly.
nihil tetigit quod non ornāvit, He touched nothing without embellishing it.
nūl admirāri, To be astonished at nothing.
nūl conscire sibi, nullā pallescere culpa, To be conscious of no fault, to turn pale at no accusation.
nūl desperandum, There is no cause for despair; never despair.
nūl nisi cruce, Nothing but by the cross; no reward without suffering.
nūmum ne crēde colōri, Do not trust too much to your good looks.
nisi Dominus, frustra (Ps. cxvii, 1. Vulg.), Unless the Lord is with us, our labor is vain.
nitor in aduerum, I strive against opposition.
nōbilitas sōla est atque ūnica virtus, Virtue is the true and only nobility.
nolens volens, Whether willing or not.
noli me tangere, Touch me not.
non cuius hominī contingit adire Corinthum, It is not every man's lot to go to Corinth (the headquarters of luxury and refinement); hence, = it is not every man's good fortune to be able to see great cities.
non deficiente crumēnā, While the money lasts.
non est inventus, He is not found.
non ignāra mali, miseris succurrere disco, Not unacquainted with misfortune, I learn to succor the wretched.
non libet, It does not please me.
non multa, sed multum, Not many things, but much.
non nobis solum nāti sumus, We are not born for ourselves alone.
non omne licitum honestum, Every lawful act is not necessarily honorable.
non omnia possumus omnes, We cannot, all of us, do everything.
non paribus aequis, Not with equal steps. (Sometimes applied to a person who has been outstripped by another in the race for fame, wealth, etc.)
non quis, sed quid, Not who, but what; measures, not men.
non sequitur, It does not follow; an unwarranted conclusion.
non sibi, sed patri, Not for himself, but for his native land.
non sum quālis eram, I am not what I once was.
nosce teipsum, Know thyself.
noscur e sociis, A man is known by the company he keeps.
nota bene (N. B.), Mark well.
novus homo (lit., a new man), A mushroom, an upstart.
nūdis verbis, In plain words.

nulla dies sine lineā, No day without a line, i. e., without something done.
nulli secundus, Second to none.
nunc aut nunquam, Now or never.
nunquam minus sōlus quam cum sōlus, Never less alone than when alone.
obit, He (or she) died.
obiter didum, A thing said incidentally; an unofficial expression of opinion.
obscurum per obscurius, Explaining an obscurity by something still more obscure.
oderint dum metuant, Let them hate so long as they fear. (A favorite saying of Caligula).
odi profanum vulgus, et arceo, I hate the vulgar rabble, and drive them away.
odium theologium, The hatred of theologians.
officina gentium, The workshop of the world.
o fortunātos nimium, sua si bona nōrint, O more than happy, if they only knew their advantages.
oh! tam satis, Oh! there is now enough.
omne ignōtum pro magnifico, Everything unknown is taken for magnificent.
omnem mōvere lapidem, To turn every stone; to make every exertion.
omne simile est dissimile, Every like is unlike; if there were not unlikeness there would be identity.
omne solum forti patria est, Every land is a brave man's home.
omne tulit punctum qui miscuit utile dulci, He has gained every point who has mixed the useful and the agreeable.
omnia ad Dei gloriam (1 Cor. x. 31. Vulg.), All things for the glory of God.
omnia mors aequal, Death levels all distinctions.
omnia mutantur, nos et mutamur in illis, All things are subject to change and we change with them.
omnia vincit amor, nos et cedamus amorī, Love conquers all things, let us too yield to love.
omnia vincit labor, Labor conquers all things.
omnis amara amens, Every lover is demented.
opere pretium est, It is worth while.
ora ei labori, Pray and work.
ora pro nobis, Pray for us.
orāte pro animā, Pray for the soul (of).
orator fit, poeta nascitur, The orator is made; the poet is born.
ore rotundo, With loud resounding voice.
o tempora, o mores, Alas for the times and the manners.
ōtiosa sedulitas, Laborious trifling.
otium cum dignitate, Ease with dignity.
otium sine dignitate, Ease without dignity.
pāce, By leave of; with the consent of.
pāce tuā, By your leave.
pacta conventa, The conditions agreed on.
pallida mors aquo pulsat pede pauperum tabernas | rēgumque turres, Pale Death, with impartial foot, knocks at the cottages of the poor and the palaces of kings.
palmam qui meruit ferat, Let him bear the palm who has deserved it.
par negotiis neque suprà, Equal to, but not above his business.
par nobile fratrum, A noble pair of brothers; a well-matched pair.
pars pro toto, The part for the whole.
particeps criminis, A partaker in the crime; an accessory.
parturient montes, nascitur ridiculus mus, The mountain is in labor; a ridiculous mouse will be born.
parva componere magnis, To compare small things with great ones.
pater familias, The father of the family.
pater noster, Our father.
pater patrie, The father of his country. A title bestowed by the Roman Senate on Cæsar Octavianus Augustus.
pathēmata mathēmata, One learns by suffering.
patres conscripti, The Conscript Fathers; the Roman Senate. (Often jocularly applied to the members of a town council.)
patrias gra est pas h'in an prallē tis en, Every land where a man is successful is his native land.
pax orbis terrarum, The sovereignty of the world. (A legend of frequent occurrence on Roman coins.)
pax Romāna, The Roman Empire.
pax vobiscum, Peace be with you.
peitheim dōra kai theous logos, Gifts persuade even the gods, as the proverb says.
per, By, through, by means of.
per ambages, By circuitous ways; with circumlocution.
per angusta ad augusta, Through trial to triumph.
per aspera ad astra, Through rough ways to the stars; through suffering to renown.
per fas et nefas, Through right and wrong.

perfidium ingēnium Scotōrum, The intensely earnest character of the Scotch.
per gradus, Gradually.
periculum in morā, There is danger in delay.
per interim, In the meantime.
per mare, per terras, By sea and land.
per saltum, By a leap; by fits and starts.
per se, In itself; for its own sake.
petitio principii, A begging of the question.
placet, It seems right, it is approved of. The formula by which the members of an Ecumenical Council or a University senate record affirmative votes. The negative formula is non placet.
poeta nascitur, non fit, The poet is born, not made.
pondere, non numero, By weight, not by number.
pons asinorum, The bridge of asses.
populus vult decipi, decipiatur, The people wish to be deceived; let them be deceived.
post bellum auxilium, Aid after the war.
post equitem sedet atra cūra, Black care sits behind the rich man on horseback; riches and high position bring cares.
præmonitus, præmunitus, Forwarned, forearmed.
prima facie, At the first glance.
principia, non homines, Principles, not men.
principiis obsta, Resist the first advances.
prior tempore, prior jure, First in point of time, first by right; first come first served.
pro aris et focis, For our altars and hearths; for our homes.
probatum est, It is proved.
probitas laudatur et alget, Honesty is praised, and left to starve.
pro bono publico, For the public good.
pro Deo et ecclesiā, For God and the Church.
pro forma, As a matter of form.
pro pudor, For shame.
pro memoria, As a memorial.
pro rege, lege, grege, For the king, the law, and the people.
pugnis et calcibus, With fists and heels; with might and main.
punica fides, Punic faith; treachery.
quæ fuerant vitia mōres sunt, What were once vices are now in fashion.
quæ nocent, docent, Things which injure, instruct; we are taught by painful experience; what pains us, trains us.
quidā ab incepto processerit et sibi constat, as he begins, let him go on, and be consistent with himself.
quidā rex, fālis grex, Like king, like people.
quidā vita, fānis ūa, As life, so will its end be.
quandiu se bene gesserit, As long as he behaves himself; during good behavior.
quandōque bonus dormiāt Homērus, Even good Homer nods sometimes; the wisest make mistakes.
quanti est sapere, How valuable is wisdom.
quantum libet, As much as you like.
quantum meruit, As much as he deserved.
quantum multū ab illo, How changed from what he was.
quem dī diligunt | adolescens moritur, He whom the gods love dies young.
quid faciendum? What is to be done?
quid nunc? What now? what news?
quid pro quo, One thing for another; an equivalent.
quid rides? Why do you laugh?
qui nimium probat, nihil probat, He who proves too much proves nothing.
qui non proficit, deficit, He who does not advance, loses ground.
quis custodiet ipsos custodes? Who shall keep the keepers?
qui tacet consentire videtur, He who keeps silent is assumed to consent; silence gives consent.
qui timide rogat docet negāre, He who asks timidly courts denial.
quoad hoc, To this extent.
quo animo, With what intention.
quocunque jactis stabit, Wherever you throw it, it will stand. (The motto of the Isle of Man.)
quocunque modo, In whatever manner.
quocunque nōmine, Under whatever name.
quod avertat Deus! God forbid!
quod bene notandum, Which is to be especially noted.
quod erat demonstrandum, Which was to be proved. [Q. E. D.]
quod erat faciendum, Which was to be done. [Q. E. F.]
quod hoc sibi vult? What does this mean?
quod non opus est, esse edum est (a saying of Cato, quoted by Seneca), What is not necessary is dear at a penny.
quod vide [q. v.], Which see.
quo fāta vocant, Whither the Fates call.

quo fas et glōria dūcunt, Where duty and glory lead.
quōrum pars magna fuit, Of whom I was an important part.
quos Deus vult perdere, prius dementat (probably altered from a passage in Euripides), Those whom God wills to destroy he first deprives of their senses.
quot homines, tot sententia, Many men, many minds.
rāra avis in terris, nigrōque simillima cygno, An extremely rare bird, and very like a black swan (supposed not to exist). The first four words are often used ironically.
ratione soli, According to the soil.
recte et suaviter, Justly and mildly.
rectus in cūrā, Upright in court, with clean hands.
redolet lucernā, It smells of the lamp. (Said of any labored literary production.)
re infectā, The business being unfinished.
relata refero, I tell the tale as I heard it.
religio loci, The spirit of the place.
rem acu tetigisti, You have touched the matter with a needle; you have described it accurately.
remis velisque, With oars and sails; with all one's might.
requiescat in pace, May he rest in peace.
rēs angusta domi, Narrowed circumstances at home; limited means.
rēs est sacra miser, A man in distress is a sacred object.
res gesta, Things done, exploits.
res judicata, A matter decided; a case already settled.
respicere finem, Look to the end.
resurgam, I shall rise again.
ridere in stomacho, To laugh inwardly; to laugh in one's sleeve.
ride si sapis, Laugh if you are wise.
rixarū de lānā saepe caprīnā, He often quarrels about goats' wool, i. e., trifles.
rūdīs indigestaque mōles, A rude and undigested mass.
ruū calum, Let the heavens fall.
rus in urbe, A residence in or near town, with many of the advantages of the country.
rusticus expectat dum deflūat amnis, at ille | lābitur, et lābitur in omne volūbitis ævum, The peasant waits till the river shall cease to flow, but it glides on, and will glide on forever.
sal alticum, Attic salt, i. e., wit.
salvo jure, Without prejudice.
salvo pudore, Without offense to modesty.
sapere aude, Dare to be wise.
sat cito, et sat bene, Quickly enough if well enough.
satia eloquentia, sapientia parum, Eloquence enough, but too little wisdom.
satia superque, Enough, and more than enough.
sat pulchra, et sat bona, Fair enough if good enough; handsome is that handsome does.
secundum artem, According to the rules of art.
semel abbas, semper abbas, Once an abbot, always an abbot.
semel insanivimus omnes, We have all been mad at some time.
semper avārus eget, The avaricious man is always in want.
semper fidēlis, Always faithful.
semper idem, Always the same.
semper parātus, Always prepared.
semper timidum scelus, Crime is always fearful.
sequiturque patrem, non passibus aquis, He follows his father, but not with equal steps.
sero venientibus ossa, The bones for those who come late; those who come late get the leavings.
serus in calum redeas, May it be long before you return to heaven; long life to you.
servāre modum, To keep within bounds.
servus servorum Dei, The servant of the servants of God. (One of the titles of the pope.)
sic eunt fāta hominum, Thus go the destinies of men.
sic tūc ad astra, Thus do we reach the stars.
sic passim, So in various places.
sic semper tyrannia, Ever thus to tyrants.
sic transeat glōria mundi, So the glory of this world passes away. (The first words of a sentence said to have been used at the installations of the popes.)
sicut ante, As before.
sicut patribus, ut Deus nobis, May God be with us, as he was with our fathers.
sic volo, sic jubeo, etat pro ratione voluntas, Thus I will, thus I command, my pleasure stands for a reason.
sic vos non vobis, Thus do ye, but not for yourselves. The commencement of each of four verses which Virgil wrote, but left incomplete, on the occasion when Bathyllus claimed some lines really written by the poet, who alone was able to complete the verses, and thus prove their authorship. Used of persons by whose labors others have unduly profited.

si Deus nobiscum, quis contra nos? If God be with us who shall be against us.
sile et philosophus esto. Hold your tongue, and you will pass for a philosopher.
simile gaudet simili. Like loves like.
similia similibus curantur. Like things are cured by like. (The principle of homoeopathy.)
si monumentum requiris circumpice. If you seek my monument, look around. (The epitaph of Sir Christopher Wren in St. Paul's Cathedral, of which he was the architect.)
simplex munditiis. Simple, in neat attire; neat, not gaudy.
sine cura. Without care or change.
sine dubio. Without doubt.
sine mora. Without delay.
sine præjudicio. Without prejudice.
sine qua non. Without which, not; an indispensable condition.
si parva licet componere magnis. If it be lawful to compare small things with great.
sit tibi terra levis. May the earth lie light upon thee. (An inscription often found on Roman tombstones; frequently abbreviated to S. T. T. L.)
si vis pacem, para bellum. If you wish for peace, prepare for war.
skēnē pas ho bios. Life is a stage.
solitudinem faciunt, pacem appellant. They make a wilderness and call it peace.
sophēn de miā. I hate a blue-stocking.
spes sibi quisque. Let each man's hope be in himself; let him trust to his own resources.
speude bradeō. Make haste slowly. A favorite saying of Augustus Cæsar.
splendide mendax. Nobly untruthful; untrue for a good object. (Often used ironically of an unblushing liar.)
sponte sua. Spontaneously; of one's (or its) own accord.
spertā injuriā formæ. The affront offered to her slighted beauty. (In allusion to the resentment of Juno because Paris gave the golden apple to Venus as the prize of beauty.)
stat magni nōminis umbra. He stands the shadow of a mighty name.
stat nōminis umbra. An adaptation of the preceding, used by "Junius" as the motto of his *Letters*.
status quo, status in quo, statu quo. The state in which.
status quo ante bellum. The state in which the belligerents were before war commenced.
sta, viator, hērōem calcas. Stop, traveler, thou treadest on a hero's dust. (The epitaph inscribed by Condé over the grave of his great opponent, Mercy.)
stemmata quid faciunt? Of what value are pedigrees?
studium immane loquendi. An insatiable desire for talking.
sua cuique voluptas. Every man has his own pleasures.
sudviter in modo, fortiter in re. Gentle in manner, resolute in execution.
sub colore jūris. Under color of law.
sublatā causā, tollitur effectus. The effect ceases when the cause is removed.
sub panā. Under a penalty.
sub rosa. Under the rose; secretly.
sub silentio. In silence; without formal notice being taken.
sub specie. Under the appearance of.
sub voce. Under such or such a word.
sui generis. Of its own kind; unique.
summum jus, summa injuria est. The rigor of the law is the height of oppression.
sumptibus publicis. At the public expense.
suo Marte. By his own powers or skill.
suppressio verā, suggestio falsæ. The suppression of the truth is the suggestion of a falsehood.
surgit amarū aliquid. Something bitter arises.
suum cuique. Let each have his own.
suus cuique mōs. Every one has his own particular habit.
tangere ulcus. To touch a sore; to reopen a wound.
tanquam animis caelestibus ira. Can such anger dwell in heavenly minds?
tellum imbelles sine ictu. A feeble dart, devoid of force; applied, fig., to a weak argument.
tempori pārendum. We must move with the times.
tempus edax rerum. Time the devourer of all things.
tempus fugit. Time flies.
tempus omnia revelat. Time reveals all things.
tenax propositi. Firm of purpose.
teres aique rotundus. A man polished and complete.
terra colla. Baked clay.
terra firma. The firm land; the continent.
terra incognita. An unknown land.
tenium quid. A third something, produced by the union of two different things, or the collision of two opposing forces.

teste. By the evidence of.
timeo Danaos et dona ferentes. I fear the Greeks, even when they bring gifts. (Used of distrusting the kindness of a foe.)
to kalon. The beautiful.
to prepon. What is becoming or decorous.
tot homines, quot sententiæ. So many men, so many minds.
trahit sua quemque voluptas. Each man is led by his own taste.
transcendit exemplum. Let it pass into a precedent.
tria juncta in uno. Three joined in one (the motto of the Order of the Bath).
trium literarum homo. A man of three letters; a thief (far being Latin for thief).
Troja fuit. Troy was; Troy has perished.
Tros Tyriusve mihi nullo discrimine agitur. Trojan or Tyrian shall have the same treatment from me.
triduum dies die. One day follows hard on another.
übermora fides. Implicit faith.
ubi bene tibi patria. Where one is well off, there is his country.
ubi jūis incertum, tibi jūis nullum. Where the law is uncertain, there is no law.
ubi mel tibi apes. Where the honey is, there are the bees.
ubi tres medici, duo athei. Where there are three physicians there are two atheists.
ultima ratio regum. The last argument of kings (engraved on French cannon by order of Louis XIV.).
ultimus Rōmānūrum. The last of the Romans; used by Brutus of Cassius.
unguis et rostro. With claws and beak.
unguis in ulcere. A nail in the wound, to keep it open.
urbem lateritiam invenit, marmoream reliquit. He found the city (Rome) brick, but left it marble.
usque ad nauseam. To disgust.
ūsus loquendi. Usage in speaking.
ut infra. As stated or cited below.
uti possidetis. As you now possess. (A diplomatic phrase meaning that at the termination of hostilities the contending parties are to retain whatever territory they may have gained during the war.)
ut supra. As stated or cited above.
vade in pace. Go in peace.
væ victis. Woe to the conquered. (Said to have been the exclamation of Brennus, when he threatened to exterminate the Romans.)
valeat quantum valere potest. Let it pass for what it is worth.
Vare, legiones redde. Varus, give back my legions. (A frequent exclamation of Cæsar Augustus when he thought of the defeat and slaughter of Quinctilius Varus with three legions by the Germans. Often used of a commander who has recklessly sacrificed troops, or of a financier who has wasted funds.)
varia lectiōes. Various readings.
varium et mutabile semper | femina. Woman is always a changeable and capricious thing.
veluti in speculum. As in a mirror.
venâlis populus, venâlis cūria patrium. The people and the senators are equally venal.
vendidit hic auro patriam. He sold his country for gold.
venenum in auro bibitur. Poison is drunk out of gold; the rich run more risk of being poisoned than the poor.
venia necessitatē datur. Pardon is granted to necessity; necessity has no law.
venienti occurrere morbo. Meet the coming disease; take it in time; prevention is better than cure.
venit summa dies et ineluctabile tempus. The last day has come, and the inevitable doom.
veni, vidi, vici. I came, I saw, I conquered. (The laconic despatch in which Julius Cæsar announced to the Senate his victory over the Pharnaces.)
ventus secundis. With favorable winds.
vera incessu patuit dea. She stood revealed an undoubted goddess in her walk.
verbum ad sapientiā. A word is sufficient for a wise man.
veritas odium parit. Truth begets hatred.
veritatis simplex oratio est. The language of truth is simple.
vestigia . . . nulla retrorsum. No signs of any returning, usually Englished as, No stepping back.
vestita questio. A disputed question.
via media. A middle course.
via trita, via tutissima. The beaten path is safest.
victrix causa dis placuit, sed victa Calōni. The winning cause was pleasing to the gods, the conquered one to Cato.
video meliora, probèque | deteriora sequor. I see and approve the better course, but I follow the worse.
vidit et erubuit lymphā pudica Deum. The modest water saw its God and blushed. (On the miracle at Cana in Galilee.)
vi et armis. By main force.

vilius argentum est auro, virtutibus aurum, Silver is of less value than gold, gold than virtue.
vinct amor patriæ, The love of country will prevail.
vir bonus dicendi peritus, A good man skilled in the art of speaking. (The Roman definition of an orator.)
viresque acquirât cundo, She (Rumor) gains strength as she travels.
Virgilium vidî tantum, I only just saw Virgil; I was not intimate with the great man.
virtute offici, By virtue of one's office.
virum volûtare per ora, To hover on the lips of men; to be in everybody's mouth.
vis comica, Comic power or talent.
vis consilii expers môle ruit suâ, Force, without judgment, falls by its own weight.
vita hominis sine literis mors est, The life of man, without literature, is death.
vitam impendere vëro, To risk one's life for the truth.
vix ea nostra voco, I scarcely call these things our own.
vixere fortes ante Agamemnona, Brave men lived before Agamemnon.
volenti non fit injûria, No injury is done to a consenting party.
vox clamantis in deserto, The voice of one crying in the wilderness.
vox et prætered nihil, A voice and nothing more; a mere sound; hence, fine words without weight or meaning.
vox faucibus hæsit, His voice died in his throat; he was dumb with amazement.
vox populi, vox Dei (an old proverb quoted by William of Malmesbury in the Twelfth Century), The voice of the people is the voice of God.
vultus animi jânua et tabula, The countenance is the portrait and picture of the mind.
zônâ perdidit, He has lost his purse; he is in distressed circumstances.

MODERN LANGUAGES

Phrases not designated are from the French; those from other languages are distinguished thus: (Ger.) = German; (It.) = Italian; and (Sp.) = Spanish.

à bon marché, Cheap.
absence d'esprit, Absence of mind.
à cheval, On horseback.
a che vuole, non mancano modi (It.), Where there's a will there's a way.
à compte, On account.
à corps perdu, Headlong; neck or nothing.
à couvert, Under cover, protected, sheltered.
à deux mains (for both hands), Having a double office or employment.
adieu, la voiture, adieu, la boutique (good-bye, carriage; good-bye, shop), All is over.
à discrétion, At discretion, unrestrictedly.
à droite, To the right.
affaire d'amour, A love affair.
affaire d'honneur, An affair of honor, a duel.
affaire du cœur, An affair of the heart, a love affair.
à fin, To the end or object.
à fond, To the bottom, thoroughly.
à forfait, By contract, by the job.
à gauche, To the left.
à genoux, On one's knees.
à grande frais, At great expense.
à haute voix, Aloud.
à huis clos, With closed doors, secretly.
aide-toi, et le Ciel t'aidera, Help yourself, and Heaven will help you.
à l'abandon, Disregarded, uncared for.
à la belle étoile, Under the canopy of heaven; in the open air.
à la bonne heure, Well-timed, in good time; favorably.
à l'abri, Under shelter.
à la campagne, In the country.
à la carte, By the card.
à la dérobée, Stealthily.
à la Française, In French fashion.
à la grecque, After the Greek fashion.
à la mode, In the fashion; according to the custom or fashion.
à la Tartufe, Like Tartufe, the hypocritical hero of Molière's comedy, *Tartufe*, hence hypocritically.
al buon vino non bisogna frasca (It.), Good wine needs no bush.
à l'envi, With emulation.
à fresco (It.), In the open air.
à l'improvise, Unawares, on a sudden.
Allen hat seine Zeit (Ger.), All in good time.
allez-vous en, Away with you, be off.
allons, Come on.
allzuviel ist ungesund (Ger.), Too much of a good thing.
à l'outrance, To the death.
al più (It.), At most.

à main armée, By force of arms.
am Anfang (Ger.), At the beginning.
amar y saber no puede ser (Sp.), No one can love and be wise at the same time.
âme de boue (lit., soul of mud), A base-minded person.
amende honorable, Fit reparation; a satisfactory apology.
à merveille, Marvellously, extraordinarily.
ami du cour (lit., a friend of the court), A false friend; one who is not to be depended on.
ami du peuple, Friend of the people.
amour propre, Vanity, self-love.
ancien régime, The former condition of things.
à outrance, To the last extremity.
à pas de géant, With a giant's stride.
à perte de vue, Till out of sight.
à peu près, Nearly.
à pied, On foot.
à point, Just in time; exactly; exactly right.
à prima vista (It.), At the first glance.
à propos, To the point.
à propos de rien (lit., apropos to nothing), Motiveless; for nothing at all.
argent comptant, Ready money.
arrière pensée, Mental reservation; unavowed purpose.
à tort et à travers, At random.
au bon droit, To the just right.
au bout de son Latin, At the end of his Latin; to the extent of his knowledge.
au contraire, On the contrary.
au courant, Well acquainted with; posted up in.
au désespoir, In despair.
au fait, Expert.
au fond, To the bottom.
au gratin, With cheese.
au jus, With the natural juice.
au pis aller, At the very worst.
au reale, As for the rest.
au revoir, Till we meet again.
aussitôt dit, aussitôt fait, No sooner said than done.
autant d'hommes, autant d'avis, Many men, many minds.
autre droit, Another's right.
autre fois, Another time.
autre vie, Another's life.
aut vincere aut mori, Victory or death.
auz armes, To arms.
avant propos, Preface; introductory matter.
à volonté, At pleasure.
à votre salute (It.), To your health.
à votre santé, To your health.
à vœstra salud (Sp.), To your health.
ballon d'essai, A balloon sent up to test the direction of air-currents; hence, anything said or done to gauge public feeling on any question.
bas bleu, A blue-stocking; a woman who seeks a reputation for learning.
beau-idéal, A model of ideal perfection.
beaux esprits, Men of wit, or genius.
bel esprit, A wit, a genius.
benedetto è quel male che vien solo (It.), Blessed is the misfortune that comes alone.
ben-trovato (It.), Well invented.
bête noire (lit., a black beast), A bugbear.
billet doux, or billet d'amour, A love letter.
bizarre, Odd; fantastic.
blanc mange (a delicate dessert), White jelly.
blasé, Surfeited.
bon ami, Good friend.
bon bon, A sweet-meat; confectionery.
bon gré, mal gré, With good or bad grace; willing or unwilling.
bonhomie, Good-natured simplicity.
bon jour, Good day, good morning.
bon mot, A witicism.
bonne et belle, Good and handsome. (Of a woman.)
bonne foi, Good faith.
bon soir, Good evening.
bon ton, High fashion; first-class society.
boudoir, A small private apartment.
bouillon, Soup.
breveté, Patented.
cap-à-pie, From head to foot.
carte blanche, Full power.
castello che dà orecchia si vuol rendere (It.), The fortress that parleys soon surrenders.
cela va sans dire (That goes without saying). That is understood.
ce n'est que le premier pas qui coûte, It is only the first step that is difficult.
c'est à dire, That is to say.
c'est une autre chose, That is quite another thing.
chacun à son goût, Everyone to his taste.
chacun tire de son côté, Everyone inclines to his own side or party.

chanson, A song.
chapeau, A hat.
chapeau de bras, A military cocked hat.
chappelle ardente, The chamber where a dead body lies in state.
chateau, A castle.
chauffeur, Driver of an automobile.
chef, Man cook.
chef-d'œuvre, A masterpiece.
chemin de fer (lit., iron road), A railway.
chère amie, A dear (female) friend, a lover.
che sarrà, sarrà (It.), What will be, will be.
cheval de bataille (lit., a war-horse), Chief dependence or support; one's strong point.
chi tace confessa (It.), He who keeps silent admits his guilt.
ci git, Here lies. (A common inscription on tombstones.)
comme il faut, Proper, as it should be.
comment vous portez vous, How are you?
compagnon de voyage, A traveling companion.
compte rendu, An account rendered, a report.
con amore (It.), With affection, very earnestly.
concours, Competition for, or as for a prize.
con diligenza (It.), With diligence.
con dolore (It.), With grief; sadly.
conseil de famille, A family council or consultation.
conseil d'état, A council of state, a privy council.
consommé, A kind of soup.
contretemps, An awkward mishap.
cordon sanitaire, A line of sentries to prevent, as far as possible, the spread of contagion or pestilence. Used also of other precautionary measures.
couleur de rose, Rose color.
coup, A stroke.
coup de grâce, A finishing-stroke. (Formerly applied to the fatal blow by which the executioner put an end to the torments of a culprit broken on the wheel.)
coup de main, A sudden attack, enterprise, or undertaking.
coup de maître, A master-stroke.
coup d'essai, A first attempt.
coup d'état, A stroke of policy; a sudden and decisive blow, usually inflicted by unconstitutional means.
coup d'oeil, A rapid glance.
coup de pied, A kick.
coup de plume, A literary attack.
coup de soleil, A sunstroke.
coup de théâtre, A theatrical effect.
courage sans peur, Fearless courage.
coute que coule, Cost what it may.
cuisine, A kitchen; cookery.
dame d'honneur, A maid of honor.
Das geht Sie Nichts an (Ger.), That does not concern you.
de bonne augure, Of good omen.
de bonne grâce, With good will, willingly.
débris, Refuse.
début, First appearance.
débütante, A young lady just entering society.
decollété, Open-breasted.
dégagé, Free, easy, without constraint.
de gaieté de coeur, In sport, sportively.
déjeuner à la fourchette, A cold breakfast.
de mal en pis, From bad to worse.
demi-lasse, A small cup.
dénouement, An unraveling or winding up.
dernier ressort, The last resource.
désagrément, Something disagreeable or unpleasant.
détour, A circuitous march.
di buona volontà sta pieno l'inferno (It.), Hell is full of good intentions.
Dieu est toujours pour les plus gros bataillons, God is always on the side of the largest battalions; the largest army has the best chance.
Dieu et mon droit, God and my right.
Dieu vous garde, God protect you.
di grado in grado (It.), Step by step; gradually.
Dios me libre de hombre de un libro (Sp.), God deliver me from a man of one book.
di salto (It.), By leaps.
di tutti novello par bello (It.), Everything new seems beautiful.
dolce far niente (It.), Sweet idleness.
dorer la pilule, To gild the pill.
double entendre, Double meaning.
douceur, A bribe.
durante vlt, During life.
eau de cologne, Cologne water.
eau de vie, The water of life — applied usually to brandy.
éclat, Splendor, brilliancy.
édition de luze, A splendid edition of a book, handsomely bound, and usually well illustrated.
Ehrlich währt am längsten (Ger.), Honesty is the best policy.

Eile mit Weile (Ger.), The more haste the less speed.
Eine Schwalbe macht keinen Sommer (Ger.), One swallow does not make a summer.
Ein gebranntes Kind scheut das Feuer (Ger.), A burnt child dreads the fire.
élite, A select body of persons.
embonpoint, Roundness, good condition.
en ami, As a friend.
en arrière, In the rear, behind.
en attendant, In the meantime.
en avant, Forward.
en badinant, In sport, jestingly.
en cueros, *en cueros vivos* (Sp.), Naked; without clothing.
Ende gut, Alles gut (Ger.), All's well that ends well.
en déshabillé, In undress: in one's true colors.
en Dieu est ma fiance, My trust is in God.
en Dieu est tout, In God are all things.
en effet, Substantially, really, in effect.
en famille, With one's family, at home.
enfant gâté, A spoiled child.
enfants perdus (lit., lost children), A forlorn hope.
enfant trouvé, A foundling.
enfin, In short, finally, at last.
en flûte, Carrying guns on the upper deck only.
en grande tenue, In full official, or evening, dress.
en masse, In a body or mass.
ennui, Weariness.
en passant, In passing, by the way.
en plein jour, In open day.
en queue, Immediately after; in the rear. Used specially of persons waiting in line, as at the door of a theater, at the ticket-office of a railway station, etc.
en rapport, In harmony, relation, or agreement.
en règle, Regular, regularly; in order.
en revanche, In return; as a compensation for.
en route, On the way.
ensemble, The whole.
en suite, In company, in a set.
en tasse, In a cup.
entente cordiale, A good understanding, especially between two states.
entourage, Surroundings.
entre deux feux, Between two fires.
entre deux vins (lit., between two wines), Half-drunk.
entrée, Entry; first course.
entremets, Small and dainty dishes set between the principal ones at table.
entre nous, Between ourselves; in confidence.
en vérité, In truth, really.
Es fehlt mir Nichts (Ger.), Nothing is the matter with me.
Es freut mich sehr (Ger.), I am very glad.
Es ist nicht Alles Gold, was glänzt (Ger.), All is not gold that glitters.
esprit de corps, The animating spirit of a collective body of persons, e. g., of a regiment, the bar, the clergy, etc.
esprit des lois, Spirit of the laws.
esprit fort, A daring investigator; a free-thinker.
Es thut mir sehr leid (Ger.), I am very sorry.
Ewigkeit (Ger.), Eternity.
façon de parler, Manner of speaking; phrase, locution.
faire bonne mine, To put a good face on the matter.
faire l'homme d'importance, To give one's self airs.
faire sans dire, To act without ostentation or boasting.
faire son devoir, To do one's duty.
fait accompli, An accomplished fact.
fauteuil, An easy chair.
faux pas, A false step; an act of indiscretion.
femme couverte, A married woman.
femme de chambre, A chambermaid.
femme de charge, A housekeeper.
femme galante, A gay woman; a prostitute.
femme sole, An unmarried woman.
fendre un cheveu en quatre, To split a hair in four; to make subtle distinctions.
fête, A feast, festival; holiday.
fête champêtre, A rural out-of-door feast; a festival in the fields.
feu de joie, A bonfire.
filles de chambre, A chambermaid.
filles de joie, A gay woman; a prostitute.
filles d'honneur, A maid of honor.
fin de siècle, The end of the century.
fleur-de-lis, The flower of the lily.
flux de bouche, Inordinate flow of talk; garrulity.
frà Modesto non fu mai priore (It.), Friar Modest never became prior.
frisch begonnen, halb gewonnen (Ger.), Well begun is half done.
froides mains, chaude amour, Cold hands, warm heart.
front à front, Face to face.
fuyez les dangers de loisir, Fly from the dangers of leisure.

gaieté de coeur, Gaiety of heart.
garage, A place where automobiles are stored and kept in order.
garçon, A lad, a waiter.
garde à cheval, A mounted guard.
garde du corps, A body guard.
garde mobile, A body of troops liable to be called out for general service.
garde royale, Royal guard.
gardez, Take care; be on your guard.
gardez-bien, Take good care; be very careful.
gardez la foi, Keep the faith.
Gehen sie Ihres Weges (Ger.), Go your way.
gens d'armes, Men-at-arms; military police.
gens de condition, People of rank.
gens d'église, The clergy; clerics.
gens de guerre, Military men.
gens de lettres, Literary men.
gens de loi, Lawyers.
gens de même famille, People of the same family; birds of a feather.
gens de peu, The lower classes.
gentilhomme, A gentleman.
gibier de potence, A gallows-bird; one who deserves hanging.
giovine santo, diavolo vecchio (It.), A young saint, an old devil.
gitano (Sp.), A gipsy.
Gleich und gleich gesellt sich gern (Ger.), Birds of a feather flock together.
gli assenti hanno torti (It.), The absent are in the wrong.
goutte à goutte, Drop by drop.
gouvernante, A governess.
grâce à Dieu, Thanks be to God.
grande chère et beau feu, Good fare and a good fire; comfortable quarters.
grande parure, grande toilette, Full dress.
grand merci, Many thanks.
grosse tête et peu de sens, A big head and little sense.
guerra al cuchillo (Sp.), War to the knife.
guerra, cominciata, inferno scatenato (It.), War begun, hell unchained.
guerre à mort, War to the death.
guerre à outrance, War to the uttermost.
Haben Sie Geld bei sich? (Ger.), Have you any money about you?
haut et bon, Great and good.
haut goût, High flavor; elegant taste.
haut ton, Highest fashion.
homme d'affaires, A man of business; an agent.
homme de bien, A good man; an upright man.
homme de fortune, A fortunate man.
homme de robe, A person in a civil office.
homme d'esprit, A wit, a genius.
homme d'état, A statesman.
honi soit qui mal y pense, Shame be to him who thinks evil of it. (The motto of the Order of the Garter.)
hors de combat, Disabled, unfit to continue a contest.
hors de la loi, Outlawed.
hors de propos, Wide of the point; inapplicable.
hors de saison, Out of season; unreasonable.
hors d'œuvre, Out of course; out of accustomed place.
 (Used substantively of small appetizing dishes served between the soup and the second course.)
hôtel de ville, A town-hall.
hôtel Dieu, A hospital.
hôtel garni, Furnished lodgings.
hurtar para dar por Dios (Sp.), To steal in order to give to God.
Ich dien (Ger.), I serve.
idée fixe, A fixed idea; intellectual monomania.
ignorance crasse, Gross ignorance.
i gran dolori sono multi (It.), Great griefs are silent.
il a le diable au corps, The devil is in him.
il faut de l'argent, Money is wanting.
il n'a ni bouche ni éperon, He has neither mouth nor spur; he has neither wit nor courage.
il ne faut jamais défer un fou, One should never provoke a fool.
il n'est sauce que d'appétit, Hunger is the best sauce.
il penseroso (It.), The pensive man. (The title of one of Milton's poems.)
il sent le fagot, He smells of the faggot; he is suspected of heresy.
impoli, Unpolished; rude.
in bianco (It.), In blank; in white.
in un giorno non si fe' Roma (It.), Rome was not built in a day.
ir por lana, y volver trasquilado (Sp.), To go for wool, and come back shorn.
jamaïs bon coureur ne fut pris, A good runner is not to be taken; old birds are not to be caught with chaff.
je maintiendrai le droit, I will maintain the right.

je ne sais quoi, I know not what. (Used adjectively of something indefinable, or very difficult to define.)
je n'oublierai jamais, I will never forget.
je suis prêt, I am ready.
jet d'eau, A fountain; a jet of water.
jeu de mots, A play upon words; a pun.
jeu d'esprit, A witticism.
jeu de théâtre, A stage trick; clap-trap.
je vis en espoir, I live in hope.
juste milieu, The golden mean.
kein Kreuzer, kein Schweizer (Ger.), No money, no Swiss.
la critique est aisée, l'art est difficile, Criticism is easy enough, but art is difficult.
Lade nicht Alles in ein Schiff (Ger.), Do not ship all in one vessel: do not put all your eggs in one basket.
l'adversité fait les hommes, et le l'honneur les monstres, Adversity makes men, and prosperity monsters.
la fortuna aiuta i pazzi (It.), Fortune helps fools.
la Fortune passe partout, Fortune passes everywhere; all men are subject to the vicissitudes of Fortune.
laissez faire, To let alone.
laissez nous faire, Let us act for ourselves; let us alone.
l'allegro (It.), The merry man. (The title of one of Milton's poems.)
l'amour et la fumée ne peuvent se cacher, Love and smoke cannot be hidden.
langage des halles, The language of the markets; Billingsgate.
la patience est amère, mais son fruit est doux, Patience is bitter, but its reward is sweet.
la pauvreté est la madre di tutti le arti (It.), Poverty is the mother of all the arts.
l'argent, Silver; money.
lasciate ogni speranza voi, che n'trate (It.), All hope abandon ye who enter here.
Lassen Sie mich gehen (Ger.), Let me alone.
l'avenir, The future.
la vertu est la seule noblesse, Virtue is the sole nobility.
le beau monde, The world of fashion; society.
le bon temps viendra, There's a good time coming.
le coût en ôte le goût, The expense takes away the pleasure.
le demi-monde, Bohemia.
le grand monarque, The grand monarch. A title applied to Louis XIV. (1643-1715).
le grand œuvre, The great work; the search for the philosopher's stone.
le jeu n'en vaut pas la chandelle, The game is not worth the candle (by the light of which it is played); the object is not worth the trouble.
le monde est le livre des femmes, The world is woman's book.
le mot d'énigme, The solution of the mystery.
l'empire des lettres, The empire of letters.
le parole son feminine, e i fatti son maschi (It.), Words are feminine, and deeds are masculine.
le pas, Precedence.
le point de jour, Daybreak.
le roi et l'état, The king and the state.
le roi le veut, The king wills it.
les absents ont toujours tort, The absent are always wrong.
l'ère majesté, High treason.
les extrêmes se touchent, Extremes meet.
les murailles ont des oreilles, Walls have ears.
le plus sage ne le sont pas toujours, The wisest are not always wise.
l'étoile du nord, The star of the north.
le tout ensemble, The whole taken together.
lettre de cachet, A sealed letter containing orders; a royal warrant, usually authorizing the imprisonment, without trial, of a person named therein.
lettre de change, Bill of exchange.
lettre de créance, Letter of credit.
le vrai n'est toujours vraisemblable, Truth is not always probable; truth is stranger than fiction.
l'homme propose, et Dieu dispose, Man proposes and God disposes.
l'inconnu, The unknown.
l'incroyable, The incredible, the marvelous. (The word *incroyable* was applied substantively to the fops of the Directory period in the great French Revolution.)
lingerie, Linen goods; also, collectively, all the linen, cotton, and lace articles of a woman's wardrobe.
littérateur, A literary man.
lo barato es caro (Sp.), A bargain is dear.
l'occhio del padrone ingrassa il cavallo (It.), The master's eye fattens the horse.
loyauté m'oblige, Loyalty binds me.
ma chère, My dear (fem.).
mademoiselle, A young unmarried lady.
maestro di color che sanno (It.), Master of those that know. (Applied by Dante to Aristotle.)
ma foi, Upon my faith; upon my word.

maintien le droit, Maintain the right.
maison de campagne, A country house.
maison de santé, A private asylum or hospital.
maison de ville, A town hall.
maître des basses œuvres, A nightman.
maître des hautes œuvres, An executioner; a hangman.
maître d'hôtel, A house steward.
mal à propos, Out of place; ill suited.
mal de dents, Toothache.
mal de mer, Sea-sickness.
mal de tête, Headache.
mal entendre, A misunderstanding; a mistake.
malgré nous, In spite of us.
malheur ne vient jamais seul, Misfortunes never come singly.
mardi gras, Shrove Tuesday.
mariage de conscience, A private marriage.
mariage de convenance, A marriage of convenience; or from interested motives.
matinée, A reception, or a musical or dramatic entertainment, held in the daytime.
mauvaise honte, False modesty.
mauvais goût, False taste.
mauvais sujet, A worthless fellow.
mayonnaise, A kind of salad dressing.
médecin, guéris-toi toi-même, Physician, heal thyself.
menu, Bill of fare.
Mir iet Alles einerlei (Ger.), It's all the same to me.
mise-en-scène, The staging of a play.
mon ami, My friend.
mon cher, My dear (fellow).
monsieur, Sir, master, gentleman.
mot du guet, A watchword.
mots d'usage, Words in common use.
muraglia bianca, carta di matto (It.), A white wall is the fool's paper.
naïve, Having unaffected simplicity.
naïveté, Native simplicity.
née, Born.
négligé, A morning dress.
Neue Besen kehren gut (Ger.), A new broom sweeps clean.
ni l'un ni l'autre, Neither the one nor the other.
n'importe, It is of no consequence.
noblesse oblige, Nobility imposes obligations; much is expected from persons of good position.
nom de guerre, A war-name, an assumed name, a pseudonym.
nom de plume, An assumed title.
non mi ricordo (It.), I do not remember.
non obstant clameur de haro, Despite the hue and cry.
non ogni fiore fa buon odore (It.), It is not every flower that smells sweet.
non vender la pelle dell' orse prima di pigliarlo (It.), Don't sell the bearskin before you have caught the bear.
Noth kennt kein Gebot (Ger.), Necessity knows no law.
notre dame, Our Lady, the Virgin Mary.
n'oubliez pas, Don't forget.
nous avons changé tout cela, We have changed all that.
nous verrons, We shall see.
nouvelles, News.
nouvellette, A short tale or novel.
nulla bien sans peine, No pains, no gains.
nulla nuova, buona nuova (It.), No news is good news.
ogni bottega ha la sua malizia (It.), Every shop has its trick; there are tricks in all trades.
olla podrida (It.), A heterogeneous mixture.
on connaît l'ami au besoin, A friend is known in time of need.
on dit, They say.
oro è che oro vale (It.), That is gold which is worth gold; all is not gold that glitters.
oublier je ne puis, I can never forget.
oui-dire, Hearsay.
ouvrage de longue haleine, A long-winded business.
ouvrier, A workman, an artisan.
par ci, par là, Here and there.
par excellence, Preeminently.
par exemple, For instance.
parole d'honneur, Word of honor.
partout, Everywhere.
parvenu, An upstart.
pas a pas, Step by step.
passé, Worn out.
paté de foie gras, A pie made in Strasburg from the livers of geese.
peine forte et dure, Very severe punishment; a kind of judicial torture.
penchant, Inclination; liking.
pensée, A thought expressed in terse vigorous language.
per (It.), For, through, by.

per contante (It.), For cash.
per contra (It.), On the contrary.
père de famille, The father of the family.
perdu, Lost.
per mese (It.), By the month.
per più strade si va a Roma (It.), There are many roads to Rome.
petit, Small.
petit coup, A small mask; a domino.
petit maître, A little master; a fop.
peu-à-peu, Little by little; by degrees.
piéd à terre, A resting-place; a temporary lodging.
pigliar due colombi a una fava (It.), To catch two pigeons with one bean; to kill two birds with one stone.
pis aller, The worst or last shift.
poco a poco (It.), Little by little; by degrees.
point d'appui, Prop; point of support.
pommes de terre, Potatoes (apples of the earth).
pot-pourri, A medley.
pour acquit, Paid, settled; the usual form of receipt.
pour faire rire, To excite laughter.
pour faire visite, To pay a visit.
pour passer les temps, To while away the time.
pour prendre congé, To take leave. Usually abbreviated to P. P. C.
prendre la lune avec les dents, To seize the moon in one's teeth; to aim at impossibilities.
presto maturo, presto marcio (It.), Soon ripe, soon rotten.
prêt d'accomplir, Ready to accomplish.
prêt pour mon pays, Ready for my country.
preux chevalier, A brave knight.
prima donna, Leading lady singer in an opera.
protégé, One protected by another.
purée, A thick soup.
purée aux croûtons, A thick soup with small cubes of toasted bread.
quelque chose, Something; a trifle.
qui a bu boira, The tippler will go on tippling; it is hard to break off bad habits.
quien poco sabe, presto lo reza (Sp.), He who knows little soon tells it.
quien sabe? (Sp.), Who knows?
qu'il soit comme il est désiré, Let it be as desired.
qui m'aime aime mon chien, Love me, love my dog.
qui n'a santé, n'a rien, He who has not health, has nothing.
qui va là? Who goes there?
qui vive? Who goes there?
raison d'état, A state reason.
raison d'être, The reason for a thing's existence.
régime, Mode or style of rule or management.
rendezvous, A place of meeting.
respondes s'il vous plait (r. s. v. p.), Reply if you please.
respondre en Normand, To answer in Norman; to speak evasively.
résumé, A summing up.
rete nuova non piglia uccello vecchio (It.), A new net won't catch an old bird.
revenons à nos moutons, Let us return to our sheep: let us come back to our subject.
rien n'est beau que le vrai, There is nothing beautiful but truth.
rira bien qui rira le dernier, He laughs well who laughs last.
rire entre cuir et chair, rire sous cape, To laugh in one's sleeve.
robe de chambre, A dressing-gown, a morning-gown.
robe de nuit, A night-dress.
rôle, A part in a performance.
rouge, Red coloring for the skin.
ruse de guerre, A military stratagem.
sorran cuchilladas, mas no malas palabras (Sp.), Wounds from a knife will heal, but not those from the tongue.
sans cérémonie, Without ceremony.
sans peur et sans reproche, Fearless and stainless.
sans rime et sans raison, Without rhyme or reason.
sans souci, Free from care.
saute qui peut, Save yourselves.
savant, A man of science.
savoir faire, Tact.
savoir vivre, Good breeding.
sdegno d'amante poco dura (It.), A lover's anger is short-lived.
séance, A sitting.
selon les règles, According to rule.
sempre il mal non vien per nuocere (It.), Misfortune is not always an evil.
se non è vero, è ben trovato (It.), If it is not true, it is cleverly invented.
Sie sehen gut aus (Ger.), You look well.
soirée, An evening party.
souffler le chaud et le froid, To blow hot and cold.
so viel ich weiss (Ger.), As far as I know.

Sturm und Drang (Ger.), Storm and stress.
table d'hôte, Table according to the hostess.
lâche sans lâche, A work without a stain.
tant mieux, So much the better.
tant pis, So much the worse.
tel maître, tel valet, Like master, like man.
tête-à-tête, A conversation between two parties.
tiens à la vérité, Maintain the truth.
tiens la foi, Keep thy faith.
toujours perdrix, Always partridges; the same thing over and over again.
toujours prêt, Always ready.
tour de force, A feat of strength or skill.
tourner casaque, To turn one's coat; to change sides.
tout-à-fait, Wholly, entirely.
tout-à-l'heure, Instantly.
tout au contraire, On the contrary.
tout-à-vous, Entirely yours.
tout bien ou rien, All or nothing.
tout-de-suite, Immediately.
tout ensemble, The whole.
tout le monde est sage après coup, Everybody is wise after the event.
traduttori, traditori (It.), Translators are traitors.
trousseau, Wedding outfit.
tutte le strade conducono a Roma (It.), All roads lead to Rome.
Übung macht den Meister (Ger.), Practice makes perfect.

un bienfait est jamais perdu, A kindness is never lost.
un sot à triple éage, A consummate fool.
un "tiens" vaut mieux que deux "tu l'auras", One "take it" is worth two "you shall have it"; A bird in the hand is worth two in the bush.
valet de chambre, An attendant.
vedi Napoli e poi muori (It.), See Naples and then die.
vérité sans peur, Truth without fear.
Viele Hände machen bald ein Ende (Ger.), Many hands make quick work.
vi et armis, By force of arms; by violence.
vigueur de dessus, Strength from on high.
vino dentro, senno furore (It.), When the wine is in, the wit is out.
vis à vis, Face to face.
vive le bagatelle, Success to trifles.
vive le roi, Long live the king.
voilà, See there; there is, there are.
voilà tout, That's all.
voilà une autre chose, That's quite another thing.
voir les dessous des cartes, To see the face of the cards; to be in the secret.
vous y perdrez vos pas, You will have your walk for nothing; you will lose your labor over it.
Was fehlt Ihnen? (Ger.), What is the matter with you?
Wie die Arbeit, so der Lohn (Ger.), As the labor, so the reward.
zeitgeist (Ger.), The spirit of the age.

WORDS OFTEN MISPRONOUNCED

It is in the delicate but firm utterance of the unaccented vowels with correct sound that the cultured person is most surely distinguished from the uncultured.—*Richard Grant White*.

KEY TO THE VOWEL SOUNDS

ā, as in farm, father; *ā*, as in ask, fast; *ǣ*, as in at, fat; *ā*, as in day, fate; *ā*, as in care, fare; *ē*, as in met, set; *ē*, as in me, see; *ē*, as in her, ermine; *ī*, as in pin, sin; *ī*, as in pine, line; *ō*, as in not, got; *ō*, as in note, old; *ō*, as in for, fought; *ō*, as in sole, only; *ō*, as in fog, orange; *ō*, sound cannot be exactly represented in English. The English sound of *u* in *burn* and *burnt* is perhaps the nearest equivalent to *ō*; *ōō*, as in cook, look; *ōō*, as in coon, moon; *ū*, as in cup, duck; *ū*, as in use, amuse; *ū*, as in fur, urge; *ū* sound cannot be exactly represented in English. The English sound of *u* in *luke* and *duke* resembles the original sound.

abdomen, *āb-dō'-mēn*, not *āb'-dō-mēn*.
 Abereromby, *āb'-ēr-kūm-bī*.
 Aberdeen, *āb-ēr-dēn'*.
 abstemious, *āb-stē'-mī-ūs*, not *āb-stēm'-ī-ūs*.
 abstractly, *āb'-strākt-lī*.
 Acadia, *ā-kā'-dī-ā*.
 acclimate, *āk-kli'-māt*, not *āk'-kli-māt*.
 accompaniment, *āk-kūm'-pān-īm-ēnt*, not *āk-kūmp'-nīm-ēnt*.
 accouchement, *āk-kōōsh-mān'*.
 accouter, *āk-kōō'-tēr*, not *āk-kou'-tēr*.
 accrue, *āk-krū'*, not *āk-krōō'*.
 acetylene, *ā-sēl'-īl-ēn*; *ās'-ēt-īl-ēn*.
 Achæan, *ā-kē'-ān*.
 acoustic, *ā-kou'-stīk* or *ā-kōō'-stīk*.
 across, *ā-krōs'*, not *ā-krōsēl'*.
 acts, *āks*, not *āks*.
 address (n.), *ād-drēs'*.
 address (vb.), *ād-drēs'*.
 adjectively, *ād'-jēk-tīv-lī*.
 admirative, *ād-mī'-rā-tīv*.
 Adonis, *ā-dō'-nīs*, not *ā-dōn'-īs*.
 adult, *ā-dūll'*, not *ād'-ūll*.
 adventure, *ād-vēnt'-yūr*.
 adverse, *ād'-vērs*.
 aerometer, *ā-ēr-ōm'-ē-tēr*.
 Æschylus, *ēs'-kīl-ūs*, not *ēs'-kū-lūs*.
 Afghanistan, *āf-gān-īs-tān'*, not *āf-gān-īs-tān*.
 Africanus, *āf-rīk-ā'-nūs*.
 agile, *āj'-īl*, not *āj'-īl*.
 Agincourt, *āzh-ān-kōōr'*.
 Agricola, *ā-grīk'-ō-lā*.
 Aida, *ā-ē'-dā*.
 ailment, *āl'-mēnt*, not *āl'-mūnt*.
 aisle, *īl*.

Aix-la-Chapelle, *āks-lā-shā-pēll'*, not *ā-lā-shā-pēll'*.
 Alabama, *āl-dā-bā'-mā*, not *āl-dā-bām'-dā*.
 à l'Anglaise, *ā lān-glāz'*.
 Alcott, *āl'-kūt*, not *āl'-kūt*.
 Aleutian (Islands), *āl-lū'-shī-ān*, not *āl-lū'-shān*.
 algebra, *āl'-jē-brā*, not *āl'-jē-brā*.
 algebraist, *āl'-jē-brā-īst*.
 Algernon, *āl'-jēr-nūn*.
 Algonquin, *āl-gōn'-kwīn*.
 alien, *āl'-yēn*, not *āl'-lī-ēn*.
 allopathist, *āl-lōp'-āth-īst*, not *āl'-lō-pāth-īst*.
 allusion, *āl-lū'-zhūn*, not *āl-lōō'-zhūn*.
 alma mater, *āl'-mā mā'-tēr*, not *āl'-mā mā'-tēr*.
 almond, *āl'-mūnd*.
 alpaca, *āl-pāk'-dā*, not *āl-dā-pāk'-dā*.
 Altai (Mountains), *āl-tī'*, not *āl'-tī*.
 alternately, *āl-tēr'-nāt-lī*, not *āl'-tēr-nāt-lī*.
 ameliorate, *ā-mēl'-yō-rāt*, not *ā-mēl'-lī-ō-rāt*.
 amenable, *ā-mēl'-nā-bl*, not *ā-mēn'-ā-bl*.
 ament, *ām'-ēnt*.
 Amherst, *ām'-ēr-st*, not *ām'-hēr-st*.
 The *h* is silent.
 Ampère, *ān-pār'*.
 anæmic, *ā-nēm'-īk*, not *ā-nē'-mīk*.
 anchor, *āng'-kēr*.
 Andromache, *ān-drōm'-ā-kē*.
 Angelus, *ān'-jē-lūs*.
 animalcule, *ān-īm-āl'-kūl*, not *ān-īm-āl'-kū-lē*.
 antarctic, *ānt-ārkt'-īk*, not *ānt-ār'-īk*.
 Antilles, *ān-tīl'-ēz* or *ān-tēl'*.
 Antiochus, *ān-tī-ō-kūs*, not *ān-tī-ōk'-ūs*.
 Antipater, *ān-tīp'-ā-tēr*.
 anxiety, *āng-zī'-ē-tī*, not *āngk-sī'-ē-tī*.
 anxious, *āngk'-shūs*, not *āng'-shūs*.
 Apache, *ā-pā'-chā*.

aperient, *á-pě'-rĭ-ěnt*.
 aperture, *áp'-ěr-tūr*.
 apostle, *a-pōs'-l*, not *á-pōs'-l*, nor *á-pōs'-tl*.
 apothecize, *áp-ō-thē'-ō-siz*.
 appellate, *áp-pěl'-lāt*.
 appendicitis, *áp-pěn-đis-ĭ'-lĭs*.
 appetitive, *áp'-pě-tĭ-tĭv*.
 apricot, *á'-prĭ-kót*, not *áp'-rĭ-kót*.
 apropos, *áp'-rō-pō*, not *áp-rō-pō'*.
 aqua, *á'-kwā*.
 aquarium, *á-kwā'-rĭ-ŭm*, not *á-kwā'-rĭ-ŭm*.
 aqueduct, *ák'-wē-dŭkt*, not *ák'-wē-dŭk*.
 Arab, *ár'-áb*.
 archangel, *árk-ān'-jěl*, not *árch-ān'-jěl*.
 archbishop, *árch-bĭsh'-ōp*, not *árch'-bĭsh-ōp*.
 archduke, *árch-dŭk'*, not *árch'-dŭk*.
 archfiend, *árch'-fĕnd*, not *árch-fend'*.
 archipelago, *ár-kĭ-pěl'-á-gō*, not *ár-chĭ-pěl'-á-gō*.
 architect, *ár'-kĭ-těkt*, not *ár'-chĭ-těkt*.
 arctic, *árk'-tĭk*, not *ár-tĭk*.
 Argive, *ár'-jĭv*, not *ár'-gĭv*.
 arid, *ár'-ĭd*, not *ár'-rĭd*.
 Aristotle, *ár'-ĭs-tót-l*, not *ár-ĭs-tót-l*.
 Armida, *ár-mē'-dā*.
 ascetic, *ás-sět'-tĭk*.
 Asia, *á'-shĭ-á*, not *á'-zhā*, nor *á'-zhĭ-á*.
 ask, *ásk*, not *ásk*.
 askance, *ás-kāns'*, not *ás-kāns'*.
 asphalt, *ás-jált'*, not *ás'-jált*.
 astrakhan, *ás-trá-kān'*, not *ás'-trá-kān*.
 atheneum, *áth-ē-nē'-ŭm*, not *á-thē'-nē-ŭm*.
 attaché, *át-tá-shĕ'*.
 attacked, *át-tákt'*, not *át-tákt-těd*.
 attorney, *át-túr'-nĭ*.
 aunt, *ánt*, not *ánt*, nor *ánt*.
 aurora borealis, *á-rō'-rá bō-rē-ā'-lĭs*.
 Ausable, *ó-sā'-bl*.
 automobile, *ó-tō-mō'-bĭl*; Fr. pron., *ó-tō-mō-běl'*.
 automobilist, *ó-tō-mō'-bĭl-ĭst*.
 Avalon, *áv'-á-lŭn*.
 avoirdupois, *áv-ěr-dŭ-poi-z'*, not *áv-ěr-dŭ-poi'*.
 Avon, *á'-vŏn*, not *áv-ŏn*.
 "Stratford-on-Avon."
 Baal, *bā'-ál*.
 backslide, *bák-slĭd'*, not *bákt'-slĭd*.
 backslider, *bák-slĭ'-dēr*, not *bákt'-slĭ-dēr*.
 bade, *bád*, not *bād*.
 Baden, *bā'-dēn*.
 Bagdad, *bāg-dād'*.
 Balearic (Islands), *bāl-ē-ár'-ĭk*, not *bāl-ē'-rĭk*.
 Balkan (Mountains), *bál-kān'*, not *ból'-kān*.
 banana, *bā-nā'-ná*, not *bán-ān'-á*.
 bandoline, *bān'-dō-lĭn*, not *bán-dō-lēn'*.
 Bangkok, *bāng-kŏk'*.
 Bantam (Java), *bān-tām'*.
 bargain, *bār'-gĕn*, not *bār'-gŭn*.
 Barnegat, *bār-nē-gāt'*.
 barrel, *bār'-rĕl*, not *bār'-rŭl*.
 basin, *bā'-sŭn*, not *bā'-sĭn*.
 basket, *bás'-kĕt*, not *bás'-kĕt*.
 bath, *báth*, not *báth*.
 Baton Rouge, *bát'-ŭn rōōzh*; Fr. pron., *bā-tŏn' rōōzh*.
 Bayard (Thomas F.), *bĭ'-árd*, not *bā'-árd*.
 Beatrice, *bē'-ā-trĭs*, not *bē-ā'-trĭs*, nor *bē-át'-rĭs*.
 Beauchamp (Fr.), *bō-shān'*.
 Beauchamp (Eng.), *bē'-chām*.
 "The Beauchamp Tower."
 bedstead, *bĕd'-stĕd*, not *bĕd'-stĭd*.
 Beelzebub, *bē-ěl'-zē-bŭb*, not *bĕl'-zē-bŭb*.

Beethoven van, *vān bā'-tō-vĕn*.
 belles-lettres, *bĕl-lĕt'-tĕr*.
 bellows, *bĕl'-ŭs*.
 Beloochistan, *bĕl-ōō-chĭs-tān'*.
 beloved (adj.), *bē-lŭv'-ĕd*.
 beloved (part.), *bē-lŭv'*.
 Bengal, *bĕn-gŏl'*, not *bĕn'-gŏl*.
 benignant, *bē-nĭg'-nānt*, not *bē-nĭ'-nānt*.
 Bethsaida, *bĕth-sā'-ĭd-á*.
 betrothal, *bē-trŏth'-ál*, not *bē-trŏ'-thál*.
 bicycle, *bĭ'-sĭk-l*, not *bĭ'-sĭ-kl*.
 biennial, *bĭ-ĕn'-ĭ-ál*.
 Bigelow, *bĭg'-ŭ-lŏ*, not *bĭg'-lŏ*.
 bijou, *bē-zhō'*.
 billet-doux, *bĭl'-ā-dōō*.
 bindery, *bĭnd'-ēr-ĭ*, not *bĭnd'-rĭ*.
 Bingen, *bĭng'-ĕn*, not *bĭng'-gĕn*.
 "Bingen-on-the-Rhine."
 biography, *bĭ-ōg'-rá-jĭ*.
 biographer, *bĭ-ōg'-rá-jĕr*.
 biology, *bĭ-ōl'-ō-jĭ*, not *bĭ-ōl'-ō-jĭ*.
 biparous, *bĭp'-á-rŭs*.
 bismuth, *bĭz'-mŭth*, not *bĭs'-mŭth*.
 bitumen, *bĭ-tŭ'-mĕn*, not *bĭt'-yŭ-mĕn*.
 blackguard, *blāg'-gārd*, not *blāk'-gārd*.
 blanch, *blānch*, not *blānch*.
 blanc mange, *blā mŏnj'*.
 blasé, *blā-zā'*.
 blasphemous, *blās'-jĕ-mŭs*, not *blās-jĕ'-mŭs*.
 blast, *blást*, not *blást*.
 Blenheim, *blĕn'-ĭm*, not *blĕn'-hĭm*.
 blessed (adj.), *blĕs'-ĕd*.
 blessed (part.), *blĕst*.
 Blois, *blŭā*.
 Boise City, *boi'-zā sĭl'ĭ*.
 boisterous, *bois'-tĕr-ŭs*, not *bois'-trŭs*.
 bolero, *bō-lā'-rō*.
 Boleyn (Anne), *bōōl'-ĭn*.
 Bologna, *bō-lŏn'-yā*, not *bō-lŏn'-nā*.
 bona-fide, *bŏ'-ná fĭ'-dē*, not *bŏ'-ná fĭd*.
 Bonheur (Rosa), *bŏ-nŏr'*, not *bŏn'-ŭr*.
 bon marché, *bŏn mār-shā'*.
 bonnet, *bŏn'-ĕt*, not *bŭn'-ĕt*.
 Bordeaux, *bŏr-dŏ'*.
 borrow, *bŏr'-rŏ*, not *bŏr'-rŭ*.
 Boswell, *bŏz'-wĕl*.
 boudoir, *bōō-dwŏr'*; Fr. pron., *bōō-dwār'*.
 Boulogne, *bōō-lŏn'*; Fr. pron., *bōō-lŏn'-yŭ*.
 bouquet, *bōō-kā'* or *bŏŏ'-kā*, not *bŏ-kā'*.
 Bourbon (island and dynasty), *bŏŏr'-bŭn*.
 bovine, *bŏ'-vĭn*, not *bŏ'-vĕn*.
 Bowdoin (College), *bŏ'-dn*.
 bow-legged, *bŏ'-lēgd*, not *bŏ'-lēg-ĕd*.
 Bremen, *brĕm'-ĕn*; Ger. pron., *brā'-mĕn*.
 brigand, *brĭg'-ānd*, not *brĭg'-ānd'*.
 bristle, *brĭs'-l*, not *brĭst'-l*.
 bronchitis, *brŏn-kĭ'-ĭs*.
 Brontë (Charlotte), *brŏn'-tĕ*.
 Brookline, *brŏŏk'-lĭn*.
 Brougham, *brŏŏ'-ām* or *brŏōm*.
 Bryn-Mawr (Wales), *brĭn-mŏwr'*.
 Bryn-Mawr (Penn.), *brĭn-mār'*.
 Bucephalus, *bŭ-sĕf'-á-lŭs*.
 Buchanan, *bŭk-ān'-ān* or *bŭ-kān'-ān*.
 Bucharest, *bŭ-kā-rĕst'*.
 Buckingham, *bŭk'-ĭng-ŭm*, not *bŭk'-ĭng-hām*.
 Buenos Ayres, *bŏ'-nŭs ā'-rĭz* or *ārz*.
 buffet (cupboard), *bŏpf'-ā'*.
 Bulgaria, *bŏŏl-gŭ'-rĭ-á*, not *bŭl-gŭ'-rĭ-á*.
 bureaucracy, *bŭ-rŏ'-krā-sĭ*.

Burgundy, búr'-gún-dí, not búr'-gún'-dí.
 burlesque, búr-lěsk', not búr'-lěsk.
 business, bíz'-něs, not bíz'-i-něs.
 butcher, bóoch'-ěr, not bóo'-chěr.
 Butte, búť.
 Cabot, káb'-ót, not káb'-ót'.
 Cadiz, ká'-díz, not ká'-díz'.
 Cædmon, kěd'-món or kád'-món.
 Cæsarea Philippi, sēs-á-rě'-á fíl'-íp'-pí.
 café, káf'-á.
 Cairo (Egypt), kí'-rō, not ká'-rō.
 Cairo (U. S.), ká'-rō, not kí'-rō.
 Caius, ká'-yūs.
 Calais, ká-lá'.
 calf, káf, more properly káf.
 caliph, ká'-líj.
 calm, kám, not kām.
 calve, káv, not káf.
 calyx, ká'-líks, not kál'-íks.
 Camille, ká-měł'.
 campagna, kām-pān'-yá.
 Canaan, ká'-nān or ká'-nā-ān.
 cancel, kán'-sěl, not kán'-sl.
 candelabra, kán-dě-lá'-brá, not kán-dě-lá'-brá.
 canine, ká-nín'.
 cañon, kán'-yūn or kán-yōn'.
 cantalever, kán'-tá-lěv-ěr.
 Canton (China), kán-tón'.
 Canton (U. S.), kán'-tón.
 Canute, ká-nūt'.
 canyon, kán'-yūn.
 capitulate, ká-pít'-yú-lát, not ká-pích'-ōo-lát.
 caret, ká'-rět or kár'-tí.
 caricature, kár'-ík-á-tūr.
 Carnegie (Andrew), kár-něg'-ě.
 Carnot, kár-nō'.
 Carolinian, kár-ō-lín'-í-ān, not kár-ō-lí'-nī-ān.
 carte-blanche, kárt-blānsh'.
 Carthaginian, kár-thá-jín'-í-ān, not kár-thá-jě'-nī-ān.
 cartridge, kár-tríj, not kát'-ríj.
 Casabianca, ká-sá-bě-ān'-ká.
 cashmere, káš'-měr.
 casino, ká-sě'-nō.
 castanet, kás'-tá-nět.
 catalogue, kál'-á-lōg, not kál'-á-lōg.
 catapla, ká-tál'-pá, not ká-tól'-pá.
 catch, kách.
 catchup, kách'-úp, not kěch'-úp.
 catechism, kát'-ě-kíz-m, not kát'-ě-kíz-um.
 catsup, kát'-súp.
 Caucasian, kó-ká'-shān, not kó-ká'-zhān, nor kó-káš'-ān.
 Cavalleria Rusticana, ká-vál-lá-rě'-á rōos-tě-ká'-ná.
 caveat, ká'-vě-át, not káv'-ě-át.
 Celebes (islands), sěl'-ě-běz.
 cello, chěl'-lō.
 cemetery, sēm'-ě-lěr-í, not sēm'-ě-trí.
 centennial, sěn-těn'-nī-ál, not sěn-těn'-yál.
 ceramic, sē-rám'-ík, not kē-rám'-ík.
 cerebrum, sēr'-ě-brūm, not sē-rě'-brūm.
 Cesarean, sē-zá'-rě-ān, not sē-zár'-ě-ān.
 Chaldean, kál-dě'-ān, not kál'-dē-ān.
 challis, shál'-lí.
 champagne, shām-pān'.
 Chantilly, shān-těł-yě' or shān-tě-yě'.
 chaos, ká'-ōs.
 chaperon, sháp'-ěr-ōn.
 chargé d'affaires, shār-zhá' dáf'-jár'.

Charlemagne, shār-lě-mān'.
 Charon, ká'-rōn, not chá'-rōn.
 Charybdis, ká-ríb'-dís.
 chasm, kām, not káz'-um.
 chasten, chā'-sn, not chās'-n, nor chās'-in.
 chastise, chās-tíz', not chās'-tíz.
 chastisement, chās'-tíz-měnt, not chās-tíz'-měnt.
 Chaucer, chó'-sēr, not chow'-sēr.
 chauffeur, shō-för'.
 chef, shěf'.
 Chelsea, chěl'-sě, not chěl'-sē-á.
 Cheltenham, chěll'-nūm.
 chemise, shě-měz'.
 chenille, shē-něl'.
 cherubim, chěr'-ū-bím, not chěr'-ūb-ím.
 chestnut, chēs'-nūt, not chēs'-nūt.
 cheviot (cloth), chěv'-ě-ūt.
 chicken, chík'-ěn, not chík'-n.
 chiffonier, shíf-ōn-ěr'.
 children, chíl'-drěn, not chíl'-dēr-n.
 Chile, chíl'-í.
 Chiron, kí'-rōn.
 chiropodist, kí-rōp'-ō-díst.
 chisel, chíz'-ěl, not chíz'-l.
 Chisolm, chíz'-um.
 Chopin, shō-pān'.
 chorister, kūr'-ís-těr, not kō'-ríst-ěr.
 chyle, kíł.
 chyme, kí-m.
 Cienfuégos, sē-ěn-fwá'-gōs.
 cinchona, sín-kō'-ná, not sín-chō'-ná.
 Cincinnati, sín-sín-ná'-tí, not sín-sín-nát'-ú.
 circuit, sēr'-kít, not sēr'-kūt.
 civil, sív'-íl, not sív'-l.
 clairvoyant, klár-voí'-ánt.
 clandestine, klān-dēs'-tín.
 clashboard, kláb'-ōrd, not kláp'-bōrd.
 Clapham, kláp'-um.
 clarinet, klár'-ín-ět.
 cleanly (adj.), klěn'-lí.
 cleanly (adv.), klěn'-lí.
 clematis, klēm'-á-tís, not klē-má'-tís.
 Cleopatra, klē-ō-pá'-trá, not klē-ō-pá'-trá, nor klē-ō-pát'-rá.
 clique, klěk, not klík.
 Clive, klív.
 cocaine, kō'-ká-ín.
 Coeytus, kō-sē'-tūs.
 codeine, kō-dě'-ín.
 cognomen, kōg-nō'-měn, not kōg'-nō-měn.
 Cohoes, kō-hōz', not kō-hōoz'.
 coiffure, kwá-für'.
 colander, kúl'-ān-děr, not kól'-ān-děr.
 Colchester, kól'-chēs-těr, not kól'-chēs-těr.
 cold-chisel, kól'-chíz-ěl.
 Coleridge, kól'-ríj.
 Colorado, kól-ō-rá'-dō.
 colosseum, kól-ōs-sē'-um.
 column, kól'-um, not kól'-yūm.
 comeliness, kām'-lí-něs, not kóm'-lí-něs.
 comely, kām'-lí, not kóm'-lí.
 commiserate, kóm-míz'-ěr-át, not kóm-mís'-ěr-át.
 commodious, kóm-mō'-dī-ūs, not kóm-mō'-jūs.
 commune (n), kóm'-mūn.
 comparable, kóm'-pá-rá-bl, not kóm-pár'-á-bl.
 complex, kóm'-plěks, not kóm-plěks'.
 Concord (New Hampshire), kōng'-kúrd.
 concrete (n. and adj.), kōn'-krēt.
 concrete (vb.), kōn'-krēt'.
 condolence, kōn-dō'-lěns, not kōn'-dō-lěns.

confidant, *kôn-fid-ant'*, not *kôn'-fid-ant*.
 congenial, *kôn-jên'-yâl*.
 congregate, *kông'-grê-gât*.
 Congress, *kông'-grês*.
 connoisseur, *kôn-nâ-sôr'*.
 conquest, *kông'-kwêst*, not *kôn'-kwêst*.
 conscientious, *kôn-shî-ên'-shûs*, not *kôn-sî-ên'-shûs*.
 conservatoire, *kôn-sêr-vâ-tuâr'*.
 considerable, *kôn-sîd'-êr-â-bl*, not *kôn-sîd'-râ-bl*.
 consignee, *kôn-sîn-ê'*.
 constable, *kûn'-stâ-bl*, not *kôn'-stâ-bl*.
 Consuelo, *kôn-sû-â-lô'*.
 consul, *kôn'-sûl*, not *kown'-sûl*.
 contemplative, *kôn-têm'-plâ-tîv*, not *kôn'-têm-plâ-tîv*.
 contretemps, *kôn-trû-tân'*.
 conversant, *kôn-vêr-sânt*, not *kôn-vêr'-sânt*.
 coquet, *kô-kê'*.
 coral, *kôr'-âl*, not *kô'-râl*.
 cordial, *kôr'-jâl* or *kôrd'-yâl*.
 Cordova, *kôr'-dô-vâ*.
 cornet, *kôr'-nêt*, not *kôr-nêt'*.
 corolla, *kô-rôl'-â*.
 Corot, *kô-rô'*.
 corps (military), *kôr*; pl. *kôrz*.
 cortège, *kôr-tâzh'*.
 Cortez (Fernando), *kôr'-têz*.
 cosmetic, *kôz-mêl'-îk*, not *kôs-mêl'-îk*.
 cote (n.), *kôt*, not *kôl*.
 cotillion, *kô-tîl'-yûn*.
 coupé, *kô-pâ'*.
 Courbet, *kôor-bâ'*.
 courteous, *kûrt'-ê-ûs*.
 cousin, *kûz'-n*, not *kûz'-în*.
 covetous, *kûv'-êl-ûs*, not *kûv'-ê-chûs*.
 Coxsackie, *kôok-sô'-kê*.
 Cracow, *krâ'-kô*.
 craunch, *krânch*, not *krônch*.
 crèche, *krâsh*.
 credence, *krê'-dêns*, not *krêd'-êns*.
 credulous, *krêd'-yû-lûs*, not *krêj'-ôo-lûs*.
 creek, *krêk*, not *krîk*.
 Creighton, *krâ'-tûn*.
 crematory, *krêm'-â-tô-rî*.
 Crimea, *krîm'-ê-â*, not *krî-mê'-â*.
 Crito, *krî'-tô*.
 crouch, *krouch*, not *krôoch*.
 Cruikshank, *krôok'-shângk*.
 cuisine, *kwê-zên'*.
 culinary, *kû'-lîn-â-rî*, not *kûl'-în-â-rî*.
 cupboard, *kûb'-bêrd*.
 cupola, *kû'-pô-lâ*, not *kû'-pâ-lô*.
 curator, *kû-râ'-têr*.
 Cuyahoga, *kî-â-hô'-gâ*.
 cycle, *sî'-kl*, not *sîk'-l*.
 Czerny, *chêr'-nê*.
 daguerreotype, *dâ-gêr'-ô-tîp*, not *dâ-gêr'-ê-ô-tîp*.
 damage, *dâm'-âj*, not *dâm'-îj*.
 Damrosch, *dâm'rôsh*, not *dâm'-rôsh*.
 Danish, *dâ'-nîsh*, not *dân'-îsh*.
 Dardanelles, *dâr-dânêlz'*.
 Dartmouth, *dârt'-mûth*, not *dârt'-mowth*.
 daub, *dôb*, not *dôb*.
 débutante, *dâ-bû-tôn't*.
 decade, *dêk'-ad*, not *dê-kâd'*.
 décolleté, *dâ-kôl-le-tâ*; not *dâ-kôl'-tâ*.
 deficit, *dêf'-îs-îl*, not *dê-fîs'-îl*.
 deign, *dân*.
 delirious, *dê-lîr'-î-ûs*, not *dê-lê'-rî-ûs*.

Delos, *dê'-lôs*.
 Delsarte, *dêl-sârt'*, not *dêl'-sârt*.
 depths, *dêphs*, not *dêps*.
 desideratum, *dê-sîd-êr-â'-tûm*, not *dê-sîd-êr-â'-tûm*.
 Des Moines, *dê-moin'*.
 despicable, *dês'-pîk-â-bl*, not *dê-spîk'-â-bl*.
 destine, *dês'-tîn*.
 different, *dîf'-fêr-ênt*, not *dîj'-rênt*.
 digitalis, *dîj'-î-tâ'-lîs*, not *dîj'-î-tâ'-lîs*.
 diploma, *dî-plô'-mâ*, not *dî-plô'-mâ*.
 direct, *dî-rêkt'*, not *dî-rêkt'*.
 discourse, *dîs-kôrs'*, not *dîs'-kôrs*.
 disease, *dîz-êz'*, not *dîs-êz'*.
 disputant, *dîs'-pû-tânt*, not *dîs-pû'-tânt*.
 district, *dîs'-trîkt*, not *dê'-strîkt*.
 diverge, *dîv-êrj'*, not *dî-vêrj'*.
 domain, *dô-mân'*, not *dô'-mân*.
 donkey, *dông'-kî*, not *dông'-kî*.
 Doric, *dôr'-îk*, not *dô'-rîk*.
 Doris, *dô'-rîs*.
 douche, *dôosh*.
 drawers, *drô'-êrz*, not *drôrz*.
 drought, *drowt*.
 drowned, *dround*.
 Duncan, *dûng'-kân*, not *dûn'-kân*.
 Duquesne, *dû-kân'*.
 Eames (Emma), *âmz*, not *êmz*.
 eau de cologne, *ô dû kô-lôn'*.
 Ecuador, *êk-wâ-dôr'*.
 eczema, *êk'-zê-mâ*, not *êk-zê'-mâ*.
 Edam, *â-dâm'*, not *ê'-dâm*.
 Eden, *ê-dn*, not *ê'-dên*.
 Edinburgh, *êd'-în-bûr-ô*, not *êd'-în-bûrj*.
 Eiffel (Tower), *êf'-fêl*.
 eleven, *ê-lêv'-n*, not *lêv'-n*.
 Elgin, *êl'-gîn*, not *êl'-jîn*.
 élite, *â-lê'*.
 elongate, *ê-lông'-gât*, not *ê-lôn'-gât*.
 Émile, *â-mêl'*.
 enchant, *ên-chânt'*, not *ên-chânt'*.
 encore, *âng-kôr'*.
 engine, *ên'-jîn*, not *ên'-jîn*.
 enquiry, *ên-kwî'-rî*, not *ên'-kwîr-î*.
 erasure, *ê-râ'-zhûr*, not *ê-râ'-shûr*.
 Erebus, *êr'-ê-bûs*.
 erysipelas, *êr-î-sîp'-ê-lâs*, not *îr-î-sîp'-ê-lâs*.
 etiquette, *êt'-î-kêl*.
 Eustachian, *yû-stâ'-kî-ân*.
 exaggeration, *êgz-âj-êr-â'-shûn*.
 examine, *êgz-âm'-în*, not *êks-âm'-în*.
 example, *êgz-âm'-pl*.
 exist, *êgz-îst'*, not *êks-îst*.
 exit, *êks'-îl*, not *êgz'-îl*.
 exogenous, *êks-ôj'-ê-nûs*.
 expedient, *êks-pê'-dî-ênt*, not *êks-pê'-jênt*.
 expiratory, *êks-pîr'-â-tô-rî*.
 exquisite, *êks'-kwîz-îl*, not *êks-kwîz'-îl*.
 extant, *êks'-tânt*, not *êks-tânt'*.
 ex-tempore, *êks-têm'-pô-rê*, not *êks-têm'-pôr*.
 Eyre (Jane), *âr*, not *îr*.
 factory, *jâk'-tô-rî*, not *jâk'-trî*.
 falcon, *fô'-kn*.
 Falkland, *fôk'-lând*.
 Faneuil (Hall), *jân'-îl*.
 faucet, *fô'-sêl*, not *jâs'-êl*.
 Fauntleroy, *fôn't'-lê-roi*, not *fôn't'-l-roi*.
 Faure, *fôr*.
 February, *fêb'-rû-â-rî*, not *fêb'-yû-â-rî*.
 fecund, *fêk'-ûnd*, not *fê'-kûnd*.

Federalist, fěd'-ēr-āl-īst, not fěd'-rāl-īst.
 fellow, fēl'-lō, not fēl'-lū.
 feminine, fēm'-īn-īn, not fēm'-īn-īn.
 fête, fāt.
 fiancé, fē-ān-sā'.
 fiancée, fē-ān-sā'.
 fibril, fī'-brīl, not fīb'-rīl.
 finance, fīn-āns', not fī'-nāns.
 finances, fīn-āns'-ēs, not fī'-nāns-ēs.
 financial, fīn-ān'-shāl, not fī-nān'-shāl.
 financier, fīn-ān-sēr', not fī'-nān-sēr.
 florid, flōr'-īd, not flō'-rīd.
 florin, flōr'-īn, not flō'-rīn.
 forbade, fōr-bād', not fōr-bād'.
 forest, fōr'-ēst, not fōr'-ūst.
 forum, fō'-rūm, not fōr'-ūm.
 fragile, frāj'-īl, not frāj'-īl.
 franchisement, frān'-chīz-mēnt.
 friends, frēndz, not frēnz.
 friendship, frēnd'-shīp, not frēn'-shīp.
 Fräbel, frō'-bēl.
 frontier, frōn'-tēr, not frūn'-tēr.
 Froude, frōōd.
 fuel, fū'-ēl, not fū'-ūl.
 fungi, fūn'-jī, not fūng'-gī.
 furniture, fūr'-nīt-yūr.
 gallery, gāl'-ēr-ī, not gāl'-rī.
 Galway, gōl'-wā, not gāl'-wā.
 gamut, gām'-ūt, not gā'-mūt.
 gangrene, gāng'-grēn, not gān'-grēn.
 garage, gā-rāzh'.
 garrulous, gār'-rōō-lūs.
 gazetteer, gāz-ēt-ēr', not gā-zēt'-ēr.
 generally, jēn'-ēr-āl-ī, not jēn'-rāl-ī.
 Gennesaret (Lake), gēn-nēs'-ā-rēt.
 Genoa, jēn'-ō-ā, not jē-nō'-ā.
 gentlemen, jēn'-īl-mēn, not jēn'-īl-mūn.
 genuine, jēn'-yū-īn, not jēn'-yū-īn.
 Geoffrey, jēf'-rī.
 gerund, jēr'-ūnd, not jēr'-rūnd.
 get, gēt, never gīt.
 ghastly, gāst'-lī, not gāst'-lī.
 gist, jīst, not gīst.
 gladiolus, glā-dī'-ō-lūs.
 Gladstone, glād'-stūn, not glād'-stōn.
 Glasgow, glās'-gō, not glās'-kō.
 glottis, glōt'-īs, not glōt'-īs.
 glycerine, glīs'-ēr-īn, not glīs'-ēr-ēn.
 gneiss, nīs.
 Goethe von, fōn gō'-lē.
 Goliath, gō-lī'-āth, not gō-lī'-ā.
 gondola, gōn'-dō-lā, not gōn-dō'-lā.
 gone, gōn.
 Gotham, gō'-thām.
 Gounod, gōō-nō'.
 government, gūv'-ēr-n-mēnt, not gūv'-ēr-mēnt.
 granddaughter, grānd'-dō-tēr, not grān'-dō-tēr.
 grandson, grānd'-sūn, not grān'-sūn.
 grasp, grāsp, not grāsp.
 gratis, grā'-tis, not grāt'-īs.
 Greenwich (Eng.), grēn'-īj.
 Greenwich (U. S.), grēn'-wīch.
 grimace, grīm-ās', not grīm'-ās.
 Haiti, hā'-ī.
 handbook, hānd'-bōōk, not hān'-bōōk.
 Hawaii, hā-wī'-ē.
 Hawaiian, hā-wī'-yān.
 hearth, hārth, not hērth.
 Heidelberg, hī'-dēl-bērg.
 height, hīt, not hītth.

Heine (Heinrich), hīn'-rīk hī'-nē.
 heinous, hā'-nūs, not hē'-nūs.
 helm, hēlm, not hēl'-ūm.
 Henlopen (Cape), hēn-lō'-pēn.
 heraldic, hē-rāl'-dīk, not hēr'-āl-dīk.
 herring, hēr'-īng, not hēr'-īn.
 Hiawatha, hī-ā-wō'-thā, not hē-ā-wā'-thā.
 highwayman, hī'-wā-mān, not hī-wā'-mān.
 Himalaya, hīm-ā'-lā-yā or hīm-ā-lā'-yā.
 history, hīs'-tō-rī, not hīs'-trī.
 Holyoke (Mount), hōl'-yōk, not hō'-lī-ōk.
 homestead, hōm'-stēd, not hōm'-stīd.
 honest, ōn'-ēst, not ōn'-ūst.
 honorable, ōn'-ōr-ā-bl, not ōn'-rā-bl.
 hoof, hōōf, not hōōf.
 horrid, hōr'-rīd, not hōr'-rīd.
 horseradish, hōrs'-rād-īsh, not hōrs'-rēd-īsh.
 howel, hōv'-ēl, not hūv'-ēl.
 hundred, hūn'-drēd, not hūn'-dērd.
 hydraulics, hī-drō'-īks, not hī-drōl'-īks.
 hypocrisy, hīp-ōk'-rīs-ī.
 ice-cream, īs'-krēm, not īs-krēm'.
 idiosyncrasy, īd-ī-ō-sīng'-krā-sī.
 ignoramus, īg-nō-rā'-mūs, not īg-nō-rā'-mūs.
 illustrate, īl-lūs'-trāt, not īl'-lūs-trāt.
 impious, īm'-pī-ūs, not īm-pī'-ūs.
 importune, īm-pōr-tūn'.
 impotent, īm'-pō-tēnt, not īm-pō'-tēnt.
 inaugurate, īn-ō'-gū-rāt, not īn-ō'-gūr-āt.
 incomparable, īn-kōm'-pā-rā-bl, not īn-kōm-pār'-ā-bl.
 Indian, īn'-dī-ān or īnd'-yān.
 indisputable, īn-dīs'-pū-tā-bl, not īn-dīs-pū-tā-bl.
 infamous, īn'-fā-mūs.
 Ingelow (Jean), jēn īn'-jē-lō.
 innocent, īn'-nō-sēnt, not īn'-nō-sūnt.
 inquiry, īn-kwī'-rī, not īn'-kwīr-ī.
 insatiable, īn-sā'-shā-bl or īn-sā'-shī-ā-bl.
 instead, īn-stēd', not īn-sīd'.
 interesting, īn'-tēr-ēst-īng, not īn-tēr-ēst'-īng.
 international, īn-tēr-nāsh'-ūn-āl, not īn-tēr-nā'-shūn-āl.
 inundate, īn-ūn'-dāt, not īn'-ūn-dāt.
 Iowa, ī'-ō-wā, not ī-ō'-wā.
 Iroquois, īr-ō-kwoi'.
 isinglass, ī'-zīng-glās, not ī'-zīn-glās.
 Islip, īs'-īp.
 Italian, ī-tāl'-yān, not ī-tāl'-yān.
 Italie, ī-tāl'-īk, not ī-tāl'-īk.
 ivory, ī'-vō-rī, not ī'-vrī.
 Jacob, jā'-kōb, not jā'-kūp.
 Jekyll (Dr.), jē'-kīl, not jēk'-īl.
 Jesuit, jēz'-yū-īt, not jēzh'-yū-īt.
 joist, joīst, not jois.
 Joliet (U. S.), jō'-ī-īt.
 jostling, jōs'-līng, not jōst'-līng.
 judgment, jūj'-mēnt, not jūj'-mūnt.
 jugular, jū'-gū-lēr, not jūj'-yū-lēr.
 just (adv.), jūst, never jēst.
 kaleidoscope, kā-lī'-dō-skōp.
 Kansas, kān'-sās, not kān'-zās.
 Kennebee, kēn-ē-bēk', not kēn'-ē-bēk.
 kept, kēpt, not kēp.
 kettle, kēl'-l, not kēl'-l.
 kiln, kīl, not kīln.
 kinetograph, kī-nē'-tō-grāf.
 kitchen, kīch'-ēn, not kīch'-n.
 laboratory, lāb'-ō-rā-tō-rī, not lāb'-rā-tō-rī.
 laborer, lā'-bēr-ēr, not lā'-brēr.

Labrador, *lăb-ră-dôr'*, not *lăb'-ră-dôr*.
 Lalla Rookh, *lă'-lă-rōok*, not *lă-lă-rōok'*.
 L'Allegro, *lă-lă'-grô*.
 lamentable, *lăm'-ênt-ă-bl*, not *lă-mênt'-ă-bl*.
 Lancaster, *lăngk'-ăs-têr*, not *lăn'-kăs-têr*.
 language, *lăng'-gwăj*, not *lăng'-gwěj*.
 languor, *lăng'-gwêr*.
 laryngitis, *lăr-in-jî'-tis*, not *lăr-in-jê'-tis*.
 larynx, *lăr'-ingks* or *lă'-ringks*.
 Latin, *lăt'-in*.
 laudanum, *lô-dă-nŭm*.
 laugh, *lăj*.
 laundry, *lăn'-drês*.
 lava, *lă'-vâ* or *lă'-vâ*, not *lăv'-â*.
 learned (adj.), *lêr'-nêd*.
 learned (part.), *lêrnd*.
 legate, *lêg'-ăt*, not *lê'-găt*.
 Leicester, *lês'-têr*.
 Leigh (Aurora), *lê*, not *lă*.
 length, *lêngth*, not *lênth*.
 leper, *lêp'-êr*.
 lettuce, *lêt'-is*, not *lêt'-ûs*.
 library, *lî'-bră-rî*, not *lî'-brî*.
 licorice, *lik'-ô-ris*, not *lik'-ô-rish*.
 lief, *lêf*, not *lêv*.
 Ligny (Battle of), *lên-yê'*.
 Lincoln, *lîng'-kŭn*, not *lîn'-kŭn*.
 Liszt (Franz), *frănts lîst*.
 literature, *lît'-êr-ă-tŭr*.
 lithographer, *lîth-ôg'-ră-jêr*, not *lîth'-ô-grăf-jêr*.
 Llewellyn, *lô-êl'-in*.
 long-lived, *lông'-lîvd*, not *lông'-lîvd*.
 Lorelei, *lô'-ră-lî*.
 Los Angeles, *lôs ăn'-jêl-êz*.
 Lyceum, *lî-sê'-ŭm*, not *lî'-sê-ŭm*.
 mackerel, *măk'-êr-êl*, not *măk'-rêl*.
 Madrid, *măd-rîd'*.
 magazine, *măg-ă-zên'*.
 magna charta, *măg'-nă kăr'-tă*.
 magnolia, *măg-nô'-li-ă*, not *măg-nôl'-yă*.
 Mahopac (Lake), *mă-hô'-păk*.
 mallow (marsh), *măl'-ô*, not *mêl'-ô*.
 malpractice, *măl'-prăk'-tis*, not *măl'-prăk'-tis*.
 mamma, *mă-mă'* or *mă'-mă*.
 mandamus, *măn-dă'-mŭs*, not *măn-dăm'-ŭs*.
 mange, *mănj*, not *mănĵ*.
 mania, *mă-nî-ă*, not *măn'-yă*.
 maniacal, *mă-nî-ăk-ăl*, not *mă-nî-ăk-ăl*.
 manoeuvre, *mă-nôv'-vr*.
 manufactory, *măn-yŭ-făk'-tô-rî*, not *măn-yŭ-făk'-tŭ-rî*.
 Maracaybo, *mă-ră-kî'-bô*.
 Mardigras, *măr-dê-gră'*.
 Maria Theresa, *mă-rî'-ă tē-rê'-să*.
 Marie Antoinette, *mă-rê' ăn-twă-nêl'*.
 maritime, *măr'-it-ŭm*.
 Marmora (sea), *măr'-mô-ră*, not *măr-mô'-ră*.
 marquis, *măr'-kwîs*; Fr. pron. *măr-kê'*.
 marseilles, *măr-sălz'*.
 masculine, *măs'-kŭ-lîn*, not *măs'-kŭ-lîn*.
 mask, *măsk*, not *măsk*.
 matron, *mă'-trôn*, not *măl'-rôn*.
 mattress, *măt'-rês*.
 mausoleum, *mô-sô-lê'-ŭm*.
 mauve, *môv*.
 measure, *mêzh'-ŭr*.
 mediæval, *mê-dî-ê'-văl*.
 memory, *mêm'-ô-rî*, not *mêm'-rî*.
 Mendelssohn-Bartholdy, *mên'-dêl-sôn băr-tôl'-dê*.
 meningitis, *mên-in-jî'-tis*.

Mephistopheles, *Mêf-is-tôf'-e-lêz*.
 meringue, *mê-răng'*.
 metric, *mêt'-rîk*, not *mê'-trîk*.
 Mignon, *mên-yôn'*.
 migraine, *mî-grăn'*.
 milch, *mîlch*, not *mîllk*.
 minuet, *mîn'-yŭ-êl*, not *mîn-yŭ-êl'*.
 mischievous, *mîs-chê-vŭs*, not *mîs-chê'-vŭs*.
 misconstrue, *mîs-kôn'-strŭ*, not *mîs-kôn-strŭ'*.
 miserable, *mîz'-êr-ă-bl*, not *mîz'-ră-bl*.
 Misérables (Les), *lă mē-ză-ră-bl*.
 Missouri, *mîs-sôv'-rî*, not *mîz-zôv'-rî*.
 mistletoe, *mîz'-l-tô*, not *mîs'-l-tô*.
 mitten, *mîl'-tên*, not *mîl'-n*.
 modiste, *mô-dêst'*.
 monologue, *môn'-ô-lôg*, not *mô'-nô-lôg*.
 monomania, *môn-ô-mă-nî-ă*, not *mô-nô-mă-nî-ă*.
 Moscow, *môs'-kô*.
 musicale, *mŭ-zê-kăl'*.
 mystery, *mîs'-têr-î*, not *mîs'-trî*.
 mythology, *mîth-ôl'-ô-jî*, not *mî-thôl'-ô-jî*.
 nature, *năt'-yŭr*.
 natural, *năt'-yŭ-răl*.
 nausea, *nô'-shê-ă* or *nô'-shă*, not *nô'-sê-ă*.
 necessarily, *nês'-ês-sêr-îl-î*, not *nês-ês-sêr'-îl-î*.
 née, *nă*.
 négligé, *nă-ġlê-zhă'*.
 Neilson, *nêl'-sŭn*.
 nephritis, *nê-frî'-tis*.
 nerveine, *nêr'-vîn*, not *nêr'-vên*.
 Neuchâtel, *nô-shă-têl'*.
 neuralgia, *nŭ-răl'-jî-ă*, not *nŭ-răl'-jă*.
 New Orleans, *nŭ ôr'-lê-ănz*, not *nŭ ôr-lênz'*.
 Niagara, *nî-ăg'-ă-ră*, not *nê-ăg'-ă-ră*.
 nicety, *nî-sê-tî*, not *nîs'-tî*.
 Niger, *nî'-jêr*.
 nom de plume, *nôn dŭ plŭm*.
 nominative, *nôm'-în-ă-tîv*, not *nôm'-nă-tîv*.
 nonchalant, *nôn-shă-lăn'*.
 nonpareil, *nôn-pă-rêl'*, not *nôn-pă-rêl'*.
 Northampton, *nôrh-ămp'-tŭn*, not *nôrh-hămp'-tŭn*.
 Norwich (Eng.), *nôr'-îj*.
 Norwich (U. S.), *nôr'-wîch* or *nôr'-îch*.
 Notre Dame, *nô-tr-dăm'*.
 Nottingham, *nôt'-îng-ŭm*.
 noxious, *nôk'-shŭs*, not *nôk'-shî-ŭs*.
 nuptial, *nŭp'-shăl*, not *nŭp'-chăl*.
 Nuyts (Islands), *nŭts*.
 oaths, *ôthz*, not *ôths*.
 obeisance, *ô-bê'-săns* or *ô-bă'-săns*.
 obelisk, *ôb'-ê-lîsk*, not *ôb'-lîsk*.
 Ober Ammergau, *ô-bêr ăm'-mêr-gôw*.
 obesity, *ô-bês'-îl-î*, not *ô-bês'-îl-î*.
 Obi, *ô-bê*.
 objugate, *ôb-jăr'-găt*, not *ôb'-jăr-găt*.
 occult, *ôk-kŭl'*, not *ôk'-kŭl*.
 octave, *ôk'-tăw*, not *ôk'-tŭv*.
 Odyssey, *ôd'-îs-ê*, not *ô-dîs'-ê*.
 office, *ôf'-îs*.
 often, *ôf'-n*, not *ôf'-tên*.
 olden, *ôld'-n*, not *ôld'-ên*.
 oleander, *ô-lê-ăn'-dêr*, not *ô'-lê-ăn-dêr*.
 Ole Bull, *ô'-lê bôôl*.
 olfactory, *ôl-făk'-tô-rî*, not *ôl-făk'-trî*.
 Omaha, *ô'-mă-hô*, not *ô'-mă-hă*.
 orchid, *ôr'-kîd*, not *ôr'-dîv*.
 ordeal, *ôr'-dê-ăl*, not *ôr-dê'-ăl*.
 Orleans (Maid of), *ôr'-lê-ănz*.

oust, *oust*, not *oost*.
 overalls, *ô'-vêr-ôlz*, not *ô'-vêr-hôlz*.
 Ovid, *ôv'-îd*, not *ô'-vîd*.
 Oyer, *ô'-yêr*, not *oi'-yêr*.
 pajama, *pâ-jâ'-mâ*.
 palatial, *pâ-lâ'-shâl*, not *pâl-âsh'-âl*.
 Palestine, *pâl'-ês-tîn*, not *pâl'-ês-tên*.
 palmistry, *pâl'-mîs-trî*, not *pâ'-mîs-trî*.
 Panama, *pân-â-mâ*.
 panorama, *pân-ô-râ'-mâ* or *pân-ô-râ'-mâ*, not *pân-ô-râm'-â*.
 papa, *pâ-pâ* or *pâ'-pâ*.
 papier-mâché, *pâp-yâ' mâ-shâ*.
 papyrus, *pâ-pî'-rûs*, not *pâp'-îr-ûs*.
 paresis, *pâr'-ê-sîs*, not *pâ-rê'-sîs*.
 parliament, *pâr'-lîm-ênt*.
 Parsifal, *pâr'-sîf-âl*.
 participle, *pâr'-tî-sîp-l*, not *pârt'-sîp-l*.
 partner, *pârt'-nêr*, not *pârd'-nêr*.
 partridge, *pâr'-trîj*, not *pât'-rîj*.
 passé, *pâ-sâ*.
 Pasteur, *pâs-tôr*.
 patron, *pâ'-trûn*, not *pât'-rûn*.
 pedagogue, *pêd'-â-gôg*.
 penchant, *pân-shân*.
 perhaps, *pêr-hâps*, not *prâps*.
 peritonitis, *pêr-î-tô-nî'-tîs*, not *pêr-î-tô-nê'-tîs*.
 perpetuity, *pêr-pê-tû'-î-tî*.
 Persia, *pêr'-shî-â*, not *pêr'-zhâ*.
 persist, *pêr-sîst*, not *pêr-zîst*.
 perspiration, *pêr-spîr-â'-shûn*, not *prês-pîr-â'-shûn*.
 petite, *pê-tîl'*.
 pharyngitis, *fâr-în-jî'-tîs*.
 phial, *fî-âl*.
 Philemon, *fî-lê'-môn*.
 Philip, *fîl'-îp*, not *fîl'-ûp*.
 Philippi, *fîl'-îp'-î*, not *fîl'-îp-î*.
 phosphorus, *fôs'-fôr-ûs*, not *fôs-fô'-rûs*.
 photographer, *fô-tôg'-râ-fêr*.
 photogravure, *fô-tô-grâ-vûr*.
 physicist, *fîz'-îs-îst*.
 piano, *pê-â'-nô*.
 picture, *pîk'-tûr*, not *pîk'-chûr*.
 plague, *plâg*, not *plêg*.
 plait, *plât*.
 Plata, Rio de la, *rê-ô dà lâ plâ'-tâ*.
 Pleiades, *plê'-yâ-dêz*.
 pneumatics, *nû-mât'-îks*.
 poem, *pô'-êm*, not *pô'-ûm*.
 polliwig, *pôl'-î-wîg*, not *pôl'-î-wôg*.
 polygamy, *pô-lîg'-â-mî*, not *pôl'-îg-â-mî*.
 Pompeii, *pôm-pâ'-yê*, not *pôm'-pê-î*.
 Posthumus, *pôst'-hû-mûs*.
 potato, *pô-tâ'-tô*, not *pô-tâ'-tû*.
 precedence, *prê-sê'-dêns*, not *prês'-ê-dêns*.
 predicament, *prê-dîk'-â-mênt*, not *pêr-dîk'-â-mênt*.
 preferable, *prêf'-êr-â-bl*, not *prê-fêr'-â-bl*.
 prelate, *prêl'-ât*, not *prê'-lât*.
 president, *prêz'-î-dênt*, not *prêz'-î-dûnt*.
 pretence, *prê-lêns*, not *prê'-lêns*.
 prettily, *prîl'-îl-î*, not *prîl'-îl-î*.
 prima donna, *prê'-mâ dôn'-nâ*.
 program, *prô'-grâm*, not *prô'-grûm*.
 propinquity, *prô-pîng'-kwîl-î*.
 protégé, *prô-tâ-zhâ*.
 Protestant, *prôt'-ês-tânt*, not *prôd'-ês-tânt*.
 psalm, *sâm*.
 Psalms (Book of), *sâmz*, not *sâmz*.

pseudonym, *sû'-dô-nîm*.
 psychic, *sî'-kîk*.
 publicist, *pûb'-lîs-îst*.
 Puebla, *puêb'-lâ*.
 Pueblo, *puêb'-lô*.
 pumpkin, *pûmp'-kîn*, not *pûng'-kîn*.
 Pythagoras, *pîth-âg'-ô-râs*, not *pî-thâg'-ô-râs*.
 quarrel, *kwôr'-êl*, not *kwôr'-îl*.
 quash, *kwôsh*, not *kwôsh*.
 Queenstown, *kwênz'-tûn*, not *kwênz'-town*.
 queue, *kyû*.
 Quito, *kê'-tô*.
 qui vive, *kê vêv'*, not *kwê vêv'*.
 quoit, *kwoit* or *koit*.
 quorum, *kwôr'-rûm*, not *kwôr'-ûm*.
 raceme, *râ-sêm'*.
 radish, *râd'-îsh*, not *rêd'-îsh*.
 Raleigh, *rô'-lî*.
 rancor, *râng'-kêr*, not *rân'-kêr*.
 ransack, *rân'-sâk*, not *râm'-sâk*.
 Récamier, *râ-kâ-mê-â*.
 recipe, *rês'-îp-ê*.
 reconnoiter, *rêk-ôn-oi'-têr*, not *rê-kôn-oi'-têr*.
 referable, *rêf'-êr-â-bl*, not *rê-fêr'-â-bl*.
 regalia, *rê-gâ'-lî-â*.
 régime, *râ-zhêm'*.
 renaissance, *rê-nâ'-sâns*; Fr. pron., *rû-nâ-sâns'*.
 rendez-vous, *rên'-dê-vôo*; Fr. pron., *rân'-dâ-vôo*.
 repairable, *rêp'-â-râ-bl*, not *rê-pâr'-â-bl*.
 répertoire, *rêp'-êr-tuâr*; Fr. pron., *râ-pâr-tuâr'*.
 reputable, *rêp'-yû-tâ-bl*.
 requiem, *rê'-kwî-êm*.
 research, *rê-sêrch'*, not *rê'-sêrch*.
 resource, *rê-sôrs'*, not *rê'-sôrs*.
 résumé, *râ-zôo-mâ*; Fr. pron., *râ-zû-mâ*.
 reverend, *rêv'-êr-ênd*, not *rêv'-êr-ênt*.
 revocable, *rêv'-ô-kâ-bl*, not *rê-vô'-kâ-bl*.
 rheumatism, *rû'-mâ-tîzm*, not *rôom'-â-tîzm*.
 rinse, *rîns*, not *rêns*.
 robust, *rô-bûst'*, not *rô'-bûst*.
 Rochefort, *rôsh-fôr*.
 Roentgen, *rônt'-gên*.
 roil, *roil*, not *rîl*.
 roof, *rôof*, not *rôof*.
 Roosevelt, *rôs'-vêlt*, not *rôos'-vêlt*.
 root, *rôot*, not *rôot*.
 rostrum, *rôs'-trûm*, not *rô'-strûm*.
 rutabaga, *rû-tâ-bâ'-gâ*.
 sachem, *sâ'-chêm*, not *sâch'-êm*.
 sacrament, *sâk'-râ-mênt*, not *sâ'-krâ-mênt*.
 sacrilegious, *sâk-rîl'-ê'-jûs*, not *sâk-rîl-îj'-ûs*.
 sagacious, *sâ-gâ'-shûs*, not *sâ-gâsh'-ûs*.
 said, *sêd*.
 salary, *sâl'-â-rî*, not *sâl'-rî*.
 salmon, *sâm'-ûn*.
 salve (ointment), *sâv*.
 sanguine, *sâng'-gwîn*, not *sân'-gwîn*.
 San José, *sân hô-sâ*.
 San Juan, *sân hôo-ân*.
 sarsaparilla, *sâr-sâ-pâ-rîl'-â*, not *sâs-pâ-rîl'-â*.
 satin, *sâl'-în*, not *sâl'-n*.
 Satsuma, *sât-sôo'-mâ*.
 savage, *sâv'-âj*, not *sâv'-îj*.
 says, *sêz*, not *sâz*.
 scalene, *skâ-lên'*, not *skâ-lên*.
 scared, *skârd*, not *skârt*.
 Schley, *shlî*.
 Scholarie, *skô-hâr'-î*, not *skô-hâ'-rî*.
 séance, *sê'-âns*; Fr. pron., *sâ-âns'*.
 seckel (pear), *sêk'-l*, not *sîk'-l*.

secretary, *sĕk'-rē-tā-rĭ*, not *sĕk'-ē-tā-rĭ*.
 Seine (river), *sān*.
 separable, *sĕp'-ā-rā-bl*.
 sequin, *sĕ'-kwĭn*, not *sĕk'-wĭn*.
 sesame, *sĕs'-ā-mĕ*.
 several, *sĕv'-ēr-āl*, not *sĕv'-rāl*.
 Shenandoah (Valley), *shĕn-ān-dō'-ā*, not *shĕn'-ān-dō-ā*.
 shriek, *shrĕk*, not *srĕk*.
 signora, *sĕn-yō'-rā*.
 since, *sĭns*, not *sĕns*.
 singing, *sĭng'-ĭng*, not *sĭng'-ĭn*.
 Sistine (Chapel), *sĭs'-tĭn* or *sĭs'-tĕn*.
 sleek, *slĕk*, not *sĭk*.
 slept, *slĕpt*, not *slĕp*.
 snout, *snout*, not *snoot*.
 sofa, *sō'-fā*, not *sō'-jū*.
 soften, *sōf'-n*.
 solace, *sōl'-ās*, not *sō'-lās*.
 solecism, *sōl'-ē-sĭzm*, not *sō'-lē-sĭzm*.
 sonata, *sō-nā'-tā*.
 soprano, *sō-prā'-nō*, not *sō-prān'-ō*.
 souvenir, *sōō-vū-nĕr'* or *sōōr'-nĕr*.
 species, *spĕ'-shĕz*, not *spĕ'-shĕ-ĕz*.
 spirit, *spĭr'-ĭt*, not *spĭr'-ūt*.
 spoon, *spōōn*, not *spōōn*.
 stead, *stĕd*, not *stĭd*.
 steady, *stĕd'-ĭ*, not *stĭd'-ĭ*.
 St. Louis (Missouri), *sānt lōō'-ĭs* or *sānt lōō'-ĭ*.
 stoicism, *stō'-ĭs-ĭzm*, not *stō'-ĭk-ĭzm*.
 stomach, *stūm'-ak*, not *stūm'-ick*.
 suède, *swād*.
 suite, *swĕl*, not *sūt*.
 sumach, *sū'-māk* or *shū'-māk*.
 supple, *sūp'-l*, not *sōō'-pl*.
 suppose, *sūp-pōz'*, not *spōz*.
 surprise, *sūr-prĭz'*, not *sūr-prĭz'*.
 Suwanee (River), *sū-wō'-nĕ*.
 swept, *swĕpt'*, not *swĕp*.
 syringe, *sĭr'-ĭnj*, not *sĭr'-ĭnj'*.
 syrup, *sĭr'-ūp*.
 table-d'hôte, *tā'-bl-dōt*.
 tallyho, *tāl'-lĭ-hō*, not *tāl'-lĭ-hō'*.
 Tannhäuser, *tān'-hoi-zĕr*.
 taxidermist, *tāk'-sĭ-dĕrm-ĭst*.
 technique, *tĕk-nĕk'*.
 telegraphy, *tĕ-lĕg'-rā-fĭ*.
 temperament, *tĕm'-pĕr-ā-mĕnt*, not *tĕm'-prā-mĕnt*.
 temperature, *tĕm'-pĕr-ā-tūr*, not *tĕm'-prā-tūr*.
 tenet, *tĕn'-ĕt*, not *tĕ'-nĕt*.
 tepid, *tĕp'-ĭd*, not *tĕ'-pĭd*.
 Terra del Fuego, *tĕr'-rā dĕl fū-ĕ'-gō*.
 tête à tête, *tāt-ā-tāt*.
 Thames (river in England), *tĕmz*.
 theater, *thĕ'-ā-tĕr*, not *thĕ-ā-tĕr*.
 Thoreau, *thō'-rō*.
 three-legged, *thrĕ'-lĕgd*, not *thrĕ'-lĕg-ĕd*.
 thresh, *thrĕsh*.
 Tolstoi, *tōl'-stoi*.
 to-morrow, *tōō-mōr'-rō*, not *tōō-mōr'-rū*.
 tonsillitis, *tōn-sĭl'-ĭ-tĭs*, not *tōn-sĭl'-ĕ'-tĭs*.
 tortious, *tōr'-shūs*.
 tour, *tōōr*.
 tout-ensemble, *tōōt ān-sān'-bl*.
 toward, *tō'-ĕrd*, not *tōwōrd*.
 transmigrate, *trāns'-mĭ-grāt*, not *trāns-mĭ'-grāt*.
 traveler, *trāv'-ĕl-ĕr*, not *trāv'-lĕr*.
 treacle, *trĕ'-kl*, not *trĭk'-l*.
 trichina, *trĭk'-ĭ-nā*.

tricycle, *trĭ'-sĭk-l*, not *trĭ'-sĭ-hl*.
 trilobite, *trĭ'-lō-bit*, not *trĭl'-ō-bit*.
 trousseau, *trōō'-sō'*.
 Trovatore II, *ĕl trō-vā-tō'-rā*.
 turnip, *tūr'-nĭp*, not *tūr'-nūp*.
 Tuskegee, *tūs-kĕ'-gĕ*.
 ultimatum, *ūl-tĭm-ā'-tūm*, not *ūl-tĭm-ā'-tūm*.
 umbrella, *ūm-brĕl'ā*, not *ūm-bĕr-ĭl'-ā*.
 uncivil, *ūn-sĭv'-ĭl*, not *ūn-sĭv'-ūl*.
 unctuous, *ūngkt'-yū-ūs*.
 undersigned, *ūn-dĕr-sĭnd'*, not *ūn-dĕr-zĭnd'*.
 uninterested, *ūn-ĭn'-tĕr-ĕst-ĕd*.
 unlearned (adj.), *ūn-lĕr'-nĕd*, not *ūn-lĕrnd'*.
 unlearned (part.), *ūn-lĕrnd'*, not *ūn-lĕr'-nĕd*.
 unprecedented, *ūn-prĕs'-ĕ-dĕnt-ĕd*.
 untoward, *ūn-tō'-ĕrd*, not *ūn-tō-wōrd'*.
 Urquhart, *ūr'-kwūrt*.
 used, *ūzd*, not *ūst*.
 usually, *yū'-zhū-āl-ĭ*, not *yū'-zhāl-ĭ*.
 usurp, *yū-zūrp'*, not *yū-sūrp'*.
 vagary, *vā-gā'-rĭ*, not *vā'-gā-rĭ*.
 vagrant, *vā'-grānt*, not *vāg'-rānt*.
 Valkyrie, *vāl-kū'-rĕ-ā*.
 vanquish, *vāng'-kwĭsh*, not *vān'-kwĭsh*.
 vase, *vās* or *vāz*.
 vaudeville, *vōd'-vĭl*; Fr. pron., *vōd-vĕl'*.
 vehement, *vĕ'-hĕ-mĕnt*.
 venous, *vā'-nūs*, not *vĕ'-nūs*.
 velvet, *vĕl'-vĕt*, not *vĕl'-vūt*.
 venous, *vĕ'-nūs*, not *vā'-nūs*.
 version, *vĕr'-shūn*, not *vĕr'-zhūn*.
 vessel, *vĕs'-sĕl*, not *vĕs'-l*.
 veterinary, *vĕt'-ĕr-ĭn-ā-rĭ*, not *vĕt'-rĭn-ā-rĭ*.
 vice versa, *vĭ'-sĕ vĕr'-sā*, not *vĭs'-vĕr-sā*.
 victim, *vĭk'-tĭm*, not *vĭk'-tūm*.
 Victor Hugo, *vĕk-tōr' ū-gō'*.
 Vienna, *vĭ-ĕn'-ā*, not *vĭ-ĕn'-ā*.
 vis-a-vis, *vĕz-ā-vĕ'*.
 vitriol, *vĭt'-rĭ-ūl*, not *vĭt'-rūl*.
 Vladivostock, *vĭā-dĕ-vōs-tōk'*.
 volatile, *vōl'-ā-tĭl*, not *vōl'-ā-tĕl*, nor *vōl'-ā-tĭl*.
 volume, *vōl'-yūm*.
 voluntarily, *vōl'-ūn-tā-rĭl-ĭ*, not *vōl'-ūn-tā-rĭl-ĭ*.
 was, *wōz*, not *wūz*.
 water, *wō'-tĕr*, not *wōt'-ĕr*.
 Wednesday, *wĕnz'-dā*, not *wĕd'-nĕs-dā*.
 which, *hwĭch*, not *wĭch*.
 whisk, *hwĭsk*, not *wĭsk*.
 whole, *hōl*, not *hōl*.
 whooping (cough), *hōōp'-ĭng*, not *hōōp'-ĭng*.
 widow, *wĭd'-ō*, not *wĕd'-ū*.
 Wilhelmina, *vĭl-hĕl-mĕ'-nā*.
 window, *wĭn'-dō*, not *wĭn'-dū*.
 Windsor, *wĭn'-zōr*, not *wĭnd'-zōr*.
 wistaria, *wĭs-tā'-rĭ-ā*, not *wĭs-tĕ'-rĭ-ā*.
 women, *wĭm'-ĕn*, not *wĭm'-ĭn*.
 wondering, *wūn'-dĕr-ĭng*, not *wūn'-drĭng*.
 Worcester (Eng.), *wōōs'-tĕr*.
 Worcester (U. S.), *wōōs'-tĕr*.
 Worcestershire, *wōōs'-tĕr-shĭr*.
 wrath, *rāth*, not *rāth*.
 wrestler, *rĕs'-lĕr*, not *rĕst'-lĕr*.
 Xenophon, *zĕn'-ō-fōn*.
 yacht, *yōt*.
 yellow, *yĕl'-lō*, not *yĕl'-lū*.
 yew, *yū*.
 yolk, *yōlk* or *yōk*.
 Ypsilanti, *ĭp-sĭl-ān'-tĭ*.
 Zeus, *zūs*, not *zĕ'-ūs*.
 zodiacal, *zō-dĭ'-āk-āl*, not *zō-dĭ-āk-āl*.

THIRD BOOK

LITERATURE

SHAKESPEARE AT THE COURT OF QUEEN ELIZABETH

LITERATURE

History and literature are kindred sciences, both are the written story of life which has been lived. History places before us the life of action, and the heroes of history are chiefly pioneer statesmen, soldiers, merchants, inventors, leaders of industry. Literature presents the inner life of thought and emotion and ideals. Its pages are written for us by historians and novelists and poets and philosophers. Both through deed and word, history and literature reveal to us the life of a nation.

But the life of a nation is not an individual thing. There is an intercourse of nations, as well as an interdependence. Literature, as well as history, reveals the influence of this universal contact. It is only by a survey of all literatures that any single literature can be appreciated or understood. The following tables and discussions present such a survey.

COMPARATIVE VIEW OF ANCIENT ORIENTAL LITERATURES

2000 B. C. TO 1500 B. C.

INDIA. Earliest Vedic hymns in Sanskrit. These Vedic hymns were probably sung or repeated for a thousand years before they were committed to writing.

PERSIA. Earliest metrical hymns.

CHINA. Development of ideo-phonetic writing. Odes, hymns, laws, historic documents preserved by imperial decree.

HEBREW. Age of Abraham and the patriarchs. Book of Job.

BABYLONIA AND ASSYRIA. Cuneiform inscriptions on stone slabs, and on brick and clay tablets, delicate inscriptions on glass and metal. Chaldean account of the deluge compiled about 2000 B. C.

Golden age of Babylonian literature and rise of Assyrian literature.

ARABIA. War-loving tribes roving over the table lands of Arabia produced an oral literature of pastorals, rude songs, and triumphal odes.

EGYPT. Hieroglyphic inscriptions on monuments and papyri. Hermetic books (treaties on alchemy, magic, etc.).

Book of the dead, Pta-hoteph's moral treatise.

1500 B. C. TO 1000 B. C.

INDIA. Collection of Vedic hymns, embodying the system of philosophy; The Institutes of Manu, regulating moral and social life.

PERSIA. Age of Zoroaster. Compilation of the Zend, the only existing monument of a once extensive literature.

CHINA. The Five Great Classics of Antiquity, the most important of these is the Book of Changes.

HEBREW. The Age of Moses and the Pentateuch. Hebrew anthems and elegies and wisdom literature, culminating in the psalms of David and proverbs of Solomon.

BABYLONIA AND ASSYRIA. Preservation of records in royal libraries.

Inscriptions elaborately wrought on stone and terra cotta. Chief cities made depositories of royal libraries. Babylonian literature rich in fiction, astrology, law, grammar, history, mathematics, etc.

ARABIA. Inscriptions on walls, tombs, dikes, and bronze tablets.

EGYPT. Great library founded. Golden Age of Ramesis. Literature rich in epic poetry, odes, ballads, hymns, romances, fables, history, science, etc.

1000 B. C. TO 500 B. C.

INDIA. Ancient Vedic translations contained in great epics and lyrics. The Ramayana and the Maha-

barata are called the Iliad and Odyssey of the Sanskrit. Dramas, tales, fables, and epigrams abound.

PERSIA. Preservation and enlargement of books of sacred literature. Compilation of the Zend Avesta.

CHINA. Age of Confucius. A period of great literary activity. Compilation of the sacred learning of the Chinese by Confucius and the introduction of higher ethical ideals.

HEBREW. Songs of lamentation and prophetic books of the period of the captivity. The Idylls of Ruth and Esther.

ASSYRIA. Decline of Babylonia and revival of arts and sciences in Assyria.

ARABIA. Increase of learning among the Arabs. Development of language and literature. Three poets, Auralkeis, Tharafa, and Antar.

EGYPT. Age of decline. Simplified form of writing introduced.

LITERATURE OF INDIA

The literature of India is vast beyond all comprehension. The library of one of the kings is said to have contained so many books that a hundred Brahmans were employed in taking care of it, and a thousand dromedaries were required to convey it from place to place. Literary activity in India is as great to-day as in the past, and vast stores of learning are accumulated there.

The most ancient of Hindu literatures is the Sanskrit, a branch of the Indo-European group of languages, which includes the Persian, Greek, Latin, Teutonic, Slavonic, Celtic, and Scandinavian. The Sanskrit is supposed to bear the closest resemblance to the primitive language, from which all this group of languages sprung. It is the sacred language of the Brahmans, and although classed to-day among the dead languages, it is kept alive in the conversation and writings of the priestly caste. It has furnished a rich storehouse for European scholars.

Sanskrit appears in its most ancient form in the Vedas, which date, at least, one thousand years before Christ, and these Vedic hymns were probably sung and recited many hundred years before they were committed to writing. The history of Sanskrit literature divides into two periods, the Vedic and the classic. These periods partly overlap each other, but the later Vedic works are distinguished by the subjects with which they deal and their archaic style.

The word Veda means "knowledge," books of knowledge. These sacred books of the Brahmans are divided into four classes: (1) Rig-Veda, or lore of praise (hymns); (2) Sama-Veda, or lore of tunes (chants); (3) Yajur-Veda, lore of prayer (sacrificial rites); and (4) Atharva-Veda, devotional services (incantations), to be used in sacrifices and other religious offices. The last three Vedas are medley extracts from the Rig-Veda. Each Veda is divided into two parts, the first consisting of prayers, and the second of commandments. Six branches of Vedic science are included under the terms Vedanga, namely: phonetics, music, grammar, etymology, astronomy, ceremonials. These books also contain legends and philosophical

and scientific discussions, as well as religious teachings, for the Sanskrit literature belongs to an imaginative and creative, as well as a serious and thoughtful, people.

An ancient Hindu work of great importance, is the Code of Manu, dating, at least, one thousand years before the Christian era. The institutes of Manu regulated the moral and social life of the people, and prescribed punishments. Purity of life was strictly enjoined. Two interesting epic poems belong to the classic period, the Mahabharata, a semi-historical poem, treating of ancient rivalries and wars, and the Ramayana, a religious poem, describing the incarnation of Vishnu.

The later Sanskrit, dating about one hundred before Christ, is varied in its theme, but lacks the dignity of thought, which characterizes the early Sanskrit.

Many speculative philosophies have had their birth in India, some of them in strict opposition to the teaching of the Vedas. Five centuries before the Christian era a newer and purer religion was taught by a monk of royal birth. He was afterwards known as Buddha, the Enlightened One. He taught his people to live in charity, one with another, to practice truth and morality, to overthrow caste, and to abolish Brahman sacrifices. The sacred books of Buddha are called the Tripitka, one of them is metaphysical, one disciplinary, and one contains the discourses of Buddha. They are written in a dialect of the later Sanskrit, and are very voluminous, containing more than five times as much matter as in both the New and Old Testament. The followers of Buddha are said to number over three hundred millions. Buddhism is not only one of the great religions of India, but it has millions of followers in Thibet, China, Japan, Corea, and all the countries of the far East. It would be impossible to acknowledge the full indebtedness of Western literatures to the literary thought of India. We have borrowed from every department, but nowhere have we found richer treasures than in romance and fairy tale. Stories written in far-away India have been the delight of our story-tellers, and many of the fairy tales of our nurseries were first written for the joy of some Hindu child. India is rich in literary treasures, and we are richer because we have borrowed from these treasures.

PERSIAN LITERATURE

The earliest language of Persia is the Zend, which is closely allied to the Sanskrit. The Vedic Aryans and the Zend-speaking Aryans originally belonged to one community, and spoke one language. Both language and literature reveal this unity of origin. We find similarities in their cuneiform inscriptions. Like the Sanskrit of India, the earliest literature of Persia is preserved for us in the sacred writings. These are known as the Zend-Avesta, Living Word.

The Avesta is among the most important of the sacred writings found in the whole range of Indo-European literatures. These writings are attributed by the Persians to Zoroaster, who lived probably twelve or fifteen centuries before

the Christian era. Little is known of Zoroaster, but it is said that like Buddha he was the great teacher who reformed the religious system of his country. The Parsees, or Fire-Worshippers of India and Persia are to-day the followers of Zoroaster.

The Avesta, though attributed to Zoroaster, is not the work of a single man, but, like the Vedas, is made up from fragments, which had been repeated orally, and thus brought down through generations. It is a collection of professed revelations, instructions concerning ways of living, prayers and confessions made to some Supreme Being and to inferior gods, simple hymns, some of which are grand, both in word and thought. The Avesta recognizes One Supreme Being, and exhorts to a pure way of living. "Forsake the wrong," says Zoroaster, "and choose one of the two spirits, Good or Base; you cannot serve both."

Besides the Zend-Avesta, there are two other sacred books, one a book of prayers and hymns, and the other prayers to the Genii of the days. The religion of Zoroaster prevailed for many years in Persia. The Greeks adopted some of the ideas into their philosophy, and through them its influence was extended over Europe.

When the Greeks under Alexander (331 B. C.) conquered Persia and burned the capital at Persepolis, they destroyed many inscriptions and valuable records in the great library, which had been collected by the Persian kings. After the Greek conquest, the Persian language was forced to give place to the language of their conquerors, first the Greek, and then the Arabic speech of the Mohammedans.

In the Ninth Century, A. D., native dynasties were restored, and from this time dates modern Persian literature, which flourished for nine centuries. But the literature of modern Persia is very unlike that of the ancient Empire. Greek thought, together with the arts and sciences of Arabia and the religion of Mohammed, had transformed the life and spirit of the people, and we find an entirely different literature in this later period. Satires, love ditties, songs, and religious hymns appeared, and many names are found of minstrels who belonged to the Tenth Century. The first Persian poet who impressed his stamp upon every form of poetry was Rudagi. About 1000 A. D., Prince Kabus is quoted as the author of the "Perfection of Rhetoric" and also of poems. A generation later Ansari wrote much verse in honor of the king.

To these same centuries belong Dakaki and Firdusi, court poets; Tabari, court historian; Dadi, the great moral teacher; Hafiz, the writer of love lyrics and pleasure songs; Omar Khayyam, so well known from the excellent translations of his quatrains into English.

CHINESE LITERATURE

The literature of China leads us back to the remotest past in an almost unbroken line of writings. The prose writings of the Chinese philosophers, plain, grave, and concise renderings of moral maxims, and the primeval poetry, including the oldest temperance ode in the world, were preserved in the Sacred Books, edited by Confucius.

The first published book on record in China is the "Book of Changes," dating originally about 1150 B. C. Little is known of this mysterious book, but it was evidently a treatise on philosophy, and centuries later it became the foundation for a book of divination. The "Book of History" is a compilation made by Confucius from old manuscripts, records of years between 2400 B. C. and 700 B. C. The "Book of Rites," the real guide of Chinese life, was also compiled from ancient sources and is said to be the work of a duke living sometime between 1200 B. C. and 1100 B. C. This "Book of Rites" is still the ceremonial which is the soul of the Chinese. These are the most important of the books known as the "Five Classics." Following these are the "Four Books," all by followers and pupils of Confucius. Together they form a body of records or annals, written in brief paragraphs with no literary form, simple statements of fact or doctrine. They might be considered mere curiosities of literature, but for their unbounded influence over a great nation. This influence is easily understood upon closer acquaintance for the recorded sayings, or conversations, contain the essence of wisdom, and the educated classes committed to memory pages from the Classical Books, while the wise maxims became as familiar to the people as nursery songs. The aim of all these writings was to build lofty principles of thought and action which should govern men in every relation of life. "The Great Learning," based upon the older teachings, shows political knowledge and judgment in its suggestions. These great books directed the people with such words as:

"The ancients wishing to order the empire, first ordered well their own states. Wishing to order well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified the heart."

"What a man dislikes in his superiors, let him not display in the treatment of his inferiors."

"Learn the past, and you will know the future."

Commentaries by the thousands have been written on these books, and form a great body in Chinese libraries.

Mericius (317 B. C.), the last and greatest apostle of Confucius, has been called the Plato of his nation. He was the first to maintain the goodness of human nature unmolded by education. The spirit inherent in the Chinese classics was, "Walk in the trodden paths" and seek wisdom from ancient teachings. Mericius threw his influence into society about him, insisted upon changes in his degenerate age and used humor and satire to sharpen his discussions.

Printing was invented in China about 600 A. D., and was then chiefly used in publication of chronicles of information or history. Each dynasty has its official chronicle, making a history of the nation from the Third Century B. C. to the middle of the Seventeenth Century.

The system of Chinese education has tended to compress the minds of the students into a narrowness of thought, but this helped observation of detail and may account for the value

of their topographical works, which are scarcely equaled in any other literature. Historical and literary encyclopedias are well arranged and have been closely studied by European authors, who speak highly in their praise.

The first great thoughts of this seemingly prosaic and practical people were put in the form of poetry, and their songs and ballads date back beyond any knowledge of authors. In the time of Confucius (550-478 B. C.) there was an official collection of some 3,000 songs, which he arranged and from which he made his Book of Odes. The subjects of these odes are from the everyday life and simple ways of antiquity. They are written in rhyme and give most pleasing pictures with delicate touches. Epic poetry, so conspicuous in India, is wholly lacking in China, the historical romance taking its place. Dramas abound, but in very primitive form, while didactic poems are common, official documents being sometimes issued in this form.

In China is found the philosophy of Confucius, prominently ethical; the philosophy of Tao, almost purely material; and the philosophy of Buddha, preëminently metaphysical. These seem to hold a joint power over the people and effects of this mixture can be traced in their literature. Many discussions in moral philosophy are popular among Chinese scholars, but they have, also, romances of all kinds, light poetry and works on history, geography, and travel. The Chinese are a reading people. Translations are bringing books out from their hoard of treasures, helped by a well-executed dictionary of the Chinese language.

The countries of Burmah, Siam, and Thibet are related to China by having the same monosyllabic language. To each of these nations belongs, also, a valuable literature, reaching back to antiquity.

HEBREW LITERATURE

Hebrew literature stands first among the literatures of antiquity. A universal significance has been given to it on account of the remarkable influence it has had in forming the thought of Christian and Mohammedan nations. From it we get our Bible, which gives us our revelation of God and our fundamental ideas of worship. Hebrew literature reaches back to remote antiquity. It is the story of a people who believed themselves selected by God to be the conservators of His revelation. It is the marvelous story of a race, which for thousands of years endured captivity, dispersion, wars, and persecution of every kind, and yet preserved its nationality, its peculiarities of worship, its laws and language, traditions and literature. In its deep religious spirit, in credibility, and in the vigor of its poetry, it far surpasses the literature of any other nation of antiquity. It constitutes a remarkable monument of the early history and spiritual development of the human race. Hebrew law has been studied and imitated by lawmakers of every nation and, like their literature, is unsurpassed in originality and vigor of expression.

Only a small part of the great mass of Hebrew writing has come down to us. Of this, the most important is that contained in the Hebrew

Scriptures. The composition of the books of the Old Testament Scriptures extends from the time of David to the Maccabees, a period of at least 900 years. Before this, like all ancient peoples, the Hebrews by oral tradition handed down their sagas, songs, fragments of history, inscriptions, laws, and priestly registers.

The prevalent idea of Hebrew literature is Monotheism, and a belief in themselves as the one peculiar people, chosen of God, hence their passionate enthusiasm for independence and the preservation of their nationality. While other nations were creating their divinities marred by human passions, and were painting them in the glowing colors of their poetry, as engaged in wars and feasting, sensuous love or hate, revenge or revelry, the Hebrew poets pictured their God in the most sublime language, simple, just, severe. "God is a Spirit, and they that worship Him must worship Him in spirit and in truth." Love and wisdom are His attributes; power and majesty are His, and yet paternal care and wisdom. In this contemplation of Jehovah the Hebrews reached the very source of enthusiasm, which caused their poets so fervently to utter the denunciations and promises of the Eternal in a tone suited to the inspired of God. Under whatever form they wrote, law, prophecy, history, lyric poetry, philosophy, or speculation, God and His providences are their special theme.

The simplest division of the literature of the Hebrews is into the four following periods:

The first period, extends from remote antiquity to the time of David. It includes all the records of patriarchal civilization transmitted by tradition previous to the age of Moses, and contained in the Pentateuch, with the book of Joshua added. The earliest literature belonging to this period seems to have been lyrics and laws circulated from mouth to mouth without the aid of written copies, and thus handed down as oral tradition from generation to generation. As early as the reign of David a scribe was attached to the royal court, and from that time on we have written records.

The second period extends from the time of David to the death of Solomon. To this period we refer the Psalms of David, the Songs of Solomon, the Proverbs, Ecclesiastes, Joshua, Judges, Samuel, Kings, and Chronicles.

The third period extends from the death of Solomon to the return from the Babylonish captivity, and to this age belong the writings of the prophets of the captivity and the book of Esther.

The fourth period extends from the return from the Babylonian captivity to the present time. To this time belong the writings of the New Testament, the writings of Josephus, of Philo of Alexandria, and the rabbinical literature.

The epoch of the captivity marks the beginning of Jewish literature properly so called as distinct from the earlier Hebrew. It is founded on the earlier and more creative Hebrew. It retains the fundamental religious thought, but both language and imagination are modified by contact with Persian, Greek, and Roman civilization, and by the forms of Arabic poetry and scientific study as introduced from Europe.

Since the return from exile, Jewish literature has contributed richly toward the cultivation of the human mind, and in the writings of the Jews, known as rabbinical literature, lie concealed the richest treasures of centuries.

The most important of this later literature is the Talmud. The word Talmud signifies learning and the work itself is a vast storehouse of learning and of speculation. It treats of every conceivable subject and depicts incidents in the life of the people, not only of the Jews, but of other nations as well. There are separate works on civil and criminal law, religious philosophy, psychology, education, mathematics, medicine, magic, gardening, music, astrology, zoology, geography, etc. It is enlivened by parables, jests, fairy tales, ethical sayings, and proverbs. It is a great wilderness of themes in the midst of which are precious treasures.

The Talmud is divided into two great divisions, which are kept distinct, (1) the laws and regulations designated as Mishna, and (2) the discussion of the laws designated as Gemara. The language of the Mishna is Hebrew; that of the Gemara, which is of later composition, is Aramaic. The Aramaic, both in Palestine and Babylonia, drove out the Hebrew as the popular speech.

A remarkable correspondence exists between parts of the Talmud and the gospel writings. The authority of the Talmud was long considered second only to the Bible.

It was not until the second century A. D. that the writings contained in the Talmud were systematized into a code. In the Fifth Century, A. D., the Babylonian rabbis composed new commentaries known as the Babylonian Talmud.

Sayings taken from the Talmud:

"Even when the gates of heaven are shut to prayer they are open to tears."

"Turn the Bible and turn it again for everything is in it."

"Teach thy tongue to say, 'I do not know.'"

"Thy friend has a friend, and thy friend's friend has a friend: be discreet."

"The soldiers fight, and the kings are heroes."

During the middle ages rabbinical learning flourished. Schools were established in Spain, Portugal, France, Italy, Germany, to which flocked the scholars of the world. In the Sixteenth Century there was a great revival of interest in the study of Hebrew language and literature, and again in the Nineteenth Century. At the present time there are several schools for the study of rabbinical literature. Among the most celebrated of these schools are the seminaries at Padua, Berlin, and Metz.

BOOKS OF THE BIBLE ANALYZED BOOKS OF THE OLD TESTAMENT

PENTATEUCH

Genesis. Account of creation, early history of the human race, and story of the patriarchs.

Exodus. Account of the exodus and the giving of the moral law by Moses.

Leviticus. Development of the nation and institution of priestly law.

Numbers. Further development and institution of social and political law.

Deuteronomy. Recapitulation of history and law.

HISTORIC BOOKS

Joshua. Conquest of Canaan, and separation of the tribes.

Judges. History of Israel under the administration of thirteen Judges.

Ruth. An Idyll of Jewish life in the period of the judges.

Samuel. Establishment of the kingdom under Saul and David.

Kings. Political history of the kingdoms of Judah and Israel.

Chronicles. Priestly history of the kingdoms of Judah and Israel.

Ezra. Continuation of Chronicles. Priestly restoration after the captivity.

Nehemiah. Continuation of Ezra. The political restoration.

Esther. A story of the Hebrew captivity.

POETRY

Job. A drama of the soul.

Psalms. Book of hymns.

Songs of Solomon. Hebrew pastoral poems.

DIDACTIC POETRY OR BOOKS OF WISDOM

Proverbs. Practical moral maxims.

Ecclesiastes. Practical moral reflections.

MAJOR PROPHETS

Isaiah. The Messianic prophet.

Jeremiah. The prophet of sorrow.

Ezekiel. The priestly prophet.

Daniel. The apocalyptic prophet.

MINOR PROPHETS

1. Hosea.

2. Joel.

3. Amos.

4. Obadiah.

5. Jonah.

6. Micah.

7. Nahum.

8. Habakkuk.

9. Zephaniah.

10. Haggai.

11. Zechariah.

12. Malachi.

BOOKS OF THE NEW TESTAMENT

Biography. Life of Christ as found in the four gospels, Matthew, Mark, Luke, John.

Historical. History of the Apostolic Church as given in the Acts of the Apostles.

Epistles. Continuation of the history of the Apostolic Church as given in the

PAULINE EPISTLES

Romans,

Corinthians, I and II,

Galatians,

Ephesians,

Philippians,

Colossians,

Thessalonians I and II,

Timothy I and II,

Titus,

Philemon,

Hebrews.

GENERAL EPISTLES

James,

Peter, I, II,

Prophetical.

John I, II, III,

Jude.

The Apocalypse or Book of Revelation.

ASSYRIO—BABYLONIAN

Cuneiform inscriptions which characterize early Persian tablets are found abundant in the Euphrates Valley, and point to a common Aryan origin. Very little is known of Assyrio-Babylonian literature, but abundant material awaits the faithful student in the inscriptions scattered all through the valley. The Persians preferred to write on stone, but the people of the Euphrates region used the soft clay so abundantly at hand.

The golden age of early Babylonian or Chaldean literature extends from 2000 to 1500 B. C. Before this period, however, important works had been written in Chaldea. The oldest Chaldean book is a work on astrology. The oldest known specimen of Chaldean writing is a set of bricks thought to have been made about 2000 B. C. A translation of the inscriptions on the face of one of these bricks reads in this way: "Beltis, his lady, has caused Uruk, the pious chief and king of Ur, king of the land of Accad, to build a temple to her." From a volume of Chaldean hymns, somewhat similar to the Rig Veda, is found a hymn written in most

exalted language to Istar, the Babylonian Venus. The Babylonian cities very early became the seats of learning. Oral traditions were written on clay tablets and these, collected, formed the famous tile libraries. These libraries were rich in works on ethics, astrology, law, mathematics, grammar, history, fiction. As in all the literature of the East, fables abound.

With the decline of Babylon (1500 B. C.), the Assyrian empire takes its rise. For six centuries the Assyrians confined their literary activity to the old archives and historical records, but in the reign of Shalmæser II, 858-823 B. C., there was a revival of learning, and Cabah became the seat of letters. Later, the library begun at Cabah was removed to Nineveh. There it reached vast proportions and under Sardanapalus II, 667-547 B. C., it contained ten thousand engraved tablets. This wonderful library contained grammars, lexicons, law-books, astrology, mathematics, books of magic, omens, rituals, books of prayer and song. These books were all catalogued and put into the charge of librarians for the instruction of the people. With the fall of Nineveh, 625 B. C., the library was buried in the ruins of the palace.

Later, Babylon under Nebuchadnezzar, 601-561 B. C., succeeded as the seat of power and a great revival of learning followed. Again a great royal library became the wonder of the world, and again it was overthrown and buried in the ruins of this later Babylon.

Among the valuable records recovered from these buried libraries are tablets which relate the story of the Creator, the fall of Man, and the Deluge. These tablets must have been copied from older records, which date earlier than the Pentateuch.

ARABIAN LITERATURE

The Arabs were a nomadic people, and among such a people literature and the arts of peace are of tardy development. Before the time of Mohammed, Seventh Century before Christ, these dwellers on the vast table-lands of Arabia had no prose composition, but they were essentially a poetic people. They gave vent to their fancies in rude war songs and pastorals and metrical tales. Fragments of their verse, composed at least one thousand years before Christ, have been preserved in their inscriptions.

In the Fourth and Fifth Centuries, A. D., poetry had become to them a refined art, and metrical contests were yearly established at the festival of Okad. The most renowned poets crowned at these festivals were Antar, Amralkais, and Tharafa. Their poems were suspended in public places, where all might read, and the victors were awarded prizes at the public expense. Deep passion, fertile imagination, richness of imagery, and metrical skill are the chief characteristics of all Arabian poets. Their passionate tales of love, revenge, or war, rendered in musical cadences, have peculiar power over the listener. They have been repeated to us in the "Thousand and One Nights" and other fanciful stories borrowed through translation.

In the Seventh Century, A. D., dawned a new era in Arabian life. It was due to the teaching

of a prophet Mohammed or Mohamet. The doctrine taught by Mohammed is called "Islam" or "Mohammedanism." Its fundamental principles are contained in two articles of belief: "There is no God but God; and Mohamet is God's apostle." The Koran is the name of the volume containing the doctrines and precepts of Mohammed, in which his followers place implicit confidence. The aim of the Koran, as stated, is to bring all to the obedience of Mohammed as the prophet and ambassador of God, who was to establish the true religion on earth. With sword and pen Mohammed's disciples went out to their task of conquering the world. The story of their wars has been written in history, but their intellectual conquests were as great. In every department of thought there was new life, and for centuries Arabian scholars became the teachers. They expounded the Koran and their schools became the centers of learning, where science and literature were encouraged.

The Seventh and Eighth Centuries, during the reigns of Haroun Al-Raschid and Al-Mamur, are counted as the golden age of Arabian letters. During these centuries universities were established at Bagdad, Bokhara, Bussora, and a little later in Spain and Italy. Great libraries were also established. These universities contributed greatly to the spread of knowledge. They encouraged the literature of geography and travel, and developed a clear, direct, and concise style of writing history. They encouraged arts and sciences, and in medicine, astronomy, geometry, arithmetic, Arabic scholars became the teachers of the world. During the Tenth and Eleventh Centuries, sometimes known as the "dark ages" of European learning, the University of Cordova became a refuge for scholars.

The influence of Arabian literature on modern thought is very great, we cannot estimate it. The study of Arabic is engaging the attention of scholars, not only for its historic value but for its literary worth.

EGYPTIAN LITERATURE

The literary remains of ancient Egypt relate chiefly to its history or its religion. Such remains consist of papyrus manuscripts, sculptures, inscriptions and tablets found in the tombs, temples, and in the ruins. The earliest

characters used in writing are the hieroglyphic inscriptions. The earliest of these date as far back as twenty-five centuries B. C., and the latest as recent as 250 A. D. Two other simpler forms of writing, the hieratic and the demotic, succeeded the hieroglyphic. The difficulty of reading those ancient symbols made it impossible for modern scholars to study the literature of ancient Egypt, but the discovery of the Rosetta stone in 1799, furnished a key for the unlocking of these treasures.

Many inscriptions have been deciphered by aid of the Rosetta stone, but from a literary point of view they have disappointed expectations. The variations are meager and broken, and, with a few exceptions, there is very little beauty of language or color to the imagination. There is no progressive development, but a sameness of style pervades all periods up to the Fifteenth Century B. C.—the age of Ramesis II., at whose court Moses was brought up "in all the learning of the Egyptians."

The ancient Egyptians are spoken of by Herodotus as "surpassing all others in the reverence they paid their gods." The most important religious work is the funeral ritual or Book of the Dead, one of the many sacred books sometimes called the Hermetic Books. The Book of the Dead contains a collection of prayers of a magical character and refers to the future condition of the disembodied soul. Similar to the Book of the Dead is the Book of the Lower Hemisphere. The Book of the Breath of Life treats of the resurrection and the subsequent existence of the soul.

One of the most ancient inscriptions, Ptah-Hotep's famous treatise on piety and filial obedience, recalls the proverbs of Solomon. A few hymns to Egyptian deities have been preserved. These are inferior to the Arabic, but have some beauty. There are extant copies of an epic poem by Pentaour, a writer of the age of Ramesis II., a papyrus on geometry dates about 1100 B. C., and a few papyri containing medical treatises. "The Tale of Two Brothers," by Enna, dates more than four thousand years ago. It is perhaps the oldest fairy story in the world. Legal documents, letters, histories, biographical sketches, travels, fables, parables, are all found in these fragments of ancient Egyptian literature.

GREEK LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS
Century B. C.		
900	Homer,	Iliad, Odyssey.
900	Hesiod,	Works and Days, Theogony.
700	Tyrtæus,	Elegies.
600	Sappho,	Lyrics.
600	Thales,	Astronomy and Geometry.
500	Pythagoras,	Philosophy.
500	Simonides,	Elegy, Epigrams, etc.
500	Æsop,	Fables.
500	Anacreon,	Lyrics.
500	Anaxagoras,	Astronomy.
Dates B. C.		
525-456	Æschylus,	Prometheus Bound, Seven against Thebes, Agamemnon.
433	Herodotus,	History.
522-439	Pindar,	Odes.
427	Aristophanes,	Comedy, } The Birds, } The Frogs.

GREEK LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS
480-406	Euripides,	Tragedy, { Iphigenia, } Hecuba, etc.
495-405	Sophocles,	Tragedy, { Antigone, } Electra, etc.
470-404	Thucydides,	History, Peloponnesian War, etc.
430-359	Xenophon,	History, { Memorabilia, } Cyropaedia, } Anabasis, etc.
427-347	Plato,	Dialogues, { Republic, } Phaedrus, etc.
384-322	Aristotle,	Philosophy, Organon.
382-322	Demosthenes,	Orations, { Philippics, } The Crown, etc.
380-287	Theophrastus,	Philosophy.
272	Theocritus,	Lyrics, { Death of Daphnis, } Festival of Adonis.
342-270	Epicurus,	Philosophy.
287-212	Archimedes of Syracuse,	Science and Philosophy.

The beginning of the literature of the Greeks is lost in a mass of fables, from their curious habit of personifying every feeling or experience.

Nothing definite is known of their poets before Homer. The most ancient traditional poet was Olin, followed by Linus, Orpheus, and others, but the poems left under their names cannot be relied upon as genuine.

In the poetical legends of the twelve labors of Hercules, the voyage of Theseus and the expedition of the Argonauts are the first traces of historical facts, preserved, distorted, and obscured by fables. The story of Cadmus bringing the alphabet to Greece makes one of the early tales. These stories were a part of Greek education, everyone believed them, and they made up the national religion. All this has become a part of the literature of Europe.

The Trojan War was the greatest event of the first, or heroic, age, and this was of more importance to art and poetry than to history. The poems of the first Grecian bards were written to celebrate the heroes of this war, and with these began the Epic age of Greek literature. From this time date the two great poems of Homer, the Iliad and the Odyssey, which have come down to the present day with several hymns and epigrams of which he was author. Writing was unknown, these poems were first circulated orally, and parts of them were committed to memory and recited by wandering singers. Even later, when they had been collected in writing, they were impressed upon the memory and used to excite patriotism, religious feeling, and love for the beautiful.

The poems of Homer became the foundation of all Grecian literature, and after him a class of poets endeavored to connect their work with his, calling themselves the Cyclic poets, and in their works can be found the whole cycle of tradition and mythology. They recite the birth of the gods, the creation of the world, and all the adventures of ancient times. From these poems have come the tales of the Argonauts and Hercules, the events of the Trojan War, and mythical legends telling the fate of the Greeks after the fall of Troy.

Some authorities make Hesiod contemporary with Homer, others place him two or three

generations later. His poetry has nothing of the fancy which lights up the lines of Homer, its object is to give knowledge. His poem, "Works and Days," relates the events of common life in practical fashion, interspersed with moral maxims, and is, in fact, an agricultural poem. His "Theogony" is of great importance, as it contains the religious faith of Greece. Through this poem the Greeks first found a religious code.

Until the beginning of the Seventh Century epic poetry was the only form in use except the early songs or hymns, and noble families were charmed by the recital of the deeds of their heroes in these epics. When republican movements began, these families lost something of power and privilege, a development of individuality began, and a poet dared to put his own thoughts or feelings into verse. These poems, at first, took the form of the elegy and epigram, and among writers of these are Tyrtaeus, Archilochus, and Simonides, writing between the years 694 B. C. and 664 B. C. The elegies of Solon, (592-559 B. C.) were pure expressions of his political feelings.

Æsop's name appears about 572 B. C., and among his well-known fables have been collected those from other sources. No metrical version of these fables is known to belong to early times.

Among the pleasures and amusements sought after by the Greeks, lighter poems were written intended to be sung to accompany the lute, hence called lyrics. All lyrical poetry originally consisted in cheerful songs, praises of love and wine, and exhortations to enjoy life. In this style, Anacreon was the most celebrated. In her Odes, a form of lyrics, Sappho became an object of admiration and Aleman roused valor by his martial lines.

The philosophers of this time took up practical affairs, and among them were the often quoted Seven Wise Men of Greece. Epimenides of Crete stands high on this list, closely followed by Solon and Thales, and their fame was earned by wise judgment and skill shown in their management of the offices over which they ruled. Their sayings also form the body of many maxims applied to daily practical living. As the nation grew intellectually, a habit of speculative thought also grew, and this became the

period of scientific Greek literature. Thales headed the school of Ionic philosophy which taught the material origin of the Universe. The best-known advocates of this philosophy were Pherecydes, Anaxagores, and Diogenes of Apollonia.

Pythagoras was the founder of another school known under his name, explaining another origin of all things and wandering far in speculative discussions. Xenophanes, the founder of the Eleatic school, adopted an ideal system in contrast to the principle of the Ionic school, founded on experience. Parmenides, also, belonged to this school, and by excluding the idea of creation he fell into pantheism. Zeno, a pupil of Parmenides, was the earliest prose writer among the Greek philosophers.

Toward the end of the Age of Seven Sages, some writers of history appeared, telling of distant times and events, but the first Greek to collect a well-written narrative of facts was Herodotus (484 B. C.) His work comprehends a history of nearly all the nations of the world at that time. Thucydides, historian of the Peloponnesian War, was also a philosopher, considering all events in a grave manner, and expressing himself in strong condensed sentences. The charming narration of Xenophon stands in strong contrast to this energetic sternness, and in his simple, tranquil style is found the greatest beauty of Greek prose. Of these three historians, Herodotus has been called the first artist in historical writing and Thucydides the first thinker. Xenophon combined the literary with the practical, he wrote of men of the past, and of affairs of his own time. His *Anabasis* is a modest account of his own leadership of the Ten Thousand in their retreat after the battle of Cunaxa.

Grecian drama was formed from popular festivals at which rustic worshipers, gathering around the altar of some god, sang a hymn in his honor, especially to Dionysius, the God of Wine. Those songs soon developed into dialogue form, making the elements of the drama. Æschylus (525 B. C.) is known as the founder of dramatic art, he divided the song, brought skillful actors and gave to each a part. The three greatest writers of Greek tragedy were Æschylus,

Sophocles, and Euripides. Aristophanes holds the highest place as writer of comedy.

In this same period the prose literature of Greece rose to its highest culture. Public speaking had been common in Greece, and among the orators of Athens, Pericles, aided by the rhetorical studies of the Sophists, exerted great influence upon the Greek mind. Lysias gave the new form of plain style, Isocrates established a school of political oratory, and Demosthenes excelled all, using the common language of his own age and country, and appealing to the feelings and sentiments of his listeners. Æschines was the rival of Demosthenes.

When Socrates came into philosophy he gave it a new direction, taking the study of human nature, or psychology, in place of theories and speculations. He left no written record but his genius worked on his followers and among them Plato best expressed his principles. The writings of Plato still stand first in philosophical literature, showing beauty of diction as well as power in handling thought. Aristotle, a pupil of Plato's, holds a place equal to that of his teacher. His science of reasoning has been taught in all later schools. He put into form the thoughts of Plato and Socrates, and worked out a complete system of philosophy. Epicurus, born seven years after the death of Plato, established what is known as the Epicurean School of Philosophy. He gathered about him a remarkable group of men and women and taught the practical art of living. His followers became rivals of the Stoic School.

The practical mind of the Greeks found expression in mathematics and engineering. In the Third Century B. C., Euclid laid the foundations for our modern geometry, and a generation later Archimedes demonstrated the principles which underlie all engineering.

In 146 B. C., Greece fell under the rule of her conquerors, and her living literature died with her political independence. A few poets continued to sing, and philosophers and historians continued to write, as Menander, Strabo, Plutarch, Epictetus, Lucian, Julian; but her glory is in the past, and it is of her early poets, dramatists, philosophers, we speak, when we recall Greek literature.

LATIN LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS
B. C.		
254-184	Plautus,	Comedy, { <i>Aulularia</i> , <i>Captivi</i> , <i>Pseudolus</i> , etc.
220-130	Pacuvius,	Translation Greek tragedy.
239-169	Ennius,	<i>Annales</i> , <i>Thyestes</i> , etc.
185?-159	Terence,	Comedy, { <i>Andria</i> , <i>Phormio</i> , <i>Adelphi</i> , etc.
234-149	Cato the Elder,	<i>De Re Rustica</i> , <i>Origines</i> .
103	Lucilius,	<i>Satires</i> .
116- 28	Varro,	<i>On Agriculture</i> .
99- 54	Lucretius,	<i>De Rerum Natura</i> .
100- 44	Cæsar, Julius,	<i>Commentaries</i> .
106- 43	Cicero,	<i>Orations</i> , <i>Essays</i> , <i>Letters</i> .
82- 40	Catullus,	<i>Lyrics</i> .
86- 34	Sallust,	History, { <i>Catiline Conspiracy</i> , <i>War with Jugurtha</i> , <i>Memoirs</i> .
28?	Nepos,	History, <i>Biographies</i> .
70- 19	Virgil,	<i>Georgics</i> , <i>Æneid</i> .
65- 8	Horace,	<i>Odes</i> , <i>Satires</i> , <i>Letters</i> .

LATIN LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS
A. D.		
59- 17	Livy,	History of Rome.
43- 18	Ovid,	Heriodes, Metamorphoses, etc.
3- 65	Seneca,	Investigations, Moralistic Essays.
A. D.		
39- 65	Lucian,	Pharsalia.
23- 79	Pliny the Elder,	Natural History.
40-120?	Juvenal,	Satire.
42-118	Quintilian,	Rhetories and Critics.
54	Tacitus,	Germany, History, Annals, etc.
61-115	Pliny the Younger,	Epistles.
72	Suetonius,	Lives of the Cæsars.
470-525	Bœtius,	De Consolatione Philosophiæ Translations.

The first name in Latin, commonly called Roman, literature is that of Livius Andronicus, date about 240 B. C. Some germs of poetry may be found in the traditional songs belonging to a more ancient time, but these had little influence on real literature. The Roman mind turned to practical living and study of science and law. In other nations the first literature has been put in the form of poetry, among the Romans the first literary effort was history. These original historical documents were a simple record of facts with no touch of opinions or sentiments.

The greatest change in the intellectual condition of the Romans came through influence of the Greek captives, who were employed to teach their own language, which soon became a part of the education of a Roman noble. In the year following the First Punic War (241 B. C.), Livius Andronicus, one of the Greek slaves, substituted a drama in place of the medley of songs used in public amusements or games. He made the first Latin translation of Greek in these plays, which he, himself, wrote and acted. His words became text-books in Roman schools and were used until the time of Virgil. His immediate successor, Nævius, also adapted plays from the Greek, but the tastes of his audience and the condition of the language, developed through business and action, made comedy his choice. After him, Plautus and Terence were the two great comic poets of Rome.

Ennius (239-169 B. C.) is known as the "father of Latin song," and he gave a new direction to Roman literature, closely following Greek models and, turning from the commonplace to the heroic, he borrowed greatly from Homer. His *Annals*, a poetical history of Rome, was for two centuries the national poem. Ennius was the inventor of the name, satire, but the sharp, fierce satires of Lucilius, written at this time against the vices and follies of the Romans, were more noted, and fragments of them still exist. Not one of these poets was born in Rome.

The name of Cato belongs partly to this same generation, and he represented the pure, native element; prose belonged far more to the genius of Rome than poetry. Cato heads the list of Roman historians whose works belong to literature, his greatest work, "*Origines*," was a history of all Italy from earliest times. His *De Re Rustica* was a commonplace book on agriculture and domestic economy, written in rude and unpolished style, but clear in statement and

striking in illustration. He filled many high offices, was known as an able pleader, and was the first to publish his speeches, and ninety of these orations have come down to this day.

The chief representatives of the next age are Cicero, Cæsar, Sallust, Lucretius, and Catullus, and these names still rank among classical writers. Cicero gave a fixed character to the Latin language and through him oratory at Rome took on a new form; he was both orator and critic. To him philosophy also owes much, especially the philosophy adapted to practical application, and in his letters he pictures Roman life of his day and with it Roman history. The most important work of Cæsar is his commentaries, sketches made in the midst of action. The histories of Sallust are of more value in an artistic way than as trustworthy narrative, but they rank high as political studies.

An entirely new spirit entered into the literature of Rome during the time known as the Augustan Age (42 B. C. to 17 A. D.), arising from the new political life of the nation. The earliest and greatest poet of this age was Virgil, who idealizes national glory in his *Æneid*, and the simple, hardy life of Italy in his "*Bucolics*" and "*Georgics*." Horace, the second poet of his time, shows the ways of living and of thinking in his "*Epistles*," "*Epodes*," and "*Satires*." The great historical work of Livy is, however, the most systematic record of the national life. Phædrus, in his fables, gave lessons suggested by those times, but with his observations he had little imagination.

In the century following the Augustan age the antagonisms between the government and the makers of literature gave rise to the satires of Juvenal and the somber history of Tacitus. In this time we also find Quintilian, the great teacher of rhetoric, Seneca, the author of treatises on ethics, and Pliny, the elder, with his wonderful natural history. The doctrines of the stoics suited the stern Romans, and Seneca studied the Stoic philosophy, but his treatises are records of precepts rather than explanations of principles. To this age, Juvenal, the Satirist, belongs, and with these names the term classical, signifying pure literature, is lost. The Romans began again to write in Greek, and to this Greek influence was soon added that of foreign nations. Roman literature, as one of the great literatures of the world, ended.

The Latin Fathers of the Church followed the philosophy of Plato, adapting it to Christianity. Among these were Tertullian, St.

Ambrose, and Laetantius, best known by his work "Divine Institutes," St. Augustine (360-430 A. D.), left his record in his "City of God," and St. Jerome made a Latin version of the Old Testament.

Legal writers were many, and from them came the "Digest," "Code," "Institutes," etc., the foundation of what is now known as the Roman Law.

SCANDINAVIAN LITERATURE

The scant allusions to Scandinavians found in classical literature refer to the people of Denmark and the southern part of Sweden. The languages of the different countries comprising Scandinavia are closely allied and the old Scandinavian, or Icelandic, was the literary language of all these lands until about the year 1100.

The northern sea rovers, in the Viking days, had settled along the coasts of the Western Islands, and when Iceland was discovered, in the middle of the Ninth Century, these people, headed by a widow of a king of Dublin, became settlers in the new land. From these colonies came a poetry which in beauty and power was not equaled in any Teutonic language for centuries. This poetry took the form of lays, dirges, battle songs, and songs of praise, and in the mass are also found genealogical and mythological poems which seem to have been written in honor of one famous family. To a certain shrewdness, plain straightforwardness, and a stern way of looking at life, was added a complex form and a regularity of rhyme, caught from the Latin and Celtic poetry. Scarcely a name among the authors of this poetry is known, the exact dates of the writings cannot be found, but they were the result of the spirit of the old Vikings who led lives of wild adventure, in war and storm, coming into contact with the cultivated imagination of the more civilized races. The Saga, or prose epic, was also a form of literary expression in those early days.

It has been said that in Iceland the art of poetry took the place of music and a mocking or a laudatory verse was common writing. The first generation of Icelandic poets have been likened to the troubadours of other lands; nearly all were of Celtic ancestry, they attached themselves to the kings and earls of neighboring lands, shared their adventures and made verse in which they praised their victories and recorded their deaths. The Saga was the outgrowth of this verse and is the story of some hero. In its purest form it belongs to the days of the Eleventh Century when the descendants of heroes recited the exploits of their ancestors and of the great kings of Denmark and Norway. The later Sagas show Irish influence. When these had been transmitted orally through two or three generations they were written down and this became the form followed by all scholars. In the Thirteenth Century the Saga was lost in plain biography. A work known as the "Sagas of the Norwegian Kings" gives a connected series of biographies of the kings of Norway to the middle of the Twelfth Century. This was composed by the Icelandic historian Snorri (1178-1241), the greatest author known in old Scandinavian literature. During this century

the Norwegian kings employed Icelanders in translating the French romances of Charlemagne and Arthur and these made the "Romantic Sagas."

Two remarkable collections in this old literature are known under the title of "Edda," the translation of the word, or title being great-grandmother. In the one known as the "Prose or Younger Edda" is a strange sort of history of the gods or mythical kings. This was probably written during the last half of the Twelfth Century and said to have been completed by Snorri in the year 1222. The "Elder" or poetic "Edda" was collected in Iceland. The poems belong to the Eighth or Ninth Centuries, and treat of the earliest Scandinavian legends. From the "Eddas" comes our knowledge of Scandinavian mythology and ancient religious faith.

"Annals" are the sole material for the early history of Iceland and these end with the year 1430. Of many theological works the one most noted was "John's Book," written late in the Seventeenth Century, plain in style and much read. Proverbs and folk-tales were plentiful, and have come down to the present day.

Among earlier languages we find no Swedish and no literature of Sweden existed before the Thirteenth Century. The oldest form in which it is found as a written language is in a series of manuscripts known as the "Common Laws." Another eode, "On Conduct of Kings," a handbook of morals and politics was collected and both these belong to the Thirteenth Century. The name of St. Bridget, or Birgitta, an interesting character in history, is found in connection with religious works, the most important being a collection known as "Revelations," a record of her visions and meditations to which her father-confessor added a version of the first five books of Moses. The translation of the Bible was continued by the monk Budde, who died in 1484.

The earliest specimens of Swedish poetry are the folk-songs of uncertain date. The first book printed in the Swedish language appeared in the year 1495. Neither the Renaissance nor the Reformation much influenced literature in Scandinavia. The Carmelite monks, the two brothers Petri, studied theology under Luther and went back to Sweden to teach the new faith. They wrote psalms and plays, and Olans Petri found time to add an historical "Chronicle."

The last half of the Sixteenth Century was a blank save for the literature connected with the University of Upsala, which had been founded in the year 1477; but under the reign of Charles IX. (1600-1611) literature gained life with the general prosperity of the country. Bureus, the royal librarian studied all known sciences and made a jumble of his own convictions, recording them in several unreadable volumes. Through his patient study, however, he roused interest in a knowledge of Scandinavian language and mythology. The Swedish drama began during these years, the greatest dramatist being Messenius (1579-1636), whose lyrics have something of the charm of the old ballads. His first historical comedy was "Disa," and his first tragedy "Signill." He planned to write the history of his land in fifty plays, but

he finished only six. He later plotted against the government, was sentenced to prison for life, and wrote much while in prison, including a history of Sweden written in Latin. Contemporaneous with Messenius was Stjernhjelm, who has borne the title of "Father of Swedish Poetry." He traveled over Europe, was made a noble by Gustavus Adolphus, and later attached to the court in Stockholm as a sort of poet-laureate. His writings had much influence on the language itself, molding it into smoothness. He left works on philology and wrote out the letter "A" in the first Swedish dictionary. His work shows German influence, and his greatest poem, "Hercules," is an allegory written in musical verse with Oriental phrasing and imagery. He was followed by poets who wrote after French models, but the majority took Stjernhjelm, himself, as guide, and lost all independence.

Gustavus Adolphus (1594-1632) wrote polished prose and his "Speeches" hold an important place in the literature of the Seventeenth Century. In the next age was Rubeck (1630-1702), a genius in learning, who became famous through all Europe for his discoveries in physiology before he was twenty-five. He also did much toward the practical improvement of the University of Upsala, where he spent most of his life. The object of his great work, "Atland," written in Swedish and Latin, was to prove that the fabled Atlantis had been found in the Swedish nation. It has been said of these volumes that they make "a monstrous hoard or cairn of rough-hewn antiquarian learning, now often praised, sometimes quoted from, and never read."

The Eighteenth Century saw Swedish literature take solid shape. The influence of France and England crowded out German and Italian tastes, and in Dalin, a leader of his time, the effect is plain. His "Swedish Argus" was modeled on Addison's "Spectator," and his

"Thoughts About Critics" on the writings of Pope; his epic, "Swedish Freedom," and his comedy, "The Envious Man," show admiration of the French. His songs and shorter poems are specimens of skilled workmanship. The only poet who compared with Dalin at this time was Charlotta Nordenflycht, whose lyrics, collected in 1743 under the title, "The Sorrowing Turtle-dove," became very popular. She settled in Stockholm, presided over a literary salon, and was called "The Swedish Sappho."

Among other poets are Bellman, a writer of odes, Franzen, who left some noted lyrics, and Wallin, archbishop of Upsala, publisher of the national hymn-book.

In the year 1786, the Swedish Academy was formed after the manner of the French Academy, but with eighteen members, instead of forty. In 1811, the younger men of Stockholm founded the Gothic Society, intended for improvement in literary work by means of the study of Scandinavian antiquity. Two great lights in this new school were Tegner, the famous verse writer, and Geijer, more noted for his prose. Stagnelius has been compared to Shelley and his mysterious death in 1823 gave a romantic interest to his name. Runeberg (1804-1877) divides honors with Tegner, and King Oscar II. (born 1829) was a genuine poet. Fredrika Bremer, also a writer of verse, is better known through her stories which have been translated into many languages.

As an historian of Swedish literature, Wieselgren is much quoted. Anders Fryxell (1795-1881) wrote the great history of the country which appeared in parts, taking nearly sixty years in the construction, and Schlyter, born 1795, was the legal historian. Rydberg, belonging a generation later, was author of historical tales. The general revival of letters, coming at the end of the great wars of the world, was slow in Sweden.

SWEDISH LITERATURE

TIME	AUTHOR	PROSE	POETRY
1302?-1373	St. Bridget,	Common Laws.	
1484	Johannes Budde,	On conduct of Kings.	
1497-1552	Olaus Petri,	Her "revelations."	
1499-1573	Laurentius Petri,	Translation of Bible.	
1579-1636	Johannes Messenius, . . .	Chronicle of Swedish History. . .	Mystery Play.
1594-1632	Gustavus Adolphus,	History of Sweden,	Psalms.
1598-1672	Georg Stjernhjelm,	Speeches.	Poems, Lyrics.
1630-1702	Olaf Rudbeck,	Philology.	
1688-1772	Emanuel Swedenborg, . . .	Atland, Physiology.	Hercules, Masques.
1707-1780	Johan Ihre,	Philosophic.	
1708-1763	Olaf Dalin,	Dictionary, (Swedish).	
1714-1763	Jacob Henrik Mork,	History of Sweden,	Swedish Freedom, Poems, Dramas.
1718-1763	Charlotte Nordenflycht, . .	Novels.	
1740-1795	Karl M. Bellman,		Lyrics.
1754-1817	Anna Maria Lengen,		Odes.
1759-1808	Thomas Thorild,		Household Poems.
1772-1847	Franz Franzen,	Criticisms.	
1779-1839	Johan Olaf Wallin,		Lyrics.
1779-1848	Jona Bersilius,	Chemistry.	National Hymns.
1782-1846	Eemias Tegner,		Poems (most noted).
1783-1847	Erik Gustav Geijer,	History, Philology.	
1789-1877	Gustaf Gamaelius,	Historical Novels.	
1793-1823	Erik Johan Stagnelius, . . .		Dramas, Lyrics, Sonnets.
1793-1866	Karl J. L. Almqvist,	Novels (Thorn Rose, etc.).	
1795-1881	Anders Fryxell,	History.	
1800-1877	Per Wieselgren,	History of Swedish Literature. . .	
1801-1865	Fredrika Bremer,	Novels.	
1804-1877	Johan Ludwig Runeberg, . .		Poems.
1829-1895	Viktor Rydberg,	Historical Novels.	

DANISH LITERATURE

TIME	AUTHOR	PROSE	POETRY
	Neils of Sorro,	Younger Edda,	Elder Edda. History of Denmark (rhyme). Sacred Poems.
1480-1554	Mikkel of St. Albans, . . .		
1542-1616	Christian Pedersen, . . .	Tales, Translation of Bible. . .	
	A. G. Vedel,	Saxon Grammar.	
	Alfred Høitfeld,	Chronicles of Denmark.	
	Hieronymus Rauch,		Tragedies (Biblical).
1545-1623	Peder Claussen,	Description of Norway.	
1546-1601	Tycho Brahe,	Astronomy.	
1587-1637	Anders Arrebo,		World's First Week.
1616-1678	Erik Pontoppidan,	Danish Grammar.	
1634-1703	Thomas Kingo,		Psalms and Hymns.
1684-1754	Ludwig Holdberg,	History of the World.	
1694-1764	Hans Adolphus Brorson, . . .		Hymns.
1728-1798	Peter Frederik Suhm,	History.	
1736-1806	Johan Clemens Tode,	Medical.	
1742-1785	Johan Herman Wessel,		Poems.
1743-1781	Johannes Ewald,		King Christian, Lyrics, Tragedies.
1744-1812	Werner Abrahamson,	Critical.	
1751-1833	Neils Treschow,	Philosophic.	
1760-1830	Knud Lyne Rahbek,	Novels, Essays,	Dramas, Songs. Poems (humorous).
1764-1826	Jens I. Baggeson,		
1764-1827	O. C. Olufsen,	Geography, Political Economy. . .	
1769-1826	Adolph Schack-Staffeld, . . .		Lyrics.
1773-1856	Countess Gyllenbourg, . . .	Novels.	
1775-1854	Bishop Mynster,	Theological.	
1777-1817	Peter Thun Ferson,		Translation of Shakespere.
1777-1851	Hans Christian Oersted, . . .	Modern Science.	
1779-1850	Adam Gottlob Oehlenschläger,	Romances,	Hakon, Jarl, Aladdin, Gods of the North, etc. Tour in Jutland. Poems.
1782-1848	Steen Steensen Bilcher, . . .	Novels,	
1783-1872	Nikolai F. S. Greendtvig, . . .	Theological, Political,	
1783-1857	Christian Molbeck,	Dictionary.	
1787-1832	Rasmus E. Rask,	Grammars.	
1789-1852	Joachim F. Schouw,	Geography of Plants.	
1789-1862	Bernhard S. Ingemann,	Novels (Popular).	
1791-1860	Johan Ludwig Heiberg,		Lyrics, Dramas.
1791-1862	Neils M. Petersen,	History, etc.	
1789-1870	Henrik Hertz,		Lyrics, Satire, Dramas.
1805-1875	Hans Christian Andersen, . . .	Fairy Tales, Only a Player, etc. . .	
1809-1876	Frederik P. Muller,		Dramas, Poems.
1813-1842	Solomon Drier,	Zoölogy.	

By the oldest authorities the early Scandinavian language is referred to as the "Danish tongue," and what has been noted as the most precious legacy of the Middle Ages, historical and poetical, is a collection of some 500 poems known as the Danish ballads. The language in which these poems were preserved is that of the Sixteenth and Seventeenth Centuries, but they are supposed to have been composed between the years 1300 and 1500. The University of Copenhagen was founded in 1479 and the printing press set up in the city in 1490.

Referring back to the earliest days, the "Eddas" are counted on lists of Danish literature, and the story of Iceland is part of the history of Denmark. The years between 1530 and 1680 have been named as the fourth period in the development of the Danish language; here real Danish literature begins and it was the Reformation that first gave to it the living spirit. In this connection was Christian Pedersen, who worked up into their present form some half mythical stories, including that of Ogier the Dane, and made a translation of the Bible; this work was carried on later by Vedel.

The first original dramatist was Rauch, who wrote some biblical tragedies; Peter Claussen, a Norwegian by birth, left the noted "Description of Norway," and Alfred Høitfeld gave a start in history by his "Chronicles of Denmark," printed in ten volumes between the years 1595 and 1604. Anders Arrebo, writer of psalms and hymns, has been called the founder of Dan-

ish poetry, and other hymns were written by Kingo, a Scotchman by descent, who applied Scotch vigor to his work, and his "Winter Psalter" is considered a copy of fine lyrical writing. Another writer, Brorson, published a psalm-book in 1740, in which he added the best of Kingo's to his own. With these names we reach the end of the Seventeenth Century.

Holdberg, born in 1684, and Oehlenschläger, who dates nearly a century later, were the authors who had the strongest personal influence on Danish writings. Attention was first called to Holdberg by the marked style in his "History of the World," and he was soon made professor in the University of Copenhagen. He wrote comedies in prose and verse which still have freshness in matter as well as in style. Oehlenschläger created a new form in writing and roused in the people a sense of their nationality through his treatment of Scandinavian mythology. Between these authors are many noted names and among them Wessel and Ewald, both men of genius, and the German poet and dramatist, Klopstock, who settled in Stockholm, and had great German influence on Danish letters.

Early in the Nineteenth Century, the modern fabulist, Hans Christian Andersen, who seems to belong to the world, was born in Denmark. In the year 1835 appeared his first collection of "Fairy Tales" and from that time almost every year until his death, in 1875, he published one or more of these unique stories. He traveled much about Europe and in a series of memoirs

he recorded his interesting impressions. During this century Neils Petersen translated many of the sagas; Molbeck edited the first good Danish dictionary; Schouw, an eminent botanist, Dreier and Japetus, well-known zoölogists, wrote on these sciences; Kierkegaard left philosophical works, and Nikolai de Saint Aubain published some charming romances. Georg Brandes, belonging to the last half of the century, stands conspicuous in his country as an advocate for liberal culture and speculation.

Norwegian and Danish literatures are connected in much the same way as the literatures of England and America; there was the same desire of a new nation to express local emotions and condition, though using the old language. The founding of the University in Christiania in the year 1811, and the separation of Norway from Denmark in 1814, led to intellectual as well as political independence. If all Norse writers were taken from Danish literature, the close connection between the two would be more plainly marked, for many of the noted names belong to Norway.

The first book printed in Norway was an almanac brought out in 1643 by a wandering printer who carried types from Copenhagen. The earliest purely Norwegian writer who could claim originality was the wife of the pastor Bardenbeck (1634-1716), who wrote several volumes of religious poetry, morbidly devotional, which became very popular. A few real Norwegians were distinguished in science: Gunnerus, the botanist; Schoning, the historian; and Strom, the zoölogist, but these authors also wrote in Latin and Danish. In the year 1772 the Norwegian poets were so strong in Copenhagen that they formed a Norwegian society, and there is no notice of anyone counted among Danish authors who was born in Norway since the year 1800. The first independent form taken in Norwegian literature seems to be what was called the poetry of the Seventeenth of May, the date on which Norway proclaimed her king.

The acknowledged creator of this new literature was the poet Wergeland (1808-1845), who urged the worth of individual liberty and national independence, but he was imaginative and lacking in knowledge, and his writings were coldly

received by critics; a volume of his patriotic poems, however, attracted readers and resulted in making him a power in politics. A more wholesome influence was that of Welhaven (1807-1873), whose first publications were directed against Wergeland, and raised a controversy that became the topic of the day. Welhaven preached conservatism in a collection of satirical sonnets called "The Dawn of Norway," and his advice was soon appreciated and drew attention to a wider field. He did good work both as poet and critic. Contemporary with these poets, but taking no part in the feud, was Andreas Munch. Two of his historical dramas became quite popular. Another poet, Landstad, was employed by the government to prepare a national hymn-book which was published in the year 1861.

The collection of old Norse folk-tales made by Abjornsen and Bishop Moe is prominent in Norwegian literature. They began by writing down the stories of the peasants, and publishing at first in form for children's reading. The entire collection was gathered, during many years, from minstrels, boatmen, and wanderers of all sorts, and thus they preserved the ancient and historical legends.

Old Norwegian laws, Runic inscriptions and documents dealing with the mediæval history of the country have also been studied by other writers, who have published the results in different forms.

Ibsen and Bjornson were the most prominent writers in their generation, confining their work almost entirely to the drama and the novel. The name of Bjornson was made famous by his "Symnove Solbakkian," which appeared in 1857, and Arne, following in the next year. These are romantic and yet realistic stories of life among mountain peasants written in singularly attractive style. He wrote other novels and several dramas, among them a little comedy, "The Newly Married Couple," which gained immediate success, the drama, "Sigurd Slembe," also adding to his fame. Of Ibsen's dramas "Brand" and "Peer Gynt," studies of modern life, and "The Doll's House," "Ghosts," and others are well known. Norway has also historians, theologians, and scientific men, who made their mark in the literary world of the Nineteenth Century.

GERMAN LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
	Ulfilas,	Gothic Bible.	
	Conrad,		Rolandslied.
	Wolfram von Esenbach,		Parsifal.
	Unknown,		Nibelungenlied.
	Unknown,		Gudrun.
1170-1235	Hartmann von Aue,		Der Anne Heinrich.
1483-1546	Martin Luther,	German Bible.	
1488-1523	Ulrich von Hutten,		Satirical Verse.
1495-1578	Hans Sachs,		Poems.
1575-1624	Jacob Boehm,	Mysticism.	
1606-1675	Paul Gerhart,		Poems, Hymns.
1609-1640	Paul Fleming,		Poems.
1635-1728	Christian Thomasius,	First German Periodical (Ed.).	
1708-1777	Albrecht Haller,	Scientific.	
1715-1769	Christian Gellert,	Fables (moral),	Poems.
1717-1768	Johann Winckelmann,	History of Ancient Art.	
1720-1797	Hieronymus K. F. Baron von Munchhausen,	Fiction.	

GERMAN LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1724-1803	Klopstock,	Philosophy, Critic of Pure Reason.	Dramas, Messiah, etc.
1724-1804	Immanuel Kant,	Critical and Archæological.	
1729-1812	C. G. Heyne,	Laocoon, etc.,	Minna von Barnhelm, etc.
1729-1781	G. E. Lessing,	Agathon,	Oberon.
1733-1813	Ch. M. Wieland,	Philosophic,	Voices of the People.
1744-1803	T. G. Von Herder, . . .	Wilhelm Meister,	Leonore, etc.
1748-1794	G. A. Bruger,	Elective Affinities, etc. . .	Faust, Tasso, Lyrics, etc.
1749-1832	Johann Wolfgang Goethe,	Critical,	Translation, Iliad, Louise, Idylls.
1751-1826	Johann Voss,	Thirty Years' War,	The Robbers, William Tell, Wallenstein.
1759-1805	Frederick von Schiller, .		Comedies.
1761-1819	August van Kotzebue, . .	Philosophy,	
1762-1814	Johann Gottlieb Fichte, .	Hesperus, Titan, etc., . .	Poems.
1763-1825	Jean Paul Richter, . . .	Critical,	
1767-1835	Wilhelm von Humboldt, .	History, Scientific,	Patriotic Songs, etc.
1769-1860	Ernst W. Arndt,	Philosophy,	
1768-1834	F. D. Schleiermacher, . .	Science, Cosmos, etc., Travels.	
1769-1859	Alexander von Humboldt	Philosophy, Leben Jesu, . .	
1770-1831	George W. Hegel,	History of Literature, Lucinde.	
1772-1829	Friedrich von Schlegel, .	History of Rome, etc. . . .	
1776-1831	Berthold Niebuhr, . . .	Univ. History,	
1776-1861	F. C. Schlosser,	Undine, etc.	
1777-1843	Karl de la Motte Fouque, .	Geography (noted),	
1779-1859	Carl Ritter,	Swiss Family Robinson, . .	Lion's Bride, Poems.
1781-1830	Johann R. Wyss (Swiss), .	Peter Schlemihl,	
1781-1838	Adalbert von Chamisso, .	German Mythology, etc. . .	
1785-1863	Jacob Grimm,	Household Tales (with Jacob Grimm),	
1786-1859	Wilhelm Grimm,		
1786-1862	A. T. Kerner,		Lyrics.
1787-1862	Ludwig Uhland,		Ballads.
1788-1860	Arthur Schopenhauer, . .	Philosophy,	
1789-1850	Johann Neander,	History of the Church, . . .	
1791-1813	Karl T. Körner,	Sketches,	Lyre and Sword, etc.
1797-1856	Heinrich Heine,	Theology, History,	Poems.
1799-1890	Johann T. Dollinger, . .	Commentaries, Theology, . .	
1802-1884	Johann P. Lange,	Critical, Shakespere, etc. .	
1805-1871	G. G. Gervinus,	The German War, and other Novels,	
1806-1884	Heinrich Laube,	On the Heights, etc. . . .	Poems, Lyrics.
1812-1882	Berthold Auerbach, . . .	Historical Fiction,	
1814-1873	Louise Mulbach,	History of Greece, etc. . .	
1814-1886	Ernst Curtius,	Philosophy, History, . . .	
1820-1900	Edouard Zeller,	Novels,	Poems, Dramas.
1816-1895	Gustav Freytag,	Metaphysik, Logik,	
1817-1881	Rudolf H. Lotze,	History,	
1817-1903	Theodor Mommsen, . . .	Scientific,	
1817-1895	Karl Vogt,	History (Rome, etc.)	
1819-1857	Albrecht Schwegler, . . .	Archæology,	
1822-1892	Heinrich Schliemann, . .	Novels,	Poems.
1830	Paul Heyse,	Orientalism, Novels, . . .	
1837-1898	George M. Ebers,	Philosophy,	
1842-1906	Edouard Hartmann, . . .	Novels, Travels,	
1848-1904	Karl E. Franzos,		

At the beginning of the First Century the Germans had ancient poems relating to their gods and the forefathers of their race. It is also believed that the stories of "Reynard, the Fox," and "Isengrin, the Wolf," may be traced back to those remote times, brought by the Teutons from Asia.

When these tribes began to accept Christianity the Church considered the native German traditions as heathenish monstrosities, and tried to suppress them. Charles the Great was the first to check this movement by putting together the beginnings of a German grammar and by issuing orders for the collection and preservation of old German poetry. The only remnants of this poetry left to us are the Anglo-Saxon "Beowulf," with a fragment of the old low German song of "Hildegard," and the Icelandic "Edda."

During the reign of Charles the Great and his son, Louis the Pious, learning was zealously cultivated by the monks of Germany, and

schools were established among them, but the chief subject of their study was scholastic philosophy. One of the monks, who died in the year 1022, wrote original philosophical books and translated works from Italy. As the clergy became the chief support of the government and connected with the daily life of the people a different class of writings arose. Scenes of actual life were pictured, and the fiction, although it came from cells of monks and the cloister school-rooms, was thoroughly realistic. An example is a work known as the first novel of Modern European literature, the "Ruodlieb," written by an unknown monk about the year 1030. Under the form of a story of love and adventure is given a vivid picture of German life of that day.

There are well-written Latin histories belonging to the Eleventh Century, but the best thought of that age was expressed in architecture rather than in writing.

About the year 1200, the order of knights took the place of the clergy, leading in literature. It was in poetry that Germany gained her highest distinction, and her most important poets at this time were of the knightly class. The crusades had much influence and led to the poetical romances of the Twelfth and Thirteenth Centuries. Among the poets the names of Wolfram von Eschenbach and Gottfried of Strasbourg stand first, with Walter von der Vogelweide perhaps the most popular of them all.

A few poets of this age of chivalry took up the legends of their own land, and the most important of them was he who collected and put into shape the ancient ballads which make up the *Nibelungen-lied*. Gudrun is another epic which puts into form a collection of legends. Latin was the speech of scholars and poetry the passion of writers, leaving small chance for the growth of prose, but two great collections of local laws had influence in gaining respect of the Germans for their own language, and this was the first serious attempt to secure for German prose a place in literature.

About the middle of the Thirteenth Century preaching became an agency of great power. The new preaching orders of the Franciscans and the Dominicans were given special privilege to speak on any day and in any place, thus they came in touch with the people and grew wider in thought. Most popular among these preachers was Brother Berthold, an orator and a writer of high rank. The next early writer of religious prose, Echart, became the founder of the Mystic School. The most important writers of the Fourteenth and Fifteenth Centuries are the monks of this school, whose works form the link between the great age of the Crusades and the greater age of the Reformation. The well-known "Imitation of Christ," by Thomas à Kempis (died 1471), belongs to this class.

With the Sixteenth Century begins the modern history and modern literature of Germany. Luther (1483-1546) and the Reformers belonged to the people, and in literature, not less than in religion, Luther was the commanding spirit of his age. His greatest work was his translation of the Bible, simple and strong, and in a language that the nation could understand. Germans instantly felt its charm. Up to this date each author had written in a dialect with which he was familiar, Luther's Bible, for the first time, gave to the nation a literary language and a common speech. The hymns of Luther are noted for vigor of style and high devotional feeling. Melancthon, Ulric von Hutten, and Zwingli, with other leaders of the movement, were distinguished scholars. Arnd and Jacob Boehm, theologians, Hans Sachs, the leading poet, Paracelsus and Cornelius Agrippa, mystic philosophers, belong to this century, with Albert Durer, scholar and painter, and Gesner, the naturalist.

Soon after the close of the Sixteenth Century Germany was desolated by the Thirty Years' War (1618-1648). This desolation caused a whole generation to grow up in ignorance, and the religious lyric seemed the only class of literature fitted to the conditions. Hymns took the place of the old ballads. Paul Gerhart (1606-

1675) was the greatest hymn writer with worthy associates among the Protestants and some of the wiser Jesuits. Prose writers of the Seventeenth Century were generally either artificial or coarse. Among numberless romances, one, *Simplicissimus*, by Grimmelhausen, has qualities bordering on genius. In form of fiction it is a story of the Thirty Years' War.

Under the rule of Frederick the Great, beginning in the year 1740, literature shared in the general prosperity. Prose writers on theology and philosophy grew more liberal, and the poets, Klopstock and Lessing, changed the tone of German writing. The influence of Kant (1724-1804) brought a host of philosophical writers and critics with new thoughts. Kant's new ideas embodied in his work, "Critique of Pure Reason," and the doctrines he there taught, or explained, have since been known as the Critical Philosophy. Lessing and Herder were philosophers as well as poets, and Lessing's book, "Education of the Human Race," enlarged the field of historic inquiry in Germany. Herder had a fine enthusiasm for human happiness which lights up both his prose and poetry. Fichte (1762-1814) carried the new doctrines to extremes, teaching that the life of the mind was the only real life; while Schelling, writing a few years later, in his "Philosophy of Identity," modifies this by supposing an intuition and making it superior to reason. The most profound philosophical study may be found in Hazell's "Absolute Thought." This habit of studying into the mysteries of being made the noted German philosophy that has affected literature in all countries.

Herder roused and directed the young genius of Goethe (1749-1832), thus helping to give to Germany the writer who holds place equal to Shakespeare in England, and Dante in Italy: Goethe belongs to the world rather than to one country. Late in the Eighteenth Century Goethe Schiller, Herder, and Wieland settled at Weimar, making it the center of intellectual life. Goethe's drama, "Gotz von Berlichingen," had given him place as poet, and his sentimental tale, "The Sorrows of Werther," made him known throughout Europe. During his friendship with Schiller they wrote many ballads and lyrics, but his longer poem, "Herman and Dorothea," was more successful. "Tasso" and "Faust" are best known among his dramas, and "Wilhelm Meister" as his philosophical prose work. Schiller's tragedy, "The Robbers," was received with enthusiasm, but its revolutionary ardor brought criticism. Among his poems, "Maid of Orleans," "William Tell," and the "Song of the Bell," are the best known. His "Wallenstein" is the greatest drama in the German language. Goethe's narratives of travel, his autobiography, and his scientific works are also much read. The principal prose works of Schiller are "History of the Netherlands" and "History of the Thirty Years' War." In this period belong, also, Voss, author of the poem "Louise," and Burger, who wrote the well-known "Leonore" and "The Wild Huntsman." Uhland, whose first volume of poems was published in 1815, was one of the best writers of lyrics, and his epic of "Ludwig der Baier" ranks high.

Among other poets are Arndt, author of the national song, "German Fatherland," Ruckert, also an Oriental scholar, and Heinrich Heine, whose collection of lyrics, "Buch Der Lieder," is known in all European literature.

First among the well-known scientists of Germany stands Humboldt and his "Cosmos," presenting in popular form the results of years of scientific work. Liebig in chemistry, Virchow in biology, Helmholtz in study of sight and sound, and Hæckel with his Darwinian investigations, have made their subjects intelligible and interesting to the ordinary reader.

In the list of German historians are the names of Ranke, Niebuhr, and Dahlmann; Hauser, who wrote the elaborate "History of Germany"; Schlosser, author of a universal history; Neander, whose "Life of Christ" holds place with his "History of the Church"; and Mommsen, whose works enrich all literature. Historical

fiction closely follows history, and the novel holds an important place in Germany. Tieck, as a writer of romance, first attracted attention by "Bluebeard" and "Puss in Boots." In later novels, he dealt with modern life and associated with Schlegel, a literary critic, he finished a German translation of Shakespeare, which shows mastery of verse, form, and language. E. T. A. Hoffman, another novelist, wrote grotesque, ghostly tales, and the strange genius of Jean Paul Richter shone out in his prose idyll, "The Years of Wild Oats," and "Selections from the Devil's Papers." Hesperus, Titan, and Flower, Fruit and Thorn Pieces are his best, and show striking effects with simplest subjects. Fouque is noted as author of the little master-piece "Undine," and in later days, Freytag, Auerbach, and Paul Heyse claim attention. Modern Germany is rich in all departments of literature.

FRENCH LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1079-1142	Pierre Abelard,	Epistles, Philosophy.	Chanson de Roland.
1150-1213	Lorris and Meung,	Conquest of Constantinople.	Roman de la Rose.
1224-1319?	Ville — Hardouin,	Chronicles.	
1337-1410	Jean Froissart,	Chronicles.	
1431-1500	Francois Villon,		Ballads.
1445-1509	Phillipe de Comines,	Memoirs.	
1483-1553	Francois Rabelais,	Philosophy, Satire.	
1509-1564	John Calvin,	Institutes of Religion, etc.	
1524-1585	Pierre de Ronsard,		Sonnets, Odes, etc.
1533-1592	Michel E. de Montaigne,	Essays.	Poems.
1555-1628	Francois de Malherbe,		
1596-1650	René Descartes,	Philosophy.	
1606-1684	Pierre Corneille,		The Cid, Tragedy, Comedy.
1610-1660	Paul Scarron,		Comic Plays, etc.
1613-1680	Francois de la Rochefoucauld,	Maxims, Memoirs.	
1621-1695	Jean de la Fontaine,		Fables, Contes, etc.
1622-1673	Jean B. Poquelin (Moliere),		Comedies, Le Misanthrope, etc.
1623-1662	Blaise Pascal,	Philosophy, Mathematics.	
1626-1696	Mme. de Sevigne,	Letters.	
1627-1704	Jacques Bossuet,	Sermons, etc.	
1632-1704	Louis Bourdaloue,	Sermons (Jesuit).	
1639-1690	Jean Racine,		Tragedy.
1651-1715	Francois de la Fenelon,	Telemaque, etc.	
1661-1741	Charles Rollin,	Histories.	
1663-1745	Jean Massillon,	Orations (religious).	
1668-1747	Alain Rene le Sage,	Gil Blas, etc.,	Translations.
1657-1757	Bernard Fontenelle,	Dialogues of the Dead, etc.,	Tragedies.
1694-1778	Francois M. Arouet (Voltaire),	Theology.	Poems, Dramas.
1707-1778	Comte de Buffon,	Natural History.	
1712-1778	Jean Jacques Rousseau,	Fiction, Philosophy, Ethics.	
1713-1784	Denis Diderot,	Fiction, Encyclopedie (Ed.)	
1715-1780	Etienne de Condillac,	Metaphysics.	
1719-1776	Elié Freron,	Biography.	
1723-1799	Jean Francois Marmontel,	Memoirs, etc.	
1732-1799	A. de Beaumarchais,		Comedies.
1737-1814	Henri B. de Saint-Pierre,	Paul and Virginia.	
1746-1830	Mme. de Genlis,	Novels.	
1749-1791	Comte Mirabeau,	Orations, etc.	
1757-1820	Constantin de Volney,	Ruins, etc.	
1760-1836	Claude Rouget de l'Isle,		Marseillaise.
1766-1817	Mme. de Stael,	Delphine, Corinne, etc.	
1767-1839	Jean Francois Michaud,	History of the Crusades, etc.	
1768-1848	Francois Chateaubriand,	René, Genius of Christianity.	
1769-1832	Baron de Cuvier,	Atala, etc.	
1772-1832	Francois Fourier,	Natural History.	
1780-1857	Pierre de Béranger,	Socialism (Fourierism).	
1790-1869	Alphonse de Lamertine,		Lyrics.
1792-1867	Victor Cousin,	History of the Girondists, etc.,	Poems.
1795-1856	Jacques N. Thierry,	Philosophy, Metaphysics.	
1797-1877	Louis Adolphe Thiers,	History of France, etc.	
		French Revolution, History of the Empire, etc.	
1798-1857	Auguste Comte,	Positive Philosophy.	

FRENCH LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1798-1865	Joseph Xavier Boniface,	Picciola, etc.	
1789-1874	Jules Michelet,	History of France.	
1799-1850	Honoré de Balzac, . . .	Novels, Comedies of Human Life, etc.	
1799-1864	Alfred Victor Vigny, . .	Cinq Mars, etc.	
1802-1885	Victor Hugo,	Novels (Les Misérables, etc.) . . .	Lyrics.
1803-1870	Alexander Dumas, . . .	Novels { Count of Monte Christo, Three Musketeers, etc.	
1803-1870	Prosper Mérimée, . . .	Novels.	
1804-1857	Eugène Sue,	Mysteries of Paris, Wandering Jew.	
1804-1869	C. A. Sainte-Beuve, . .	Criticisms, etc.	
1804-1876	Mme. Dudevant (George Sand),	Lelia, Consuelo, etc.	
1805-1859	Alexis de Tocqueville, .	Political Science.	
1810-1857	Alfred de Musset, . . .	Novels.	Poems, Dramas.
1810-1883	Louis Henri Martin, . .	History of France.	
1811-1872	Theophile Gautier, . . .	Criticisms, Novels,	Poems.
1811-1883	Leonard S. J. Sandeau, .	Novels.	
1821-1880	Gustav Flaubert,	Novels.	
1821-1890	Octave Feuillet,	Novels.	Dramas.
1822-1899	Emile Erckmann,	Novels (with Chartrain).	
1823-1892	J. Ernest Renan,	Life of Jesus, etc.	
1824-1895	Alexander Dumas (fils), .	Novels, Biography.	
1826-1890	Alexandre Chatrian, . .	Novels (with Erckmann).	
1827	Père Hyacinth,	Orations (Pulpit).	
1828-1893	H. A. Taine,	History of Literature, etc.	
1828-1885	François About,	Novels.	
1828-1905	Jules Verne,	20,000 Leagues Under the Sea, Round the World in 80 Days, etc.	
1831	Victorien Sardou,		Dramas.
1835-1903	Paul du Chaillu,	Travels, Natural History.	
1840-1897	Alphonse Daudet,	Novels.	
1840-1902	Émile Zola,	Novels.	
1842	François Coppée,		Poems, Dramas.
1850	Louis Viaud (Pierre Loti),	Novels, Travels,	
1850-1893	H. R. Guy de Maupassant,	Novels, Short Stories.	

The most ancient documents in the French language date from the Ninth to the Eleventh Centuries, but real French literature began much later. There are a hundred of the "Chansons de Gestes," including the famous "Chanson de Roland." Their origin is not known, but they date earlier than the songs of the troubadours. Following these were the epics, "Arthurian Romances," written from the legends of the Round Table, and later the "Romances of Antiquities," also narrative forms, treating of the conquests of Alexander and other classical stories. A fourth form in prose and verse, included "Shorter Stories" which cannot be classified. These four divisions make the literature of early France.

In earliest days poetry was used for all literary purposes and French verse is the first in modern European speech. "The Romance of the Rose," a long poem which is really prose, except for the measure of the verse, is an ancient work that gained the attention of the people of France, and no book was ever more popular. This was written by two authors, Guillaume de Lorris, who lived in the first half of the Thirteenth Century, commenced it, and it was continued and finished by Jean de Meung, who died in the year 1320. It is both a love poem and a satire and put in form of allegory. In it are found the characteristics of the later Middle Age, its mysticism, its chivalry, its science, and its shrewd criticism.

In the Tenth or Eleventh Centuries Indian tales were translated into Latin, probably by the monks, and these, with legends from Arabia,

brought by the Moors into Spain, became common to all literature. In France, during the Twelfth and the Thirteenth Centuries, tales written in verse, the collection known as "Fabliaux," appeared, and these simple, gay stories are treasures of invention from which other nations have often borrowed. Among these "Reynard the Fox," a poem, or a series of poems, is well known and for two centuries, with its companion, "Isengrin, the Wolf," it formed the basis for an endless variety of songs, poems, and satires, moral applications and generalizings. One of the most interesting of the Fabliaux, "Aucassin and Nicolette," gave the subject for the well-known opera.

It has been claimed that Latin comedy was never lost and was handed on chiefly through the convents, but when the public had forgotten ancient drama an impulse was given to this form of writing in France by the pilgrims returning from the Crusades. At the end of the Fourteenth Century dramas were produced, called the "Fraternity of the Passion" and comprehending the whole history of Christ. In these dramas dialogues of the devils were made to fill in the comic parts. Other dramatic writings followed, based on parables and historical parts of the Bible, or they became pure allegory mingled with farces, and there is hardly an abstraction, a virtue, or a vice which did not find place in these compositions. Early in the Fifteenth Century a comic company brought political and personal satire into their plays and dialogues, made from the fables, and thus began the Romantic Drama of Europe.

In all literatures of which we have record, prose is later than verse. The document containing copy of the oaths exchanged between Charles the Bold and Louis the German, in the year 842, is probably the oldest French prose. In the Tenth Century some charters were written in French, and in the eleventh the Laws of William the Conqueror. The Twelfth Century shows translation of the Bible and the Romances. History is the first subject in prose writing and is generally recorded in the form of chronicles. Each of these centuries has, in France, one gifted chronicler to describe it. Ville-Hardouin writes of the Twelfth Century, Joinville of the Thirteenth, and Froissart of the Fourteenth. "Froissart's Chronicles," though simple story, forms a history of the different states of Europe from the year 1322 to the end of the century. Philippe de Comines (1445-1509) has been noted as the last of the quartette of great French mediæval historians. He was an annalist, like Froissart, but he was, also, a political philosopher and an unscrupulous diplomat. He dwells on character rather than on scenes or events in his memoirs.

Standing equal with the early histories in French are the short stories in comic form, and among these is the "Cent Nouvelles Nouvelles," which is the first work of literary prose in the language. The authorship of this collection of tales is not fixed, the themes are the old fables, but this remarkable work, with its simple and straightforward style, had great influence on later writers and was the first of a long series of literary works, romances in miniature, in which French writers excel all others.

The discovery of a new continent, the downfall of Constantinople, and the end of feudalism were the great events of the Fifteenth Century that changed the literary world of France. The invention, or use, of printing made readers in place of listeners. French enthusiasm turned to the study and imitation of the ancient Pagan world and it was this revival of antique learning that took the name "Renaissance." By the beginning of the Fifteenth Century the effect of the Renaissance was nearly lost in Italy, in Germany it had only opened the way to a national literature with little influence in itself, but in France this century was filled with great writers in every line.

Francis Rabelais (1483-1553) holds high rank in the world, as well as in his own country, as a learned philosopher and scholar. The work which brought to him popular fame, however, was the "Lives of Gargantua and Pantagruel," a tale of the adventures of two gigantic heroes, father and son, with a drunken, fighting, swaggering monk and a witty minstrel who played practical jokes. With all this it is a commentary on the thoughts, feelings, and acts of the nation put into attractive literary form, a mirror of the Sixteenth Century. It was the book of the day and went into many editions.

By the side of Rabelais stands John Calvin (1509-1564), and his work, "Institutes of the Christian Religion," has been called the textbook of the Reformation. This book, written first in Latin, then translated by the author, had great influence on future thought and was the beginning of an argumentative prose. Cal-

vin was severe both in logic and doctrine, and turning from this severity, while not believing in the Church policy of that day, many drifted into skepticism. The literature of this skepticism, or doubt, is best represented by the "Essays" of Montaigne (1533-1592). In these essays he undermined all the creeds of the day, but offered nothing in their places. Inquiry and protest had given way to placid contentment in the belief that there was not much to be known on these subjects and that it did not much matter.

The appearance of the "Cid," founded on the Spanish romance, changed the form of dramatic writing and brought fame to the author, Corneille (1606-1684). The dramas of Racine soon followed and Moliere wrote his comedies, in which he assailed the follies of society. The best of these are "Le Misanthrope" and "Tartuffe." To this time belongs the well-known La Fontaine, prince of fable writers, and Perrault, who wrote prose tales. Richelieu, who founded the French Academy in 1635, Colbert and Louis XIV. were patrons of all learning, and the French language, distinguished for its clearness and flexibility, became the language of all literary Europe. In this age Fenelon wrote his famous "Telemaque," which has served as an introduction to the study of French language and literature. Fenelon, with Bourdaloue, Bossuet, and Massillon, were brilliant examples of a pulpit oratory which has never been surpassed in any age or country.

Political and military disasters of the last years of the reign of Louis XIV. checked all literary development, and the beginning of the Eighteenth Century has been named as one of the dead seasons of French literature. Later, a kind of free-thinking optimism arose and showed itself most distinctly in the writings of Voltaire (1694-1778), whose genius gave light to his age. His universal faculty showed itself in both verse and prose, his plays and verse-tales were admirable, and his epistles and satires, the best among their kind, were sufficiently good to bring banishment to their author. After his long exile, spent in England and Germany, he returned to the writing of history and philosophy.

Jean Jacques Rousseau, born early in the Eighteenth Century, had, also, great influence in his literary world. He began with dissertations on music, adding comedies, tragedies, and prose romance. His greatest work, the "Confessions," was finished not many years before his death (1778). In style, or manner of expression, his writings hold absolute fascination; he was a bold and independent thinker, but his sympathy with humanity saved him from the cynicism of Voltaire.

Le Sage, the first great novelist of this century, went to Spain for the subject of his "Gil Blas," and the Spanish inspiration and manner brought popularity. Marmontel, Louvet, and Bernardin de St. Pierre, author of "Paul and Virginia," were also noted novel writers. The brilliant, sparkling letters of Madame de Sevigne gave what has been considered the most complete record of court and social life. Montesquieu belongs to the first half of this century, and his "Spirit of Laws" has taken rank as a

standard work on jurisprudence. Beaumarchais wrote the well-known "Barber of Seville," and among the few lyric poets of the time Lebrun and Chenier stand worthy of mention. Rouget de Lisle, in the "Marseillaise," gave the finest lyric known in the language.

Chateaubriand filled many diplomatic places under the Bourbon rule, but was not free from exile, during which time he published his first book (in 1797), the "Essay on Revolutions." He found the subject for his "Atala" while among the Indians in America. Madame de Stael spent the years of the French Revolution in England and Switzerland, and while there wrote essays, dramas, and political pamphlets. She is best known by her later romance, "Corinne," and her "De L'Alle Mange." The last brought German literature to the notice of French readers. Beranger is named the first song-writer of France and his songs and ballads are known in all homes. These three writers seem to stand between the days of Voltaire and Rousseau and the beginning of modern French literature.

Volumes of ballads and romance in verse, written by Victor Hugo and Alphonse de Lamartine, belong to later poetry, and with these authors Alfred de Musset claims place. Among dramatists are Gozlan, Delavigne, and Sardou, with others who bear equally distinguished names.

French historical and political writers influence the world, and of these the best known may be Lamartine, Thiers, Michelet, Guizot, and De Tocqueville. Cousin and Comte have offered new views in philosophy, and the name Renan is known among all interested in theological questions. Many of these writers hold, also, a place in oratory which has risen to a high position in France.

The influence of later French romance shows in the modern literature of all countries, and Balzac (died, 1850) has been considered one of its pioneers. Eugene Sue delights in subjects that call for exciting adventure, and his books, "Wandering Jew" and "Mysteries of Paris," have been much read. Alexander Dumas, well known by his "Monte Christo" and almost numberless semi-historical romances, was master in his line, and Victor Hugo would stand as a brilliant writer on the merits of his wonderful "Les Miserables" alone. This and various other of his romances have been translated and widely read in different languages. Madame Dudevant, known by her readers as George Sand, was a strikingly original writer of fiction, and her "Consuelo," "Indiana," and "Andre" show a harmony of treatment and simplicity of language that mark them as masterpieces.

ENGLISH LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
	Unknown,		Traveller's Song.
	Cædmon,		Beowulf.
672- 735	Bede,	Ecclesiastical History,	Paraphrase of Scripture.
804	Aleuin,	Letters, Biographies,	Poems.
750	Cynewulf,		Crist, Elene, Andreas, etc.
849- 901	Alfred the Great,	Translations,	
1006	Alfric,	Homilies, Grammar,	
1095-1142	William of Malmesbury,	History of Kings of England,	
1154	Geoffrey of Monmouth,	Legendary History of English Kings,	
1112-1184	Wace, Richard,		Romance of Rollo.
1150-1210	Layamon,		Brut d'Angleterre.
1187-1237	Ormin,		Chronicles of Britain.
1214-1294	Bacon, Roger,	Natural Science, Philosophy,	Ormulum (paraphrase).
1300-1371	Mandeville, Sir John,	Travels,	
1332-1400	Langland, William,		Piers, the Plowman.
1324-1384	Wycliffe, John,	Translation of Bible,	
1325-1408	Gower, John,		Ballads, Lover's Confession.
1325-1400	Chaucer, Geoffrey,		Canterbury Tales, Short Poems.
1430	Malory, Sir Thomas,		Morte d'Arthur.
1412-1492	Caxton, William,	The Game of Chess,	
1460-1517	Dunbar, William,	Translation of Æneid,	Thistle and Rose, Golden Terge.
1480-1535	More, Sir Thomas,	Utopia, Life of Edward V.,	
1484-1536	Tyndale, William,	Translation of Bible,	
1503-1542	Wyatt, Sir Thomas,		Sonnets and Lyrics.
1517-1587	Fox, John,	Book of Martyrs,	
1536-1608	Sackville, Thomas,		Mirror for Magistrate.
1552-1599	Spencer, Edmund,		Fairie Queen.
1552-1618	Raleigh, Sir Walter,		Shepherd's Calendar.
1554-1586	Sidney, Sir Phillip,	History of the World,	
1553-1600	Hooker, Richard,	Arcadia,	
1561-1626	Bacon, Francis,	Ecclesiastical Laws,	
1564-1616	Shakespeare, William,	Essays, Novum Organum (phil.)	Dramas, Sonnets (37 plays).
1557-1634	Chapman, George,		Translation of Homer.
1574-1637	Jonson, Ben,		The Alchemist, etc.
1586-1616	Beaumont, Francis,		Philaster.
1576-1625	Fletcher, John,		Maid's Tragedy.
1576-1640	Burton, Robert,	Anatomy of Melancholy,	Woman Hater, etc.
1593-1633	Herbert, George,		The Temple, etc.
1591-1674	Herrick, Robert,		Poems.

ENGLISH LITERATURE — Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1593-1683 1608-1661	Walton, Isaak, Fuller, Thomas,	The Compleat Angler. Church History of England, etc.	
1608-1674	Milton, John,	Areopagitica,	L'Allegro and Il Penseroso. Comus, Paradise Lost, Paradise Regained, etc.
1613-1667 1612-1680 1615-1691 1628-1688	Taylor, Jeremy, Butler, Samuel, Baxter, Richard, Bunyan, John,	Holy Living, etc. Saint's Rest. Pilgrim's Progress, Holy War.	Hudibras.
1631-1700 1632-1703	Dryden, John, Pepys, Samuel,	Diary. On Human Understanding, Essay,	Virgil Translated, St. Cecilia's Day, etc.
1632-1704	Locke, John,	Thoughts on Education, etc.	
1642-1727 1661-1731	Newton, Sir Isaac, Defoe, Daniel,	Principia, etc. Robinson Crusoe.	
1667-1745 1671-1729	Swift, Jonathan, Steele, Sir Richard,	Tale of a Tub, Gulliver's Travels. Essays (established The Tatler).	
1672-1719 1684-1753 1684-1765	Addison, Joseph, Berkeley, Bishop, Young, Edward,	Essays in } The Tatler, } The Spectator. Philosophy.	Night Thoughts.
1689-1761	Richardson, Samuel,	Clarissa Harlowe, Pamela, Sir Chas. Grandison.	
1688-1744 1692-1722 1700-1743 1700-1748	Pope, Alexander, Butler, Bishop, Carey, Henry, Thomson, James,	Natural and Revealed Religion.	Essay on Man, etc. Sally in our Alley, etc. The Seasons, etc.
1707-1754	Fielding, Henry	Tom Jones, Amelia, Jonathan Wild, etc. Dictionary,	
1709-1784	Johnson, Samuel,	Rasselas, Lives of the Poets, History of England.	Vanity of Human Wishes.
1711-1776 1713-1768	Hume, David, Sterne, Laurence,	Tristram Shandy, Sentimental Journey.	
1716-1771 1721-1771	Gray, Thomas, Smollet, T. George,	Humphrey Clinker, Roderick Random, etc.	Elegy in Country Churchyard, etc.
1721-1770 1723-1790	Akenside, Mark, Smith, Adam,	Wealth of Nations.	Pleasures of the Imagination.
1728-1774 1723-1780	Goldsmith, Oliver, Blackstone, Sir Wm.,	Vicar of Wakefield, Essays, Commentaries on Laws of England.	She Stoops to Conquer. Deserted Village, etc.
1730-1797 1731-1800 1737-1794	Burke, Edmund, Cowper, William, Gibbon, Edward,	Essays, Orations, Decline and Fall of Roman Empire.	The Task. John Gilpin, etc.
1740-1795 1743-1805	Boswell, James, Paley, William,	Life of Samuel Johnson. Evidences of Christianity, Natural Theology.	
1745-1833 1751-1816	More, Hannah, Sheridan, Richard B.,	Coelebs in Search of a Wife, Speeches,	Sacred Dramas. The Rivals, School for Scandal, Song, etc. Cotter's Saturday Night, etc.
1759-1796 1767-1849 1770-1850 1770-1835 1771-1854 1771-1832 1771-1845 1772-1834 1774-1843 1775-1834 1775-1864 1775-1817 1776-1850	Burns, Robert, Edgeworth, Maria, Wordsworth, William, Hogg, James, Montgomery, James, Scott, Sir Walter, Smith, Sidney, Coleridge, Samuel T., Southey, Robert, Lamb, Charles, Landor, Walter Savage, Austen, Jane, Porter, Jane,	Popular Tales, etc. Shepherd's Calendar, Waverly Novels, etc., Sermons, Essays, etc. Essays, etc., Biogs. of Nelson, Wesley, etc., Essays of Elia, etc., Imaginary Conversations, etc., Pride and Prejudice, Emma, etc. Scottish Chiefs, Thaddeus of Warsaw.	The Excursion, Poems. Pastorals, Hymns, Poems. Lady of the Lake, etc. Rhyme of Ancient Mariner, etc. Poems. Count Julian, Heroic Idyls, etc.
1777-1844 1777-1859	Campbell, Thomas, Hallam, Henry,	Europe during Middle Ages, Introduction to Literature, Constitutional History of England.	Pleasures of Hope, Lyrics, etc.
1778-1830 1779-1852 1785-1859	Hazlitt, William, Moore, Thomas, De Quincey, Thomas,	Table Talk, English Poets, etc., Biographies, Confessions of an Opium Eater, etc.,	Lalla Rookh, Irish Melodies, etc.
1784-1859 1785-1854 1788-1824	Hunt, Leigh, Wilson, John, Lord Byron,	Essays, Sketches, Memoirs, Noctes Ambrosianæ, etc.,	Poems. Poems. Poems.

ENGLISH LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1792-1822	Shelley, Percy Bysshe,	Peter Simple, Jacob Faithful, etc.	Queen Mab, etc.
1792-1848	Marryat, Capt. Fred., . .		Lyrics.
1794-1835	Hemans, Felicia,	History of Greece,	
1794-1871	Grote, George,	Roman History, Sermons, Es-	
1795-1842	Arnold, Thomas,	says,	
1795-1881	Carlyle, Thomas,	French Revolution, Cromwell, etc.	
1796-1821	Keats, John,		Endymion, Hyperion, etc.
1797-1868	Lover, Samuel,	Handy Andy, Rory O'More, . .	Songs, Ballads.
1799-1827	Pollock, Robert,		Course of Time.
1798-1845	Hood, Thomas,		Poems.
1800-1859	Macaulay, Thomas B., . .	Essays, History of England, . .	Lays of Ancient Rome.
1801-1860	James, G. P. R.,	Novels (historical),	
1802-1856	Miller, Hugh,	Old Red Sandstone, Schools and Schoolmasters, etc.	
1802-1876	Martineau, Harriet, . . .	Political Economy, etc.	
1805-1873	Lytton, Sir Edward Bulwer, . .	Last Days of Pompeii, Last of the Barons, etc.	
1805-1881	Disraeli, Benjamin, . . .	Lothair, Vivian Grey, etc. . . .	
1806-1873	Mill, John Stuart,	Political Economy,	
1806-1872	Lever, Charles,	Tom Burke, Charles O'Malley, etc.	
1809-1882	Darwin, Charles,	Origin of Species, Descent of Man,	
1809-1861	Browning, Eliz. Barrett, .		Aurora Leigh, Poems.
1809-1892	Tennyson, Alfred,		In Memoriam, Idyls of the King.
1811-1890	Kinglake, Alex. Wm., . .	Eothen,	
1811-1863	Thackeray, Wm. M., . . .	Vanity Fair, the Newcomes, . .	
1812-1870	Dickens, Charles,	David Copperfield, Oliver Twist, etc.	
1812-1889	Browning, Robert,		Dramatic Lyrics, Poems, The Ring and the Book.
1814-1884	Reade, Charles,	Peg Woffington, Cloister and Hearth, etc.	
1815-1902	Rawlinson, George, . . .	Five Great Monarchies,	
1815-1882	Trollope, Anthony,	Barchester Towers, etc.	
1818-1894	Froude, James Anthony, .	History of England,	
1819-1875	Kingsley, Charles,	Hypatia, etc.,	Poems.
1819-1900	Ruskin, John,	Stones of Venice, Modern Painters,	
1816-1855	Brontë Charlotte,	Jane Eyre, The Professor, etc. .	
1820-1903	Spencer, Herbert,	First Principles, etc.	
1820-1880	Eliot, George,	Silas Marner, etc.,	Spanish Gypsy, Poems.
1820-1893	Tyndall, John,	Scientific Papers,	
1822-1888	Arnold, Matthew,	Essays and Criticisms,	Sohrab Rustin, etc.
1823	Müller, Max,	Science of Language, etc. . . .	
1823-1892	Freeman, Edward A., . . .	Histories,	
1823-1896	Hughes, Thomas,	Tom Brown at Oxford, etc. . . .	
1824-1889	Collins, Wilkie,	Woman in White, etc.	
1824-1905	Macdonald, George, . . .	Sir Gibbie, Alec Forbes, etc. . .	
1825-1895	Huxley, Thomas Henry, . .	Man's Place in Nature,	
1825-1900	Blackmore, R. D.,	Lorna Doone, etc.	Poems.
1826-1887	Mulock, Dinah Maria, . .	John Halifax, etc.,	The Blessed Damozel, etc.
1828-1882	Rossetti, Dante Gabriel, .		
1830	McCarthy, Justin,	History of Our Own Times, Novels,	
1830-1897	Ingelow, Jean,		Poems, High Tide on Coast of Lincolnshire.
1831-1891	Meredith, Owen,	Biography of Bulwer-Lytton, . .	Lucile.
1832-1904	Arnold, Edwin,		Light of Asia, Poems.
1834-1895	Seeley, John Robert, . . .	Ecce Homo, etc.	
1834-1896	Morris, William,	Essays on Art, etc.,	Poems, Earthly Paradise.
1834-1894	Hammerton, Philip I., . .	Intellectual Life,	
1837-1883	Green, John Richard, . .	History of the English People, .	
1837	Swinburne, Chas. Alger-		
	non,		Poems.
1838	Bryce, James,	American Commonwealth, My Impressions of S. Africa, etc. .	
1838-1901	Besant, Walter,	East London, etc., Novels, . .	
1838	Morley, John,	English Men of Letters (Ed.) . .	
1840	Hardy, Thomas,	Tess of D'Urbeville, etc., Novels.	
1841-1898	Black, William,	In Silk Attire, etc., Novels, . .	
1841-1901	Buchanan, Robert W., . .	Alone in London,	Poems.
1850-1894	Stevenson, Robert Louis, .	Essays, Novels,	Child's Garden of Verses, etc. . .

When our forefathers came to England in the Fifth and Sixth Centuries, they brought with them no written language; but the love of song. Bards and gleemen accompanied them and they sang the tales of the Northland. The oldest of the old, old songs which has been preserved for us is "The Far-traveler." "Beowulf" is their epic song. When the heathen invaders

after two long centuries of struggle had become possessed of the land they, in their turn, came under the softening influence of Christianity. Monasteries were built and in these safe shelters literature had a beginning. The glory of this beginning belongs to Northumbria in the Seventh Century. For nearly two centuries this was the seat of learning.

The poem "Beowulf" has Teutonic power but it is not native to English soil. *Cædmon's "Paraphrase of the Scriptures"* is the first great native British poem. With Christianity a new spirit entered into English poetry.

Old English prose also began in the monastery of Northumbria with Bede. His learning was famed over the whole of Europe. It is said that forty-five works written in Latin prove his industry. His last work was a "Translation of the Gospel of St. John."

During the Ninth Century the greater part of England was wasted by the Danes, and literature almost perished. The long battle against these invaders was lost in Northumbria, but was gained for a time by Alfred the Great in Wessex. Learning changed its seat from the north to the south, and as Whitby was the cradle of English poetry in the North, so Winchester became the seat of English prose in the South. Alfred gathered scholars about him and translated the Latin works of Bede, the *Chronicles* of Orosius, and added an account of the voyages of Othere and Wulfstan. Many other works were added to the English language in Alfred's time. "At Winchester the king took the English tongue and made it the tongue in which history, philosophy, law, and religion spoke to the English people." He also established schools and wrote text-books for these schools, so that every free-born youth might attend to his books till he "could read English writing perfectly."

The next great name in literature after King Alfred is Alfric. He wrote numerous ecclesiastical works and was the first translator of any considerable portion of the Bible. His translation of the Pentateuch, Joshua, Judges, and part of Job, form the best model we possess of the language at the beginning of the Eleventh Century. A long line of Saxon *Chronicles* continues an unbroken history of the language and literature from Alfred to the death of Stephen in 1154.

The overthrow of Saxon rule in England by William the Conqueror is an event of vast importance in literature as well as in history. For a hundred years after the conquest literature was inert. A foreign king and an aristocracy of a foreign people ruled the land; an alien language and literature had been introduced. A few generations of such domination and then there were signs of returning life. The language could not die while the bulk of the people remained Saxon, but it underwent a great change. England was still to remain the land of the Saxon tongue, but it was to be a language greatly modified by its contact with the Latin of the clergy and the French of the Norman conquerors. For three hundred years after the conquest these languages contended with the Saxon English for supremacy in England. In Edward the Third's reign it had been fully demonstrated that the English were to be the ruling people and parliament enacted important laws making the English the required language in the law courts and in schools.

But the English of King Edward's time was quite unlike the rude Saxon speech of "Beowulf" and "Cædmon," or the later *Chronicles*. Pure Anglo-Saxon was an energetic language, able

to express with vigor the practical common thoughts of every day; but it lacked delicacy and flexibility of expression. The Saxon mind, too, was lacking in quickness of thought and in the creative play of the imagination. It has been well said that in this blending of languages the Saxon furnished the dough and the Norman French the yeast. Out of the combined product we get a strength and flexibility of language that belonged to neither.

The literature of England during the Twelfth Century was almost entirely Latin and French, but we go back to it as a rich source of our story telling. Geoffrey of Monmouth wrote twelve short books in Latin which he called "History of the Kings of Briton." It is a clever putting together of Welsh legends, a source to which we go for some of our King Arthur stories. These stories were afterward translated into French and later brought back into English verse by Laymon in his "Brut d'Engleterre." Later many other stories were added and other cycles of romance were introduced into English literature. There were four of these great romantic cycles: The first, already mentioned, are the King Arthur legends, to which later stories were added, as "Quest of the Graal," "Morte d'Arthur," "Romance of Sir Tristram," etc.; the second, Charlemagne and his twelve peers, containing the stories of "Roland," "Charlemagne," "Otwell," "Siege of Milan," etc.; the third, the "Life of Alexander," romantic wonder stories from the east; fourth, "Siege of Troy," derived from Latin sources. Popular ballads, such as "Robin Hood" and "Robert of Gloucester's Rhyming Chronicles," and lyrics sung among the people, kept the love of poetry alive until the greater burst of song in the Fourteenth Century.

From the Conquest there is very little prose writing in England for the next three centuries, but in the Fourteenth Century there were two prose writers of preëminence, Sir John Mandeville and John Wyclif. Mandeville wrote a most popular book of stories which he styled "The Voiage and Travaile of Sir John Mandeville." This book established the love of story telling. John Wyclif, next to Chaucer, is the greatest literary name of the century. He is the first to give a complete copy of the Scriptures to the English people in their own tongue. The influence of such a translation read by all the people is to raise a dialect to the dignity of a national language. Besides this great work, Wyclif is the author of a large number of sermons and polemical writings. Contemporaneous with these religious tracts which Wyclif distributed so freely was "Piers Plowman" by William Langland. It was a satire in verse upon the evils which had gained a foothold within the Church.

The one name which stands first in the literature of the Fourteenth Century is that of Geoffrey Chaucer. Some critics claim that before him there was no permanent English verse. He is therefore often called the "Father of English poetry." Chaucer's earlier poems are "Romaunt of the Rose," "The Boke of the Duchess," and "Parlement of Briddes." His greatest work is "Canterbury Tales," the plan of which was

suggested by Boccaccio's "Decameron." The "Prologue" to the "Canterbury Tales" is one of the finest pieces of description in our language. Before Chaucer's time English was a language of dialects. He wrote in the Midland dialect and made that the language of the nation. Chaucer died in fourteen hundred, just three hundred and thirty-four years after the Norman Conquest. To sum up the most important literary events of these years we note the development of the English language, the translation of the Bible, and the creation in English of one of the world's great masterpieces, the "Canterbury Tales."

There is to be noted a comparative lack of literary progress in the century following Chaucer. There were changing social conditions and intellectual and political unrest. The struggle between the houses of York and Lancaster absorbed men's minds. These are the reasons assigned for the dearth of literature. To them must be added the lack of a literary genius. There was no one great enough to succeed Chaucer.

The greatest prose work of the Fifteenth Century was Malory's "Morte d'Arthur." This is a great prose epic of the deeds of King Arthur and his Knights of the Round Table. Fortunately for the Fifteenth Century it also established the printing press. In 1477, Caxton printed the first book in England. A second complete translation of the Scriptures was made by William Tyndale, early in the Sixteenth Century, and the work of the reformation was furthered. In 1535, Miles Coverdale published the first printed copy of the whole Bible. Certain Italian influences were at work that were changing the form of our poetry. Wyatt and Surrey introduced the Italian sonnet and made use of the Italian blank verse.

The Elizabethan age is marked by features so distinct and so superior that it has been called the "Golden Age in English literature." Two great forces combined to make this the greatest intellectual age, the Renaissance and the Reformation. Men's minds were stimulated and a language completely formed was ready at their hand. There was freedom for thought to express itself and there was variety in life and freshness of experience for the mind to feed upon. The printing press and travel and social intercourse all stimulated intellectual activity. Life was worth enjoying and there was leisure for letters. It was an age of imagination and enthusiasm, and in the midst of it all geniuses were born. What age ever produced two such poets as Shakespeare and Spenser, unless it might be the "Golden Age" of Greek splendor?

The non-dramatic poets of the Elizabethan age are Thomas Sackville, Sir Philip Sidney, and Sir Walter Raleigh, who also wrote a most ambitious work in prose, the "History of the World."

Spenser, the only great non-dramatic poet of Elizabeth's reign, has been called the successor of Chaucer. His first great work is the "Shepherd's Calendar," divided into twelve eclogues, one for each month. His greatest work, the "Faery Queen," was also divided into twelve books, but only six books and the fragment of

the seventh were ever written. Spenser has been justly called "the poet's poet." He may be wearisome to the general reader who undertakes to study him to-day, but the purity of his imagination, the beauty of his verse, and the music of his rhythm, have furnished models for our later poets.

The dawn of the drama in England is found in "Miracle Plays and Mysteries" which were introduced soon after the Norman Conquest. Following these were the later dramatic recitals, the "Moralities," "Interludes," "Masks," and "Pageants."

As early as the Eleventh Century miracle plays were performed in the monasteries by monks and choristers. Later, companies of professional players traveled about the country and enacted their plays in the yards of inns. In 1575, the Puritans expelled the players from the city and theaters were built outside the limits. Shakespeare was born in 1564, and twenty-two or three years later made his way to London where he was attracted by one of these forbidden theaters. Already the English drama had taken form in the great plays of Christopher Marlowe, "Tamburlaine the Great," "Faustus," "The Jew of Malta." The greatest of these plays is "Faustus." Marlowe established the use of blank verse in the English drama, a form of verse which Shakespeare adopted.

That Shakespeare quickly rose to prominence in his art we may judge from the fact that in 1592, when he had been in London not more than five or six years, he was already writing plays and was the object of a jealous attack by one of his rival playwrights. At the age of forty-nine he was able to leave London with a competence and return to his home at Stratford-on-Avon. This also argues for his success as a dramatist. In 1598, Francis Mere writes of the growing fame of Shakespeare and prints the titles of a number of his plays. Ben Jonson, the second dramatist of the age, was his intimate friend. These are facts worth knowing about the personality of the man who is the greatest figure in English literature, perhaps in all literature.

Taking the number from the globe edition of Shakespeare's dramas, he wrote thirty-four different plays, counting as one play those which are written in two parts. His dramas may be divided into three classes: comedies, histories, tragedies. The following are a few of the best in each class. Everyone well-read should be familiar with them:

Comedies: "A Midsummer Night's Dream," "As You Like It," "Merchant of Venice," "Winter's Tale," "Twelfth Night," "The Tempest."

Histories: "Richard III.," "Henry IV.," "Henry V.," "Henry VIII.," "King John," "Julius Cæsar."

Tragedies: "Hamlet," "Macbeth," "Lear," "Othello," "Romeo and Juliet."

In addition to his dramas, Shakespeare also wrote two long narrative poems, and one hundred and fifty-four sonnets. It is said that the measure of Shakespeare's greatness is his universality, "not of an age, but for all time." Other

writers have equaled Shakespere in some one quality, but he excels them all in the combination of great qualities.

Ben Jonson wrote three great dramas which will repay reading, "Volpone," "The Alchemist," and "The Silent Woman," and to these three some would add a fourth, "Every Man in His Humor." Jonson failed in his delineation of character. He was a critic of men's follies and he gave a distorted and incomplete picture of life. In his delineation of women, where Shakespere was strongest, Jonson utterly failed.

The decay of the drama began while Shakespere was yet alive. The drama in his hands had been the painting of the whole of human nature, the painting of characters as they were built up by their natural bent, and by the play of circumstance upon them. The drama, in Ben Jonson's hands, was the painting of that particular human nature which he saw in his own age; and his characters are not men and women as they are, but as they may become when they are mastered by a special bias of the mind. In Beaumont and Fletcher, the women are overdrawn and the men are base in thought. Shakespere's men and women are of the types of the noblest characters his age produced.

One of the most remarkable men who adorned the court of Queen Elizabeth was Sir Francis Bacon, the greatest prose writer of the age. As courtier and scholar he adorned both this and the succeeding reign of James I. His political success and his political disgrace are familiar stories in history. His enduring work is in literature. He was both poet and philosopher. His great work in philosophy is magnificent in scope, as may be inferred from the title "Instauratio Magna," or "The Great Institution of True Philosophy." It is a great work designed to be written in six parts, but never finished. The second part, "Novum Organum," the "new instrument," is described as "the science of a better and more perfect use of reason in the investigation of things, and of the true aids of the understanding." It sets forth the methods to be adopted in searching after truth, points out sources of error, and suggests the means of avoiding errors in the future. His entire philosophy is built upon the idea of inductive investigation. Bacon had so little respect for the English language that he wrote his great philosophy in Latin. His "New Atlantis," like Sir Thomas More's "Utopia," pictures in romance an ideal commonwealth, some features of which have been realized in our own republic. The most important among his English works is his volume of essays, clear, concise, practical in observation, of profound wisdom. Sir Walter Raleigh contributed to prose his ambitious "History of the World," and to poetry a few beautiful lyrics.

With the death of Bacon, in 1626, we pass from the glory of the Elizabethan age into the Puritan age. There are some characteristics which sharply separate this age from the preceding. Intense patriotism, peace within the realm, general prosperity, and much worldliness characterized the reign of Elizabeth. The Stuart reign was characterized by controversy in religion and politics, open rupture between king and

parliament protracted into the Great Civil War. Puritan standards became triumphant during this period. Literature, which always reflects life, presented the somber tone of the age and was in large part religious. The "King James Version of the Bible" was printed in 1611. It is impossible to overestimate the influence of this translation upon the lives of the people and the language of every day. The study of the Bible became so universal that it colored the imagination and the speech of the common people. Even those who were irreligious in their lives spoke in the language of the Scriptures.

The great literature of the Elizabethan age was in poetry. With one exception, John Milton, the great literature of the Puritan age was in prose. But the prose writers of the Puritan age were not without imagination and delicacy of humor. Bunyan's "Pilgrim's Progress," by some thought to be the crowning work of the imagination, is a product of this age, and during the same period Thomas Fuller brightens his "History of the Worthies of England" by irresistible touches of humor, and Isaak Walton adds delight in nature and rustic pastime in his "Complete Angler"; but for the most part the world was looked upon seriously.

John Milton has been awarded the second place among the great names in English literature. He was born eight years before the death of Shakespere. It may be that Shakespere saw the boy Milton. One likes to think so. Milton's childhood was very happy. His parents trusted him because they realized that he was a boy of high ideals. He had every advantage of a liberal education and of long quiet years of study at his father's home in Horton. This was well for the years of struggle that followed. Milton's literary career may be divided into three periods: that of his youth, his manhood, and his old age. It has been called "a drama in three acts." The first may be stated in years as extending from 1623 to 1640; the second, from 1640 to 1660; and the third, from 1660 to 1674.

The first period, that of his youth, was spent at school and among his family at Horton. During this period he wrote the "Hymn on the Morning of Christ's Nativity," the "Masque of Comus," "Lycidas," "L'Allegro," "Il Penseroso," and a number of his sonnets. Some critics consider "Comus" Milton's finest poem. It is perfect in lyric qualities and as an apotheosis to virtue is lofty in conception. "If virtue feeble were, Heaven itself would stoop to her."

"Lycidas," an elegy on Milton's class-mate, Edward King, ranks as one of the great elegies in our language. "L'Allegro" and "Il Penseroso" are companion poems; one describes the delights of social life, the other the deep enjoyment of the scholar in seclusion. These poems will always remain favorites for their beautiful imagery and their truthful study of the emotions. Milton's sonnets have for their theme such subjects as religion, patriotism, domestic affection; whereas the older poets, Shakespere, Spenser, Sidney, Raleigh, and their imitators, preferred to write sonnets on love. The most remarkable of Milton's minor poems is the "Hymn on the Nativity," written when the

author was only twenty-one, yet nowhere does he excel it in beauty of verse nor in dignity of language.

The second period of Milton's life may be called the time of "storm and stress." Thick darkness was upon him. For twenty years, from 1640 to 1660, his life was filled with religious and political controversy. He was forced to turn from poetry to prose, and lamenting it he says: "I have the use, as I may account it, but of my left hand." His prose works are voluminous. They are upon varied subjects but upon one theme, liberty. He struck heavy blows for liberty in church and state and in all the relations of life. He plead for more freedom of speech and for more liberal ideas in education. His greatest prose work is the "Areopagitica: A Speech for the Liberty of the Press." In 1652, at the age of forty-three, Milton became totally blind; but even in his blindness he served the Commonwealth as Secretary for Foreign Tongues under Oliver Cromwell, the Lord Protector, and continued to write his burning pamphlets against the royalists who were struggling to regain power.

The third period is that which succeeds the Restoration, in 1660. With the return of Charles II., the leaders of the Commonwealth had to flee for their lives. Milton's life was at first endangered and he was concealed by friends. Later, he preferred retirement where he might have leisure to do the great work of his life. Here he wrote "Paradise Lost," "Paradise Regained," and "Samson Agonistes."

The beauty of "Paradise Lost" has been compared to that of a stately temple, the loftiest in the whole range of English poetry. Its scenes are laid in Heaven and Earth and Hell, its characters are God and the holy angels, Satan and his legions, and the newly created race of man. It is almost inconceivable how any human mind could have attempted it. "Paradise Regained" and "Samson Agonistes" show a decline of power, though standing alone they would be great. In "Paradise Regained" Christ is tempted in the wilderness and resists Satan. In "Samson Agonistes" we have a choral drama modeled upon the form of the Greek. In the greatness of his work, Milton can be compared only to the great classic writers, Homer and Virgil.

The second great name in the Puritan age is John Bunyan, the prince of prose writers for his time and the prince of story tellers for all times. "Pilgrim's Progress" has been pronounced the greatest of all allegories. Bunyan's preëminence is undoubted. It is not an exaggeration to repeat this estimate of him: "What Shakespere is to English dramatists, what Milton is to English epic poets, that John Bunyan is to writers of English allegory." From extreme poverty and ignorance and years of imprisonment in Bedford jail, he rose to the respected position of pastor over a large church. His biographer says of him, "The fame of his sufferings, his genius as a writer, his power as a speaker, gave him unbounded influence among the Baptists; while the beauty of his character and the catholic liberality of his views secured him universal esteem. His ministrations ex-

tended over the whole region between Bedford and London."

Historically, one of the greatest prose works of the century is Samuel Pepy's "Diary." It is a gossip record of nine years and gives a life-like picture of the gay and profligate portion of society which fell under his observation. The reaction from Puritanism led to an extraordinary state of society among the aristocracy, which we would not like to picture to-day. The great historical work of the age is the "History of the Great Rebellion," by Edward Hyde, the first Earl of Clarendon. A curious coincidence marks the birth and death of Clarendon. Born in 1608 and died in 1674, his life is exactly co-extensive with John Milton, his great opponent in the great civil strife. Clarendon has been called the "Cavalier-prince of historic portrait-painters," and Milton the "Puritan-prince of epic poets."

Chaucer, Shakespere, Spenser, Milton, royal names in English literature, are succeeded by a meager school of artificial poets. Dryden and Pope are the representatives of this school. Dryden died in 1700, just three hundred years after the death of Chaucer. The sweetness and gay and kindly humor and tender sympathies which so illumine Chaucer's poetry, is gone from Dryden's didactic verse. His greatest satire is "Absalom and Achitophel," a bitter arraignment of those who opposed the succession of James, the brother of Charles II., to the English throne. "MacFlecknoe," another satire is directed against a Whig poet. "All for Love," a drama, is in this same cold, critical vein. He wrote long criticisms in argumentative verse which are utterly lacking in the true spirit of poetry. His "Hind and the Panther" and "Religio Laici" are known to-day only as names. The greatness of poetry cannot be expressed by the critical spirit. Dryden's one really admirable poem, "Ode to St. Cecilia's Day or Alexander's Feast," will be remembered for its lyric qualities. His prose writings are numerous, and the English in which he wrote them has become a standard of good style to all later writers.

The English Revolution of 1688 secured peace for the realm and an opportunity for the development of arts and sciences. The investigations of Newton and the development of philosophy under Locke mark this period.

Alexander Pope is the literary successor of John Dryden, and the representative poet of his time. He was a precocious boy whose body was "one long disease." Before he was twelve years of age he had written an "Ode to Solitude," and reading was his passion. To understand Pope one must remember his deformity and the spirit of the time in which he lived. The first half of the Eighteenth Century is marked by a low standard of morals. Political unrest and political double dealing, coarse social life, dull, unimaginative, brutal, these are the common terms by which it is described. Drunkenness was common and morality laughed at. Out of such conditions Pope and Swift and Steele gathered the material for their satires. Addison alone of this distinguished group of writers kept his genial nature and wrote what was gentle

and mirthful with such grace that satire lost its severity.

The literary faults of this age are lack of moral earnestness and enthusiasm. Form was preferred to matter. The age was molded by classical rules. It delighted in studied regularities. Pope is the great exponent of the classic school. So deficient is he in warmth of feeling for man or nature, so fixed and formal are his lines, that it is often questioned whether Pope was entitled to the name of poet. But whether poet or not, Pope has enriched our language by his epigrammatic couplets which are familiar in our common speech. Pope and Dryden have done much for our English in raising the standard of good speech. Poems of satire the world will forget, but a good laugh is worth preserving. "Gulliver's Travels," by Jonathan Swift, are even more enjoyed to-day than when they were written, for the sharpness of their first intent is forgotten.

The first half of the Eighteenth Century is far more remarkable for its prose than for its poetry. A new and excellent field for essayists was found in the "Tatler," planned by Richard Steele. Periodical papers containing news had existed in England from the time of the Civil War, but this was the first periodical designed to have literary merit and to discuss questions of common, every-day interest, containing lively sketches, anecdotes, humorous discussions. It was succeeded by the "Spectator," which appeared every week-day morning in the shape of a single leaf from March 1, 1711, to December, 1712; after a suspension it reappeared three times a week in 1714, and extended to 635 numbers. The "Guardian" was begun in 1713, but ceased after the 176th number. Steele was the principal contributor to the "Tatler" and "Guardian," and Addison to the "Spectator," but papers were also furnished by Swift, Pope, Berkeley, and Hughes. The essays, especially those of Addison, were often models of grace and delicacy, and were highly influential in correcting and refining the tone of society.

Prose fiction is another development of the Eighteenth Century. Daniel Defoe (1661-1731) first gave to English fiction a simple, direct, matter-of-fact, and human interest, and the narrative of "Robinson Crusoe" has never been excelled. The "Tale of a Tub" and "Gulliver's Travels," by Swift, "The History of John Bull," by Arbuthnot, are satires in the form of fictitious narratives. The writings of Swift are admirable for their vigor and humor. Under his successors the novel became more complex and artistic, embraced greater varieties of character and diversities of treatment, and pictured the artificial refinements and distinctions of society. "Joseph Andrews," "Tom Jones," and "Amelia" by Fielding, and "Pamela," "Clarissa Harlowe," and "Sir Charles Grandison," by Richardson, were published near the middle of the century. "Peregrine Pickle," "Humphrey Clinker," and other novels by Smollett are distinguished for coarse, comic incidents and broad humor. "Tristram Shandy" and "Sentimental Journey," by Sterne, contain passages sparkling with wit and humor, also much sentimentality. The "Vicar of Wakefield," by Oliver Goldsmith,

is without doubt the most delightful romantic novel of the century. It is not a book without grave faults, but it combines delicate humor with sweet human emotions. Goldsmith was a writer in every field of invention, but he will be longest remembered because of the Vicar and his family. His "Deserted Village" and his "Traveler" contain passages that cannot be forgotten. So also Gray's "Elegy in a Country Churchyard" and Collins' "Odes" and Cowper's hymns belong to immortal verse.

The Eighteenth Century, which gave us the modern essay and the novel, also produced writers of carefully elaborated and finished history: "History of England," by David Hume; "History of the Decline and Fall of the Roman Empire," by Gibbon; and Robertson's histories of Scotland, Germany, and America. There was also noted oratory, Burke, Fox, Pitt, and the philosophy of Berkeley, Paley, and Hume, and the great prose works of Adam Smith and William Blackstone.

In striking personality and in power to make others think, Dr. Samuel Johnson was, without doubt, the foremost man of literary London. He was the central figure around whom all the literary men and women gathered, the Nestor of his age. Dr. Johnson founded and carried on as sole editor two periodicals, the "Rambler" and the "Idler," in the style of the "Spectator" which Addison had made so popular. His most famous work was a "Dictionary of the English Language." His critical estimate of poetry cannot be highly valued and his criticisms are often stilted and overstrained in language. His best prose is his romance, "Rasselas, the Prince of Abyssinia." Johnson is better known because of his biographer, Boswell, than for what he wrote.

The close of the century, so remarkable for its development in prose, adds one great name to the poets already mentioned, Robert Burns, the Scottish prince of lyric verse. Love of nature, feeling for humanity, he has written for us as no other poet ever wrote. The poetic ideal of Gray and Collins and Cowper and Blake and Burns reacted against cold formalities in verse. The joys and sorrows of life they would put into poetry, and as it came from the heart they would have it touch the heart. Man and nature are the chosen themes, and man is always in the foreground with Burns. The songs of Burns minister to every common feeling of the human heart. That he has won his audience is proven by the fact that since the day of his death his audiences have continually grown larger. Those who read and those who do not read are familiar with these songs: "Scots wha hae wi' Wallace Bled," "Auld Lang Syne," "Comin' Through the Rye," "Ye Banks and Braes."

Poetry, at the close of the Eighteenth Century, was simpler than in the preceding generations. There were songs of joy and laughter and tender sympathies. Imagination was given free play and it touched with beauty the familiar scenes of every day.

The opening years of the Nineteenth Century ushered in a brilliant company of nature poets: Scott, Wordsworth, Coleridge, Southey, Byron, Shelley, Keats, together with Cowper and Burns, who died in the closing years of the last century,

belong practically to this group. There was to be noted a change of ideals. The reign of the epic and the drama was past. Classic models gave place to freer expression, more individuality, a deeper appreciation of the beauties of nature, and more value set upon the commonplace. Imagination and a larger sympathy found beauty in that which had been counted low and mean. This was illustrated in the poems of Burns and Cowper. Sir Walter Scott showed this tendency in his romances. His romance poems combine the refinements of modern poetry with the spirit and material of the neglected border minstrelsy. Wordsworth aimed to renew nature by bringing back poetry to truth and nature. His verse is often weak, but his best poems, as "Ode on Immortality" and many of his shorter poems, are exquisite in their simplicity of feeling and truthfulness of delineation. Coleridge's finest poems are "Cristabel" and "Ancient Mariner." They are unsurpassed in their strong, wild music and their splendid imagination. Southey contributed both to prose and verse and displayed extensive learning. Byron was remarkable for strength and passion. Keats and Shelley were instinct with love and intellectual sense of ideal beauty. "The Skylark" and "The Cloud," by Shelley, are perfect in their music and their imagery. Thomas Moore, sometimes called the "Irish melodist," besides his shorter poems, wrote "Lalla Rookh," a volume containing four Oriental stories told with rich imagery and diction. Thomas Campbell wrote "Pleasures of Hope." Humor and pathos are combined in the poems of Thomas Hood: "Song of the Shirt," "Bridge of Sighs," "The Last Man."

The prose of this first half of the century also takes high rank. Scott will always be remembered as the creator of the historical novel, Charles Lamb for his delicate humor and rare use of language. His "Essays of Elia" have been called the finest of their kind in literature. Macaulay's essays give us fine examples of English prose. De Quincey's opium dreams and his "English Mail Coach" are also brilliant specimens of English. Mill, Bentham, Malthus, are the chief contributors to philosophical prose.

In 1837, Queen Victoria ascended the throne. From this date until the present time may be called the Victorian age. This age is not remarkable for the development of any new type of literature but for the quantity and general excellence of literature in every department. Representative names of the Victorian age are Browning, Tennyson, Matthew Arnold, the Rossettis, in poetry; Thackeray, Dickens, George Eliot, Bulwer, in prose fiction; Carlyle, Macaulay, Ruskin, Matthew Arnold, Swinburne, Leslie Stephen, in essay writing; Spencer, Newman, Hamilton, Darwin, Tyndall, Huxley, Faraday, Mill, in philosophy and science; Milman, Grote, Froude, Freeman, Buckle, Green, and Lecky, in history.

Problems of life occupy the minds of the Victorian writers. It is an age of scientific thought and of practical reform. There is a struggle of the masses upward, a striving for better government, for higher moral ideals. Prose and poetry alike are imbued with an ethical purpose.

Dickens desired to bring out what he called "the romantic aspect of familiar things," and he began with the study of "vicious poverty." Most of Dickens' novels were inspired by a firm purpose to accomplish some reform. His social creed has been formulated in these words: "Banish from earth some few monsters of selfishness, malignity, and hypocrisy, set to rights a few obvious imperfections in the machinery of society, inspire all men with a cheery benevolence, and everything will go well with this excellent world of ours." While Dickens with inimitable humor and rare optimism was presenting the cause of the submerged poor, Thackeray wrote of the follies of the upper classes of society, and George Eliot pictured the English middle class. These great novelists with their deep human sympathies pictured the interdependence of human beings, the relation that every man bears to his surroundings. Thus fiction has kept in close touch with the social ideas of the time, reflecting not only its mood, but also its important changes, showing thereby that it has life and does not exist as a mere literary form.

The vigor and idealism of the age has been splendidly expressed by Browning and Tennyson. Carlyle was the mouthpiece of the strongly-felt need of heroism. He was by far the greatest of the Englishmen of his time who taught the value of sincerity. Another author who had a great influence upon his contemporaries was John Ruskin. Each generation has its message to deliver. Carlyle and Ruskin in their criticisms, one on life, and one on art, caught the message of their time. They would have men be true and live up to the best that is in them. They spoke as the poets Tennyson and Browning spoke of the larger and truer meaning in life. They believed in growth through evolution and in the possibilities of the individual.

It is impossible in so short an article to select and discuss the individual writers of the Victorian age. They must be characterized, if at all, in groups. Such a book as this affords little space for library lists and selected works of the best authors both in English and American literature and the best known works in foreign literatures, so that the student who wishes to continue his studies or the general reader who wishes the delight of well-selected reading should consult Brooke's English literature. Such names as the following, which belong to every appreciative study of English literature, but which have necessarily been omitted here, will be found well treated by this gifted critic and careful student of his country's literature: in poetry — Elizabeth Barrett Browning, Edward Fitzgerald, Arthur Hugh Clough, Jean Ingelow, William Morris, Algernon Charles Swinburne, William Watson, Rudyard Kipling; fiction — Charles Lever, Elizabeth Gaskell, Charles Reade, Anthony Trollope, Charlotte Brontë, Charles Kingsley, Wilkie Collins, Richard D. Blackmore, Dinah Maria Craik, George Meredith, Thomas Hardy, William Black, Robert Louis Stevenson, Mrs. Humphrey Ward, Hall Caine, Rudyard Kipling, George MacDonald; essay and criticism — Leslie Stephens, Algernon Charles Swinburne, Walter Pater, John Addington Symonds.

AMERICAN LITERATURE

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1586-1647	Hoopar, Thomas, . . .	Sermons, Survey of Church, etc.	
1588-1649	Winthrop, John, . . .	History of New England (1630-1649).	
1612-1672	Bradstreet, Anne, . . .		Poems.
1663-1728	Mather, Cotton, . . .	Magnalia (history).	
1703-1758	Edwards, Jonathan, . .	Freedom of the Will, Original Sin, etc.	
1706-1790	Franklin, Benjamin, . .	Poor Richard's Almanac. . . .	
1737-1791	Hopkinson, Francis, . .	Autobiography, Essays, etc. . .	
1743-1826	Jefferson, Thomas, . . .	Notes on Virginia.	Battle of the Kegs.
1752-1832	Freneau, Philip, . . .		Poems (humorous).
1755-1812	Barlow, Joel, . . .		The Columbiad, etc.
1757-1804	Hamilton, Alexander, . .	State Papers.	
1758-1843	Webster, Noah, . . .	Spelling Book, Dictionary. . .	
1766-1813	Wilson, Alexander, . . .	Ornithology.	
1770-1842	Hopkinson, Joseph, . . .		Hail Columbia.
1771-1810	Brown, Charles Brockden	Wieland, Clara Howard, etc. . .	
1773-1811	Paine, Robert Treat, . .		Adams and Liberty, Poems.
1775-1863	Beecher, Lyman, . . .	Sermons, Political Addresses. .	
1779-1843	Key, Francis Scott, . . .		Star Spangled Banner, Poems.
1779-1843	Allston, Washington, . .	Lectures on Art,	Poems.
1779-1860	Paulding, James Kirk, . .	Novels,	Poems.
1780-1842	Channing, William E., . .	Essays, Addresses.	
1780-1851	Audubon, John James, . .	Birds of America,	
1782-1852	Webster, Daniel, . . .	Quadrupeds of America. . . .	
1782-1845	Story, Joseph, . . .	Orations, etc.	
1782-1858	Benton, Thomas Hart, . .	Commentaries, on U. S. Court.	
1783-1859	Irving, Washington, . . .	Thirty Years View (U. S. Senate). Knickerbocker's N. Y. Sketch Book, etc.	
1784-1865	Worcester, Joseph E., . .	Dictionary, Eng. Language. . .	
1785-1886	Pierpont, John, . . .	School Readers,	Lyrics.
1784-1868	Allen, William, . . .	First American Biographical Dictionary.	
1787-1789	Dana, Richard H., . . .	Lectures on Shakespere,	The Buccaneer.
1788-1855	Campbell, Alexander, . .	Religious Debates.	
1789-1841	Hillhouse, James A., . . .		Percy's Masque, Hadad.
1789-1861	Sedgwick, Catherine M., .	New England Tales, etc. . . .	
1789-1851	Cooper, James Fenimore,	The Spy, Leather Stocking Tales, etc.	
1790-1867	Halleck, Fitz Greene, . .		Marco Bozarris, Poems.
1791-1865	Sigourney, Lydia H., . .		Poems.
1791-1871	Ticknor, George, . . .	History Spanish Literature. . . .	
1791-1875	Sprague, Charles, . . .		The Family Meeting, Poems.
1792-1852	Payne, John Howard, . .		Home, Sweet Home, etc.
1793-1863	Goodrich, Samuel G., . .	Peter Parley Books, etc. . . .	
1793-1868	Hall, James, . . .	History of Indian Tribes,	Poems.
1793-1879	Carey, Henry Chas., . . .	Principles of Political Economy.	
1794-1866	Sparks, Jared, . . .	American Biographies.	
1794-1878	Bryant, William Cullen, .		Poems (Thanatopsis), etc.
1795-1868	Thompson, Daniel P., . .	Green Mountain Boys, Historical Novels.	
1795-1820	Drake, Joseph Rodman, . .		The Culpit Fay.
1795-1870	Kennedy, John P., . . .	Swallow Barn, Bob of the Bowl, Horse-Shoe Robinson, etc., Memoirs.	
1795-1856	Percival, James G., . . .		Prometheus, etc.
1796-1865	Wayland, Francis, . . .	Moral Science, Political Economy.	
1796-1859	Prescott, William H., . .	Intellectual Philosophy,	
1796-1828	Brainard, John C., . . .	Ferdinand and Isabella, Conquest of Peru, Conquest of Mexico, etc.	Poems.
1796-1881	Palfrey, John G., . . .		
1797-1882	Parsons Theophilus, . . .	History of New England. . . .	
1797-1865	Haliburton, Thomas C., .	Relig. Phil. of Swedenborg. . .	
1798-1870	Barnes, Albert, . . .	Sam Slick.	
1800-1891	Bancroft, George, . . .	"Barnes's Notes" (Bible). . . .	
1802-1864	Morris, Geo. P., . . .	History U. S. to 1879.	Lyrics.
1802-1880	Child, Lydia M., . . .		
1802-1876	Bushnell, Horace, . . .	Mothers Book, Biographies. . .	
1803-1882	Emerson, Ralph Waldo, . .	Nature and the Supernatural, Moral Uses of Dark Things. . . .	
1803-1870	Prentice, George D., . . .	Conduct of Life,	
1803-1879	Abbott, Jacob, . . .	Essays, Representative Men, etc. Louisville Journal (Ed.),	Poems.
1804-1864	Hawthorne, Nathaniel, . .	Rollo Books, etc.	
1805-1877	Abbott, John S. C., . . .	Twice Told Tales, Blithedale Romance,	
1806-1870	Simms, William Gilmore, .	Scarlet Letter, Wonder Book, Marble Faun, etc.	
1806-1867	Willis, Nathaniel P., . . .	Histories, Biographies, etc. . .	Poems.
		Novels, Biography, etc.,	Scriptural Poems, etc.
		Sketches,	

AMERICAN LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1807-1882	Longfellow, H. W., . . .	Outre Mer, etc.,	Hiawatha, etc., Household Poems.
1807-1865	Hildreth, Richard, . . .	History of U. S. to 1821. . . .	
1807-1892	Whittier, John G., . . .		Household Poems, Maud Müller, etc.
1809-1894	Holmes, Oliver Wendell, }	Autocrat of the Breakfast Table, etc.,	Poems. The Raven, etc.
1809-1849	Poe, Edgar Allen, . . .	Novels,	
1811-1894	McCosh, James,	Gold Bug,	
1812-1896	Stowe, Harriet Beecher, . .	Intuitions of the Mind, etc. . . .	
1813-1891	Lossing, Benjamin, . . .	Uncle Tom's Cabin, etc.	
1814-1877	Motley, John Lothrop, }	Pictorial Histories, etc.	
1815-1882	Dana, Richard Henry, . .	Dutch Republic,	
1816-1887	Saxe, John G.,	United Netherlands, etc.	
		Two Years before the Mast. . . .	New Rape of the Lock. The Money King, etc.
1816-1889	Allibone, Samuel A., . . }	Critical Dictionary of English, Literature and Authors.	
1817-1862	Thoreau, H. D.,	Walden, Excursions, etc.	
1817-1881	Fields, James T.,	Yesterdays with Authors.	
1817	Bigelow, John,	Life of Benjamin Franklin. . . .	
1819-1881	Holland, J. G.,	Timothy Titcomb's Letters, . . .	Katrina.
1819	Howe, Julia Ward, . . .	Arthur Bonnicastle, etc.,	Battle Hymn of the Republic, Later Lyrics.
1819-1891	Lowell, James Russell, .	Social and Philosophical Papers,	Vision of Sir Launfal, Biglow Papers.
		Among My Books, My Study Window Essays and Reviews, American Literature.	
1819-1886	Whipple, Edwin P., . . .		Leaves of Grass.
1819-1892	Whitman, Walt,		
1822-1885	White, Richard Grant, }	Words and their Uses,	
1822-1897	Adams, William Taylor, }	Every Day English, etc.	
1822	Hale, Edward Everett, }	Juveniles (Oliver Optic).	
1822-1891	Parton, James,	The Man Without a Country, . .	
		His Level Best, etc.	
1822	Mitchell, Donald G., . .	Biographies.	
1822-1872	Read, Thomas Buchanan, }	Dream Life, Reveries of a Bach- elor.	The New Pastoral, etc.
1823-1893	Parkman, Francis, . . .	Oregon Trail, Pioneers of France, Montcalm and Wolfe, etc. . . .	
1823	Higginson, Thomas Wentworth, }	Outdoor Papers,	
		Short Studies of American Au- thors, etc.	
1824	Whitney, Adeline D., . .	The Gayworthys, Faith Gartney, etc.	
1824-1892	Shea, John D. G., . . .	The Catholic Church in America.	
1824-1890	Boker, George H., . . .		Poems of the War.
1824-1892	Curtis, George W., . . .	Potiphar Papers, Life of W. C. Bryant, Prue and I, etc.	
1825-1878	Taylor, Bayard,	Northern Travel, Greece and Russia, etc.,	Poems of the Orient.
1825-1903	Stoddard, Richard H., . .	Hannah Thurston, etc.	
1826-1864	Foster, Stephen Collins, }	Loaves and Heroines of the Poets,	Book of the East, Poems. Old Uncle Ned, Old Folks at Home, Old Dog Tray, etc.
1827-1905	Wallace, Lew,	The Fair God, Prince of India, Ben Hur.	
1829-1900	Warner, Charles Dud- ley,	My Summer in a Garden,	
1830-1886	Hayne, Paul Hamilton, }	Little Journey in the World, etc.	Sonnets and Other Poems, Legends and Lyrics.
1830	Terhune, Mary V., . . .		
1832-1888	Alcott, Louise May, . . .	Alone, Hidden Path, etc.,	
1833-1908	Stedman, Edmund C., . .	Common Sense in the Household. Little Women, etc.	The Diamond Wedding, Alice of Monmouth, etc.
1833-1885	Mulford, Elisha,		
1834-1902	Stockton, Frank R., . . }	The Nation, Republic of God. . .	
1835-1900	Tyler, Moses Coit, . . .	Rudder Grange, Squirrel Inn, . .	
1835	Clemens, Samuel L., . . }	The Lady or the Tiger, etc. . . .	
1835	Abbott, Lyman,	History of American Literature. Innocents Abroad,	
		Huckleberry Finn,	
		Life and Letters of St. Paul, . .	
		Sermons, etc.	
		Venetian Life, Their Wedding Journey,	
		The Rise of Silas Lapham, etc.	
		Marjorie Daw, Novels.	
		Hoosier Schoolmaster, Roxxy, etc.	
		Wake Robin, Winter Sunshine, etc.	
		Hans Brinker,	
		Barriers Burned Away, etc. . . .	
		A Fool's Errand, etc.	
			Along the Way.

AMERICAN LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY
1838-1896	Dodge, Mary Abigail,	Country Living, Stumbling Blocks,	The Heathen Chinee and other poems.
1839-1902	Harte, Bret,	Luck of Roaring Camp,	
1839	Schouler, James,	Gabriel Conroy, etc.,	
1841	Miller, Joaquin,	History of the U. S.	Songs of the Sierras, etc.
1842-1901	Fiske, John,	Myths and Myth Makers,	
1842-1881	Lanier, Sidney,	Histories,	Poems.
1843	James, Henry,	The Boy's Froissart,	
1844	Cable, George W.,	Daisy Miller, Portrait of a Lady, etc.,	
1844	Ward, Eliz. S. Phelps,	Ole Creole Days, etc.,	Ballads.
1845	Crawford, F. Marion,	Gates Ajar, etc.,	
1847	Hardy, Arthur S.,	Saracinesca, etc.,	
		Passe Rose, etc.,	

American history and American literature are not contemporaneous terms. American history began with the European settlement of the American continent, but the literature not until generations later, when the life of the new world had created distinctively different ideals and different currents of thought and emotion. American literature was in its origin simply a branch of English literature set in new earth. Our intellectual dependence on England has gradually lessened, and as we have gained independence in national affairs, national ideals have grown clearer and our character more definitely defined. This gradual change in national character has been reflected period by period in our literature, but American literature remains to-day, and it is desirable that it shall ever remain, a branch of the great literature of England which binds together the great body of the English speaking people.

PERIODS OF AMERICAN LITERATURE

- I. The Colonial Period, 1607-1765.
- II. The Revolutionary Period, 1765-1789.
- III. The Period of the Republic, 1789-1908.

Colonial Period, 1607-1765. It is important to remember that the group of English colonies scattered along the Atlantic coast represented entirely separate communities. There was no national life. The literature of the colonial period had its beginnings in no one center. Colonial literature is a literature of sections, each reflecting the character of the settlers.

In Virginia education was despised. All were in eager search for ease of life or gold. The earliest writings in this colony were news letters and various descriptions of the new and strange country or the story of mishaps and prosperity, written by the settlers to their friends in England. Very little attempt was made at beauty of style. Captain John Smith had printed when he returned to London "A True Relation of Virginia," published in 1608. "We doubt not," he writes, "but by God's gracious assistance, and the adventurous, willing minds and speedy furtherance to so honorable an action in after times, to see our nation enjoy a country, not only exceedingly pleasant for habitation, but also very profitable for commerce in general, no doubt pleasing to Almighty God, honorable to our gracious sovereign, and commodious gener-

ally to the whole kingdom." This and other writings of the early Virginia colonists form very valuable historic documents. Certain few attempts at scholarly work were made, such as the translation of Ovid's "Metamorphoses," by George Sandys, treasurer of the Virginian colony and son of the archbishop of York.

Among the narratives and descriptions of the country were "Good News from Virginia," by Alexander Whitaker, published in London in 1613; and "Leah and Rachel," by John Hammond, published in 1636. But books of this character cannot be said to belong to the new continent. They were written by Englishmen and printed in England to be read by their countrymen.

Great importance was attached to education in the New England colonies. Schools, colleges, the printing press, were soon established. Books and pamphlets were published. The first book printed was the "Bay Psalm Book." Before 1630 public instruction was compulsory in New England.

Among the earliest writings were diaries, histories, and descriptions. The events of the first year of the Plymouth Colony were recorded in the "Journal of William Bradford and Edward Winslow," vivid and full of interesting incidents. The "History of Plymouth," by William Bradford, for thirty years governor of the colony, comes down to 1646.

The literature of New England was, throughout the Colonial period, of a religious character. The only questions of general interest were questions of theology. The writers of books and pamphlets were men who had fought for their religious opinions. They had exiled themselves that they might be free to worship God according to the dictates of their own conscience. Naturally, the first publications were in defense of their creed. Their only literary object was to explain divine truth as they perceived it. Religious books and pamphlets, therefore, form the great bulk of the publications of the period.

Most prominent among the clergy were Roger Williams, the author of many writings, in which he boldly stood for liberty of conscience; John Eliot, the "Apostle to the Indians" and a writer of books; the Mathers, father, son, and grandson, who were men of great mental power and voluminous sermons.

The three greatest names during the Colonial period were: Cotton Mather (1663-1728), Jonathan Edwards (1703-1758), Benjamin Franklin (1706-1790). The most celebrated book by Cotton Mather was the "Magnalia Christi Americana," or "great things done by Christ for the American people." Jonathan Edwards' principal work is entitled "Inquiry into the Freedom of the Will." The best known of Franklin's works are his "Autobiography," "Father Abraham's Speech," and "Poor Richard's Almanac." The early writings of Benjamin Franklin fall within the Colonial period, but his state papers and his later works belong to the Revolutionary period. The first newspaper published in America was "Public Occurrences," in 1690. "The Boston News Letter" was published in 1704; "The Boston Gazette" in 1719.

Revolutionary Period. By the middle of the Eighteenth Century great changes were manifested in the character of the colonies. They had become closer neighbors and they had discovered that they had much in common. The old isolation was broken down, and with united voice they protested against foreign injustice. The character of the writings of the Colonial period was theological, the character of the writings of the Revolutionary period was political. The writers of the day denounced tyranny and proclaimed for liberty and self-reliance, and thus laid the foundations for our national literature. Already, for half a century, the weekly newspapers, as well as a few monthly magazines for a decade or more, had been publishing and discussing political news, so that the people of the colonies had been educated to think and write upon such subjects. The American colleges had contributed their share to the spirit of independence, and educated men were ready to act as leaders. It is not strange, therefore, that the state papers of the Revolutionary period form a body of exceedingly able documents. "When your lordship looks at the papers transmitted to us from America," said Chatham, in 1775, "when you consider their decency, firmness, and wisdom, you cannot but respect their cause."

The greatest orator of Massachusetts was James Otis; the greatest orator of Virginia, Patrick Henry. Jefferson, Madison, Monroe, John Jay, Alexander Hamilton, all were able writers. There were some attempts at general literature, history, essay, biography, fiction, and there were a few poets of an inferior sort. The bal-lad literature of Revolutionary days is said to have attracted the attention of Lord Chatham. The songs current in America during this era are historically interesting and artistically monotonous. They celebrate in rude verse the achievements of native heroes, like "Bold Hawthorne"; or ridicule, like "Jack Brag," the British Lion; or, like the "Fate of Burgoyne," the overthrow of vaulting ambition; or, as in "Wyoming Massacre," bewail the fate of the fallen; or, as in "Free America," celebrate the triumph of the good cause. Among the very rude national anthems of the West, "Yankee Doodle" is remarkable as having been an old Dutch catch adapted into an English satirical chant, and adopted, with conscious or unconscious irony, by the

American troops. "Hail Columbia" was a somewhat later production, by Joseph Hopkinson; and the "Star-Spangled Banner," by Francis S. Key, is associated with the traditions of the second British War. As inspired with the spirit of the Eighteenth, though belonging in date to the early years of the Nineteenth Century, we may mention the "Pilgrim Fathers" of J. Pierpont; Woodworth's "Old Oaken Bucket"; "Home, Sweet Home," by J. H. Payne; the humorous burlesque of J. G. Saxe, "Miss MacBride"; and the verses of the great painter and romancer, Washington Allston, with the refrain, "We are One." Francis Hopkinson's "Battle of the Kegs"; Joel Barlow's "Hasty Pudding"; the humorous "Wants of Man," by Quincy Adams; the "Conquest of Canaan," and "Columbia," also by Quincy Adams, are the best verses of their time.

Period of the Republic. The best energies of the American people have been concentrated on the development of vast material resources and the building of a great nation. It is not to be expected that a century of such activity would produce a literature equal to that of the Mother Country with her centuries of assimilation and development. American literature has no name that can rank with the highest. She has never produced a Shakespeare or a Milton, but her long roll of honorable names who have written prose and verse give promise of the literature that may be produced in America when time has ripened this nation and when the great genius shall be born.

The center of literary production during the last century shifted from place to place along the Atlantic coast. It was first in New York and began with the writers who formed the Knickerbocker school. From 1830 to 1835 the literary center shifted to Cambridge and Concord, where it remained for more than half a century. Since the deaths of Hawthorne, Longfellow, Emerson, Lowell, Holmes, the leaders of the Concord-Cambridge school, there has been no one center of literary preëminence. New writers have arisen in many parts of the country and a general interest in letters has been diffused.

With the first decade of the Nineteenth Century the stress of war and politics was relaxed and the time was favorable for the beginnings of our national literature.

The principal writers during the pioneer period of American literature were Washington Irving, James Kirk Paulding, James Fenimore Cooper, Joseph Rodman Drake, Fitz-Greene Halleck, William Cullen Bryant, Edgar Allen Poe. It was Washington Irving who, by his "Knickerbocker History" and "Sketch Book," removed from us the taunt, "Who reads an American Book?" Cooper invented a new type of novel in his "Leather Stocking Tales," and Bryant gave us poetry of the new world. Edgar Allen Poe created the music of poetry such as had never been sung.

The literary history of New England divides into three periods, represented by three groups of writers. First, the political group, including the great orators; second, the poets, and theo-

logians; third, poets, novelists, essayists, critics. Among the orators and statesmen of the first group are Daniel Webster, Edward Everett, Rufus Choate, Wendell Phillips, Charles Sumner, all orators of the anti-slavery days. Contemporaneous with these were the great orators of the South: Henry Clay, Robert Hayne, John C. Calhoun. To the great orators of the nation must be added the name of Abraham Lincoln, who won an enduring place by his Gettysburg speech.

The second New England group includes minor poets as well as the great theologian, William Ellery Channing; the poet and painter, Washington Allston, and Richard Henry Dana, for many years editor-in-chief of the "North American Review." The third group of New England writers includes Emerson, Hawthorne, Longfellow, Whittier, Lowell, Holmes, and to these may be added Bronson Alcott and Louisa M. Alcott, Henry Thoreau, William Ellery Channing, Theodore Parker, George William Curtis, George Ripley, and Margaret Fuller. Notable among historical writers during this half of the century are Richard Hildreth, George Bancroft, Francis Parkman, John Lothrop Motley, William Hickling Prescott, John Fiske, and John Bach MacMaster.

The period since the close of the Civil War has been one of great productiveness in literary fields, and continues to show an increasing rather than a diminishing tendency. To record even the name of every writer who has been thought worthy of favorable notice by competent critics would be impossible in a short review. The importance of the monthly and other magazines and reviews as vehicles for the first publication of all varieties of writing, has wonderfully developed and the success of those periodicals which employ the art of illustration is especially notable. While the greater part of magazine writing has been of a quality to engage chiefly the attention of desultory and uncritical readers, there is now apparent a decided development in the direction of greater thoroughness, sounder scientific method, and a more acute and delicate art. This is especially the case in historical and biographical studies.

With the dawn of the Twentieth Century we have no promise of literature equal in quality to the best that was produced in the middle of the Nineteenth Century, but the number of those who can write well is exceedingly large. American fiction of to-day is realistic and it has utilized freely the large resources of this country. The number of writers of realistic fiction cannot be computed, for among them must be included the writers of short stories with local coloring. Two acknowledged leaders in this field are William Dean Howells and Henry James, Jr. Mr. Howells is a keen observer of social life in our principal cities and has described it in several novels with depressing accuracy. Mr. James has given us a study of the American abroad in what has been called the "international novel." Contemporaneous with these are Thomas Bailey Aldrich and Edmund Clarence Stedman, both of them writers of poetry as well as prose. With the death of Aldrich in 1907 and Sted-

man in 1908, the last of the old school of American critics may be said to have passed away. Mr. Aldrich and Mr. Stedman were not great literary geniuses, they did not assume to be, but they had fine literary tastes and as editors and essayists they educated the reading public. Other writers of attractive stories are Edward Everett Hale, Frank R. Stockton, Elizabeth Phelps Ward, Mary E. Wilkins Freeman, Sarah Orne Jewett. Among the essayists are Charles Dudley Warner, John Burroughs, Richard Henry Stoddard, Henry Van Dyke, Donald G. Mitchell, Thomas Wentworth Higginson, Richard Grant White, Moses Coit Tyler. Prominent among literary journalists and critics, are Barrett Wendell, Parke Godwin, Richard Watson Gilder.

Western-writers have added to our literature an original vein of realism and humor; the poems of Riley and the novels of Edward Eggleston with their Hoosier dialect, Maurice Thompson, Eugene Field, Lew Wallace, Helen Hunt Jackson, Cincinnatus Miller ("Joaquin Miller"), Francis Bret Harte, and greatest of all, Samuel L. Clemens ("Mark Twain"), with his inimitable humor, have not only given us a literature of the West but a fund of laughter which is international.

The South, since the close of the Civil War, has awakened to greater intellectual activity. She has a right to be proud of the writers she has already produced and to be hopeful of her future. In these years, when poetry has been so rare and prose essay and the novel have so multiplied, the South has given us two poets with unusual poetic power, Sidney Lanier and Paul Laurence Dunbar. Sidney Lanier was both poet and musician and had the rare power of interpretation. In his "Marshes of Glynn," as he saw and felt them, he has made us see and feel them too. Paul Laurence Dunbar, the poet of the colored race, had the lyric charm that belongs to true poetry. Some of his exquisite poems will be accounted among the best that America has produced. Nowhere is there a finer dialect poem than Dunbar's "When Malindy Sings," a poem written as a delicate tribute to his own mother who was a negro slave. Fiction has been everywhere the favorite form of writing during the last few decades, and the South may well take satisfaction in the fine literary work of such writers as George W. Cable, James Lane Allen, Thomas Nelson Page, Richard M. Johnston, Mary N. Murfree ("Charles Egbert Craddock"), F. Hopkinson Smith, Joel Chandler Harris ("Uncle Remus"), Winston Churchill.

Three stages in American literature have been considered, the Colonial period, lasting two hundred years and more, when literary efforts were confined to feeble imitation of European models; the second, the period of the Revolution, when there was great unrest and no creative literary genius; the third period, that of the Republic, in the midst of which we are to-day working out our ideals, which will appear in future American literature.

TABLE OF ITALIAN LITERATURE

TIME	AUTHOR	PROSE	POETRY
13th Century	Ristoro d'Arezzo, . . .	Treatise on Astronomy and Geography.	
13th Century	Fra Poliano,	Latin Chronicle.	
13th Century	Fra Guittone d'Arezzo,	Letters,	Poems.
1265-1321	Alighieri Dante,		Divina Commedia.
1270-1336	Cino de' Pistoia,		Poems.
1300	Giovanni Villani,	Chronicles.	
1304-1374	Francesco Petrarci,	Letters,	Sonnets.
1313-1375	Giovanni Boccaccio,	Decameron.	
1431-1457	Luigi Pulci,		Morgante Maggiore.
1449-1492	Lorenzo de' Medici,		Poems.
1452-1498	Girolamo Savonarola,	Sermons,	Poems.
1458-1530	Jacopo Sannazzaro,		Arcadia.
1469-1527	Niccolo Machiavelli,	History, Art of War, The Prince.	
1474-1533	Ludovico Ariosto,		Orlando Furioso.
1482-1540	Francesco Guicciardini,	History, Politics.	
1480-1562	Matteo Bandello,	Novels.	
1490-1536	Francesco Berni,		Satire (comic).
1490-1547	Vittoria Colonna,		Poems.
1496-1556	Jacopo Nardi,	History of Florence.	
1500-1569	Benvenuto Cellini,	Autobiography.	
1512-1574	Georgio Vasari,	Lives of Celebrated Artists.	
1544-1595	Torquato Tasso,		Rinaldo, Aminta, Jerusalem Delivered, etc.
1550-1600	Giordano Bruno,	Metaphysics.	
1564-1642	Galileo Galilei,	Scientific.	
1568-1639	Tommaso Campanella,	Philosophy.	
1552-1623	Pietro Sarpi,	History of Council of Trent, etc.	
1698-1648	Bonaventura Cavalieri,	Geometry.	
1670-1744	G. Battista Vico,	"Scienza Nuova."	
1698-1782	Pietro Metastasio,		Musical Dramas.
1707-1792	Carlo Goldino,		Comedies.
1672-1750	Ludovico Antonio Muratori,	Annals of Italy, Italian Antiquities.	
1745-1827	Alexandro Volta,	Scientific.	
1731-1794	Girolamo Tiraboschi,	Literary History.	
1749-1803	Vittorio Alfieri,		Poems.
1766-1837	Carlo G. Botta,	Historical, Story of Italy.	
1773-1842	Jean Charles Sismondi,	Historical, Political.	
1777-1827	Ugo Foscolo,	Miscellaneous,	Poems
1784-1873	Alessandro Manzoni,	Novels,	Dramas.
1789-1853	Cesare Balbo,	Hopes of Italy, etc. (political).	
1798-1837	Giacomo Leopardi,		Poems.
1804-1881	Cesare Cantu,	History of Italians, Historical Novels.	

The oldest existing libraries have been found in Italy and in that country have been preserved the oldest and most valuable Greek and Latin MSS. Among these are the palimpsest, "De Republica," of Cicero, believed to date as far back as the Third Century, the famous "Codex Vaticanus" of the Fourth Century, and the equally ancient "Virgil" and "Terence." Italy of the Middle Ages clung to classical traditions and when at the end of the Fifth Century the fighting bands from the North conquered the Roman world Latin thought held its power while political Rome was lost. During years that followed the Italians treasured memories of Rome and fought against the encroaching Hohenstaufen Empire, and from this absorbing interest in political questions they were attracted by positive and practical subjects, especially the study of Roman law. Those who turned toward theology generally went to Paris for study, while in Italy the schools for laymen educated scholars and writers who were masters in grammar and rhetoric, and such poets as Fortunatus. All this kept alive a certain culture in that barbarous age and had great influence on future Italian literature.

When legends, poems, and tales appeared in other countries and among other Latin peoples, Italian writers and students, still interested in history and law, copied these from the French and German, but made the romance of the

Troubadors into serious history, written in the Latin language. Even the religious legend, so popular in that age, was little known, or appreciated in Italy. Prosaic lives of the saints, historical chronicles, and translations from Aristotle's philosophy and Marco Polo's travels were gathered into long series of facts. This hindered the literary growth of the new language and there was no real Italian writing before the Thirteenth Century. Especially in the last half of that century the new literature grew, in the north of Italy chiefly, in the form of religious poems intended to be recited to the people, and in the south in love poems of ideality, feeling, and sentiment. The stirring religious movement of that age, when the two great orders of Saint Francis and Saint Dominic arose, influenced all Italian life and letters. Many poems or hymns have been attributed to Francis of Assisi and others to the poet, Jacopone, who was a mystic and a most original writer.

At this time, too, the religious drama began with an old hermit, Fasani, who had come out from his cavern in the year 1258, and suddenly appeared in Perugia. Life was hard in Italy during these years, the never-ceasing quarrels between the Guelphs and the Ghibellines, the frequent interdicts and excommunications from the popes and the tyrannous cruelty of the nobles, added to famines and plagues, kept the people in constant fear. Fastani added to this un-

happy turbulence in Perugia by announcing himself as sent by God to warn the people of terrible visitations shown to him in visions. From these influences many joined together and formed themselves into a society to do penances and their songs, connected with the church liturgy and chanted in dialogue form, grew into the first dramas in the Italian tongue.

The people of Tuscany spoke a dialect closely resembling the Latin and it became the language of literature. Under its democratic government Tuscany was the first province of Italy, politically, and philosophy and science gained a hold in the cities, but prose was scanty during the Thirteenth Century, while poetry in various forms was abundant. The first real prose writing in Italian was a scientific book, a treatise on astronomy and geography by Ristoro. A collection of tales called the "Cento Novelle Antiche" belongs to that time, containing short stories from history, ancient tradition, the Bible, and legends. A number of novels were also written, but they are of little note compared with the rich legendary lore of other countries.

Guittone d'Arezzo is a name that attracts attention in this period, he wrote many poems and some prose, mostly in the form of letters. His love for antiquity, Roman tradition, and the old language was strong; in his researches he went back more than a thousand years and took Seneca for his model, trying to write Italian in the old Latin style. His subjects were moral or religious and his mixed style most extravagant and involved. All this belongs to the age of beginnings.

During this Thirteenth Century the Reformers gained greatly in numbers and about the middle of the century one sect, the Paterini, was nearly destroyed by the Guelphs, led by a Dominican friar. Two columns in the city of Florence still mark the place of the fearful massacre. Not many years later the banished Ghibellines gathered their forces, became conquerors in their turn and would have burned the city but for the determined opposition of Farenato degli Uberty, whose name Dante afterward made immortal. In the year 1282 the most wealthy guilds of the rich city drew away from all rule and established a government of their own, and this year may be considered the date at which a new period of Italian literature began, the period of development. This period saw, also, the beginning of Italian art in Tuscan lyric poetry.

The poet and philosopher, Cavalcanti, became head of the Ghibellines; and when never-ending brawls wearied the people who sought peace, by banishing the leaders of the rival parties, he was cast out among the rest and died in the year 1300. He wrote in prose on oratory and philosophy, but his poems, especially the love sonnets and short songs, were most noted and were praised by Dante, who was his great friend. Some of these songs were simple and graceful, others were heavy with metaphysical ideas borrowed from the Christian Fathers and ancient philosophers. His "Canzone d'Amore" became popular and was frequently published. In the most noted songs or ballads, probably written during banishment, his melancholy

longing for home and his solemn love for the lady of his heart crowded out all subtle philosophy. More than two centuries later his complete poetical works were placed in the libraries of Florence and Venice.

The works of Dante Alighieri (1265-1321), stand as the center of all literature of his time. In his little book of poetry and prose, the "Vita Nuova," are found lyrics, the form and style of which mark all lyrical poetry of that day. In this he idealizes love, making everything heavenly through it as he tells the story of his own love for Beatrice, whom he makes almost divine. The "In Memoriam" of Tennyson has been likened to this work. Dante was the most illustrious of Florentine citizens as well as poets, and was chosen prior of the republic in the year 1300. In his immortal poem, the "Divine Comedy," he has preserved the names and deeds of the great men who made Florence renowned. The parties contending for power took new names at the beginning of the Fourteenth Century, the Bianchi representing the remnant of the old Ghibelline faction while the Guelphs, the nobles or aristocracy, took the name of the Neri. Dante, as one of the Bianchi, was, at last, among the proscribed and his life became a perpetual pilgrimage from one Italian town to another.

The "Convito" or "Banquet" was the work of Dante's manhood as the "Vita Nuova" was the work of his youth. It is made up of three treatises, each forming a commentary, and he planned to compose eleven more, which would have made it a book of universal knowledge. Another work, "De Monarchia," written in Latin in scholastic form, was meant to show that a universal monarchy is necessary to the well-being of the world, this monarchy was to be centered in the Romans. This has been called the creed of Dante's Ghibellinism. Besides his "Divina Commedia" there are numbers of sonnets, ballads, and short songs bearing the poet's name, some of them undoubtedly spurious. The letters of Dante have been counted among the most important material for his biography. He wrote to the government of Florence to complain of his undeserved exile, to Henry VII. urging to some definite plans and to the Italian cardinals pleading for the election of an Italian pope. There are other letters to friends and to people connected with his work.

The contents and scope of the wonderful poem, the "Divine Comedy," are beyond the space of a short notice. From different authorities we may conclude that it was begun about the year 1300, the "Inferno" was finished in 1314, the "Purgatorio" completed in 1318, and the last cantos of the "Paradiso" were probably finished not long before the death of the poet. Dante said of this poem that he called it a comedy because it had a sad beginning and a cheerful ending. He hides an allegorical meaning under the literal one and in this it is connected with mediæval literature, but the merit of the poem lies in the individual art. He took his materials from theology, philosophy, history, and mythology, mingled this with hatred and love, and under his genius the dead became again alive. This

great poem fixed the destiny of Italian literature and began the age of the Renaissance.

Cino da Pistoia (1270-1336), son of a noble family, was also a friend and correspondent of Dante. In literature he continued in some sort the tradition of Dante during the interval between him and his successor, Petrarch. His name is found on all lists of early Italian poets and his love poems are musical and full of sweetness and quoted by critics as being surpassed only by Dante himself. It has been said that in the writings of Cavalcanto, Dante, and Cino da Pistoia "the psychology of love and of sorrow nearly reaches perfection."

In histories of literature Petrarch (1304-1374), is classed as one of the four classical poets of Italy, but he is as well known from his interest in the old Latin writers and his influence in the revival of learning in mediæval Europe. His father was included in the same edict of life-long banishment that sent Dante out of Florence and the boyhood of Petrarch was spent in a little village of Tuscany where he acquired the pure Tuscan idiom that he afterward used with so much skill in odes and sonnets. He lived for many years at Avignon, denouncing the life of the papal court; he traveled much in Europe and in the year 1341 he received the poet's crown in Rome. He wrote works in Latin, the most important being in the form of letters, known as the "Epistolæ," important as a history of his own times as well as an index to his own life and mind. Another work in Latin was a poem, "Africa," in which he recited the wars of Scipio. In the year 1327 he is said to have first met Laura, the object of his life-long devotion and heroine of his poetic writings. That Laura really lived has come to be a belief, but who Laura was cannot be definitely proved; she undoubtedly lived at Avignon. His "Canzoniere" contains poems written during the life-time of Laura, poems written after her death, and a third part which seems to have been planned after the manner of Dante. While these poems show Petrarch to have been a psychologist, he did not, like the poets before him, go into transcendentalism, but kept within human limits. Petrarch had no decided political idea, but he was a most patriotic Italian, and in his mind connected the Italy of his day with the great Rome of the days of Cicero.

Boccaccio (1313-1375) lacked nothing of Petrarch's love for antiquity or his interest in the new Italian literature. Great classical learning shows in his "Genealogia Deorum," where he writes of the Pagan deities, making an encyclopedia of mythological knowledge. He compiled, or perfected, works on geography, he touched upon history and wrote some minor things in Latin, besides his Italian lyrics and longer poems. His famous Italian work was the "Decameron," a collection of a hundred novels related by men and women who had left Florence during a year of plague (1384). In this the rude form used in fable-writing gave place to careful work on classic models and was the beginning of an artistic style in romance. Among authors who wrote collections of tales in imitation of Boccaccio were Fiorentino, Sacchetti, and Sercaimbi.

A chronicle of events dating between the years 1280 and 1312 was written by Compagni, which is still consulted as important authority for that period of Florentine history. It shows strong feeling and discusses the reasons of the events which evidently came under his own notice. Villani, another chronicler, relates events up to 1347. He traveled in France as well as Italy, and his chronicle includes much valuable knowledge concerning both countries. This was afterwards versified by Antonio Pucci and other versified history was written during this century when every subject was treated under the form of verse. Many minor poets also left political works. In connection with this versification comic poetry was also developed and carried on by Pucci, Orgagna, and their followers. These poems, comical as well as historical, were meant to be recited to the people and in them were the beginnings of the romantic epics of the Sixteenth Century, Ariosto's "Orlando Furioso," Bojardo's "Innamorato," and others.

Lorenzo de' Medici (1449-1492), remembered chiefly as a statesman, was a man of letters, and left poems written in the spirit of Dante and older poets, while he was a man of his own time. As a classical scholar he shows the influence of the Renaissance in Italy. During the Fifteenth Century a kind of literature started in Florence, attached to popular festivals held in honor of St. John, the patron saint of the city. Although this was in the form of popular poetry the names of some of the most important authors are found in connection with it and it became the foundation of the Italian drama. Against this literary and social movement the friar, Savonarola, appeared, arriving in Florence in the year 1489. He took the line of a prophet and preached against much of the reading of the day and against the classical studies. In his struggle with Lorenzo de' Medici he directed his attack against him as a patron of pagan literature rather than against a political tyrant. Savonarola has sometimes been considered as a forerunner of the Reformation, but his preparation of the way for that great German and English religious movement was no part of his plan. He desired a reform of manners, not of doctrine, and had no great merit as a thinker or writer. He left Italian sermons, hymns, and ascetic and political treatises.

Machiavelli (1469-1527) and Guicciardini were leaders in history as a science founded on observation. Machiavelli noted facts, studied other histories and sought out reasons, and his principal works are political rather than historical. His "Principe," the "Prince," called out severe accusations against him, and has since associated his name with unscrupulous politics, but the book seems to have been the result of the civil and moral condition of Italy at that time. His history of Florence is still consulted as standard authority. The "Story of Italy," by Guicciardini, a history of the time from the death of Lorenzo de' Medici to the year 1534, is full of political wisdom, and treats of characters as well as events. Following these were Nardi, Varchi, and Segni, Tuscan historians; Porzio, who wrote histories covering short periods;

Bembo, Paruto, and others, who arranged chronicles or annals of other nations.

The romances of chivalry versified by Pulci and Bojardo became the foundation of the romantic epic formed by the genius of Ariosto (1474-1533). His "Orlando Furioso" made wonders and prodigies appear as truths and facts and his descriptions were marked by grace and beauty. The historical epic was the work of Tasso (1544-1595), who became famous through his poem, "Jerusalem Delivered," the story of the liberation of the Sepulchre by Godfrey of Bouillon in the Eleventh Century. This poem ranks now as the best heroic poem that Italy can show.

Tasso seems to stand between the high development of the Renaissance and the period of decadence in Italian literature, that began with the Spanish rule in the middle of the Sixteenth Century. The people of Italy were oppressed, every high aspiration was checked, no freedom of word or thought was allowed, and this continued until the war of the Spanish succession. This one hundred and forty years is known in the history of Italian literature as the Secentismo. During this time, however, some independent thinkers, such as Bruno, Campanella, and Vannani, opened the way for the scientific triumphs of Galileo (1564-1642). He was conspicuous in literature as well as in science, a student of Ariosto, and in his prose is found the poet's ease, clearness, and elegance. The prose of Galileo has been called the best prose ever written in the Italian language.

When freed from Spanish dominion in the Eighteenth Century, civil reforms, resulting from ideas quietly working in many parts of Europe, improved the conditions of life in Italy. The first sign in the literature was in historical and scientific prose. In history Muratori collected the chronicles for the years 500 to 1500, and wrote his *Annali d'Italia*, and Mazzuchelli turned to literary history preparing for a biography of Italian writers. Everything tended toward improvement and the influence was soon seen in the drama. Metastasio (1689-1782) was one of the most pleasing poets of his day, writing plays, operas and ballets. Goldoni revived comedy and Alfieri (1749-1803) raised tragedy to a high standard. "Saul" is regarded as his masterpiece. Monti and Foscolo were followers, both inspired by patriotism. Silvio Pellico (1789-1854) also wrote tragedies which were good specimens of modern art, but he is most popular as author of "Lie Mie Prigioni," "My Prisons," the story of his ten years' life in the fortress of Spielberg. Manzoni (1784-

1873) and Niccolini were also popular writers. Giordani, born in 1774, was the last of the writers known as the classicists.

Scholars in Italy were influenced by the ideas embodied in the movement known as Romanticism, especially strong in Germany at the beginning of the Nineteenth Century. Silvio Pellico, Breme, Berchet, and Manzoni were prominent among them, but the literary reform opposing the classical studies of the past took more the way of realism in Italy. Manzoni was distinguished in this and from his "Promessi Sposi" the new form is dated. In this the historical novel grew into a work of art, and the genius that created it was first recognized by Goethe, and placed the author, Manzoni, at the head of Italian literature of the century. Leopardi (1798-1837) shared this honor by putting into his poems most realistic pictures of what he saw and felt. Circumstances had given him a dreary life and his poetry has been quoted as the poetry of despair in which he surpassed even Shelley and Byron. He has also been honored by critics as the first poet since Dante and a most perfect writer of prose. Among his poems are "Passero Solitario," "Sabato del Villaggio," and "Genestra." "Operette Morali," a volume of discourses and dialogues, was his greatest prose.

Botta (1766-1837) and Colletta (1775-1831) wrote noted histories of their own country and to these Botta added a history of the American Revolution. These were followed by "Vespri Siciliani," a history by Amari, "Storia d'Italia," by Troya, and the "Archivio Storico Italiano," established by Vieusseux, all in the renewed spirit of research. Interest in history was inspired by the noted Italian love of country and patriotism led to literary expression. Among authors connected with the political revolution of 1848 were Guisti with his popular satires, Guerrazzi, writing historical novels, Gioberti in polemics, and Balbo making an epitome of history.

Political geniuses of this century were Aleardi Prati, Carducci, and Zanella. Arnaboldi, also a poet, has been criticised for writing utilitarian verse. Fiction lists carry the names of Barili, Farina, Giovagnoli, and Bersezio, and biography and history have been made richer by the work of Zini, Capponi, Bartoli, Villari, and Berti, with Fiorentino, Trezza, Ferrari, and Cossa in general literature.

Italian fiction has a wide field, description in travels is well done as De Amici's almost unequalled works show, and through translations Italy holds a place in the reading world.

SPANISH LITERATURE

TIME	AUTHOR	PROSE	POETRY
1176-1250	Juan Lorenzo Segara, .	.....	Poem (on Alexander the Great).
1198-1268	Gonzalo de Berceo, . .	.....	Religious Poems.
	Unknown, . . . . .	.....	Early ballads.
	Unknown, . . . . .	.....	Poems of the Cid.
1282-1349	Don Juan Manuel, . . .	Count Lucanor (tales), . . .	Poems.
1300-1360	Juan Ruiz de Hita, . .	.....	Poems.
1332-1407	Pedro Lopez de Ayala, .	.....	Court Rhymes, Poems.
1384-1434	Marquis of Villena, . .	Labors of Hercules.	
14th Century	Rodrigo Yanez, . . . .	.....	Chronicles of Alfonso XI.

SPANISH LITERATURE—Continued

TIME	AUTHOR	PROSE	POETRY
1398-1458	Lopez de Mendoza, . . .		Sonnets.
1411-1456	Juan de Mena,		Labirinto.
1474-1566	Las Casas,	Historical.	
1478-1577	Oviedo,	Natural and General History of Indies.	
1493-1543	Juan Boscan,		Poems.
1503-1536	Garcilasso de la Vega, . .	History of Florida,	Poems.
1503-1575	Diego de Mendoza,	History, Fiction.	
1512-1581	Zurita,	Annals of Aragon.	
1528-1591	Luis de Leon,		Lyrics (religious).
1534-1597	Fernando Herrera,		Lyrics.
1533-1595	Ercilla,		Araucana.
1536-1623	Juan de Mariana,	History of Spain.	
1547-1616	Miguel de Cervantes Saavedra,	Don Quixote, etc.,	Galatea.
1562-1635	Lope de Vega,		Dramas, Lyrics, etc.
1569-1631	Guillen de Castro,		Dramas.
1580-1647	Gomez de Quevedo,	Theology, Satires,	Poems.
1600-1681	Calderon de la Barca, . . .		Dramas.
1596-1669	Manuel de Villegas,		Lyrics.
1610-1686	Antonio de Solis,	Conquest of Mexico.	
1676-1764	Feyjoo y Montenegro, . . .	Scientific Essays, Criticisms. .	
1702-1754	Don Ignacio Luzan,	Art of Poetry,	Poems.
1750-1798	Juan de Yriarte,	Proverbs.	
1760-1828	Leandro F. Moratin,		Dramas, Poems.
1775-1848	Alberto Lista,	Criticism.	
1731-1799	Ramon de la Cruz,		Dramas.
1807-1878	Don Patricio de la Es- cosura,	Fiction.	Poems.

There is no record of the literature of Spain earlier than the Twelfth Century. The oldest manuscript is a fragment of a play written for the Church of Toledo, the earliest important work the "Chronicle of the Cid." Allusions in later literature suggest that heroic poetry may have been quite rich, but no poems are preserved.

With the heroic poetry, taking subjects from history and legends, there grew up in the Thirteenth Century a religious poetry, written mostly by monks. Among these Gonzalo de Berceo wrote poetical lives of the saints, devotional poems, and religious hymns. To this century also belongs a "Life of St. Mary the Egyptian," translated from the French.

King Alfonso X., who reigned until 1284, was author of the poem, "The Philosopher's Stone," besides several prose works. Under his patronage scientific compilations were made and he was the founder of history written in Spanish. The "Cronica General," composed under his direction, tells of universal history from the creation of the world, in one part, and of national history in another. This last was called "Historia De Espana." The source of the first part was Spanish chroniclers, who wrote in Latin, but whose works were soon translated. In the "Historia De Espana" many legends are found, also the story of the Cid.

King Alfonso's example was followed by other writers on his models. About 1390 a "Chronicle of the Conqueridores" was compiled by command of the grand-master of the Order of St. John of Jerusalem. Special chronicles of each king were also written. Among the writers of these comes Pedro Lopez de Ayala, a man who shows literary culture and knowledge of ancient history, and with him the style of writing is much improved. Besides these chronicles are some biographies of important persons and a very curious book of travels, the story of an embassy sent by Henry III. to Tamur, in 1403, evidently written by one who led the mission.

Other writings in prose in the Thirteenth and Fourteenth Centuries are generally filled with maxims and short moral tales, a few of Eastern origin. The best among these Oriental tales is a collection by Juan Manuel, nephew of Alfonso X. Juan Manuel also wrote graver works on education, domestic economy, and politics.

The principal French romances of the Round Table were translated and imitated in Spain in the first half of the Fourteenth Century, and notice of the "Book of Chivalry," in Spanish literature, shows that Spaniards have long known this romance from France, perhaps through Great Britain.

In the reign of John II. of Castile (1407-1454) there appeared a court poetry, now known as the "Arte de Trobat." This poetry was written in short pieces and in complicated verse form. It was made up of love ditties, debates, repartees, burlesques, and satirical songs. To understand or appreciate these poems they must be read in connection with the history of the time. Mendoza, Marquis of Santillana, stands first among these courtiers and poets, and some of his lighter poems are very graceful and full of melody. Juan de Mena belongs, also, to those days, and his principal works, "The Coronation" and "The Labyrinth," show the effect of Italian influence. They also show progress of the language in Spain.

As the beginning of Spanish drama during these centuries, dramatic representations had been given at church festivals, with the object of explaining the ritual to the ignorant. Gradually changing, dialogue was added, and about the year 1492 a book appeared, "La Celestina," written by Fernando de Rojas, and this most astonishing novel exhibited, for the first time, persons of all classes, particularly the lowest, talking in harmony with their natural surroundings. This could not have been represented on the stage, but it left its mark on the drama of the nation. It was translated into various

languages, and, with its liberty of thought and expression, was a great success.

Two most noted among dramatic writers, Cervantes and Lope de Vega, were contemporaries. Cervantes, born in 1547, began writing comedies and tragedies; the first, "Galatea," was published in 1584. His great work, "Don Quixote," published in 1605, was immediately translated into all the languages of Europe. "Don Quixote" has been defined as the social romance of Sixteenth and Seventeenth Century Spain. Lope de Vega was a prodigy of learning and imagination. He wrote numberless dramas and detached verses, many of which are collected under the name "Obras Sueltas."

The "Golden Age" of Spanish literature dates from the union of Aragon and Castile and the connection of the House of Austria, which gave unity to the literature of Spain, as well as to Spanish politics. During this age Calderon de la Barca (1600-1681) was the head of the Spanish drama. His plays are of four kinds: sacred dramas from Scriptural sources, historical dramas, classic dramas, and pictures of society and manners. The most celebrated are "The Constant Prince," and "El Magico Prodigioso." Calderon was attached to the court for the purpose of furnishing dramas for the royal theater, and in making his story to hold interest throughout, facts were no obstacles.

With the celebrated Juan de Mariana (1536-1623) a new manner of writing history appeared. In place of the tagging on of one fact after another, with no apparent connection, he wrote a general survey of the history of Spain. Various accounts of more or less important episodes in the history of the country were written by different authors with reports of trans-Atlantic conquests. Gracilasso de Vega, a descendant of the Incas, wrote a history of Florida, based upon the adventures of De Soto. To another historian, Solis, belongs "Conquest of Mexico," a flattering picture, and very successful. Gomara, Oviedo, and Las Casas left records of their adventures in the new world, and on these records all history of early Spanish settlements in America is founded. Letter writers are numerous in Spanish literature, and from collections of letters may be gathered history of the times and secrets of Spanish policy. Among these is Antonio Perez (died 1611), whose letters give much information in a gallant and sprightly fashion.

Philosophy was poorly represented in these centuries, the few thinkers writing in Latin, and the very existence of mathematical science was unknown.

Luis de Leon and Herrera led in lyric poetry during the Sixteenth Century and much of their inspiration came from the Hebrew Scriptures. After these writers ballads grew to be a delight among the people, and no poetry of modern times has been more widely known or influenced so thoroughly all national life. Many of these ballads were by authors who wrote little else; but ballads are also found in the works of all writers who wished for fame, or to become of interest among the Spanish people. The religious poems of Quevedo show beauty, but he is best known by his prose satires.

At the end of the reign of Charles II., in 1700, France had great place in Spanish thought; French customs crept into use and French became the language of the society of the court. Translations from the French took the place of native work and little advance was made.

Charles III. (1759-1788) gave new life by abridging the power of the Inquisition and allowing books to stand by defense of author or publisher. In these years the poems of Moratin, the literary fables of Yriarte, and the "Life of Friar Gerund," by Salazar, were added to the literature.

The return of the Bourbons in 1814, however, made this of small account. During fierce political changes and long civil war the political pamphlet was the only book to attract great attention. José de Larra (1809-1837) was a prose writer of talent, who gained reputation by his "letters" on political subjects. He was better known by the pseudonym of "Figaro."

Among later writers Antonio de Trueba is known by his popular songs and short stories, Lista and Duran as literary critics, and Campoamor and Bequer, poets. In the novel we find the best contemporary Spanish literature. Perez Galdos, a writer of fiction, touches modern thought in the conflicting interests of Spanish life. Juan Valera is the author of "Pepita Jimenez," a famous novel, and the stories of Caballero, though not of equal merit, find translators.

RUSSIAN LITERATURE

Going to the foundations of Russian literature we find, as in most literatures, the oral tradition in the form of poetry. This poetry is not rhyme but poetic in figures, and has a sort of cadence appreciated by the scholar of the language. These tales of old time, known as *bilini*, are full of interest, many in number, and have been carried by wandering minstrels all through the land, as minstrels have chanted the songs and sagas of so many peoples. Thus we find in Russian literature the division of the oral and the written.

The oral literature of song or tale has been marked by scholars into periods, beginning with that of the old heroes. Songs in this period reach to the bounds of mythology, for the oldest heroes are represented as monstrous beings and might be personifications of the powers of nature. In all these there is also the imagery of popular poetry, the terms "brightest sun" used to designate the hero, "damp earth" in connection with a being of evil propensities, and others like. Giants of the mountains and serpents of the caves are made the subjects, or heroes, of the songs, and are shown guarding their surroundings. The animal natures are prominent, as in the well-known legendary characters, *Idolistiche Poganskoe*, the great glutton, and *Solovei Razboinik*, the nightingale robber, with his nest in six oaks, who is the terror of travelers.

Fabulous tales or legends centering around the cruel tyrant, their celebrated Prince Vladimir and his introduction of Christianity in connection with the Greek Church, seem to mark the second literary period. The chief hero of these is known as *Ilya Murometz*, a giant in

form and strength and performing gigantic deeds. Vladimir introduced the forms of Christianity after his connection with the Church at Constantinople, during the last half of the Seventh Century, but no note of its spirit is prominent in the recital of his valorous performances as given in these tales.

The great commercial success of Novgorod, and its influence on the country, seems to mark a period in the history of Russia and a third cycle in the literature. In this are found the stories of Sadko, the great merchant, and of Versilii Buslaevich, of daring ventures and grand results.

The period following belongs to Moscow, which became the capital of the future empire in 1300 A. D., and during these years the literature busied itself with the autocracy and its doings. The destruction of Kazan by Ivan the Terrible, the conquest of Siberia, the iron rule of Ivan, himself, with its cruelty and superstition, are the foundations of the popular traditions which, strangely, show no hatred or call for revenge. Mingling with these in the later years are stories of the Cossacks, which almost make a literature in themselves. The Cossack songs laud the glories of the day, while they also record the sufferings of the people during Turkish invasion, the devastation carried by the Mongols, and the final overthrow of the Cossack republic.

The arrival of Peter the Great on the scene is marked as plainly in literature as it is in history. The spirited poem on the death of Ivan the Terrible, the pathetic story of Xenia, the tale of Yermak, the conqueror of Siberia, were followed by songs in abundance celebrating the wonderful Czar. The religious poems of Russia are numerous, and in them may be found many curious legends with beliefs of the Middle Ages. Many of these poems, with a large department of folk-lore, belong to antiquity and offer a fine field for the student of comparative mythology. Belonging to the more modern period some of these songs rehearse the death of Peter the Great and the deeds of Napoleon. The greater amount of all this poetry was not written, but belonged to oral tradition until an Oxford student, sent as chaplain with an embassy, early in the Seventeenth Century, collected a few old songs and tales and put them into writing.

According to authorities, the earliest specimen of the written literature of Russia is a Codex based on the Slavonic gospels. This was written by order of the Governor of Novgorod, and dates 1056 A. D. About twenty years later is a sort of Russian encyclopedia compiled from the Greek. This bears the name of Prince Sviatoslaff, son of Olga, the first Christian sovereign, and the work was done for him by his diak, or deacon. The style is said to be simple and clear. What seems a strange mixture is found in a work considered one of the best written in the language at that time, known as a "Discourse Concerning the Old and New Testaments" and containing a panegyric on Prince Vladimir. That he was the hero of so much of the popular poetry of Russia in that century, may explain the connection. The noted monk, Theodosius, wrote his "Instructions," discussions concerning

the faith of the Church and exhortations to better living. Most of the writing of those years seems to have been done by monks and churchmen, and this confirms the statement so often met, that the "beginnings of Russian literature are contemporaneous with the introduction of Christianity." In this connection are mentioned the missionaries, Cyril and Method.

The earliest Russian code of laws, the "Russkai Pravda," is found in the Chronicle of Novgorod, and was first published during the reign of the son of Vladimir, Yaroslaff, who died in the year 1054. Both form and subject-matter of this code show that Russia then stood on a level in civilization with other European countries. Nestor, who is known as the patriarch of Russian literature, wrote his "Chronicle" during this century, and it proved to be the first of a long series of Russian annals recorded of many towns and written by many authors, mostly by the cloistered monks. These would be as dry reading as the Anglo-Saxon chronicles but for the romantic stories and sagas bountifully included in them. Travelers who visited the Holy Land and India left records of their adventures, and the sermons of Cyril and other bishops, written in allegorical style, are also preserved with many lives of the saints and the Fathers. Some of these have been edited in later years.

At the end of the four dreary centuries, the period of the appanages followed by the yoke of the Mongols, the literature of the country began a slow revival. The "Story of Igor," the manuscript of which was carefully preserved until the burning of Moscow in 1812, has been of much note. It is the story of the early part of the Tenth Century, but it has poetic spirit and holds interest for the general reader. To the time of the terrible Ivan (1530-1584) belongs the curious "Domostroi, the Book of Household Management," which became popular. It is said to be the work of a monk, and it faithfully pictures the ignorance and barbarisms of the time. At this date we also find the "Chetii Minei," which is said to have taken twelve years in compiling from the Greek. It was made up of extracts from writings of the Fathers, arranged for every day of the year.

The printing-press was set up in Moscow in the year 1553, and ten years later the first book was printed. This was called the "Apostel," and contained the Acts of the Apostles and the Epistles of the New Testament. Prince Kurbski was a fluent writer of this time who died in exile. Early in the Seventeenth Century appeared the "Chronograph" of Sergius Kubasoff, a history from the creation of the world to the day of Michael Romanoff (1617 A. D.). But the most important writing of that period was the "Account of Russia" by Gregory Kotoshikhin, who fled to Poland about the year 1664. He wrote his work in Sweden, the manuscript was preserved until 1840 and then printed. These books are considered an important record of Russian life before the time of Peter the Great. Works on philology and other educational subjects were written and the authors generally banished. The patriarch Nikon is well-known through his struggles with the Czar

as well as his remodeling of the sacred books which led to the great religious schism of Russia, a matter of history. The whole of the Seventeenth Century shows influence of Poland, and with these men the old Russian literature seems to have ended. Knowledge of the literature of the West made a new or modern literature for Russia.

Simeon Polotzki (1628-1680) was a sort of connecting link between the old and the modern period. He was tutor to Feoder, son of the Czar Alexis, had been educated at Kieff, then a Polish district, but seems to have known something of French literature. He wrote religious works, dramas, and doggerels. During his time Alexis made additions to the "Code of Laws" and burned the "Books of Pedigrees," which held histories of the different branches of past royal families. Peter the Great, beginning his reign in the year 1689, met the Polish element that had been so great in its influence and made native Russian the language of communication in all business. He found help toward introduction of new literary forms in Propocovich, a scientific scholar, who endeavored to put aside the numberless superstitions of the time by teaching material facts of science. Yavorski, who wrote the "Rock of Faith," opposing Lutherans and Calvinists, and Pososhkoff with his valuable treatise on political economy, under the title "Poverty and Riches," were also of note. The indefatigable writer, Michael Lomonosoff, did much to aid education in Russia by his personal influence as well as by his odes, tragedies, essays, and slight histories.

The plan of Peter the Great to civilize Russia on the model of the nations of the West reached its climax under the ten years' rule of Anna (died, 1740). The influence of her German advisers headed by Biren, was strong in all departments, but the annals of the time show little literary progress.

From the beginning of the reign of her successor, Elizabeth, Russians date a notable advance in letters, the work mainly following French models. Through the influence of Ivan Shuvaloff the University of Moscow, the oldest in the country, was founded in the year 1755, and in the following year the first theater at St. Petersburg was opened with Sumarokoff as director. He was noted for his rhymed comedies and tragedies written in French style. Up to this time only religious plays had been allowed in the country.

Catherine II. (reigned 1762-1796) gathered about her a generation of court poets, most of them poor writers but urged to emulate Horace, Virgil, and Homer. Few of them are now remembered even by name. Kherasoff was author of two lengthy epic poems which are no longer read, and Denis von Visin, evidently of German blood, wrote national comedy. The greatest poet was Gabriel Derzhavin (1743-1816), who has been called Catherine's poet laureate. Of his poems the "Ode to God," "The Nobleman," and "The Taking of Warsaw" are best known. Alexander Radistcheff appeared as writer of "A Journey to Moscow," in which he noted the sad condition of the serfs and for which he was sent to Siberia. The censorship of the press became

severe, many foreign books were excluded and for readers, as well as authors, times grew troublous.

The form of allegorical writing, so common in countries under absolute rule, was popular in Russia and a long list of fabulists was headed by Ivan Khemnitz (1744-1784), who began with translating and afterward wrote original tales. A later author, Ivan Kriloff (1768-1844), proved to be the most popular fable-writer of the nation. He resembled the French La Fontaine in character and in work. Among the earliest of real romances or novel writers in Russia were Zagoskin and Lazhechnikoff, whose books are still read, long narratives of life in their own times. Among them is "Yari Miloslaviski," a tale of the days when the Poles were driven from Russia. Nicholas Gogol (1809-1852), a native of Little Russia, was the first novelist of talent and he described the people and the scenery of his own district in his "Old Fashioned Home" and "Taras Bulba," a story of war between Cossacks and Poles. In a curious tale, "The Demon," he pictured Kieff in the old days. Novels grew popular, and we find the names of Hersen, the exile, Goncharoff, Bulgarin, and Dostoievski. Count Tolstoi, noted for many other works, was also a novelist and the English translation of his "Anna Karenina" has been said to be the longest novel in our language. Most eminent was Ivan Turgenieff, in his own time the author best known outside his own country.

Turgenieff first attracted notice by his interest in the Russian peasant and his best poems and tales find subjects among the serfs. These have been translated and made for the author his reputation in Europe. "Dvorianskoe Gnezdo," or "A Nest of Gentle People," has been noted as one of the most pathetic tales found in any literature. "Nov" (Virgin Soil), and "Mumu," with other minor stories, have been often translated and greatly praised.

While Count Tolstoi has written much and on many subjects, including religion and morals, and become known throughout the reading world, critics have named as the best of his work, the three plays, "The Death of Ivan," "The Czar Feodor," and "The Czar Boris." The first Russian play made on the model of Shakespeare's dramas was "Boris Godunoff," written by Pushkin, but many have appeared since his time. The impulse that came from abroad, especially through acquaintance with the poetry of Goethe, Schiller, Shakespeare, and later, that of Byron, pushed aside the French models that were so often copied. Besides writing after the models found in other languages, Russian poets have translated much, and the literature of their country is rich in these reproductions.

Both in number and genius of novelists, Russia compares well with other countries. Gogol, the first real novelist, has been followed by a series that continues to the present day. Dostoevskii is quoted in connection with Tolstoi and Turgenieff, and near them is Goncharov and Pisemskii, Garshin, called a disciple of Tolstoi, and Korolenko, a Little Russian.

Russia has, also, historians worthy to be known as successors of Karamzin, and who have given more accurate record of fact if not in his brilliant

style. It has been said that Russian historians have been generally satisfied to write the story of their own country, but this they seem to have thoroughly investigated. They meet strict censorship whenever they deal with history of recent times. Among these, Kostomarov (1817-1885) wrote much of note, became obnoxious to the government and was banished for several years and forbidden to publish anything. After his return in the year 1854 he wrote several works and contributed to leading Russian reviews. Ustrailoff published a good and full history of his own country but it was not as popular as his "Reign of Peter the Great," in which he brought out several documents until then unknown and with them facts of interest. He has been called the ablest Russian historian of his time.

Solovieff (1820-1879) left an unfinished history of great length, which has proved a mine of information for writers and scholars. Others have written up particular periods or subjects. An account of the Polish Rebellion of 1863, which first appeared in a Russian magazine and was afterward published in book form, gave some startling disclosures that caused its circulation to be forbidden. Excavations in many parts of the country, within the last century, have also given light to the pre-historic period.

Good histories of Russian literature have been written, and these often include philology and go back to older Slavonic literature. A valuable "Explanatory Dictionary of the Great Russian Language," was published many years ago. Works on ethnology and publications on natural history have attracted attention, but moral and mental philosophy found few interested authors. Scientific subjects, law, and medicine have their share of students and works on these have been translated from foreign languages.

We hear of the literature of White Russia and of Little Russia, which are really Russian dialects. Little Russian literature had no separate existence until the annexation of Poland. It developed in a mass of song and legend with some theological writings, educational works, and annals. In the year 1876, the Imperial Government forbade the publishing of anything in Little Russian and both Poland and Russia had long shown hostility toward it. Its popular poetry is exceedingly rich and interesting. The poet, Shevchenko, gathered the old songs of his land as Burns gathered the lays of Scotland and, like Burns, he was one of the great poets. In his youth he rejoiced in the traditions of his native village as he heard them from the priests and in his poetry he faithfully reproduced the life of the old days. The story of those times is lightened by the charming lyrics that he mixed with his recital. He was banished to Siberia for ten years (1847-1857), and died soon after his return. The great cairn that marks his grave has been called the Mecca of South Russia. The folk-tales of Little Russia are still recited by wandering pedlars and the peasants.

In the literature of White Russia is found little besides a few songs, parts of Scripture, and some law papers. The country of this literature is the dreariest in the empire.

JAPANESE LITERATURE

In the Fifth Century letters and the Confucian classics were carried into Japan through Corea, and about the year 550 A. D. Buddhist missionaries settled in the islands. In the Eighth Century Japan copied the Chinese form of centralized government in place of the ancient feudalism, and Japanese literature, both prose and poetry, dates from this time. Compilations of historical facts are supposed to have existed at least 100 years earlier and two distinct works are quoted, but neither have been preserved.

The earliest known Japanese writing is the "Kojiki" or "Record of Ancient Matters," dating from the year 711 A. D. The most ancient poetry is the "Manyoshui" or "Collection of a Myriad Leaves," belonging also to the early part of the Eighth Century. In the preface to the Kojiki it is said that the emperor who reigned during the last half of the Seventh Century, trying to preserve all true traditions, had all the records then existing carefully examined, corrected, and arranged, but this work was never completely written, and the memory of a member of the imperial household, one Are, became the only authority for future references. Twenty years later one of the ministers of the government compiled the work, mostly from the words of Are, and this, completed, became the "Kojiki." In the year 720 another work, entitled the "Nohongi" or "Japanese Record," was put into shape. The earlier record is largely pure Japanese, preserving the form and spirit of Japanese antiquity, the other shows Chinese ideas. Both are really ancient histories, going back to the "divine age," and completely mixed with mythological legend. In them the country itself is named "land of the gods," and the pedigree of the sovereign traced back to a Sun goddess. These works formed the basis for many later writings and numerous commentaries. A noted edition of the "Kojiki," with an elaborate commentary, was published between the years 1789 and 1822. Many old manuscripts have been published in modern style.

Among later Japanese histories is the "Dai Nihoushi" or "History of Great Japan" in 240 books. This was composed by the second lord of Mito (1622-1700), a noted patron of literature, who collected a large library of old books from temples and shrines, and from among the people. It is said that the lord of Mito had aid from Chinese scholars who had fled to Japan to escape their Manchu conquerors. A doubt of the origin of the imperial dynasty might endanger the very foundations of the throne, and for this reason the national annals of Japan have been most carefully guarded. The purpose of the "Dai Nihoushi" was to call attention to historical facts and thus give new strength to his rightful authority, which was being usurped by the Shogun. The writing of this history had much to do with the revolution that came more than a century later. Following this, an author, Rai Sanyo (1780-1832), wrote the "Guaishi," or "External History of Japan," which was widely read by Japanese scholars. There are many other historical works adapted for popular reading and for scholars.

Works on local geography make a large showing in this literature. As early as the Eighth Century the government ordered careful descriptions of every province and village to be compiled. These are much like the county histories of England and the books growing from them are numberless. They include facts of topography, natural history, origin of names, local legends and traditions, records of industries and commerce, and descriptions of temples, shrines, and monuments, and all these, written with minute detail, make works of great length and of much historic interest. Every province in Japan has places noted in history, monuments, castle-towns, temples, and other memorials of past ages, and the guide books included in this geographical section of the literature give the traveler a perfect knowledge of his route. Probably no other country is so minutely known by its inhabitants.

Japanese classical poetry has always been a favorite study and there are many volumes written or collected by the old nobles. The "Hiakuninshui" or "Collection of One Hundred Poems" contains verse written by the emperors themselves. It had long been a custom for scholarly people to gather for the purpose of passing away time in the making of verse. These verses or poems were kept in the original manuscripts, or printed and made up into numberless books of minor poems. Loyalty to country and love of its beauty make many subjects in this verse, and most of the short poems are simple, almost explanatory, in form and very difficult of translation into what we would call poetry. Some of the lyrics, however, show quaint ways of thought and happy modes of expression. The editors of "Sunrise Stories" have very cleverly succeeded in translating the peculiar flavor of Japanese verse and keeping something of Japanese form. There are no great epics or didactic poems in the Japanese language, and the drama does not hold large place. Popular plays are the most common and are often stilted in style, but the farces are lighter.

Religion and philosophy make a large section in the literature of most countries, but no Japanese book yet read or translated by a foreigner takes the place held by the religious books in European languages. Nothing has thus far undone the work of the early ages, and loyalty, family pride, patriotism, and religion are all one in Japan. The national, or Shinto faith, accounts for its lack of a moral code by teaching that loyal subjects of the emperor need no other moral guidance. The journey to the land of perpetual youth is one of the expressions in their literature on the philosophy of death. The great body of imported literature, the Confucian learning, and Buddhist Books, have long been held in high honor by native students.

The "Story of My Hat," probably written seven hundred years ago, is a Japanese classic, which has its great charm from its simplicity of language and its picture of a most simple life. It is full of allusions to nature, telling of the bright moon, the floating cloud, the fireflies, the notes of the wild-bird, etc., and it gives minute descriptions of natural surroundings. Another book, "Tosca Nikka," describing in

simplest language the ordinary life of a traveler in the Tenth Century, is also classical. It gives no adventure or romance and no wise maxims, it is simple narration, and is said to have been written by a woman. In the Tenth Century the learned men of Japan wrote only for the well-read and educated class and were deep in the study of Chinese. The women of the court kept up their own language and a large part of the best writings in their literature was the work of women.

Romances and novels are by no means unknown in Japan, and their heroes and heroines have thrilling adventures, which are graphically presented. Much of this fiction is mixed with history and the tale dates back to one of the numerous wars. Fairy tales abound and are very artistically told, and short-story books are common. These and the books for children often take for subject some hero of ancient times.

The mental equipment of this nation has been forming for centuries, and when the Empire shut its ports and drew away from the rest of the world, it had, within itself, resources of food for its intellectual life. By the opening of these ports Japan was introduced into the affairs of the modern world, taking a stand among the nations. Through the researches of scholars the literature of the West is being enriched by the imagination of the East, and to this Japan is giving a generous share, but only a fraction of the books of this modern Oriental nation are yet reached by Western readers. The "Wakan Sansai Dzuze," known to the world as the "Great Japanese Encyclopedia," is noted as a necessary help to all who seek knowledge of Japan letters. The fact that such a large work has been compiled and that it is considered an essential part of a student's equipment, shows something of the value and interest of Japanese literature.

THE FAMILY LIBRARY

Selecting books for a family library is remarkably like selecting food for a family table,—a very nice art, indeed. The cook must know food values, their preparation and their economic selection, so as to balance one kind of food against another and furnish complete nourishment. Within a narrow range of choice, allowance must be made for individual tastes, and enough provided to satisfy every rational appetite. So it is in the selection of books. What is a good book for one may not be a good book for another. A family library, like a family table, should cater somewhat to individual tastes; but there are common tastes as well, and the well-selected library of even a few books may furnish joy for the whole family.

No one list of books can ever be the best list. It can only be suggestive of the kind of books that belong to every good list. A short list of books for a family library is appended here.

A SMALL HOME LIBRARY

TITLE	PUBLISHER OR AUTHOR
A Standard Dictionary.	
A Good Encyclopedia.	
Imperial Atlas of the World.	Rand-McNally.

TITLE	PUBLISHER OR AUTHOR	TITLE	PUBLISHER OR AUTHOR
History of the United States, . . .	John B. McMaster.	The Scarlet Letter,	Nathaniel Hawthorne.
The United States in Our Own Times,	E. B. Andrews.	Marble Faun,	Nathaniel Hawthorne.
History of Our Own Times (English),	Justin McCarthy.	Vesty of the Basins,	Sarah P. M. Greene.
English Lands, Letters, and Kings (4 vols.),	Donald G. Mitchell.	John Halifax,	Dinah Mulock Craik.
American Lands and Letters (2 vols.),	Donald G. Mitchell.	Rudder Grange,	Frank Stockton.
Outlines of Universal History (2 vols.),	Geo. P. Fisher.	The Widow O'Callaghan's Boys,	Gulichma Zollinger.
Romance of Discovery,	W. E. Griffiths.	The Sky-pilot,	Ralph Connor.
Romance of Conquest,	W. E. Griffiths.	The Blazed Trail,	Edward Stewart White.
Critical Period of American History,	John Fiske.	Old-town Folks,	Harriet Beecher Stowe.
History of the English People,	Green.	Alice of Old Vincennes,	Maurice Thompson.
Struggle for a Continent,	Francis Parkman.	The Virginian,	Owen Wister.
A Talk About Books,	J. N. Larned.	Princess of Thule,	William Black.
Natural Resources of the United States,	Simeon N. Patton.	Adam Bede,	George Eliot.
Holland and Its People,	Edmondo de Amicis.	Old Curiosity Shop,	Charles Dickens.
Spain and the Spaniards,	Edmondo de Amicis.	Annals of a Quiet Neighbor-hood,	George Macdonald.
The Alhambra,	Washington Irving.	Margaret Ogilvie,	James Barrie.
Wayfarers in Italy,	Catharine Hooker.	Beside the Bonnie Brier-Bush,	Ian McLaren.
French By-ways,	Clifton Johnson.	Put Yourself in His Place,	Charles Reade.
Fresh Fields (English),	John Burroughs.	Ben-Hur,	Lew Wallace.
A Corner of Cathay,	A. M. Fields.	Cambridge Book of Poetry and Song,	Charlotte Fiske Bates.
Across Asia on a Bicycle,	Allen and Sachtleben.	Songs of Nature,	John Burroughs.
At the Rainbow's End (The Klondike),	Alice Henderson.	Shakespeare's Plays: Hamlet, Merchant of Venice, Macbeth, as You Like It, Julius Caesar, King Lear, and others, as preferred,	Selected volumes of Household Poetry.
The Desert (American),	John Van Dyke.		
Hawaiian America,	Casper Whitney.		
Thirty Years in Australia,	Ada Campbell.		
Java, the Pearl of the East,	T. W. Higginson.		
Japan, Its History and Folklore,	W. E. Griffiths.		
Japanese Girls and Women,	Alice M. Bacon.		
Great World's Farm,	Salina Gage.		
Romance of Industry and Invention,	Robt. Cochran.		
Men Who Made the Nation,	E. E. Sparks.		
Literary Friends and Acquaintances,	W. D. Howells.		
Yesterdays with Authors,	Jas. T. Fields.		
My Summer in a Garden,	Chas. Dudley Warner.		
Indoor Studies,	John Burroughs.		
Outlines of English Literature,	Henry S. Pancoast.		
Outlines of American Literature,	Henry S. Pancoast.		
Life of Abraham Lincoln,	John G. Nicolay.		
Lincoln, Master of Men,	Alonzo Rothschild.		
Life of William Penn,	Augustus Buell.		
The Mother of Washington and Her Times,	Mrs. Robert Pryor.		
The Making of an American,	Jacob A. Riis.		
Practical Garden Book,	L. H. Bailey.		
A Woman's Hardy Garden,	Helen R. Ely.		
Earth's Bounty,	Kate V. St. Maur.		
Sesame and Lilies,	John Ruskin.		
The Development of the Child,	Nathan Oppenheim.		
Mental Growth and Control,	Nathan Oppenheim.		
Two Children of the Foot Hills,	Elizabeth Harrison.		
Fisherman's Luck,	Henry Van Dyke.		
Bits of Talk on Home Matters,	Helen Hunt Jackson.		
Village Sermons,	Charles Kingsley.		
Children's Rights,	Kate Douglas Wiggin.		
Heredity and Christian Problems,	Amory Bradford.		
Prue and I,	George W. Curtis.		
The Brook Book,	Mary Rogers Miller.		
Three Acres and Liberty,	Bolton Hill.		
The Life of the Spirit,	Hamilton Mabie.		
The Blue Flower,	Henry Van Dyke.		
Marsh Island,	S. O. Jewett.		
Adventures of Tom Sawyer,	Mark Twain.		
Fishin' Jimmy,	Annie Trumbull Slosson.		
Story-tell Lib,	Annie Trumbull Slosson.		
How to Tell Stories to Children,	Sarah Bryant.		
Point of Contact,	Patterson Du Bois.		
Solomon Grow's Christmas Pockets,	Ruth McEnery Stuart.		
Uncle William,	Jeannette Lee.		
Captain of the Gray-horse Troop,	Hamlin Garland.		
Ramona,	Helen Hunt Jackson.		
The Crisis,	Winston Churchill.		
Aliens,	Mary Tappan Wright.		
Wanderers of the Colorado Desert (2 vols.),	G. W. James.		
In and Out of the Old Missions of California,	G. W. James.		
Certain Delightful English Towns,	W. D. Howells.		
Prophet of the Great Smoky Mountains,	Chas. Egbert Craddock.		

BOOKS FOR THE CHILDREN'S LIBRARY

"A wise mother and good books enabled me to succeed in life."—*Henry Clay.*

NOTE.—These books have been carefully selected from children's lists, issued by public libraries, and from lists prepared by school departments. They are all of them good books and children like them, but they are only a few of the many equally good ones which can be found from the same sources.

PICTURE BOOKS AND RHYME BOOKS FOR THE VERY LITTLE ONES

(Children under six years of age.)

TITLE	PUBLISHER OR AUTHOR
Babyhood Days,	Dutton.
Little Sunshine,	De Wolf.
Cherry-tree Farm,	Stokes.
Children's Pets,	Dutton.
Little Black Sambo,	Doubleday.
Five Minute Stories,	Richards.
Book of Nursery Rhymes,	Welsh.
Baby Days,	Dodge.
Child Stories and Rhymes,	Poulsson.
Mother Goose: Old Nursery Rhymes,	Warne.
Rhymes and Jingles,	Norton.
Caldicott Picture Books,	Warne.
Songs for Little Children,	Smith.
Nursery Rhymes,	Welsh.
Lullaby Land,	Eugene Field.

FOR CHILDREN OF THE FIRST AND SECOND PRIMARY GRADES

(From six to eight years of age.)

TITLE	PUBLISHER OR AUTHOR
Five Mice in a Mouse Trap,	Richards.
Six Nursery Classics,	Welsh.
Happy Heart Family,	Gerson.
Asgard Stories,	Foster and Cummings.
Stories of the Red Children,	Brooks.
Book of Fables,	Sudder.
St. Nicholas Christmas Book,	Century.
Docas, the Indian Boy,	Suedden.
Grimm's Fairy Tales (2 vols.),	Wiltse.
Stories of Great Americans for Little Americans,	Eggleston.
Book of Fables and Folk Stories,	Sudder.
Fairy Stories and Fables,	Baldwin.
Anderson's Fairy Tales,	Baldwin.
Many Folks of Many Lands,	Chance.
Mother Goose,	Greenaway.
First Jungle Book,	Kipling.
Brownies, their Book,	Cox.
Treasury of Stories, Jingles, and Rhymes,	Humphrey.
Child's Garden of Verse,	Stevenson.
Sunshine Land,	Thomas.
Rhymes of Childhood,	Riley.

FOR CHILDREN OF THE THIRD AND
FOURTH GRADES

(From eight to ten years of age.)

TITLE	PUBLISHER OR AUTHOR
Joyous Story of Toto,	Richards.
Toto's Merry Winter,	Richards.
Jackanapes,	Ewing.
Children's Book,	Scudder.
Seven Little Sisters,	Andrews.
Our Little Brown Cousin, . . .	Wade.
Our Little Indian Cousin, . . .	Wade.
Our Little Japanese Cousin, . .	Wade.
Our Little Russian Cousin, . . .	Wade.
Old Greek Stories,	Baldwin.
Adventures of a Brownie,	Mulock.
Little Jarvis,	Seawell.
Stories of American Life and Adventure,	Eggleston.
Four Great Americans,	Baldwin.
Mischief's Thanksgiving,	Coolidge.
World and Its People (our own country),	Duntun.
Just So Stories,	Kipling.
Golden Windows,	Richards.
Uncle Remus and His Friends, . .	Harris.
Boys of Other Countries,	Taylor.
Book of Knight and Barbara, . . .	Jordan.
Children's Life of Lincoln,	Putnam.
Court of King Arthur,	Green.
Water Babies,	Kingsley.
Little Folks' Lyrics,	Sherman.
Poems Every Child Should Know, Know,	Bacon. Burt.

FOR CHILDREN OF THE FIFTH AND SIXTH
GRADES

(From ten to twelve years of age.)

TITLE	PUBLISHER OR AUTHOR
Century Book of Famous Amer- icans,	Brooks.
True Story of Christopher Co- lumbus,	Brooks.
True Story of George Wash- ington,	Brooks.
True Story of Benjamin Frank- lin,	Brooks.
True Story of Ulysses S. Grant, Pioneer Stories (3 vols.),	Brooks. McMurry.
Travels Through North Amer- ica with the Children,	Carpenter.
Boys of '76 and Boys of '61, . . .	Coffin.
Story of the Greeks,	Guerber.
Story of the Romans,	Guerber.
Paul Jones,	Seawell.
Robinson Crusoe,	Defoe.
Plans Brinker,	Dodge.
Land of Pluck,	Dodge.
The Land We Live In (3 vols.), . .	King.
Nelly's Silver Mine,	Jackson.
Tales of King Arthur,	Farrington.
Zig-Zag Journeys (series),	Butterworth.
Little Cousin Series (Italy, Ger- many, Holland, etc.),	Pub. by Page & Co.
Fifty Famous Stories Retold, Story of a Bad Boy,	Baldwin. Aldrich.
Myths Every Child Should Know,	Mabie.
Legends Every Child Should Know,	Mabie.
Wonder-Book and Tangle-wood Tales,	Hawthorne.
Lobo, Rag and Vixen,	Thompson-Seton.
Squirrels and Other Fur-bearers, Little Smoke,	Burroughs. Stoddard.
Juan and Juanita,	Baylor.
Heidi (Home life in Switzer- land),	Spyri.
Little Women,	Alcott.
Little Men,	Alcott.
Spinning Wheel Stories,	Alcott.
Jack Hall,	Grant.
Betty Leicester,	Jewett.
Some Merry Adventures of Robin Hood,	Pyle.
King of the Golden River,	Ruskin.
Swiss Family Robinson,	Wyss.
Arctic Alaska and Siberia,	Aldrich.
Poems of American Patriotism, Golden Numbers (Poems),	Matthews. Wiggin and Smith.

FOR SEVENTH AND EIGHTH GRADES
(From twelve to fourteen.)

TITLE	PUBLISHER OR AUTHOR
Boys' Handy Book and Girls' Handy Book,	Beard.
Cyclopedia of Common Things, Colonial Days and Ways,	Champlin. Smith.
Twelve Americans,	Carroll.
The Story of Washington,	Seelye.
Ulysses S. Grant,	Wister.
Abraham Lincoln,	Noah Brooks.
Osecola, Chief of the Seminoles, Tecumseh, Chief of the Shawan- nees,	Gordon. Gordon.
Paul Jones,	Seawell.
One Hundred Famous Ameri- cans,	Smith.
Heroes of the Golden Age,	Baldwin.
Cruise of the Cachalot,	Bullen.
Captains Courageous,	Kipling.
Personally Conducted,	Stockton.
Tour of the World in Eighty Days,	Verne.
We Girls,	Whitney.
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World of the Great Forest,	Du Chaillu.
Historical Tales from Shakes- pere,	Couch.
Stories from Shakespere,	Chas. and Mary Lamb.
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From Cattle-ranch to College, . . .	Doubleday.
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The Spy and the Leather Stock- ing Tales (5 vols.),	Cooper.
Twenty Thousand Leagues Un- der the Sea,	Verne.
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Young Folks' Cyclopedia of Literature and Art,	Champlin.
Young Folks' Cyclopedia of Persons and Places,	Champlin.
Age of Fable,	Bulfinch.
Helps for Ambitious Boys,	Drysdale.
Boys' Book of Inventions,	Baker.
Electricity for Everybody,	Atkinson.
Discovery of America,	Fiske.
War of Independence,	Fiske.
Advance Guard of Western Civilization, Tramp Across the Continent,	Gilmore. Luminis.
Story of Our Continent,	Shaler.
Successful Men of To-day,	Craft.
Abraham Lincoln,	Nicolay.
Story of Music and Musicians, . . .	Lillie.
Story of the English,	Guerber.
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John Brent,	Winthrop.
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The Roman and the Teuton,	Kingsley.
Nicholas Nickleby,	Dickens.
Being a Boy,	Warner.
Cuore,	D'Amicis.

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		Collins, Percy,	Price Collier.
		Colmore, G.,	Mrs. Gertrude Colmore

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Adams, Stephen,	Michael Maybrick.
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A. L. O. E. (A Lady of England),	Charlotte M. Tucker.
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Andrews, Annet,	Mrs. J. Kingsley Ohl.
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Arnold, Birch,	Mrs. J. M. D. Bartlett.
Arp, Bill,	Charles H. Smith.
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Atlas,	Edmund Yates.
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Ayres, Alfred,	Thomas E. Osmon.
Bab,	W. S. Gilbert.
Ballin, Ada S.,	Mrs. Oscar G. D. Berry.
Baba, Ali,	Alberigh Mackay.
Barnaval, Louis,	Charles De Kay.
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Bates, Charlotte Fiske,	Mme. Adolphe Roge.
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Bell, Ellis,	Emily Brontë.
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Belloe, Mrs. Adelaide,	Mrs. Frederiek S. Lowndes.
Bentzon, Th.,	Marie Therese Blanc.
Berkeley, Thunelsda,	Mrs. Mary L. Metcalfe.
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Billings, Josh,	Henry W. Shaw.
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Boz,	Charles Dickens.
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Connor, Ralph,	Rev. C. W. Gordon.
Conway, Hugh,	Fernie Hamme.
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Coolidge, Susan,	Sarah C. Woolsey.
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Cornwall, Barry,	B. W. Proctor.
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Crayon, Geoffrey,	Washington Irving.
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Cusack, George,	Grace Carter-Smith.
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Dale, Darley,	Francesca Maria Steele.
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Dix, Dorothy,	Elizabeth M. Gilmer.
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Dooley, Martin,	Finley Peter Dunne.
Douglas, George,	George D. Brown.
Douglas, Marian,	Annie Douglas Green Robin- son.
Doyle, Conan,	Sir Arthur C. Doyle.
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"Droch",	Robert Bridges.
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Dunning, Charlotte,	Charlotte D. Morse.
"Duchess, The",	Mrs. Hungerford.
Egerton, George,	Mrs. R. Golding Bright.
Eichberg, Annie,	Mrs. John Lane.
Elia,	Charles Lamb.
Eliot, George,	Marian Evans.
Eliot, Max,	Mrs. Granville Alden Ellis.
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Ettrick Shepherd,	James Hogg.
Falconer, Lanceo,	Mary Elizabeth Hawkes.
Fane, Violet,	Lady Currie.
Farnam, Ella,	Ella F. Pratt.
Farquharson, Martha,	Martha F. Finley.
Fern, Fanny,	Sara P. Parton.
Field, Michael,	Miss Bradley and Miss Cooper.
Fielding, Howard,	Charles W. Hooke.
Finn, Mickey,	Ernest Jarrold.
"Fitsnoodle",	B. B. Vallentine.

PEN NAME	REAL NAME	PEN NAME	REAL NAME
Fleming, George,	Julia Constance Fletcher.	Kirk, Eleanor,	Eleanor K. Ames.
Flynt, Josiah,	Josiah Flynt Willard.	Kirke, Edmund,	James R. Gilmore.
Fontenoy, Marquise de, .	Margaret Owen Cunliffe.	Klingbe, George,	Mrs. Holmes.
Forbes, Athol,	Forbes Alexander Phillips.	Knickerbocker, Cholly, .	John W. Kellar.
Forrester, Francis, . . .	Daniel Wisner.	Knickerbocker, Diedrich,	Washington Irving.
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Forrester, Isola,	Mrs. Reuben Merrifield.	Kvelve,	Rasmus B. Anderson.
"Fra Elbertus,"	Elbert Hubbard.	Laurie, Annie,	Winifred Black.
France, Anatole,	Jacques Anatole Thibault.	Le Baron, Grace,	Mrs. Henry Macy Upham.
Francis, M. E.,	Mrs. Frank Blundell.	Lee, Home,	Harriet Parr.
Frank, Dr.,	J. Frank Perry, M. D.	Lee, Vernon,	Violet Paget.
"G. G.,"	Henry George Harper.	L. E. L.,	Letitia E. London.
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Gates, Eleanor,	Mrs. Richard Walton Tully.	Leslie, Mrs. Frank, . . .	Mrs. Miriam F. F. Wilde.
"Gath,"	George Alfred Townsend.	Logan, Celia,	Mrs. J. B. Connelly.
George, G. M.,	Mrs. Spurrell.	Logan, Olive,	Mrs. W. Wirt Sikes.
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Gerard, Emily,	Mme. de Laszowski.	Loti, Pierre,	L. M. Julien Viaud.
Gerard, Morice,	Rev. J. Jessop Teague.	Ludlow, Johnny,	Mrs. Henry Wood.
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Gissing, George,	J. Storer Clouston.	"M. E. W. S.,"	Mrs. Jno. Sherwood.
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Going, Maud,	E. M. Harding.	McManus, Blanche, . . .	Mrs. M. F. Mansfield.
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Gubbins, Nathaniel, . . .	Edward Spencer Mott.	Marvel, Matthew,	E. P. Ackerman.
"Gyp,"	Countess de Martel.	Mathers, Helen,	Mrs. Henry Reeves.
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	keth Prichard.	Moore, Mollie E.,	Mary Evelyn Moore Davis.
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Holloway, Laura,	Laura C. H. Langford.	Nox, Owen,	Charles B. Cory.
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King, Katherine Douglas, .	Mrs. Burr.	Paul, John,	Chas. Henry Webb.

PEN NAME	REAL NAME	PEN NAME	REAL NAME
Perkins, Eli.	Melville D. Landon.	Sinjohn, John.	John Galsworthy.
Phoenix, John.	George H. Derby.	Slick, Sam.	T. C. Halliburton.
Phiz.	H. K. Browne.	Smith, T. Carlyle.	John Kendrick Bangs.
Pindar, Peter.	John Wolcott.	Spinner, Alice.	Mrs. Augusta Zelia Fraser.
Plymle, Peter.	Sydney Smith.	"Spy."	Leslie Ward.
"Porte Crayon."	David H. Strother.	Stanlaw, Penrhyn.	Penrhyn Stanley Adamson.
Powell, Richard Stillman.	Ralph Henry Barbour.	Stepniak.	S. Kartheffsky.
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Prescott, E. Livingston.	Edith K. Spicer-Jay.	Stewart, Philip.	Philip Robinson.
Prevost, Francis.	Harry F. P. Battersby.	"Stonehenge."	J. H. Walsh.
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"Rita."	Mrs. E. M. J. von Booth.	Thanet, Octave.	Alice French.
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Robinson, A. Mary F.	Mme. Emile Duclaux.	Thompson, Wolf.	Ernest Thompson Seton.
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Ross, Martin.	Violet Martin.	Titmarsh.	W. M. Thackeray.
"Rover."	Alfred Gibson.	"Tivoli."	Horace W. Blackley.
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Rowe, Saville.	Clement Scott.	Tottenham, Blanche L.	Mrs. Arthur Ram.
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Rutherford, Mark.	Wm. Hale White.	Trask, Katrina.	Mrs. Spencer Trask.
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St. Clair, Victor.	G. Waldo Browne.	"Trois-Etoiles."	E. C. Grenville-Murray.
St. Laurence.	Alfred Laurence Felkin.	Turner, Ethel.	Mrs. H. R. Curlewis.
Saint Remy.	The Duc de Morny.	Twain, Mark.	Samuel L. Clemens.
"Saladin."	William Stewart Ross.	Tyler, G. Vere.	Mrs. Lachlan Tyler.
Sand, George.	Mme. Dudevant.	Tynan, Katherine.	Mrs. H. A. Hinkson.
Sanghamita, Sister.	Countess M. A. de S. Canavarro.	Tytler, Sarah.	Henrietta Keddie.
		"Uncle Charles."	Charles Welsh.
Saunders, Marshall.	Margaret M. Saunders.	"Uncle Remus."	Joel Chandler Harris.
Schreiner, Olive.	Mrs. S. C. Cronwright.	Vandegrift, Margaret.	Margaret T. Janvier.
Seeley, Charles Sumner.	John William Munday.	Varley, John Philip.	Langdon E. Mitchell.
Setoun, Gabriel.	Thomas Nicoll Hepburn.	Verne, Jules.	M. Olchewitz.
"Sevenoaks."	Alfred S. Edwards.	Voltaire.	François Marie Arouet.
Sharp, Luke.	Robert Barr.	Ward, Artemas.	Charles F. Browne.
Shaw, Flora.	Lady Flora Lugard.	Warden, Florence.	Mrs. G. James.
Sidney, Margaret.	Harriett Mulford Lothrop.	Wetherell, Elizabeth.	Susan Warner.
Siegerson, Dora.	Mrs. Clement Shorter.	Winter, John Strange.	Mrs. H. E. V. Stannard.
Siegvolk, Paul.	Albert Mathews.	Zadkiel.	Capt. R. J. Morrison, R. N.

MYTHOLOGY

The term is now used appropriately for that branch of knowledge which considers the notions and stories, particularly among the Greeks and Romans, respecting gods and demigods, their pretended origin, their actions, names, attributes, worship, images, and symbolical representations.

Gods of the Greeks and Romans. The principal deities of each were common to both, and we can include them all in one system of classification.

"The ancient Greeks believed their gods to be of the same shape and form as themselves, but of far greater beauty, strength, and dignity. They also regarded them as being of much larger size than men; for in those times great size was esteemed a perfection, supposed to be an attribute of divinities, to whom they ascribed all perfections. A fluid named Ichor supplied the place of blood in the veins of the gods. They were immortal, but they might be wounded or otherwise injured. They could make themselves visible or invisible to men, and assume the forms of men or of animals. Like men, they stood in daily need of food and sleep. The meat of the gods was called Ambrosia, their drink Nectar. The gods, when they came among men, often partook of their food and hospitality.

"Like mankind, the gods were divided into two sexes; namely, gods and goddesses. They married and had children. Often a god became enamored of a mortal woman, or a goddess was smitten with the charms of a handsome youth, and these love-tales form a large portion of Grecian mythology.

"To make the resemblance between gods and men more complete, the Greeks ascribed to their deities all human passions, both good and evil. They were capable of love, friendship, gratitude, and all affections; on the other hand, they were frequently envious, jealous, and revengeful. They were particularly careful to exact all due respect and attention from mankind, whom they required to honor them with temples, prayers, costly sacrifices, splendid processions, and rich gifts; and they severely punished insult or neglect.

(1) **SUPERIOR GODS.**—Jupiter, Neptune, Apollo, Mars, Mercury, Vulcan, Janus, Saturn, Pluto, Bacchus, Juno, Minerva, Diana, Venus, Vesta, Ceres, Rhea. (2) **INFERIOR GODS.**—Cælus, Sol, Æolus, Plutus, Esculapius, Pan, Luna, Aurora, Nox, Iris, Latona, Themis, Nemesis, Fortuna, Fama. Several gods peculiar to the Greeks: Enyo, Ergane, Cottoy, etc. Several gods peculiar to the Romans: Priapus, Terminus, Vertumnus, Pomona, Flora, Feronia, Pales, etc. (3) **MYTHICAL BEINGS.**—Titans. Giants. Pygmies, Tritons, Sirens, Nymphs, Muses, Graces, Hours, Seasons, Fates, Furies, Harpies, Winds, Genii, Somnus, Mors, Manes, Laræ, Penates, Satyrs, Fauns, Gorgons, Amazons, Centaurs, Minotaur, Chimæra, Geryon, Hydra, Pegasus, Scylla, Charybdis, Sphinx, Typhon.

Most of the heroes were at last viewed as sons of gods, and often of Jupiter himself. The veneration for the heroes was, however, less sacred and less universal than the worship of the gods. The heroes received only an annual commemoration at their tombs, or in the vicinity, when offerings and libations were presented to them. Sometimes the respect paid them exceeded these limits, and they were exalted to the rank and honors of the gods. The introduction of solemnities in memory of heroes is ascribed to Cadmus.

(4) **DEIFIED HEROES.**—Inachus, Phoroneus, Ogyges, Cecrops, Deucalion, Amphietyon, Cadmus, Danaus, Pelops, Minos, Perseus, Hercules, Theseus, Jason, Castor, Pollux, and heroes of the Theban and the Trojan Wars, etc.

Ach'eron. Acheron, Styx, Cocytus, and Phlegethon, are known as rivers of hell. These regions below the earth were considered as the residence of departed souls, where after death they received rewards or punishments according to their conduct upon earth.

Ach'il'les. The son of Peleus and Thetis. In the Trojan War he was the most distinguished for his strength and bravery. When Achilles was born, Thetis plunged him in the river Styx, which made him invulnerable in every part except the heel, by which she held him. And in this heel he received a fatal wound.

A'cis. The nymph, Galatea, loved Acis, the handsome shepherd, and the monstrous Cyclop, Polyphemus, sued in vain for her favor.

Acris'ius. Son of Abas, King of Argos, grandson of Lynceus, and great-grandson of Danaus. An oracle had declared that Danaë, the daughter of Acrisius, would give birth to a son who would kill his grandfather. For this reason he kept Danaë shut up in a subterranean apartment, or in a brazen tower. But here she became the mother of Perseus, by Zeus, who visited her in a shower of gold.

Actæ'on. Actæon was the son of Aristæus and Autonoe, daughter of Cadmos. He was reared by Chiron, and becoming passionately fond of the chase, passed his days chiefly in pursuit of wild beasts that haunted Mount Cithæron.

Adis'sehen. In Indian mythology the serpent of a thousand heads which hold the universe in place.

Adm'e'tus. A king of Thessaly, and husband of Alce'is, famous for his misfortunes and his piety. Apollo tended the flocks of Admetus for nine years, when he was obliged to serve a mortal for having slain the Cyclops.

Ado'nis. A beautiful youth, loved by Venus, and slain by a wild boar which he was hunting. Venus was inconsolable at his loss, and at last obtained from Proserpine that Adonis should spend six months on earth with her and six months among the shades. Adonis is also the name given to a Syrian god, who was supposed to be slain by a wild boar in Lebanon, and to revive every year. He is identified with the Greek Adonis, beloved by Venus.

Adam'melech. God of the people of Sepharva'im, to whom infants were burned in sacrifice (Kings xvii, 31). Probably the sun.

Adras'tus. A king of Argos, and the institutor of the Nemean games.

Æa'cus. Son of Jupiter and grandson of the river-god Asopus. Æacus was renowned in all Greece for his justice and piety, and after his death became one of the judges in hades.

Æge'on. One of three brothers, huge monsters, with fifty heads and a hundred arms. According to the most ancient tradition, Ægeon and his brothers conquered the Titans when they made war upon the gods, and secured the victory to Zeus, who thrust the Titans into Tartarus, and placed Ægeon and his brothers to guard them.

Æge'us. King of Athens, and father of Theseus.

Ægir. God of the ocean, whose wife is Rana. They had nine daughters, who wore white robes and veils. These daughters are the billows, etc.

Æ'gis. The shield of Jupiter made by Vulcan was so called, and symbolized "Divine protection." The shield of Minerva was called an ægis also.

Æ'gle. The mother of the graces. Also the name of one of the sisters of Phaeton.

Ælu'rus. The cat. An Egyptian deity held in the greatest veneration. Herodotus tells us that Diana, to avoid being molested by the giants, changed herself into a cat. The deity used to be represented with a cat's head on a human body.

Æne'as. A Trojan prince, son of Anchises and the goddess Venus. When Troy fell, he quitted the city with his followers, accompanied by his father and son, visited various countries, settled in Latium, and married Lavinia, the daughter of Latinus. To him tradition ascribes the commencement of the Roman Empire.

Æolus. Under the name of Æolus both Greeks and Romans worshiped a god and ruler of winds and storms. He was called the son of Jupiter, sometimes of Neptune, and by others, of Hippiotes, an ancient lord of the Lipari Isles. From Jupiter he received his authority over the winds, which had previously been formed into mythical persons, and were known by the names Zephyrus, Boreas, Notus, and Eurus, and were afterwards considered the servants of Æolus. He held them imprisoned in a cave of an island in the Mediterranean Sea, and let them loose only to further his own designs or those of others, in awakening storms, hurricanes, and floods. He is usually described by the poets as virtuous, upright, and friendly to strangers. He is represented as a vigorous

man supporting himself in the air by wings, and blowing into a shell trumpet like a Triton, while his short mantle is waving in the wind.

Æs'acus. A son of Priam, who was enamored of the nymph Hesperia, and, on her death, threw himself into the sea, and was changed by Thetis into a cormorant.

Æs'cula'pius. The son of Apollo and Coronis, the daughter of a Thessalian King. By his father he was committed to the care of the wise Centaur, Chiron, who taught him botany, together with the secret efficacy of plants. By means of this information, Æsculapius became the benefactor of mankind. In tradition he is noted as having awakened the dead.

Æsir. plural of As or Asa, the celestial gods of Scandinavia, who lived in Asgard (god's ward), situate on the heavenly hills between earth and the rainbow. The chief was Odin.

Æson. The father of Jason and brother of Pelias who seized the kingdom rightfully belonging to Æson.

Æs'tas. The god of summer; he is crowned with corn and generally holds a sickle in his hand. By poets and artists the seasons are all personified. They are frequently seen together on reliefs, medals, and gems. The artists have also followed the poets in representing the four ages of life by depicting Ver (spring), as infantile and tender; Æstas (summer), as young and sprightly; Autumnus (autumn), mature and manly; and Hyems (winter), as old and decrepit.

Æta. A king of Colchis, was father of Medea.

Agamem'non. King of Argos, in Greece, and commander-in-chief of the allied Greeks who went to the siege of Troy. Agamemnon married Clytemnestra, the daughter of Tyndareus, by whom he became the father of Iphianassa (Iphigenia). When Helen, the wife of Menelaus, was carried off by Paris, and the Greek chiefs resolved to recover her by force of arms, Agamemnon was chosen their commander-in-chief.

Ag'an'y'pe. A fountain at the foot of Mount Helicon, in Boeotia, consecrated to Apollo and the Muses, and believed to have the power of inspiring those who drank of it.

Ah'r'l'man. A deity of the ancient Persians, being a personification of the principle of evil. To his agency were ascribed all the evils existing in the world. Ormuzd the principle of good, is eternal, but Ahriman is created, and will one day perish.

A'jax. The son of Telamon, and one of the Greek heroes in Homer's "Iliad." He was of great stature, strength, and courage, but dull in mind. He killed himself out of vexation because the armor of Hector was awarded to Ulysses.

Ak'u'man. The most malevolent of all the Persian gods.

Alas'tor. A surname of Jupiter. Among the lesser gods the name Alastor is given to the unforgetting, revengeful spirit, who, in consequence of some crime perpetrated, persecutes a family from generation to generation.

Alces'tis, or Alces'te. A daughter of Pelias, and the wife of Admetus. To save her husband's life, she died in his stead. By request of Apollo, the gods had granted eternal life to Admetus but on the condition, that when the appointed time came for the good king's death, some one should be found willing to die in his stead. This decree was reported to Alcestis, Admetus' beautiful young wife, who offered herself as substitute, and cheerfully gave her life for her husband. But immortality was too dearly bought at such a price; and Admetus mourned until Hercules, pitying his grief, descended into hades, and brought her back.

Alec'to. One of the Furies. She is represented with her head covered with serpents, and breathing vengeance, war, and pestilence.

Alec'tryon. A servant of Mars, who was changed by him into a cock because he did not warn his master of the rising of the sun.

Al'fadur. In Scandinavian Mythology the Supreme Being—Father of all.

Alphe'os and Arethu'sa. The Greek fable says that Alphe'os, the river-god, fell in love with the nymph Arethu'sa, who fled from him in affright. Diana came to her rescue.

Al Si'rat. A narrow bridge extending from this world to the next over the abyss of hell, which must be passed by every one who would enter paradise.

Althæ'a. Sister to Atalanta, and mother of Meleager. She caused the death of her son and killed herself in remorse.

Am'azons. A nation of women-soldiers who lived in Scythia. Hercules defeated them, and gave Hippolyte, their queen, to Theseus for a wife.

Ambro'sia. The food of the gods; so called because it made them not mortal, i. e., it made them immortal.

Imac'l'ia. The goddess of friendship. In Greek

mythology she was represented with her head bare, her dress open near the heart, holding in her left hand an elm around which a vine clung, filled with clusters of grapes.

Ammon. One of the names bestowed on Jupiter. As Jupiter Ammon, he was represented as having the horns of a ram.

Amphion. Son of Jupiter and Antiope, and brother of Zethus. They were born on Mount Cithæron, and grew up among the shepherds. When they had learned their origin they marched against Thebes, where Lycus reigned, the husband of their mother Antiope, who had married Dirce in her stead. They took the city, and killed Lycus and Dirce, because they had treated Antiope with great cruelty. After they had obtained possession of Thebes, they fortified it by a wall. Amphion had received a lyre from Mercury, on which he played with such magic skill that the stones moved of their own accord and formed the wall.

Anæus. A son of Neptune who, having left a cup of wine untasted to pursue a wild boar, was killed by it, which gave rise to the proverb, "There's many a slip between the cup and the lip."

Anchises. King of Dardanus and father of Æneas. On the capture of Troy by the Greeks, Æneas carried his father on his shoulders from the burning city.

Andromache. Daughter of one of the kings of Thebes, and wife of Hector.

Andromeda. Andromeda, to atone for a crime of which she was guiltless, was to have become the victim of divine anger. The whole country was laid waste with plagues, which, according to the oracle of Jupiter Ammon, were not to cease until Andromeda, swallowed up by a sea-monster, should, by her death, expiate the crime of her mother. Perseus beheld the maiden fastened with chains to a rock, and a monster rising out of the sea ready to devour her; while her parents stood on the shore in despair. Perseus rushed down upon the monster, struck the deadly blow, delivered the fair maiden and obtained her as his wife. After her death she was placed among the stars.

Angurva'del. Frithiof's sword, inscribed with Runic letters, which blazed in time of war, but gleamed with a dim light in time of peace.

Antæus. One of the giant sons of Neptune whose home was in Libya. His strength was invincible so long as he remained in contact with his mother earth. Once lifted from the earth and allowed again to touch it his strength increased. One of the exploits ascribed to Hercules was the exhibition of his strength in overcoming Antæus.

Antigone. In the story of Oedipus, Antigone appears as a noble maiden, with a truly heroic attachment to her father and brothers. When Oedipus had put out his eyes, and was obliged to quit Thebes, he was accompanied by Antigone, who remained with him till he died at Colonus, and then returned to Thebes. After her two brothers had killed each other in battle, and Creon, the King of Thebes, would not allow Polynices to be buried, Antigone buried him by night, against the orders of Creon, for which offense he ordered her to be buried alive. She, however, killed herself on hearing of the sentence. The death of Antigone is the subject of a tragedy written by Sophocles. (See *Eteocles*.)

Aph'rodite. One of the names under which Venus was worshipped. She was said to be the daughter of Zeus, but later poets frequently relate that she was sprung from the foam of the sea, whence they derive her name.

A'pis. One of the Egyptian gods worshiped under the form of an ox.

Apollo. According to both Greeks and Romans, Apollo was the son of Jupiter and Latona, born on the island Delos. He was regarded as the god of the sciences and the arts, especially poetry, music, and medicine. They ascribed to him the greatest skill in the use of the bow and arrow, which he proved in killing the serpent Python, the sons of Niobe, and the Cyclops. The last achievement incensed Jupiter, and he was banished from Olympus. During his exile Apollo-abode as a shepherd with Admetus, King of Thessaly. All sudden deaths were believed to be the effect of his arrows; and with them he sent the plague into the camp of the Greeks before Troy. As he had the power of punishing men, so he was also able to deliver men, if duly propitiated. From his being the god who afforded help, he is the father of Æsculapius, the god of the healing. As a god of inspiration and prophecy he gave oracles and communicated this gift to other gods and to men. The stories of Apollo in Greek mythology are much the same as the stories concerning Krishna in Hindoo mythology.

Arach'ne. A Mæonian maid, named Arachne, proud of her skill in weaving and embroidery, in which arts

the goddess of wisdom had instructed her, ventured to deny her obligation, and challenged her patroness to a trial of skill. Minerva accepted the challenge and they met to try their skill. Arachne produced a piece of cloth in which the amours of the gods were woven, and as the goddess could find no fault with it, she tore the work to pieces. Arachne, in despair, hung herself. Athena loosened the rope and saved her life, but the rope was changed into a cobweb, and Arachne herself into a spider.

Ares. The Greek god of war, known as Mars by the Romans.

Arethusa. A wood nymph of Elis, in Greece, who, pursued by the River Alpheus, was changed into a fountain and ran under the sea. The waters of the fountain, mingled with the river, rose again in the fountain of Arethusa in the island of Ortygia, near Syracuse. According to another version of the same legend, it was Diana herself, and not the nymph Arethusa, whom the river-god of the Alpheus pursued; and when this pursuit ended in the island of Ortygia, then arose the fountain Arethusa.

Argonauts. One of the most celebrated enterprises of the heroic ages, one which forms a memorable epoch in Grecian history, a sort of separation-point between the fabulous and the authentic, was the Argonautic expedition. This was a voyage from Greece to Colchis in order to obtain the golden fleece, conducted by Jason, the son of Æson, King of Thessaly. The undertaking was imposed upon him by his uncle Pelias. He invited the most illustrious heroes of Greece to unite in the expedition, and among those who joined him were Hercules, Castor and Pollux, Peleus, Pirithous, and Theseus. The vessel built for the purpose was named Argos, which after various adverse events arrived at Æa, the capital of Colchis.

Argos. A fifty-oared ship in which Jason and his companions made their voyage to Colchis in search of the golden fleece. This ship was built of pines cut from Mount Pelion, which, although larger than any other previously constructed, moved lightly and easily, and was therefore called the Argos (swift-sailing). From her name, those who embarked in her were called Argonauts. The mast of the Argos was taken from the forest of Dodona, where the oaks were endowed with the power of making predictions; therefore, the ship was regarded as an animated being, in accord with Fate, to which a man might commit himself with confidence.

Argus. A fabulous being of enormous strength, who had a hundred eyes, of which only two were asleep at once, whence he was named Panoptes, or the All-seeing.

Ar'adne. Daughter of Minos, second king of Crete, and Pasiphe, fell in love with Theseus, who was shut up in the labyrinth to be devoured by the Minotaur. She gave Theseus a clew of thread by which he extricated himself from the windings of the labyrinth.

Ar'lon. A Greek bard, who having thrown himself into the sea to escape from pirates, was taken up by dolphins, and carried on their backs safe to land.

Artemis. Artemis, the daughter of Zeus and Leto, or Latona, and twin sister of Apollo, was the goddess of chastity, of the chase and the woods.

As'gard. In Scandinavian mythology Asgard represents the city of the gods, situated at the center of the universe, and accessible only by the bridge Bifrost, i. e., the rainbow.

A'sir. In Northern mythology the most powerful, though not the oldest, of the deities; usually reckoned as twelve gods and twelve goddesses. The gods are—Odin, Thor, Baldur, Njord, Frey, Tyr, Bragi, Heimdall, Vidar, Vali, Ullur, and Forseti; the best-known of the goddesses—Frigga, Freyja, Iduna, and Saga.

Astar'ite. Noticed in the Old Testament under the name Ashteroth, an ancient Syrian deity, who was adored as the goddess of the moon; hence Jeremiah calls her "the queen of heaven." Solomon built her a temple on the Mount of Olives.

Atalan'ta. A maid of Arcadia who was forsaken by her parents and reared in the hills. Found by some hunters she afterward joined in the Calydonian hunt, and at the funeral games of Pelias, she won the prize in wrestling.

Atlan'tis. A mythical island in the west, mentioned by Plato, Pliny and other ancient writers, and said to have sunk beneath the ocean.

At'las. One of the Titans, son of Iapetus and Clymene. Being conquered by Jupiter, he was condemned to the labor of bearing on his head and hands the heaven he had attempted to destroy.

At'ropos. One of the three Parcæ, or Fates; the one that cut the thread of life. As wife of Pluto, and queen of hell, Proserpine presided over the death of mankind; and according to the opinion of the ancients, no one could die if the goddess herself, or Atropos, the minister, did not cut off one of the hairs from the head.

Auge'an Stables. The stables of Augeas, King of Elis, in Greece. In these stables he had kept 3,000 oxen, and the stalls had not been cleansed for thirty years. When Hercules was appointed to cleanse these stables, he caused two rivers to run through them.

Augurs. Their principal business was to observe the flight and cry of birds from which they predicted future events. They also explained other omens and signs.

Auræ. The Auræ, or Sylphs, Nymphs of the air, a species of sportive, happy beings, and well-wishers to mankind, were winged and represented as flying.

Auro'ra. The goddess of the morning, or of the dawn; sometimes described as the goddess of day. She is represented as standing in a magnificent chariot, and sometimes drawn by winged steeds. A brilliant star sparkles upon her forehead, and while with one hand she grasps the reins, she holds in the other a lighted torch.

Avatar. The incarnation or descent of the deity Vishnu, of which nine are believed to be past, and the tenth is yet to come when Vishnu will descend from heaven on a white-winged horse, and will introduce on earth a golden age of virtue and peace.

Avernus. Properly, a small, deep lake in Campania, occupying the crater of an extinct volcano, and almost completely shut in by steep and wooded heights. The entrance to the infernal regions, called Avernus, is described as having around it a host of dreadful forms; Disease, Old Age, Terror, Hunger, Death, War, Discord, and the Furies, the avengers of guilt.

Aza'zel. Ewald considers Azazel to have been a demon belonging to the pre-Mosaic religion. Another opinion identifies him with Satan, or the devil. Milton makes him Satan's standard bearer.

Az'rael. Meaning in Hebrew "help of God." In the Jewish and the Mohammedan mythology, the name of an angel who watches over the dying, and separates the soul from the body.

Ba'al. In Hindu mythology, god of the sun, worshipped by the Phenicians.

Bac'chus. The god of wine.

Balm'wawa. In American Indian folk-lore, the sound of thunder.

Bal'der. The god of peace, son of Odin and Frigga. He was killed by the blind war-god, but restored to life at the general request of the gods.

Ba'lios. A famous horse given by Neptune to Peleus as a wedding present, and afterwards given to Achilles.

Bal'mung. In Norse mythology, the sword of Siegfried forged by Vulcan.

Ban'shee. The domestic spirit of certain Irish or Scottish families, supposed to wail at the death of one of the family. The Banshee is allowed only to families of pure stock.

Bar'quest. A frightful goblin among fairies, armed with teeth and claws. An object of terror in the north of England.

Bay-tree. The tree of Apollo, hence a shield against lightning. A wreath of bay-leaves was worn as protection during thunder-storms. The withering of a bay-tree was dreaded as an omen of death.

Beel'zebub. A heathen god of evil at the head of nine ranks of demons and second only to Satan. Also the god of flies.

Befa'na. The fairy of Italian children, who is supposed to fill their stockings with toys on Twelfth Night.

Beller'ophon. A prince who rode the winged horse, Pegasus, controlling him with a golden bridle, the gift of Minerva. By aid of Pegasus, he killed the lion-headed monster, the Chimæra.

Bello'na. Goddess of war. She prepared the chariot of Mars when he was going to war, and appeared in battles armed with a whip and holding a torch.

Bel'phegor. A god of evil, worshipped by the Moabites. An archfiend who had been an archangel.

Be'lus. The Chaldean name of the sun.

Beren'ice. Princess who vowed to sacrifice her hair to the gods, if her husband returned in safety. She suspended her hair in the temple of the war-god, but the winds wafted it to heaven, where it still forms the seven stars near the constellation Leo.

Berg Folk. Pagan spirits doomed to live on the Scandinavian hills till the day of redemption.

Ber'tha. The white lady who guards good German children, but is the terror of the bad, who fear her iron nose and big feet. Corresponds to the Italian Befana.

Bheem. One of the five brotherhoods of Indian demi-gods, famous for his strength.

Bif'rost. In Norse mythology, a bridge between earth and heaven, over which none but the gods could travel. It leads to the palace of the Fates.

Bil'skirni. A wonderful palace built by Thor for the use of peasants after death.

Bladud. A mythical king of England, who built the city of Bath, and dedicated the medicinal springs to Minerva.

Bo'reas. The name of the north wind blowing from the Hyperborean mountains. He was son of Astræus and Aurora.

Bragi. The son of Odin and Frigga and the god of poetry and eloquence. He is represented as an old man with flowing white beard.

Brah'ma. The supreme god of the Hindus, represented with four heads and four arms. He is regarded as the creator of the universe, and forms, with Vishnu, the preserver, and Siva, the destroyer, the divine triad.

Briar'eos. A giant with fifty heads and a hundred hands. He hurled a hundred rocks at Jupiter in a single throw and Jupiter bound him under Mount Ætna with a hundred chains.

Bubas'tis. Name applied to the cat as worshiped among Egyptian gods.

Bukada'win. The god of famine among American Indians.

Can'ba. The shrine of Mecca, said by the Arabs to be built by Ishmael, assisted by his father Abraham.

Caco'dæ'mon. An evil spirit consulted by the Greeks.

Ca'cus. A famous robber, son of Vulcan and Medusa, represented as a three-headed monster.

Cad'mus having slain the dragon which guarded the fountain of Dirce, in Boeotia, sowed the teeth of the monster, when a number of armed men sprang up and surrounded Cadmus with intent to kill him. By the counsel of Minerva, he threw a precious stone among the armed men, who, striving for it, killed one another. According to tradition, Cadmus introduced the use of letters in Greece—the alphabet, as introduced by him, consisting of sixteen letters.

Cadu'ceus. A white wand carried by Roman officers when they went to treat for peace. It had two winged serpents entwined round the top.

Cal'chas. The son of Thestor, was the wisest of the soothsayers among the Greeks at Troy. He died from grief on meeting with a soothsayer who proved wiser than he.

Calli'ope. The Muse who presided over epic poetry and rhetoric. She is generally depicted using a stylus and wax tablets, the ancient writing materials.

Callis'to. A nymph of Arcadia, the mother of Arcas, who was changed into a bear and placed in the heavens as a constellation.

Cal'pe. One of the two pillars of Hercules, the other named Abyla. These two were originally only one mountain, which Hercules tore asunder and poured the sea between them.

Calyp'so. One of the daughters of Atlas. When Ulysses was shipwrecked on her coasts she received him with hospitality, and offered him immortality if he would remain with her, which he refused to do. After seven years' delay he was permitted to depart from the island.

Cam'a. The god of love and marriage in Indian mythology.

Cam'deo. The Hindu god of love.

Came'ne. Nymphs who prophesied. Roman poets sometimes gave the name to the Muses.

Cami'la. Virgin queen of the Volscians. She was so swift that she could run over a field of corn without bending a blade, or make her way over the sea without wetting her feet.

Canop'us. The Egyptian god of water. The Chaldeans worshipped fire, and sent all the other gods a challenge, which was accepted by a priest of Canop'us. The Chaldeans lighted a vast fire, when the Egyptian deity spouted out torrents of water and quenched it.

Cassan'dra. Daughter of Priam and Hecuba, was passionately loved by Apollo.

Cassiope'ia. The chief stars of this constellation form the outline of a chair. Cassiopeia boasted that the beauty of her daughter Andromeda surpassed that of the sea-nymphs. The sea-nymphs complained to the sea-god of this affront, and Andromeda was chained to a rock to be devoured by sea-monsters. Perseus delivered her and made her his wife. The mother was taken to heaven and placed among the stars.

Cast'aly. A fountain on Mount Parnassus. Whoever drank of its waters was endowed with the gift of poetry.

Castor and Pollux. Were brothers, sons of Leda. Mercury carried them to Pallena, where they were educated. As soon as they arrived at manhood they embarked with Jason in quest of the Golden Fleece. Pollux was the son of Jupiter, and Castor of Tyndarus. Hence

Pollux was immortal, while **Castor** was subject to old age and death, like other men.

Cau'ther. In Mohammedan mythology, the lake of paradise, whose waters are as sweet as honey, as cold as snow, and as clear as crystal; and any believer who tastes thereof is said to thirst no more.

Ce'crops. In mythology is represented with upper part of his body human, the lower part that of a dragon. **Cecrops** is said to have founded Athens, and to have divided Attica into twelve communities, and to have introduced the first elements of civilized life; he instituted marriage, abolished bloody sacrifices, and taught his subjects how to worship the gods.

Cent'ours. Monsters, half horse, half human. They are especially celebrated for their contest with the giants in the mountains of Thessaly.

Cer'berus. The three-headed dog that keeps the entrance of the infernal regions. He prevents the living from entering and the shades from escaping. **Orpheus** lulled Cerberus to sleep with his lyre; and the Sibyl who conducted **Aeneas** through the Inferno, also threw the dog into a sleep with cake seasoned with poppies.

Ceres. The daughter of Saturn, sister of Jupiter and Neptune. She was the goddess of corn, flowers, and harvest. She is represented as riding in a chariot drawn by dragons and crowned with poppies. She was the mother of Proserpine, who was seized by Pluto while she was gathering flowers. Ceres was the Roman name for mother-earth.

Cha'os. The vacant space which existed before the creation of the world, and out of which the gods, men, and all things arose. Chaos was called the mother of Erebus and Night.

Cha'ron. A god of the infernal regions, son of Nox and Erebus, who conducted the souls of the dead in a boat over the rivers Styx and Acheron.

Charyb'dis. A woman who robbed travelers and was turned by Jupiter into a dangerous gulf on the coast of Sicily, opposite Scylla. Scylla and Charybdis are generally mentioned together to represent alternative dangers.

Che'mobis. The god of war among the Moabites.

Chibla'bos. A musician, ruler in the land of spirits, and friend of Hiawatha. Personification of harmony in nature.

Chimæ'ra. A celebrated monster goat, lion, and dragon, which continually vomited flames. It was destroyed by Bellerophon.

Chi'ron. A centaur, son of Philyra and Saturn. He was famous for his knowledge of medicine, and taught mankind the use of plants and herbs. He was placed among the stars and is known as Sagittarius.

Chlo'ris. The goddess of flowers, known as Flora in Greek mythology.

Chou. An Egyptian god corresponding to the Roman Hercules.

Cimne'rians. People living in a land of perpetual darkness.

Cir'ce. A sorceress. Daughter of Sol and Perseis, celebrated for her knowledge of magic and venomous herbs. Ulysses, on his return from the Trojan war, visited her coasts, and his companions were changed by her potions into swine.

Clio. The muse who presided over history.

Clio'tho. The youngest of the three daughters of Jupiter and Themis, was supposed to preside over the moment of birth. She held the distaff and spun the thread of life.

Clu'ricane. An Irish elf, who guards a hidden treasure. He has an evil disposition and appears as a wrinkled old man.

Cly'temnestra. A daughter of King of Sparta; married Agamemnon.

Cly'te. A water-nymph who loved the sun-god, Apollo, and was changed into a sunflower. In this form, she turns always toward the sun.

Cocy'tus. A river of the infernal regions. The unbred dead wander on its banks for 100 years, and it is known as the river of lamentation.

Col'chis or Colchos. A country of Asia famous for the expedition of the Argonauts, and the birthplace of Medea.

Colli'na. The goddess of the hills.

Co'mus. The god of revelry, presiding over feasts.

Concor'dia. The goddess of peace and concord, one of the oldest at Rome. She is represented holding a sceptre budding with fruit, and a horn of plenty. Camillus raised a temple to this goddess, in the capitol.

Consen'tes Divi. The twelve Etruscan gods who formed the council of Jupiter, consisting of six male and six female divinities. Juno, Minerva, Vulcan, Saturn, and Mars were among them.

Con'sus. The god of counsel, a name given to Neptune.

Co'ra. The goddess of vegetation.

Coro'nis. A king's daughter who was transformed into a crow by Minerva when asking for protection from Neptune. Another Coronis was the consort of Apollo.

Cor'yban'tes. Priests who served at the worship of the mother of the gods. The name came from their habit of striking themselves in their religious dances.

Cress'ida. Daughter of Calchas, the Greek, beloved by Troilus, son of Priam. They vowed eternal fidelity, and as pledges Troilus gave the maiden a sleeve, and Cressida gave the Trojan prince a glove.

Creu'sa. Daughter of Priam and wife of Aeneas. She was lost in the city of Troy when her husband escaped from its flames.

Cro'nos. The youngest of the Titans. Cronos also known as the father of Jupiter.

Cu'pid. God of love, son of Jupiter and Venus, is represented as a winged boy, naked, armed with a bow and arrows, and often with a bandage covering his eyes. He shot his arrows into the hearts of both gods and men. Like all the gods, he put on different forms to suit his plans. He became the husband of Psyche.

Cy'bele. A goddess, daughter of Caelus and Terra, and wife of Saturn. She is supposed to be the same as Ceres, Vesta, etc. On her birth she was exposed on a mountain, where she was tended and fed by wild beasts, receiving the name of Cybele from the mountain. She is represented on a throne with lions at her side.

Cy'clops. One-eyed giants who forged the thunderbolts of Jove. Homer describes them as wild, insolent, lawless shepherds, who devoured human beings. A later tradition represents them as Vulcan's assistants.

Cyp'aris'sus. A beautiful youth, beloved by Apollo, whose favorite stag he inadvertently killed, and who was metamorphosed into a cypress because of his grief.

Cyre'ne. A water-nymph, the mother of Aristæus. Her residence and the visit of her son are described in the fourth book of Virgil's "Georgics."

Dæd'alus. A great architect and sculptor. He invented the wedge, the axe, the level, and the gimlet, and was the first to use sails. He made himself wings with feathers and wax, and fitted them to his body and to his son Icarus. They sailed in the air, but the heat of the sun melted the wax on the wings of Icarus, and he fell into the ocean, which after him has been called the Icarian Sea.

Dag. In mythology of the North this name is given to the "radiant son of night." The name is also applied to the last of a treacherous race, the Hlunding.

Dag'an. A Syrian divinity, who, according to the Bible, had richly adorned temples in several of the Philistine cities. He was a national god of the Philistines, formed in human shape upwards from the waist, and resembling a fish downwards, with a finny tail.

Dag'un. In Indian mythology a god who reconstructed the world when it had been destroyed after creation.

Dah'ak. In mythology of Persia the ages of the world are divided into periods of 1,000 years. When the cycle is complete, the reign of Ormuzd will begin, and men will be good and happy; but this event will be preceded by the loosing of Dahak, who will break his chain and fall upon the world, and bring on man the most dreadful calamities.

Dai'koku. A mythical god invoked by Japanese workers. He is represented as holding a full sack which he beats to bring from it all useful articles, and the sack never becomes empty.

Dai'tyas. Among Hindu gods these are powerful to work evil.

Dan'æ. The daughter of Anacrisius, King of Argos, who became the mother of Perseus. An Italian legend related that Danæ came to Italy, built the town of Ardea, and married Pilius, by whom she became the mother of Daunus, the ancestor of Turnus.

Dana'ides. The fifty daughters of Danaus, King of Argos, who married the fifty sons of their uncle, Aegyptus.

Daph'ne. The goddess of the earth. Apollo courted her, but she fled from him, and was, at her own request, turned into a laurel tree.

Daph'nis. A Sicilian shepherd, son of Hermes (Mercury), by a nymph, was taught by Pan to play on the flute, and was regarded as the inventor of bucolic poetry. A Naiad to whom he proved faithless punished him with blindness, whereupon his father, Hermes, translated him to heaven.

Delph'obus. A son of Priam and Hecuba. After the death of Paris, he married Helen, but was betrayed

by her to the Greeks. Next to Hector, he was the bravest among the Trojans. On the capture of Troy by the Greeks he was slain and fearfully mangled by Menelaus.

De'lius. A name of Apollo, from the island in which he was born. The name Delia has been traced to this origin.

Del'phi. A town on Mount Parnassus, famous for its oracle, and for a temple of Apollo.

Del'phos. The place where the temple was built from which the oracle of Apollo was given.

Deme'ter. The mother of Persephone, who was evidently a goddess of the earth, whom some ancient system married to Zeus, the god of the heavens.

De'mogor'gon. The tyrant genius of the soil or earth, the life and support of plants. He was depicted as an old man covered with moss, and was said to live underground.

Deo. A name sometimes applied to Ceres.

Derce'tis. A Syrian goddess who corresponds to Dagon of the Philistines.

Dian'a. An ancient Italian divinity, whom the Romans identified with the Greek Artemis. Her worship is said to have been introduced at Rome by Servius Tullius, who dedicated a temple to her on the Aventine. At Rome Diana was the goddess of light. She was a daughter of Jupiter, and was born of Latona, or Leto, on the island Delos, at the same time with Apollo. As in Apollo the sun was deified and adored; so was the moon in Diana.

Diety'na. A Greek name of Diana. The name is connected with a Greek word meaning hunting-net, and refers to Diana as huntress.

Di'do. She was daughter of the Tyrian King Belus, and sister of Pygmalion, who succeeded to the crown after the death of his father. Dido was married to her wealthy uncle Acerbas, who was murdered by Pygmalion. Dido had vowed eternal fidelity to her late husband, and under pretense of soothing the manes of Acerbas by sacrifices, she erected a funeral pile, on which she stabbed herself in presence of her people. After her death she was worshipped by the Carthaginians as a divinity.

Dike. One of the three guardians of life appointed by Themis, whose names are Eumonia (order), Dike (punishment), Irene (peace). Their office was to promote unanimity by the exercise of equity and justice. They likewise stand around the throne of Zeus, and their regular occupation is to open and shut the gates of heaven, and yoke the steeds to the chariot of the Sun.

Dind'yimus. A mountain in Phrygia, on the frontiers of Galatia, near the town Pessinus, sacred to Cybele, the mother of the gods, who is hence called Dindymênê.

D'omed. A Greek hero of the Trojan War, was a son of Tydeus, and became King of Argos. He was a favorite of Minerva, who, according to Homer, encouraged him to attack and wound both Mars and Venus, who were engaged on the side of the Trojans.

Diome'des. The cruel tyrant of Thrace, who fed his mares on the flesh of his guests, was overcome by Hercules, and was given to the same horses as food.

Di'o'ne. The youngest of the Titan sisters and reputed mother of Venus. The name has also been poetically applied to Venus, herself.

Diony'sus. Son of Jupiter and Semele, the daughter of Cadmus. He was the god of wine, and is generally represented crowned with vine leaves.

Di'ræ. The avenging goddesses of Furies.

Dis. Contracted from Dives, a name sometimes given to Pluto, and hence also to the lower world.

Discor'dia. A malevolent deity corresponding with the Greek "Eris," the goddess of contention. She was driven from Heaven by Jupiter because she sowed dissensions among the gods. At the nuptials of Peleus and Thetis she threw an apple among the gods, which was the primary cause of the ruin of Troy, and of infinite misfortunes to the Greeks.

Dives. Demons of Persian mythology. According to the Koran, they are ferocious and gigantic spirits under the sovereignty of Eblis.

Dodo'na. The most ancient oracle was that of Jupiter at Dodona, a city of the Molossi, said to have been built by Deucalion.

Do'nar. A name given, sometimes, to Thor, the thunder-god, in Norse mythology.

Door'ga. A goddess worshiped among the Hindoos.

Do'ris. Daughter of Oceanus and Thetis, wife of her brother Nereus, and mother of the Nereides.

Dra'co. One of the hounds of Acteon.

Draup'nir. The marvelous ring belonging to Odin, with which he worked magic. It was burned on the funeral pyre of his son Balder.

Dro'ma. The chain forged for the purpose of binding the Fenris wolf, but which he broke. Hence the proverb, "to dash out of Dro'ma."

Dry'ads. Wood nymphs, believed to be sent from heaven. The Dryads were distinguished from the Hamadryads in this, that the latter were supposed to be attached to some particular tree, with which they came into being, lived and died; while the former had the care of the woods and trees in general.

Duer'gar. Dwarfs who dwell in rocks and hills; noted for their strength, subtlety, magical powers, and skill in metallurgy. They are the personification of the subterranean powers of nature.

Dur'ga. In Hindu mythology, the wife of Siva, represented as having ten arms.

E'acus. Son of Jupiter and Egina, one of the judges of the infernal regions, who was appointed to judge the Europeans.

Eb'lis. Among Mohammedans, name given to the prince of fallen angels who refused to worship the man, Adam.

Echino'bas. One of Actæon's hounds, whose bark rose above all other sounds.

Echo. A nymph who engaged the attention of Juno by her never-ceasing talk, allowing Jupiter his freedom, meanwhile. Juno found out her trick and accordingly punished her. Echo loved Narcissus; as her love was not returned, she pined away until nothing remained but her beautiful voice. In Northern mythology, Echo is the sound of the dwarf's talk.

Eck'hardt. In German legends, Eckhardt appears on the evening of Maundy Thursday to warn all persons to go home, that they may not be injured by the headless bodies and two-legged horses which traverse the streets on that night.

Ec'tion. Wife of Hector and mother of Andromache.

Egeon. A giant sea-god, who assisted the Titans against Jupiter.

Ege'ria. A nymph from whom King Numa Pompilius was fabled to have received his instructions respecting the forms of public worship which he established in Rome.

E'gia. One of the nine beautiful giantesses seen by Odin along the sea shore, known as wave-maidens. Her son became guardian of Bi-frost, the rainbow bridge.

Egil. The Vulcan of Northern mythology, one of the three brothers who married the swan-maidens. He was a great archer and killed his brother, Völund, by command of the king, and himself later became a peasant.

Egip'ans. Rural deities who inhabited the forests and mountains, the upper half of the body being like that of a man, and the lower half like that of a goat.

Egis. Part of the armor of Jupiter used by Minerva as a shield.

El'ra. An attendant of the goddess, Frigga, and a skillful nurse. She gathered herbs and plants for the cure of both sickness and wounds and taught the science to women.

El'atus. A prominent warrior among the mythical people of Thessaly and the father of Caneus, whom Neptune changed into the form of a man.

El'begast. One of the dwarfs of Scandinavian mythology who dwell in a magnificent palace under ground, and drew their servants from the bosom of the earth.

El'ber-ich. In the German hero legends a dwarf who aided the Lombard Emperor Otnit to win the daughter of the Soldan of Syria. He is identical with the Oberon of French and English fairy mythology.

Elec'tra. The bright or brilliant one. A daughter of Agamemnon and Clytemnestra, and the sister of Iphigenia. She became the accomplice of Orestes in the murder of their mother.

Elf. The water sprite, known also as Elb, from which the name of the River Elbe is said to be derived. Elves are more properly known as mountain fairies or those airy creatures that dance on the grass or sit in the leaves of trees and delight in the full moon.

Eliva'gar. In Norse mythology, the name of a great stream in Chaos, flowing from a fountain in the land of mist. This stream was much frequented by the elves at their creation.

Ely'sium. The Paradise of the Greeks, known also as the Happyland. Departed mortals were adjudged to Elysium or to Tartarus by the sentence of Minos and his fellow judges in the "Field of Truth." Elysium is described as adorned with beautiful gardens, meadows, and groves; where birds ever warble; where the River Eridanus winds between banks fringed with laurel, and "divine Lethe" glides in a quiet valley; where the air is always pure, and the day serene; where the blessed have their delightful abode.

Em'bla. An elm tree found in human form, by the gods, according to Northern mythology.

Empyre'an. A term used by the ancients to express the highest heaven, where the blessed enjoy the

beatific vision. Its name is derived from its having been supposed to be the region of fire.

Encel'adus. A Titan, son of Terra, and the most powerful of all the giants who conspired against Jupiter, and attempted to scale heaven. He was struck by Jupiter's thunderbolts, and chained beneath Mount Ætna.

Endym'ion. In Greek mythology, is the setting sun with which the moon is in love. One of the many renderings of his story is that Endymion was a beautiful youth who fed his flock on Mount Latmos. One clear night, Diana, the moon, looked down and saw him sleeping. The cold heart of the goddess was warmed by his beauty, and she came down to him, kissed him, and watched over him while he slept. Another story was that Jupiter bestowed on him the gift of perpetual youth united with perpetual sleep. One version of this myth made sleep a reward for piety, while another version made it a punishment for presuming to fall in love with Hera.

Enl'peus. A fabled river in Thessaly. Poseidon assumed the form of the god of this river in order to obtain possession of Tyro, who was in love with Enipeus. She became the mother of Pelias and Neleus.

En'yo. One of the gray-maidens who became the goddess of war, who delights in bloodshed and the destruction of towns, and accompanies Ares in battles.

Eolus. Known in Roman mythology as the god of the winds.

Eos. The Roman name for Aurora.

E'paphus. The son of Zeus and Io, born on the river Nile, after the long wanderings of his mother. He became king of Egypt, and built Memphis.

E'peus. Noted as builder of the Trojan horse.

E'rebus. A name applied to the dark and gloomy space under the earth through which the souls of the dead were obliged to pass on their way to Hades. The name also means Tartarus, the prison house into which Jupiter cast the Titans, the adherents of his father, Saturn.

Erga'tis. A name given to Minerva. It means the work-woman, and was given to the goddess because she was credited with having invented spinning and weaving.

E'ris. The goddess of discord; a sister of Mars, and a daughter of Night; the same as the Roman "Discordia."

Eri-king. Name given to the king of the elves, or a spirit of the air. According to tradition, its home is in the Black Forest of Germany and it appears as a goblin, working harm and ruin, especially among children.

E'ros. The Greek name of the deity called "Cupido," or Cupid, by the Romans. He is said to have come forth from the egg of Night, floated on Chaos, and to have inherited arrows with which he pierced all things, thereby giving new life and a torch with which he lighted the world. (See Cupid.)

Erythe'ia. One of the daughters of Night appointed to guard the golden apples in the gardens of the Hesperides.

Erythro'os. The Grecian name of one of the horses of Sol's chariot.

E'thon. One of the horses which drew the chariot of Sol, the sun. The word is Greek and signifies hot.

Eumae'us. The faithful swine-herd of Ulysses, whom Telemachus consulted upon his return to Minerva.

Eumen'ides. A euphemistic name given by the Greeks to the Furies, whose true name of Erinnyes they were afraid to utter. They are represented as the daughters of Earth or of Night, and as fearful winged maidens, with serpents twined in their hair, and with blood dripping from their eyes. They dwell in the depths of Tartarus, dreaded by gods and men.

Euphor'bus. The son of Panthous, one of the bravest of the Trojans, slain by Menelaus, who dedicated his shield in the temple of Hera (Juno), near Mycenae. Pythagoras asserted that he had once been Euphorbus, and in proof of his assertion took down at first sight the shield from the temple of Hera.

Euphros'yne. One of the three Graces. She specially represented joy, as her sisters stood for splendor and pleasure.

Euro'pa. Daughter of the Phœnician King Agenor, or, according to the Iliad, daughter of Phœnix.

Eury'lee. The wife of Orpheus, who died from the bite of a serpent. Orpheus, disconsolate at her loss, determined to descend to the lower world, and obtain permission for his beloved Eurydice to return to the regions of light. Armed only with his lyre, he entered the realms of Hades, and gained an easy admittance to the palace of Pluto. Orpheus was promised she should return on condition that he looked not back till she had reached the upper world. When the poet got to the confines of his journey, he turned his head to see if

Eurydice were following, and she was instantly caught back again into Hades.

Eurylochus. One of the companions of Ulysses in his wanderings, and the only one of them who was not changed by Circe into a hog.

Eury'theus. The King of Argos who appointed the twelve labors of Hercules.

Eury'tos. The god made tutor to Hercules, by Mercury, who taught him the use of the bow and arrows.

Eva'dne. Wife of Capaneus, and mother of Stenelion. Her husband having been killed at the siege of Thebes, she threw herself upon the funeral pile, and was consumed with him.

Excal'ibar. (Written also Excalibur, Excaliber.) The name of King Arthur's sword. When about to die, he sent an attendant to throw the weapon into a lake near by. Twice eluding the request, the knight at last complied. A hand rose from the water, clutched the sword, and after waving it three times both sank.

Fada. A fé or kobold of the south of France, sometimes called "Hada." These house-spirits, of which, strictly speaking, there are but three, bring good luck in their right hand and ill luck in their left.

Faf'nir. In Northern mythology the eldest son of the dwarf king, Hreidmar. The slaying of Fafnir is the destruction of the demon of cold or darkness who had stolen the golden light of the sun.

Fah'fah. Name given to one of the rivers of Paradise in mythology of the East.

Fa'ids. Name sometimes applied to Druids.

Faen'sil. A mythical Scandinavian tribe far north, whose ears were so long that they would cover their whole body.

Fates. In Greek and Roman mythology the Fates are identical with the Parcs. They were three sisters, daughters of Night, whom Jupiter permitted to decide the fortune and especially the duration of mortal life. One of them "Clotho," attached the thread; the second, "Lachesis," spun it; and the third, "Atropos," cut it off, when the end of life arrived. They were viewed as inexorable, and ranked among the inferior divinities of the lower world. Their worship was not very general. The Parcs were generally represented as three old women, with chaplets made of wool and interwoven with the flowers of the Narcissus, wearing long robes, and employed in their works: Clotho with a distaff; Lachesis having near her sometimes several spindles; and Atropos holding a pair of scissors.

Faunl. Rural deities represented as having the legs, feet, and ears of goats, and the rest of the body human. Name of Italian origin.

Fauns. Among the Romans, a class of rural deities corresponding with the Greek "Pan." They were the demi-gods of woods and forests, and hence called "sylvan deities," and are represented with horned heads, sharp-pointed ears, and with their bodies below the waist resembling those of goats. Their festival was celebrated at Rome on the 5th of December.

Fay. A diminutive name applied to a fairy or an elf.

Felle'titas. A symbolical, moral deity of the Greeks and Romans. She was the goddess of happiness and prosperity, and is frequently seen on Roman medals, in the form of a matron, with the staff of Mercury and a cornucopia.

Feng. The name taken by Odin in the capacity of wave-stiller. Under this name he teaches mortals to distinguish between good and bad omens and to know the moods of the winds.

Fenrir or Fenris. In Scandinavian mythology, the wolf of sin, meaning the goading of a guilty conscience. The "wolf" was the brother of Hel. When he gapes, one jaw touches earth and the other heaven.

Fero'hers. The guardian angels of Persian mythology. They are countless in number, and their chief tasks are for the well-being of man.

Fero'nia. A goddess of fruits, nurseries, and groves among the Romans. She had a very rich temple and grove specially sacred to her. She was honored as the patroness of enfranchised slaves, who ordinarily received their liberty in her temple.

Fides. The personification of faithfulness, worshipped as a goddess at Rome.

Flora. The Romans had a particular goddess of blossoms and flowers, whom they worshipped under the name of "Flora." She is said to have been the same as the Grecian nymph "Chloris."

Fortit'udo. A deification of courage and bravery, was one of the moral deities of the Romans.

Fortu'na. Known also as Fortune and sometimes as the goddess of Chance, to whom was ascribed the distribution and the superintendence of prosperity and adversity in general.

Fortuna'tæ. Known also as "the Islands of the Blessed." The early Greeks, as we learn from Homer, placed the Elysian fields, into which favored heroes passed without dying, at the extremity of the earth, near the River Oceanus. In poems later than Homer, an island is spoken of as their abode; hence when certain islands were discovered in the ocean, off the western coast of Africa, the name of *Fortunate Insule* was applied to them. They are now called the Canary and Madeira Islands.

Frekki and Geri. The two wolves of Odin. When Odin, seated on his throne, overlooks heaven and earth, his two wolves lie at his feet.

Frey. (Scandinavian mythology.) The god of the sun and of rain, and hence of fertility and peace. He was one of the most popular of the Northern divinities. No weapons were ever allowed in Frey's temple, although oxen and horses were sacrificed to him. His name was connected with the taking of any solemn oath, a heavy gold ring was dipped in the blood of the sacrifice and the oath sworn upon the ring. One of the most celebrated of the temples built to Frey was at Therva in Iceland.

Frey'ja. She was the sister of Frey, and the wife of Odur, who abandoned her on her loss of youth and beauty, and was changed into a statue by Odin, as a punishment. She is known as the Northern goddess of beauty and love; plants were called Freya's hair, and the butterfly, Freya's hen.

Frigga. In Scandinavian mythology the wife of Odin, the queen of the gods, and the mother of Baldur, Thor, etc. She sometimes typifies the earth, as Odin does the heavens. The Anglo-Saxons worshipped her as "Frea." The name survives in "Friday."

Fro'di. The son of Frey, a god of peace. Under his direction two giantesses turned a pair of magic mill-stones which ground out gold according to his wish and filled his coffers. Excited by greed he forced them to labor, allowing rest only long enough for the singing of one verse. When Frodi, himself, slept, the giantesses changed their song and proceeded to grind out an army of troops to invade the land. These troops represent the Vikings.

Furies. Among the divinities of the lower world were three daughters of Acheron and Night, or of Pluto and Proserpine, whose office it was to torment the guilty in Tartarus, and often to inflict vengeance upon the living. The Greeks called them "Furies." They are also known as Erinyes and Eumenides.

Fylgje. Guardian spirits treated of in Norse mythology. Besides the Norns or Dises, who were regarded as protective deities, the Norsemen ascribed to each human being a guardian spirit named *Fylgje*, which attended him through life.

Gæa. Same as *Tellus* and *Terra*, a personification of earth. Sometimes written *Ge*.

Galar. One of the dwarfs who, with his fellow dwarf, Fialar, slew the giant, Kvasir, and drained every drop of his blood.

Ganga. One of the three Indian River goddesses.

Gangler. The gate-keeper in Odin's palace who gave the explanation of the Northern mythology that it might be recorded.

Gany'mede. A son of Troas, King of Troy, according to Homer, was the most beautiful of all mortals, and was carried off by the gods that he might fill the cup of Zeus (Jupiter), and live among the immortal gods. Later writers state that Zeus himself carried him off, in the form of an eagle, or by means of his eagle, from Mount Ida.

Garm. A fierce dog that kept guard at the entrance of Hel's kingdom, the realm of the dead. He could be appeased by the offering of a Hel-cake which always appeared in the hand of one who, on earth, had given bread to the needy.

Gauta'ma. The chief deity of Burmah.

Gem'ini. One of the names given to the twins, Castor and Pollux, under which they were transported to dwell among the stars.

Ge'nii. Protecting spirits or gods.

Gerdä. Wife of Frey, and daughter of the frost giant, Gymer. She is so beautiful that the brightness of her naked arms illuminates both air and sea.

Ger'yon was a monster, said to be the offspring of Chrysaor and Callirhoe, and to have three bodies and three heads. His residence was in the island of Gades, where his numerous flocks were kept by the herdsman, Eurythion, and guarded by a two-headed dog, called Orthos. The destruction of this monster formed one of the twelve labors of Hercules.

Giall. The infernal river of Scandinavian mythology.

Giallar Bridge. The bridge of death, over which all must pass.

Giallar Horn. The Heimdall's horn, which went out into all worlds whenever he chose to blow it.

According to Northern mythology, he blew a long-expected blast as a rallying call to the battle which ended the reign of the gods, Odin, Frey, and Tyr.

Glan ben Glan. King of the Ginns or Genii, and founder of the Pyramids. He was overthrown by Aza'zil or Lucifer. (Arab superstitions.)

Giants. Earth united with Heaven produced Oceanos and the giants with fifty heads and a hundred hands — by which is meant, the personification of the great powers of nature — as their names signify: Cotos (eruption), Briareos (hurricane), and Gyes (earthquake). In fables the giants are beings of monstrous size, with dragons' tails and fearful countenances. They attempted to storm heaven, being armed with huge rocks and the trunks of trees, but were killed by the gods with the assistance of Hercules, and were buried under Mount Ætna and other volcanoes. In Scandinavian mythology they are described as evil geni of various forms and races, enemies of the gods. They dwelt in a territory of their own, called Giant-land. They had the power of assuming divers shapes, and of increasing or diminishing their stature at will.

Glinun'ga-gap. In Norse mythology, the vast chaotic gulch of perpetual twilight, which existed before the present world and separated the region of fog from the region of heat. Giants were the first beings who came to life among the icebergs and filled this vast abyss.

Glads'-helm. A great hall in the palace of Odin, in which were the twelve seats occupied by the gods when holding council.

Gla'sir. A marvelous grove in the land of Asgard, in which the leaves were all of shimmering red gold.

Glendoveer'. In Hindu mythology, is a kind of sylph, the most lovely of the good spirits.

Gnome. One of a class of spirits or imaginary beings which were supposed to tenant the interior parts of the earth, and in whose charge mines, quarries, etc., were left. Rübzahl, of the German legends, is often cited as a representative of the class.

Golden Apples. The. A great treasure which was thought to be altogether unobtainable, was the golden apples in the gardens of the Hesperides. These gardens were watched by a monstrous dragon, and to bring the golden fruit to Eurystheus, was one of the tasks which Hercules was to accomplish.

Golden Fleece. Iro persuaded her husband, Athamas, that his son Phryxos was the cause of a famine which desolated the land, and he ordered him to be sacrificed to the angry gods. Phryxos made his escape over sea on a "ram which had a golden fleece." When he arrived at Colchis, he sacrificed the ram to Zeus, and gave the fleece to King Æetes, who hung it on a sacred oak. It was afterwards stolen by Jason in his celebrated Argonautic expedition.

Gorgons. The three Gorgons were hideous monsters whose faces were so fearful that whoever looked on them became "congealed stone." One of these creatures, Medusa, was slain by Perseus, and her head was presented to Minerva, who placed it in her shield, where the face continued to retain its petrifying power.

Graces. To the retinue of Venus belonged the Graces, servants and companions of the goddess. They were said to be daughters of Jupiter and Eurynome, or according to others, of Bacchus and Venus herself, and were three in number: Splendor, Pleasure, and Joy. They were honored, especially in Greece, and had temples in the principal cities. Altars were often erected to them in the temples of other gods, especially Mercury, Venus, and the Muses.

Grid. Wife of Odin and mother of Vidar. She lent Thor her girdle, staff, and glove, warning him to beware of treachery.

Gripr. A horse-trainer, servant of Odin, who could foretell events of the future. He could teach a young hero all that he might need to know. He is compared to Chiron the Centaur.

Groves. The Romans were accustomed, like other ancient nations, to consecrate groves and woods to the gods. As many as 230 sacred groves are enumerated, chiefly within the city of Rome. In Greece, the particular tract of land, situated between Athens and Megara, was consecrated to Ceres and Proserpine, and trees were also set apart and with ceremony consecrated to some god.

Gyes. One of the hundred-handed giants. (Also written Gyges.)

Ha'des. The Greek god of the nether world, the son of Saturn and Rhea, and the brother of Jupiter and Neptune. He is the same as Pluto. In ordinary life he was usually called Pluto (the giver of wealth), because people did not like to pronounce the dreaded name of Hades. His wife was Persephone (Proserpine), the

daughter of Demeter, whom he carried from the upper world. In the division of the world among the three brothers, Hades obtained the abode of the shades, over which he ruled. Of all the gods he was most hated by mortals. The ensign of his power was a staff, with which, like Hermes, he drove the shades into the lower world. He possessed a helmet which rendered the wearer invisible, and which he sometimes lent to both gods and men. The Furies are called his daughters; the nymph Mintho, whom he loved, was metamorphosed by Persephone into the plant called mint; and the nymph Leuce, whom he likewise loved, was changed by him after death into a white poplar. Being the king of the lower world, Pluto is the giver of all the blessings that come from the earth; hence he gives the metals contained in the earth.

Ham'adryads. Nymphs of the woods who were born and died with particular trees. They possessed the power to reward and punish those who prolonged or abridged the existence of their special tree.

Harmo'nia. A daughter of Mars and Venus, and wife of Cadmus. Harmonia received a present of a necklace, which afterwards became fatal to all who possessed it.

Haro'e'ris. The Egyptian god, whose eyes are the sun and moon.

Harpies. Robbers or Spoilers, described by Homer as carrying off persons, who had utterly disappeared. Hesiod represents them as fair-haired and winged maidens; but subsequent writers describe them as disgusting monsters, birds with the heads of maidens, with long claws, and faces pale with hunger.

He'be. The goddess of youth, was daughter of Zeus and Hera. She was employed by her mother to prepare her chariot, and harness her peacocks, and was cupbearer to all the gods.

He'cate. A mysterious divinity known as the goddess that troubles the reason of men; the goddess that presides over nocturnal ceremonies, and consequently over magic; hence her identity with Diana in Grecian mythology, and with Isis in Egyptian.

Hec'tor. The prominent hero of the Trojans in their war with the Greeks, was the eldest son of Priam and Hecuba, and the husband of Andromache. He fought with the bravest of the Greeks, and slew Patroclus, the friend of Achilles. The death of his friend roused Achilles to the fight. The other Trojans fled before him into the city. Hector alone remained without the walls, but when he saw Achilles, his heart failed him, and he took to flight. Thrice he ran round the city, pursued by Achilles, and fell, pierced by Achilles' spear. Achilles tied Hector's body to his chariot, and thus dragged him into the camp of the Greeks. At the command of Zeus, Achilles surrendered the body to the prayers of Priam, who buried it at Troy with great pomp. Hector is one of the noblest conceptions of the poet of the "Iliad."

He'cuba. The second wife of Priam, King of Troy, and the mother of Paris and Heetor. After the fall of Troy, she fell into the hands of the Greeks as a slave, and, according to one account, threw herself in despair into the sea.

Heim'dal. In Northern tales a god, who lived in the celestial fort Himinsborg, under the farther extremity of the bridge Bifrost, and kept the keys of heaven. He is the watchman or sentinel of Asgard, sees even in sleep, can hear the grass grow, and even the wool on a lamb's back. Heim'dall, at the end of the world, will wake the gods with his trumpet.

Helen. A daughter of Jupiter and Leda, and the wife of Menelaus, King of Sparta. She was the most beautiful woman of her age, and chose Menelaus among many suitors. She afterward eloped with Paris, her husband's Trojan guest, and thus brought on the war between the Greeks and Trojans. After the fall of Troy she was restored to Menelaus.

He'lenus. Son of Priam and Hecuba, celebrated for his prophetic powers.

He'lice. A maid beloved of Jupiter, and by jealousy of Hera changed into a she-bear.

He'licon. A mountain in Boeotia sacred to the Muses, from which place the fountain Hippocrene flowed. It is also known as the Muses' Mount. It is part of the Parnassus, a mountain range in Greece.

He'lios. The Greek sun-god, who rode to his palace in Colchis every night in a golden boat furnished with wings. This god gives light both to gods and men. He sees and hears everything, and discovers all that is kept secret.

He'le. Daughter of Athamas and Nephèle, and sister of Phrixus. When Phrixus was to be sacrificed, Nephèle rescued her two children, who rode away

through the air upon the ram with the golden fleece, the gift of Hermes; but Helle fell into the sea. The episode gave the name of the Hellespont to the part of the sea where Helle was drowned. It is now called the Dardanelles.

Hel'en. The son of Deucalion and Pyrrha, and father of Æolus, Dorus, and Xuthus. He was King of Phthia in Thessaly, and was succeeded by his son Æolus. He was the mythical ancestor of all the Hellenes.

Hell Shoon. In Icelandic mythology indispensable for the journey to Valhalla as the obolus for crossing the Styx.

Helmet of Hades. A helmet worn by Perseus, rendering him invisible and which, with the winged sandals and magic wallet, he took from certain nymphs, who held them in possession. After he had slain Medusa he restored them again, and presented the Gorgon's head to Minerva, who placed it in the middle of her shield.

He'ra. Greek name for the wife of Jupiter, known among Romans as Juno. Hera was worshiped in many parts of Greece, but more especially at Argos, in the neighborhood of which she had a splendid temple, on the road to Mycenæ. She had also a temple in Samos. Hera was usually represented as a majestic woman of mature age.

Heracl'dæ. Name given to the descendants of Hercules, who, in conjunction with the Dorians, conquered the Peloponnesus eighty years after the destruction of Troy, or B. C. 1104, according to mythical chronology. This legend represents the conquest of the Achæan population by Dorian invaders, who henceforward appear as the ruling race in the Peloponnesus.

Hercules. Of all the Grecian heroes, no other obtained such celebrity as Hercules, son of Jupiter and Alcmena. Wonderful strength was ascribed to him even in his infantile years. Eurystheus imposed upon him many difficult enterprises, which he carried through with success; particularly those which are called the "twelve labors" of Hercules. These were: to kill the Nemean lion; to destroy the Lernaean hydra; to catch alive the stag with golden horns; to catch the Erymanthean boar; to cleanse the stables of Augeas; to exterminate the birds of Lake Stymphalus; to bring alive the wild bull of Crete; to seize the horses of Diomedes; to obtain the girdle of Hippolyta, Queen of the Amazons; to destroy the monster Geryon; to plunder the garden of Hesperides, guarded by a sleepless dragon; and to bring from the infernal world the three-headed dog, Cerberus. Many other exploits were ascribed to him, by which he gave proof of his extraordinary strength and exhibited himself as an avenger and deliverer of the oppressed. Such were: his slaying the robber, Cacus; the deliverance of Prometheus, bound to a rock; the killing of Busiris, and the rescue of Alceste from the infernal world. His last achievement was the destruction of the centaur, Nessus. Nessus, dying, gave his poisoned tunic to Deianira; Hercules afterwards receiving it from her, and putting it on, became so diseased that he cast himself in despair upon a funeral pile on Mount Æta. The worship of Hercules became universal, and temples were erected to his honor.

Herculean Knot. A snaky complication on the rod or caduceus of Mercury, adopted by the Grecian brides as the fastening of their woolen girdles, which only the bridegroom was allowed to untie.

Her'la. A mythical king, the supposed leader of The Wild Hunt of Scandinavian mythology. This was known as the Raging Host in Germany and as Herla-thing in England, from the name, Herla.

Herm'es. A Greek name of the god Mercury.

Herm'one. The beautiful daughter of Menelaus and Helen. She had been promised in marriage to Orestes before the Trojan War, but Menelaus, after his return home, married her to Neoptolemus (Pyrrhus).

Hesper'ides. The Hesperides are called daughters of Night, because their origin and existence are veiled in darkness. Their names were Ægle, Erytheia, and Arethusa;—and they were appointed to guard the golden apples, which were the gift of Earth to Juno on her wedding day. The celebrated gardens of the Hesperides abounded with fruits and were carefully guarded by a dragon, which never slept.

Hes'perus. A supposed son or brother of Atlas enrolled among the deities after death, and made identical with the Evening Star.

He'stia. The Greek name for Vesta. She was the goddess of the domestic hearth.

Hippoc'rene. The Muses were entertaining themselves in the mountain with song and lyre, in so gay a manner that all could hear them. Poseidon sent up Pegasus, charging him to limit the mirth and noisy merriment. On arriving at the top of the mount,

Pegasus had only to paw the ground to bring all quiet; and from beneath his foot arose that well-known fountain which, from its origin, is called Hippocrene.

Hippolyta. Queen of the Amazons, and daughter of Mars. In classic fable, her sister Antiope married Theseus. Hippolyta was famous for a girdle given her by her father, and it was one of the twelve labors of Hercules to possess himself of this prize.

Hippolytus. Son of Theseus and Hippolyte; he was killed by a fall from a chariot, but was raised to life again by Diana, or by Æsculapius.

Hippomenes. Son of Megareus, and great-grandson of Poseidon (Neptune), conquered Atalanta in a foot-race. He had three golden apples, which he dropped one by one, and which she stopped to pick up. By this delay she lost the race.

Hofvarpnir. The fleet steed of Ina, in Scandinavian legend, which traveled through fire and air and enabled this messenger of the gods to see all that was happening on the earth.

Hobomok'o. An evil spirit known among American Indians.

Ho-de-ken. A famous German kobold, or domestic fairy servant; so called from wearing a little felt hat pulled down over his face.

Ho'dur. In Norse mythology, a blind god who destroyed his brother, Baldur, at the instigation of Loki, without meaning to do so. He is the type of night and darkness, as Baldur is of light and day.

Ho'nir. In Asgard tales, name given to the god of mind or thought.

Ho'ræ. Daughters of Zeus and Themis, the goddesses of the order of nature and of the seasons, who guarded the doors of Olympus, and promoted the fertility of the earth.

Ho'rus. The Egyptian god of the sun, who was also worshipped in Greece and at Rome.

Hugin. One of Odin's two ravens, who carried him news from earth, and who, when not thus employed, perched upon his shoulders. The personification of thought or intellect.

Hu'go. A kind of evil spirit in the popular superstition of France—a sort of ogre made use of to frighten children.

Hundred-eyed. Argus, in Greek and Latin fable. Juno appointed him guardian of Io, but Jupiter caused him to be put to death; whereupon Juno transplanted his eyes into the tail of her peacock.

Hyacinthus. A youth beloved by Apollo, and accidentally slain by him while playing at quoits. From his blood sprang the flower which bears his name.

Hy'ades. A class of nymphs commonly said to be seven in number.

Hy'dra. Name of a monstrous serpent in the Lake Lerna, with numerous heads. When one of these heads was cut off, another or two others immediately grew in its place, unless the blood of the wound was stopped by fire. The destruction of the Hydra was a labor assigned to Hercules, which he accomplished by the aid of Iolaus, who applied lighted brands or a heated iron as each head was removed. The arrows of Hercules, being dipped in the Hydra's blood, caused incurable wounds.

Hyge'la. The goddess of health, and a daughter of Æsculapius, though some traditions make her the wife of the latter. In works of art she is represented in a long robe, feeding a serpent from a cup.

Hy'men or Hymenæus. One of the imaginary companions of Venus. He presided over marriage.

Hy'mlr. In mythology of Northern lands, the frost-giant who owned the great kettle called "Mile-deep."

Hyperbo'reans. A fabulous people, supposed to live in a state of perfect happiness, in a land of perpetual sunshine.

Hyperion. Son of Cœlus and Terra. The model of manly beauty, synonymous with Apollo. The personification of the sun. Hyperion was the father of the Sun, Moon, and Dawn. He is, therefore, the original sun-god, and is painted with splendor and beauty.

Iacchus. The solemn name of Bacchus in the Eleusinian mysteries, whose name was derived from the boisterous song called "Iacchus." In these mysteries Iacchus was regarded as the son of Zeus and Ceres, and was distinguished from the Theban Bacchus (Dionysus), the son of Zeus and Semele.

Iap'etos. The father of Atlas and ancestor of the human race, called the progeny of Iapetos. By many considered the same as Japheth, one of the sons of Noah.

Ic'arius. An Athenian, who hospitably received Dionysus in Attica, and was taught the cultivation of the vine.

Ic'aros. Son of Dædalos, who flew with his father from Crete; but the sun melted the wax with which his wings were fastened on, and he fell into the sea, hence called the Ic'arian.

Ida. A mountain range of Mysia, in Asia Minor, celebrated in mythology as the scene of the rape of Ganymede and of the judgment of Paris. In Homer the summit of Ida is the place from which the gods watch the battles in the plain of Troy. It is an ancient seat of the worship of Cybele. A mountain in Crete, known as Mount Ida, was closely connected with the worship of Jupiter.

Idæan Mother. Cyb'ele, who had a temple on Mount Ida, in Asia Minor.

Idom'eneus. He led the Cretans against Troy, and was one of the bravest heroes in the Trojan War. He vowed to sacrifice to Poseidon whatever he should first meet on his landing, if the god would grant him a safe return. This was his own son, whom he accordingly sacrificed. As Crete was thereupon visited by a plague, the Cretans expelled Idomeneus, who went to Italy.

Idun'a or Idun'. Daughter of the dwarf Svail, and wife of Bragi. She kept in a box the golden apples which the gods tasted as often as they wished to renew their youth. Loki on one occasion stole the box, but the gods compelled him to restore it. Iduna seems to personify that part of the year when the sun is north of the equator. Her apples indicate fruits generally. Loki carries her off to Giant-Land, when the Sun descends below the equator, and he steals her apples. In time, Iduna makes her escape, in the form of a sparrow, when the Sun again rises above the equator; and both gods and men rejoice in her return.

I'fing. In Scandinavian mythology the great stream between the earth and the sacred lands, whose waters never froze.

In'achus. One of the river-gods, a son of Oceanus and Tethys, and father of Phoroneus and Io, was the first King of Argos, and said to have given his name to the river Inachus.

In'dra. In Hindu mythology, the ever youthful god of the firmament, and the omnipotent ruler of the elements. He is a most important personage in Indian fable. In the Vedic period of the Hindu religion, he occupied a foremost rank, and, though degraded to an inferior position in the Epic, he long enjoyed a great legendary popularity. In works of art, he is represented as riding on an elephant.

I'o. The daughter of Inachus, first King of Argos, beloved by Zeus, and metamorphosed, through fear of Hera, into a heifer.

Iola'us. The son of Iphicles and Automedusa. Iphicles was the half-brother of Hercules, and Iolaus was the faithful companion and charioteer of the hero.

I'ole. The daughter of Eurystus of Oechalia, beloved by Hercules, who tried to gain her in marriage for himself. Eurystus promised his daughter to the man who should conquer him and his sons in shooting with the bow. Hercules defeated them; but Eurystus and his sons, with the exception of Iphitus, refused to give Iole to him, because he had murdered his own children.

I'on. The fabulous ancestor of the Ionians, son of Xuthus and Creusa, or of Apollo and Creusa, grandson of Helen. According to some traditions he reigned in Attica.

Iphigeni'a. A daughter of Agamemnon and Clytemnestra, and sister to Orestes. Iphigenia was to have been sacrificed on entering upon the expedition against Troy; but was rescued by Diana, who carried her to Tauris, where she became a priestess in her temple. She was afterwards recognized by her brother, Orestes, and enabled to save him with his friend, Pylades.

Ire'ne. The Roman goddess of peace, and daughter of Zeus and Themis, and one of the Horæ.

I'ris. Name given among the Greeks to the rainbow, as personified and imagined a goddess. Her father was said to be Thæumas, and her mother Electra, one of the daughters of Oceanus. Her residence was near the throne of Juno, whose commands she bore as messenger to the rest of the gods and to mortals. Sometimes, but rarely, she was Jupiter's messenger, and was employed even by other deities.

Irus. The beggar of gigantic stature, who kept watch over the suitors of Penel'ope. His real name was Ar'neus, but the suitors nicknamed him Irus because he carried their messages for them. Ulysses, on his return, felled him to the ground.

I'sis. In Egyptian mythology, the sister-wife of Osiris. She was originally the goddess of the earth, and afterwards of the moon.

Isme'ne. Daughter of Ge'dipus and Jocasta. Antig'one was buried alive by the order of King Creon, for burying her brother Polynices. Ismene declared that

she had aided her sister, and requested to be allowed to share the same punishment. Denied of this, she is said to have died from grief. The story is told by Sophocles, and the modern artist, Teschendorf, has made a noted picture of the two sisters.

Is'rafil. Known among Arabians as the angel of music, who possessed the most melodious voice of all God's creatures. This is the angel who is to sound the Resurrection Trump, and make music for the saints in Paradise. Israfil, Gabriel, and Michael were the three angels that warned Abraham of Sodom's destruction.

Ith'aca. In mythology, the island-kingdom of Ulysses. The city of Ithaca, the residence of Ulysses, was situated on a precipitous, conical hill, now called "eagle's cliff," occupying the whole breadth of the isthmus. Ithaca was also the home of Penelope.

Ithuri'el. One of the angels commissioned by Gabriel to search for Satan, who had effected his entrance into Paradise.

Ix'ion. A fabled king of Thessaly, who became father of the Centaurs. The story by which he is most noted runs: When Deioneus demanded of Ixion certain gifts he had promised, Ixion treacherously invited him to a banquet, and contrived to make him fall into a pit filled with fire. Ixion, as a punishment, was chained by Hermes with his hands and feet to a wheel, which is described as winged or fiery, and said to have rolled perpetually.

Jamshid'. King of the Genii, famous for a golden cup full of the elixir of life. This cup, hidden by the genii, was discovered while digging the foundations of Persepolis.

Janus. One of the superior gods of the Romans. The myths represent him as reigning over the earliest inhabitants of Italy, in the time of Saturn. It was to Janus that Saturn fled, and under them was the "golden age," a period of peace. To Janus, Romulus dedicated that celebrated temple, which was always open in time of war, and was closed with much solemnity, whenever there was general peace in the Roman Empire; a thing which happened but three times during 700 years. From this deity the month of January was named, and the first day of the month was sacred to him.

Ja'son. He was a shoot of the heroic stem of Æolus, but not the son of a god; and Juno, while she persecuted the sons of Jupiter, took him under her especial protection. His father, Æson, who reigned at Iolcus, was deprived of the kingdom by his half-brother Pelias, who attempted to take the life of the infant Jason. He was saved by his friends, and intrusted to the care of the Centaur Chiron. When he had grown up he came to Iolcus, and demanded the kingdom, which Pelias promised to surrender to him, provided he brought the golden fleece, which was in the possession of King Æetes in Colchis, and was guarded by an ever-watchful dragon. The greatest feat recorded of him is his voyage in the Argo to Colchis to obtain the golden fleece, which, aided by Juno, he succeeded in doing. He married Medea, daughter of the King of Colchis, who was a magician, and on Jason having vowed eternal fidelity to her, she gave him charms to protect him from danger.

Jinn. A sort of fairies in Arabian mythology, the offspring of fire. They are governed by a race of kings named Suleyman, one of whom "built the pyramids." Their chief abode is the mountain Kaf, and they appear to men under the forms of serpents, dogs, cats, monsters, or even human beings, and become invisible at pleasure. The evil jinn are ugly, but the good are beautiful. According to fable, they were created from fire two thousand years before Adam was made of earth.

Jord. Daughter of Night and mother of Thor. In Scandinavian mythology the name given to primitive earth.

Jove. Known in classical mythology as the god of thunder. The name Jove is but another appellation, rarely given to Zeus or Jupiter.

Juggernaut or Jaggernaut. A Hindu god. The temple of this god is in a town of the same name in Orissa.

Juno. The wife and sister of Jupiter, daughter of Saturn and Rhea, and as wife of Jupiter mistress of gods and men. Her birthplace was assigned by the Greeks to Argos, or the Island Samos, and to other spots in Greece, although her story and her worship were rather of Phœnician origin. The chief peculiarities of her character were love of power and jealousy. The worship of Juno was far spread, and the number of her temples and festivals was very great. The same goddess was worshipped among the Greeks under the name of Hera.

Ju'piter. The highest and most powerful among the gods. By this god was originally represented nature in general; and finally the supreme existence. The worship of Jupiter was universal, and numerous temples were erected to his honor. The largest and the

most celebrated in Greece was that in Olympia, remarkable for its own magnificence, and for its statue of Jupiter wrought by Phidias, and for the Olympic games held in its vicinity. His oracle in the grove of oaks at Dodona was renowned, and considered the most ancient in Greece. In Rome the capitol was specially dedicated to him, and he had in that city many temples. Among the Greeks he was known as Zeus.

Kama. The Hindu god of love. His wife is Rati (voluptuousness), and he is represented as riding on a sparrow, holding in his hand a bow of flowers and five arrows, each tipped with the bloom of a flower supposed to conquer one of the senses. His power is so much exalted that even the god Brahma is said to succumb to it.

Ka'mi. The gods of ancient Japan. The name, in modern times, designates any spiritual saint and may also be applied to a prince.

Kaswa. The camel admitted into Moslem paradise, the favorite camel of Mahomet which fell of its knees in adoration when "the prophet" delivered the last clause of the Koran to the assembled multitude at Mecca.

Kelpie. In mythology of Scotland, a spirit of the water seen in the form of a horse. Each lake has its Kelpie.

Kobold. A house-spirit in German superstition. In northern lands the name is sometimes used in place of elf or dwarf representing an under-ground spirit. Probably the same as the Scotch brownie.

Koppelberg. The hill which miraculously opened to receive the children who followed the Pied Piper. This belongs to mythology, as people in the Middle Ages considered Odin as the leader of disembodied spirits, and from this came the Pied Piper. The rats were the restless souls of the dead, which the Pied Piper released by drowning.

Krish'na. In Hindu mythology, the eighth incarnation of Vishnu. According to some authorities he is considered distinct from all the Avatars, as these had only a portion of the divinity, and Krishna was Vishnu himself in form of "the Black One."

Kro'nos. Kronos (Time) was the youngest of the Titans, and as the heavens measure out time to us, and earth is considered its beginning, he is said to be born of Uranos and Ge. He was generally worshipped under the name of Saturn.

Kuve'ra. In Hindu mythology, the god of riches, represented as frightfully deformed, and as riding in a car drawn by hobgoblins.

Lach'e-sis. One of the three fates; the one that spun the thread of life.

Ladon. The dragon who guarded the apples of the Hesperides, and was slain by Hercules. Ladon is also the name of the father of Daphne and Metope.

Læ'ding. In Norse mythology the strongest chain with which the wolf, Fenris, was bound. He easily broke the chain and from this legend has grown the saying, "to get loose out of Læding." A stronger chain was known as Droma.

Læ'rtes. Mythical King of Ithaca and father of Ulysses. Lærtēs took part in the Calydonian hunt, and in the expedition of the Argonauts. He was still alive when Ulysses returned to Ithaca, after the fall of Troy. During the absence of Ulysses he had withdrawn to the country in grief and bowed with age, and Penelope, the wife of Ulysses, is represented as weaving the shroud of her father-in-law, the work with which she put aside her many suitors.

La'lus. King of Thebes, son of Labdacus, husband of Jocasta, and father of Oedipus, by whom he was slain.

La'mla. A monstrous specter, which was believed to devour human beings.

Laoc'oön. Son of Priam and priest of Apollo. He opposed the reception of the Wooden Horse into Troy, thinking it some artifice of the deceitful Greeks. He and his two sons were killed by two monstrous serpents which came from the sea. The people believed that they were struck by the gods because of their interference. The death of Laocoon is the subject of one of the most magnificent and celebrated works of ancient sculpture still in existence; it was discovered in 1506 at Rome, and is now preserved in the Vatican. It is a single block of marble, and was the work of Agesander of Rhodes and two other sculptors.

Laodam'a. The wife of Proteusilaus, who was slain before Troy. She begged to be allowed to converse with her dead husband for only three hours, and her request was granted. Hermes (Mercury) led Proteusilaus back to the upper world; and when Proteusilaus died a second time, Laodama died with him.

Laom'edon. The king who built the walls of Troy assisted by Neptune and Apollo, who had displeased

Jupiter and were sent to work for wages. Neptune built the walls of Troy, while Apollo tended the king's flocks on Mount Ida. When the two gods had done their work, Laomedon refused the reward he had promised and expelled them from his dominions. Neptune sent a sea-monster to ravage the country; and a maiden, chosen by lot, was from time to time sacrificed to propitiate it.

Lap'ithæ. A mythical people of Thessaly, noted for their defeat of the Centaurs.

Lar'es. Inferior gods at Rome, and known as domestic Lares and public Lares. There was in every house their proper sanctuary (lararium) and altar. They seem to have been viewed as the spirits of the departed ancestors, the fathers and forefathers of the family, who sought the welfare of their descendants. The Lares and the Penates are often confounded, but were not the same. "The Penates were originally gods, the powers of nature personified. The Lares were originally themselves human beings, who, becoming pure spirits after death, loved still to hover round the dwelling they once inhabited; to watch over its safety, and to guard it as the faithful dog guards its master."

Lat'inus. A king of Latium, son of Faunus and the nymph Marica, brother of Lavinium, husband of Amata, and father of Lavinia, whom he gave in marriage to Æneas. Italy was so called from Lavinia, daughter of Lat'inus and wife of Æneas. Æneas built a town which he called Lavin'ium, capital of Latium. According to one account, Latinus, after his death, became Jupiter Latiaris, just as Romulus became Quirinus.

Lat'mus. A mountain in Cai'ria. It was the mythological scene of the story of Selene (Luna) and Endymion.

Lato'na. Daughter of Cœus, a Titan, and Phœbe, and by Jupiter, the mother of Apollo and Diana. The love of the king of the gods procured for her the hatred of Juno.

Lavin'ia. The daughter of Latinus and Amata, betrothed to Turnus, but married to Æneas. Æneas founded the town of Lavinium, called after Lavinia, the daughter of Latinus.

Lé'da. The mother of Helen. Jupiter visited her in the form of a swan, and "Leda and the Swan" has been a favorite subject with artists. Correggio and Michael Angelo have both left paintings of the same subject.

Lepra'caun. The fairy shoemaker of Ireland, so called because he is always seen working at a single shoe.

Les'trigons. A mythical race of giants who lived in Sicily. Ulysses sent two of his men to request that he and his crew might land, but the king ate one and the other died. The Lestrigians assembled on the coast and threw stones against Ulysses and his crew. Ulysses fled with much loss.

Leth'e. The river that separates Hades from the Elysian fields. The Greeks believed in a magical power of the waters of this river, which the souls of all the dead are obliged to taste, that they may forget everything said and done in the earth.

Lí'ber. A name frequently given by the Roman poets to the Greek Bacchus or Dionysus. But the god Liber and the goddess Libera were ancient Italian divinities, presiding over the cultivation of the vine and the fertility of the fields. Hence they were worshiped in early times in conjunction with Ceres. The vine and ivy and the panther were especially sacred to him. Goats were usually offered in sacrifice to him, because they are particularly injurious to the vine.

Lí'bertas. The goddess of liberty, to whom several temples were erected at Rome. Libertas is represented in works of art as a matron, with the pileus, the symbol of liberty, or a wreath of laurel. Sometimes she appears holding the Phrygian cap in her hand.

Lib'issa. Queen of fays and fairies.

Libit'ina. An ancient goddess of Rome, who presided over the burial of the dead. At her temple at Rome everything necessary for funerals was kept, and persons might there either buy or hire such things. Hence a person undertaking the burial of a person (an undertaker) was called "libitinarius," and his business "libitina."

Lidskial'fa. The throne of Alfader, whence he can view the whole universe.

Lif. In Norse mythology the name given to man who is to occupy the purified earth when goodness resumes its sway.

Lil'inau. In American Indian folk-lore Lilinau was wooed by a phantom. She followed his green waving plume through the forest, and was never seen again.

Lil'ith. In Hebrew mythology a female specter who lies in wait for children in order to destroy them. The older traditions tell of Lilith as a former wife of Adam and the mother of demons. Amulets were worn as protection from her powers.

Lob'aircin. In Irish mythical tales a fairy shoemaker resembling an old man, who resorts to out-of-the-way places, where he is discovered by the noise of his hammer. He is rich, and while anyone keeps his eye fixed upon him cannot escape, but the moment the eye is withdrawn he vanishes.

Lo'fen. The Scandinavian god who guards friendship.

Lo'fua. The Scandinavian goddess who reconciles lovers.

Lo'ki. The great god of fire in Norse mythology.

Lo're-lef'. In German legend a siren who haunted a rock of the same name on the right bank of the Rhine. She combed her hair with a golden comb, and sang a wild song which enticed fishermen and sailors to destruction on the rocks and rapids at the foot of the precipice. In Northern mythology Lorelei is represented as immortal, a daughter of the Rhine, and dwelling in the river bed.

Lo'tis. A nymph, who, to escape the embraces of Priapus, was metamorphosed into a tree, called after her Lotus.

Lubins. A species of goblins in Normandy that take the form of wolves, and frequent churchyards. They are very timorous, and take flight at the slightest noise.

Lu'cifer. As the bringer of light, is the name of the planet Venus, when seen in the morning before sunrise. The same planet was called "Hesperus," when it appeared in the heavens after sunset.

Lu'na. She was the daughter of Hyperion and Theia, and was distinct in name, descent, and story, from Diana, who was taken as goddess of the moon. To Luna was ascribed great influence in relation to the birth of men. Luna seems to have been especially worshiped by the Atlantees.

Lycome'des. A king in the Island of Scyros, to whose court Achilles was sent, disguised as a maiden, by his mother, Thetis, who was anxious to prevent his going to the Trojan War. Some traditions say that Lycomedes treacherously killed Thesus by throwing him from a rock.

Maenalus. A mountain in Arcadia, extending from Megalopolis to Tegea, celebrated as the favorite haunt of the god Pan. The Roman poets frequently use the adjectives "Maenalis" and "Maenalis" as equivalent to Arcadian.

Mæ'ra. The dog of Icarus. Icarus having made wine, gave it to some shepherds, who, thinking themselves poisoned, killed him; recovering themselves, they buried him. His daughter, Erigone, being shown the spot by his faithful dog Mæra, hung herself through grief.

Mam'mon. In demonology, placed at the head of nine ranks of demons. Also a Syriac word used in the Scriptures to signify either riches or the god of riches. By poetic license, Milton makes Mammon one of the fallen angels.

Ma'nes. In Roman mythology these are found among the demons of the Genii. Although often spoken of as the spirits or souls of the departed, they seem more commonly to have been considered as guardians of the deceased, whose office was to watch over their graves, and hinder any disturbance of their tranquillity.

Ma'ni. Name given in ancient Norse mythology to the moon. Later known as the son of Mundilfori; taken to heaven by the gods to drive the moon-car. He is followed by a wolf, which, when time shall be no more, will devour both Mani and his sister Sol.

Man'itou. The great spirit of American Indians.

Mars. The god of war and battles was a son of Jupiter and Juno, and educated in Thrace. He was viewed as presiding over rude and fierce war, the origin of which was ascribed to him, while Minerva had the credit of inventing tactics and the proper military art. The Romans regarded him as the father of Romulus, and the founder and protector of their nation.

Marsyas. The Phrygian flute-player who challenged Apollo to a contest of skill, and, being beaten by the god, was flayed alive for his presumption. From his blood arose the river so called. The flute on which Marsyas played was one Athëna had thrown away, and, being filled with the breathe of the goddess, discoursed most excellent music.

Max'imus. One of the appellations of Jupiter, being the greatest of the gods.

Mede'a. A daughter of Æetes, skilled in charms and witchcraft. She had scarcely beheld Jason, when, through the influence and disposal of the gods, a tender affection for the hero was raised in her bosom, which soon kindled to a flame of the most violent passion. Jason went to the temple of Hecate to supplicate the mighty goddess, where he was met by Mede'a. She disclosed her love to him, at the same time promising her assistance in the dangers which threatened him, and her powerful

help in accomplishing his glorious undertaking, provided he would swear fidelity to her. Jason complied, and Medea, reciprocating the oath, rendered the hero invincible by means of her magical incantations.

Medusa. One of the three Gorgons whose hair was entwined with hissing serpents, and their bodies were covered with impenetrable scales; they had wings, and brazen claws, and enormous teeth, and whoever looked upon them was turned to stone. Medusa, who alone of the sisters was mortal, was, according to some legends, at first a beautiful maiden, but her hair was changed into serpents by Athena (Minerva), in consequence of her having become by Poseidon (Neptune) the mother of Chrysaor and Pegasus, in one of Athena's temples. She was killed by Perseus, and her head was fixed on the shield of Minerva. From her blood sprang the winged horse, Pegasus.

Megæra. One of the Furies; sometimes said to personify a guilty conscience. The names of the Furies were: Tisiphone, whose particular work was to originate fatal epidemics and contagion; Alecto, to whom was ascribed the devastations and cruelties of war; and Megæra, the author of insanity and murders. Temples were consecrated to them among both the Greeks and the Romans, and among the latter a festival also.

Meglin-giord. A magic belt worn by the god Thor. He once proposed to show his strength by lifting great weights, but when challenged to pick up the giant's cat, he tugged and strained, only to succeed in raising one paw from the floor, although he had taken the precaution to enhance his strength as much as possible by tightening his belt Megin-giord.

Meleager. Son of the Calydonian King Oeneus; took part in the Argonautic expedition. He distinguished himself as one of the Argonauts, and by his skill in throwing the javelin.

Mel'ia. One of the daughters of Oceanus and mother of Phoroneus, one of the fabulous kings of Argos.

Mellan Nymphs. The nymphs sent to bear the infant Jupiter to the cave on Mount Ida.

Melicer'tes. A son of the Theban King Athamas by Ino. He was metamorphosed into a sea-god.

Mellissa. A nymph, said to have discovered the use of honey, and from whom bees were believed to have received their name. There can be no doubt, however, that the name really came from a Greek word meaning honey, and was hence given to nymphs.

Mello'na. One of the rural divinities, the goddess of bees.

Mel-pom'e-ne. One of the Muses. Melpomene, the Muse of tragedy, was supposed to preside over melancholy subjects of all kinds.

Melus'na. The most noted among French fairies. She was condemned to become every Saturday a serpent from the waist downward, as a punishment for having, by means of a charm, inclosed her father in a high mountain, in order to avenge an injury her mother had received from him. She married Raymond, Count of Poitiers, and, having been seen by him during her loathsome transformation—in violation of his solemn promise never to visit her on a Saturday—was immured in a subterranean dungeon of the castle of Lusignan.

Mem'non. A son of Tithonus and Aurora, and King of Ethiopia. After the fall of Hector, he went to the assistance of his uncle, Priam, with ten thousand men, and displayed great courage in the defense of Troy, but was at length slain by Ajax, or by Achilles, in single combat, whereupon he was changed into a bird.

Men'des. An Egyptian god like Pan. He was worshipped in the form of a goat.

Menela'us. A son of Plisthenes or Atreus, and younger brother of Agamemnon, was King of Lacedæmon, and married to the beautiful Helen, by whom he became the father of Hermione. His early life, the rape of his wife by Paris, and the expedition of the Greeks to Asia to punish the Trojans, are related under Agamemnon. In the Trojan War Menelaus killed many Trojans, and would have slain Paris also in single combat had not the latter been carried off by Aphrodite (Venus) in a cloud.

Menoe'ceus. (1) A Theban, grandson of Pentheus, and father of Hippomenes, Jocasta, and Cæon. (2) Grandson of the former, and son of Creon, put an end to his life because Tiresias had declared that his death would bring victory to his country, when the seven Argive heroes marched against Thebes.

Mence'tius. Brother of Atlas and son of one of the Titans. On account of his pride and strength he was killed by Jupiter's lightnings.

Men'tor. A friend of Ulysses in Ithaca, whose form Minerva assumed, to give instructions to Ulysses' son Telemachus, whom she accompanied to Pylos and Lacedæmon.

Meph'is-toph'e-les. One of the seven chief devils in the old demonology, the second of the fallen archangels, and the most powerful of the infernal legions after Satan. He figures in the old legend of Dr. Faustus as the familiar spirit of that magician. To modern readers he is chiefly known as the cold, scoffing, relentless fiend of Goethe's "Faust," and the attendant demon (Mephistophilis) in Marlowe's "Faustus."

Mercury. Has been identified with the Greek Hermes. The Romans of later times transferred all the attributes and myths of Hermes to their own god. (Hermes.) The Fætales, however, never recognized the identity; and, instead of the "caduceus," they used a sacred branch as the emblem of peace. The resemblance between Mercurius and Hermes is indeed very slight. The worship of Mercury was very common among Egyptians, Greeks, and Romans, and many temples were consecrated to him. At Rome there was a particular festival held for the expiation of merchants, in honor of Mercury.

Mer'iones. A Cretan hero, son of Molus, was one of the bravest heroes in the Trojan War, and usually fought along with his friend Idomeneus.

Mer-maids. Wave maidens of Northern mythology and classed with nymphs in Grecian and Roman. They were generally represented as young and beautiful virgins, partially covered with a veil or thin cloth, bearing in their hands vases of water, or shells, leaves, or grass, or having something as a symbol of their appropriate offices. They were attendants of the gods.

Me'u. In Hindu mythology, a sacred mountain, 80,000 leagues high, situated in the center of the world. It is the abode of Indra, and abounds with every charm that can be imagined.

M'id-as. In mythology, known as King of Phrygia, who restored to Bacchus his nurse and preceptor Silenus, and received as a compensation the fatal attribute of turning into gold everything he touched. But this proved to be very inconvenient, as it prevented him from eating and drinking, and he prayed that the gift might be revoked. At the command of the god, he washed in the Pactolus, the sands of which became, in consequence, mixed with gold. Another tradition is, that in a musical contest between Pan and Apollo, he gave judgment in favor of the satyr; whereupon Apollo in contempt gave the king a pair of ass's ears. Midas hid them under his Phrygian cap; but his servant, who used to cut his hair, discovered them, and was so pleased with the "joke," which he durst not mention, that he dug a hole in the earth, and relieved his mind by whispering in it, "Midas has ass's ears."

M'id'gard. In Scandinavian mythology the name given to the earth. Out of the giant's flesh they fashioned Midgard (middle garden), as the earth was called, which was placed in the exact center of the vast space, and hedged all round with Ymir's eyebrows which formed its bulwarks or ramparts. The solid portion of Midgard was surrounded by the giant's blood or sweat, which now formed the ocean, while his bones made the hills, his flat teeth the cliffs, and his curly hair the trees and all vegetation.

Midgard Sormen (earth's monster). The great serpent that lay in the abyss at the root of the celestial ash. Child of Loki.

M'imir. In Scandinavian mythology, the god of wisdom. Also god of the ocean, which is called "Mimir's well," in which wit and wisdom lay hidden, and of which he drank every morning from the horn Gjallar. Odin once drank from this fountain, and by doing so became the wisest of gods and men; but he purchased the privilege and distinction at the cost of one eye, which Mimir exacted from him.

Minerva. Under the name of Minerva among the Romans and of Athena among the Greeks, ancient fiction personified and deified the idea of high intelligence and wisdom. She was a daughter of Jupiter, sprung from his head. The Greeks ascribed to this goddess the invention of many arts and sciences, which had a great influence on their civilization. She was regarded as inventress of the flute, of embroidery and spinning, the use of the olive, and various instruments of war; in short, of most works indicating superior intelligence or skill. Arachne's contest with her in working with the needle, and consequent despair and transformation are beautifully described by Ovid. The city of Athens was consecrated to Minerva, and boasted of receiving its name from her.

Minos. Son of Lycæstus, and grandson of the former, was likewise a king and lawgiver of Crete. In order to avenge the wrong done to his son Androgeos at Athens, he made war against the Athenians, and compelled them to send to Crete every year as a tribute, seven youths and seven maidens, to be devoured in the laby-

rinth by the Minotaurus. From Minos we have Minois, a daughter or a female descendant of Minos, as Ariadne, and the adjectives Minois and Minous, used by the poets as equivalent to Cretan.

Mino'taur. A celebrated monster with the head of a bull and the body of a man. The labyrinth in which it was kept was constructed by Daedalus. This monster was slain by Theseus, with the assistance of Ariadne, the daughter of Minos. [Theseus.] Daedalus having fled from Crete to escape the wrath of Minos, Minos followed him to Sicily, and was there slain by Cocalus and his daughters.

Mith'ras. In Persian mythology, one of the principal gods of the ancient Persians, a personification of the sun. He was regarded as a mediator between the two opposite deities, Ormuzd and Ahriman, or the principle of good and the principle of evil.

Mjolnir. From mythology of northern lands. The name of Thor's celebrated hammer—a type of the thunderbolt—which, however far it might be cast, was never lost, as it always returned to his hand; and which, whenever he wished, became so small that he could put it in his pocket.

Mnemos'yne. Mother of the Muses and goddess of memory. Jupiter courted the goddess in the guise of a shepherd.

Mnes'theus. A Trojan, and a companion of Æneas in his voyage to Italy; the reputed progenitor of the family of the Memmii in Rome. At the funeral games, by which Æneas celebrated the death of his father, Anchises, Mnestheus took part in a naval contest, and, though not the victor, obtained a prize for skill and energy.

Moakkibat. A class of angels, according to the Mohammedan mythology. Two angels of this class attend every child of Adam from the cradle to the grave. At sunset they fly up with the record of the deeds done since sunrise. Every good deed is entered ten times by the recording angel on the credit or right side of his ledger, but when an evil deed is reported the angel waits seven hours, "if haply in that time the evil-doer may repent."

Mol'rae. The Greek name for Parcae or the Fates. These grave and mighty goddesses were represented by the earliest artists with staffs or scepters, the symbol of dominion.

Morpheus. The son of Sleep and the god of dreams. The name signifies the fashioner or mold, because he shaped or formed the dreams which appeared to the sleeper.

Mowis. The bridegroom of Snow, who (according to American Indian tradition) wooed and won a beautiful bride; but when morning dawned, Mowis left the wigwam, and melted into the sunshine. The bride hunted for him night and day in the forests, but never saw him more.

Muses. Nine daughters of Jupiter and Mnemosyne, goddesses of poetry, history, and other arts and sciences. Calliope was the muse of eloquence and heroic poetry (to her the ancients gave precedence); Clio, of history; Erato, of amorous poetry; Euterpe, of music; Melpomene, of tragedy; Polyhymnia, of eloquence and imitation; Terpsichore, of dancing; Thalia, of comic and lyric poetry; and Urania, of astronomy. Their usual residence was Mount Parnassus in Helicon.

Mysterious Three. The, of Scandinavian mythology were "Har" (the Mighty), the "Like-Mighty," and the "Third Person," who sat on three thrones above the rainbow. Then came the "Æsir," of which Odin was chief, who lived in Asgard (between the rainbow and earth); next came the "Vanir," or gods of the ocean, air, and clouds, of which deities Njord was chief.

Myr'midons. The trusty followers of Achilles. They are said to have inhabited originally the island of Ægina, and to have emigrated with Pelus into Thessaly; but modern critics, on the contrary, suppose that a colony of them emigrated from Thessaly into Ægina. The Myrmidons disappear from history at a later period. The ancients derived their name either from a mythical ancestor, Myrmidon, son of Zeus (Jupiter) and Eurymedusa, and father of Actor; or from the ants in Ægina, which were supposed to have been metamorphosed into men in the time of Æacus.

Na'ids. The nymphs of fresh water, whether of rivers, lakes, brooks, or springs. Many of these nymphs presided over springs, which were believed to inspire those who drank of them. The nymphs themselves were, therefore, thought to be endowed with prophetic power, and to be able to inspire men. Hence all persons in a state of rapture, such as seers, poets, madmen, etc., were said to be caught by the nymphs.

Naraka. The hell of the Hindus. It has' twenty-eight divisions, in some of which the victims are mangled

by ravens and owls; in others they will be doomed to swallow cakes boiling hot, or walk over burning sands.

Narcis'sus. The beautiful youth Narcissus was son of the river-god Cephissus and the sea-nymph Liriope. Echo, who was enamored of him, died of grief. But Nemesis, to punish him, caused him to see his own image reflected in a fountain, whereupon he became so enamored of it that he gradually pined away, until he was metamorphosed into the flower which bears his name. According to another tradition Narcissus had a sister of remarkable beauty, to whom he was tenderly attached. She resembled him in features, was similarly attired, and accompanied him in the hunt. She died young, and Narcissus, lamenting her death, frequented a neighboring fountain to gaze upon his own image in its stream. The strong resemblance that he bore to his sister made his own reflection appear to him, as it were, the form of her whom he had lost. The gods looked with pity upon his grief, and changed him to the flower that bears his name.

Nausica'a. A daughter of Alcinous, King of the Phæacians, and Arete, who conducted Ulysses to the court of her father.

Nec'tar. Wine conferring immortality, and drunk by the gods.

Ne'leus. Son of Neptune and Tyro, and brother to Pelias. He became king in Peloponnesus; was the father of twelve sons, all of whom were killed by Hercules.

Neme'an Lion. A monstrous lion, near the forest of Nemæa, wasted the surrounding country and threatened destruction to the herds. Hercules promised to deliver the country of the monster, and Theseus rewarded Hercules by making him his guest so long as the chase lasted. Hercules slew the lion, and henceforth wore its skin as his ordinary garment, and its mouth and head as his helmet. Others related that the lion's skin of Hercules was taken from the Nemean lion. This great adventure happened while he was watching the oxen of his father.

Nem'esis. A Greek goddess, who measured out to mortals happiness and misery, and visited with losses and sufferings all who were blessed with too many gifts of fortune. This is the character in which she appears in the earlier Greek writers; but subsequently she was regarded, like the Erinyes or Furies, as the goddess who punished crimes.

Neoptole'mus. The son of Achilles. Neoptolemus was reared in Scyros, in the palace of Lycomedes, and was brought from thence by Ulysses, because it had been prophesied that Neoptolemus and Philoctetes were necessary for the capture of Troy. At Troy Neoptolemus showed himself worthy of his great father. He was one of the heroes concealed in the wooden horse. At the capture of the city he killed Priam, and sacrificed Polyxena to the spirit of his father.

Nept'une. The sea. In Roman mythology the divine monarch of the ocean. The principal exploits and merits ascribed to Neptune are, the assistance to Jupiter against the Titans; the building of the walls and ramparts of Troy; the creation and taming of the horse; the raising of the Island Delos out of the sea; and the destruction of Hippolytus by a monster from the deep. He was feared also as the author of earthquakes and deluges, which he caused or checked at pleasure by his trident.

Ne'reids. Sea-nymphs, generally regarded as belonging to the Mediterranean. The chief characteristics of these minor deities of the sea were the power of divination and ability to change their forms at pleasure. The daughters of Nereus and Doris were the so-called "Nereides," or sea-nymphs, fifty in number. They belonged to the train of Neptune and were subservient to his will.

Ne'reus. A son of Pontus and Gæa, and husband of Doris, by whom he became the father of the fifty Nereides.

Nes'tor. A son of Neleus and Chloris, and King of Pylos in Triphylia. He took a prominent part in the Trojan War, acting as counselor of the other Grecian chiefs, but was equally distinguished for his valor in the field of battle. Homer extols his wisdom, justice, bravery, and eloquence. He lived to so great an age that his advice and authority were deemed equal to those of the immortal gods.

Nickar or Hnikar. The name assumed by Odin when he personated the destroying principle.

Nineven. A gigantic and malignant female spirit of the old popular Scottish mythology. The hag is represented as riding at the head of witches and fairies at Hallow-e'en.

Nidhug. The dragon that gnaws at the root of Yggdrasil, the tree of the universe in Scandinavian mythology.

Nif'helm. Mist-home of old Norse mythology. The region of endless cold and everlasting night, ruled over

by Hela. It consists of nine worlds, to which are consigned those who die of disease or old age. This region existed "from the beginning" in the North, and in the middle thereof was the well Hvergelmeer, from which flowed twelve rivers.

N'rus. The son of Belus, the husband of Semiramis, and the reputed builder of Nineveh and founder of the Assyrian monarchy.

Ni'o-be. The daughter of Tantalus, and the wife of Amphion, King of Thebes. Niobe alighted the divinity of Latona, and the latter engaged both her children. Apollo and Diana, to avenge her; they, by their arrows, slew the seven sons and seven daughters of Niobe, who by grief was changed into stone. She was transported in a whirlwind to the top of Mount Sipylus, where she has ever since remained, her tears flowing unceasingly.

Njord. The Scandinavian sea-god. He was not one of the Æsir. Njord's son was Frey (the fairy of the clouds), and his daughter was Freyja. His home was Noatun. Njord was not a sea-god, like Neptune, but the spirit of water and air. The Scandinavian Neptune was Ægir, whose wife was Skadi. His temples were near the sea shore and all aquatic plants belonged to him.

N'rus. A Trojan youth who accompanied Æneas to Italy, after the fall of Troy, and who is celebrated for his devoted attachment to Euryalus.

Nix. Little creatures not unlike the Scotch brownie and German kobold. They wear a red cap, and are ever ready to lend a helping hand to the industrious and thrifty.

Noko'mls. Daughter of the moon, American Indian myths. Sporting one day with her maidens on a swing made of vine canes, a rival cut the swing, and Nokomis fell to earth, where she gave birth to a daughter named Weno'nah.

Nornlr or Norns. The three fates of Scandinavian mythology, past, present, and future. They spin the events of human life, sitting under the ash-tree Yggdrasil (Ygg-dra-sil), which they carefully tend. Their names are Urd (the past), Verdandi (the present), and Skulda (the future). Besides these three Norns, every human creature has a personal Norn or fate. The home of the Norns is called in Scandinavian mythology "Doomstead."

Nox. Goddess of night was considered among the ancients as one of their oldest divinities, and was worshipped by them with great solemnity. In the temple of Diana, at Ephesus, was a famous statue of her. She became the mother of Æther (air), and Dies (day). She is likewise, according to some, the mother of the inexorable Parce; of the avenging Nemesis, who punishes hidden crime; of the Furies, who torment the wicked; of Charon, the ferry-man of hell; and of the twin brothers, Sleep and Death.

Nymphs. The nymphs of ancient fiction were viewed as holding a sort of intermediate place between men and gods, as to the duration of life; not being absolutely immortal, yet living a vast length of time. Oceanus was considered as their common father, although the descent of different nymphs is given differently. Their usual residence was in grottoes or water-caves. Their particular offices were different, and they were distinguished by various names according to the several objects of their patronage, or the regions in which they chiefly resided. Thus there were the "Oreades," or nymphs of the mountains; "Naiades," "Nereides," and "Potamides," nymphs of the fountains, seas, and rivers; "Dryades" and "Hamadryades," nymphs of the woods; "Napeæ," nymphs of the vales.

Oce'anids. Nymphs of the ocean, said to be three thousand in number; daughters of Oceanus.

Oce'anus. The god of the water which was believed to surround the whole earth, is called the son of Heaven and Earth, the husband of Tethys, and the father of all the river-gods and water-nymphs. The early Greeks regarded the earth as a flat circle, which was encompassed by a river perpetually flowing round it, and this river was Oceanus. Out of and into this river the sun and the stars were supposed to rise and set; and on its banks were the abodes of the dead. Before Neptune, Oceanus, son of the heavens and the earth, and husband of Thetis, was honored as god of the sea.

Odhærr. In Scandinavian mythology, the mead or nectar made of Kvasir's blood, kept in three jars. The second of these jars is called "Sohn," and the "Bohn." Probably the nectar is the "spirit of poetry."

Odin. The king of gods and men, and the reputed progenitor of the Scandinavian kings. He corresponds both to the Jupiter and the Mars of classical mythology. As god of war, he holds his court in Valhalla, surrounded by all warriors who have fallen in battle, and attended by two wolves, to whom he gives his share of food;

for he himself lives on wine alone. On his shoulders he carries two ravens, Hugin (mind) and Munin (memory), whom he dispatches every day to bring him news of all that is doing throughout the world. He has three great treasures: namely, Sleipnir, an eight-footed horse of marvelous swiftness; Gungnir, a spear, which never fails to strike what it is aimed at; and Draupnir, a magic ring, which every ninth night drops eight other rings of equal value. The German tribes worshipped Odin under the name of "Woden." The fourth day of the week, Wednesday (i. e., Woden's day), was sacred to him.

O'dur. In Scandinavian mythology, husband of Freyja, whom he deserted. He abandoned his wife on her loss of youth and beauty, and was punished.

Odys'seus. A Greek form of the name Ulysses.

Ed'i-pus. He was the son of Laius, King of Thebes, and his wife Jocasta. Laius, having been warned by an oracle that his throne and life were in danger from this son, gave him to a herdsman to be killed. But his life was saved, and he was reared by a peasant. Afterwards he ransomed Thebes from the Sphinx by answering her riddle, unwittingly killed his own father, married Jocasta, and became King of Thebes. Subsequently discovering his parentage, he destroyed his eyesight, and wandered away from Thebes, attended by his daughter, Antigone, who remained with him till his death.

O'gres of nursery mythology are giants of very malignant dispositions, who live on human flesh.

Olymp'us. A range of mountains in Thessaly, the abode of the gods. A gate of clouds, kept by the goddesses named the Seasons, unfolded to permit the passage of the Celestials to earth, or to receive them on their return.

Oph'ion. (1) One of the Titans. (2) One of the companions of Cadmus. (3) Father of the Centaur Amycus, who is hence called "Ophionides."

Ops. A goddess of plenty, fertility, and power, the wife of Saturn, and the patroness of husbandry; identical with Cybele, or Rhea.

Ores'tes. The son of Agamemnon and Clytemnestra. On the murder of his father by Ægisthus and Clytemnestra, Orestes was saved from the same fate by his sister Electra, who caused him to be secretly carried to Strophius, King in Phocis, who was married to Anaxibia, the sister of Agamemnon. There he formed a close and intimate friendship with the king's son, Pyllades; and when he had grown up, he repaired secretly to Argos with his friend, and avenged his father's death by slaying Clytemnestra and Ægisthus. After the murder of his mother he was seized with madness, and fled from land to land, pursued by the Erinyes or Furies. At length, on the advice of Apollo, he took refuge in the temple of Athena (Minerva), at Athens, where he was acquitted by the court of the Areopagus, which the goddess had appointed to decide his fate. (See Pyllades.)

Or-ion. A mighty giant and hunter, famous for his beauty. Having come to Chios, he fell in love with Merope, the daughter of Oenopion; his treatment of the maiden so exasperated her father, that, with the assistance of Dionysus (Bacchus), he deprived the giant of his sight. Being informed by an oracle that he should recover his sight if he exposed his eyeballs to the rays of the rising sun, by following the sound of a Cyclops' hammer, he reached Lemnos, where he found Vulcan, who gave him Cedalion as a guide to the abode of the sun. After the recovery of his sight he lived as a hunter with Artemis (Diana). Orion was slain by Diana, or, as some say, by Jupiter, and placed among the stars, where he forms the most splendid of all the constellations, appearing as a giant wearing a lion's skin and a girle, and wielding a club.

Orith'yia. A daughter of Erechtheus, beloved by Boreas, who carried her off as she was wandering near the River Ilissus. (See Boreas.)

Or'log. A god of Norse fable personifying the eternal law of the universe, from whose decree there was no appeal.

Ormuzd. The name of the supreme deity of the ancient Persians, and of their descendants, the Parsees and Guebans. He is an embodiment of the principle of good, and was created by the will of the great eternal spirit, Zervan-Akharana, simultaneously with Ahriman, the principle of evil, with whom he is in perpetual conflict. Ormuzd is the creator of the earth, sun, moon, and stars, to each of which he originally assigned its proper place, and whose various movements he continues to regulate.

Or'pheus. The son of Oeagrus and Calliope, lived in Thrace at the period of the Argonauts, whom he accompanied in their expedition. Presented with the

lyre by Apollo, and instructed by the Muses in its use, he enchanted with its music not only the wild beasts, but the trees and rocks upon Olympus, so that they moved from their places to follow the sound of his golden harp. After his return from the Argonautic expedition, he took up his abode in Thrace, where he married the nymph Eurydice. His wife having died of the bite of a serpent, he followed her into the abodes of Hades. Here his lyre so charmed King Pluto that Eurydice was released from death on the condition that Orpheus would not look back till he reached the earth. He was just about to place his foot on the earth when he turned round, and Eurydice vanished from him in an instant.

Osiris, in Egyptian mythology, is said to have been the son of Jupiter by Niobe, and to have ruled first over the Argives, and afterwards to have become king of the Egyptians. His wife was Isis, who is by many said to be the same with the Io, daughter of Inachus. Osiris was at length slain by Typhon, and his corpse concealed in a chest and thrown into the Nile. Isis, after much search, by the aid of keen-scented dogs, found the body, and placed it in a monument on an island near Memphis. The Egyptians paid divine honor to his memory, and chose the ox to represent him, because, as some say, a large ox appeared to them after the body of Osiris was interred, or according to others, because Osiris had instructed them in agriculture. Osiris was generally represented with a cap on his head like a mitre, with two horns; he held a stick in his left hand, and in his right a whip with three thongs. Sometimes he appears with the head of a hawk.

O'tus. This giant and his brother, Ephialtes, were usually called the Aloidae. They were renowned for their extraordinary strength and daring spirit.

Pactolus. The river whose sands turned to gold when Midas washed in the waters by order of Bacchus.

Palmosaid'. In American Indian myths a walking thief, especially one who walks through cornfields about harvest time to pluck the ears of maize or corn.

Palamon. Originally called Melicertes. Son of Ino; called Palamon after he was made a sea-god. The Roman Portunus, the protecting god of harbors, is the same.

Pal'es. The goddess of shepherds, presided over cattle and pastures, whose festival, the Palilia, was celebrated on the 21st of April, the day on which Rome was founded.

Palamedes. A Greek hero. He was sent by the Greek princes, who were going to the Trojan War, to bring Ulysses to the camp, who, to withdraw himself from the expedition, had pretended to be insane. Palamedes soon penetrated the deception, and Ulysses was obliged to join in the war.

Palladium. A Trojan statue of the goddess Pallas, which represented her as sitting with a spear in her right hand, and in her left a spindle or distaff. On this statue the fate of the city was supposed to depend; for while this sacred image was kept intact, Troy was supposed to be impregnable. The Palladium is said to have fallen from heaven near the tent of Ilus, at the time when that prince was employed in building the citadel of Ilium or Troy; and Apollo, by an oracle, declared that the city should never be taken whilst the Palladium was contained within its walls.

Pallas. (1) One of the giants. (2) The father of Athena, according to some traditions. (3) Son of Lycæon, and grandfather of Evander. (4) Son of Evander, and an ally of Æneas.

Pallas-Athene. She is in Homer, and in the general popular system, the goddess of wisdom and skill. In war she is opposed to Ares, the wild war-god, as the patroness and teacher of just and scientific warfare. Therefore she is on the side of the Greeks, and he on that of the Trojans. Ulysses was her special favorite. As the patroness of arts and industry in general, Pallas-Athene was regarded as the inspirer and teacher of all able artists. Thus she taught Ægeus to form the wooden horse, by means of which Troy was taken; and she also superintended the building of the ship Argo.

Pan. One of the most singular of the inferior gods was Pan, whose worship was everywhere regarded. He was the god of shepherds and herdsmen, of groves and fields, and whatever pertained to rural affairs. His worship was probably derived from the Egyptians. He was said to be the son of Mercury and Dryope. His favorite residence was in the woods and mountains of Arcadia. From his love to Syrinx, who was changed into a reed, he formed his shepherd-pipe out of seven reeds, and called it by her name. His pride in this invention led him into his unlucky contest with Apollo. Pan was originally, among the Egyptians, worshipped in the form of a goat, and under the name of Mendes.

In Greece, Arcadia was especially sacred to him, and here he is said to have given oracles on Mount Lycæus. His festivals were introduced by Evander among the Romans and by them called Lupercalia. Goats, honey, and milk were the usual offerings to Pan. Pan, like other gods, who dwell in forests was dreaded by travelers, to whom he sometimes appeared, and whom he startled with sudden awe or terror. Hence sudden fright, without any visible cause, was ascribed to Pan, and was called a panic fear.

Pandora. The first mortal female that ever lived. She was made of clay by Vulcan, and having received life, all the gods made presents to her. Venus gave her beauty and the art of pleasing; the Graces gave her the power of captivating; Apollo taught her how to sing; Mercury instructed her in eloquence and brought her to Epimetheus, who made her his wife, forgetting the advice of his brother Prometheus, not to receive gifts from the gods.

Parce. (The fates.) Powerful goddesses who presided over the birth and life of mankind. They were three in number, Clotho, Lachesis, and Atropos, daughters of Nox and Erebus. Parce is from "pars," a lot; and the corresponding Moire is from "meros," a lot. The fates were so called because they decided the lot of every man. Among early peoples the superiority which they ascribed to their deities consisted chiefly in freedom from bodily decay, a sort of immortal youth, ability to move with wonderful celerity, to appear and disappear at pleasure with a noble and beautiful form, and to exert an immediate influence upon the condition of mortals. In these respects, however, their power was limited, according to the general opinion, being controlled by an eternal and immutable relation of things, termed fate, and to the Parce, or fates, was attributed a power over all destinies and at times control of the gods themselves.

Paris. The son of Priam, King of Troy, and Hecuba; he was also called Alexander. The tradition is that at the marriage of Peleus and Thetis the goddess of discord, who had not been invited, showed her displeasure by throwing into the assembly of the gods, who were at the nuptials, a golden apple, on which were the words: "Let it be given to the fairest." The apple was claimed by Hera (Juno), Aphrodite (Venus), and Athena (Minerva). Zeus (Jupiter), ordered Hermes (Mercury), to take the goddesses to Mount Ida, and to intrust the decision of the dispute to the shepherd Paris. The goddesses accordingly appeared before him. Hera promised him the sovereignty of Asia, Athena renown in war, and Aphrodite the fairest of women for his wife. Paris decided in favor of Aphrodite, and gave her the golden apple. This judgment called forth in Hera and Athena fierce hatred against Troy. Under the protection of Aphrodite, Paris now sailed to Greece, and was hospitably received in the palace of Menelaus at Sparta. Here he succeeded in carrying off Helen, the wife of Menelaus, who was the most beautiful woman in the world. Hence arose the Trojan War. Paris fought with Menelaus before the walls of Troy, and was defeated, but was carried off by Aphrodite. He is said to have killed Achilles, either by one of his arrows or by treachery.

Parnassos (Greek). **Parnassus** (Latin). A mountain near Delphi, in Greece. It was well wooded; at its foot grew myrtle, laurel, and olive trees, and higher up fir; and its summit was covered with snow during the greater part of the year. It contained numerous caves, glens, and romantic ravines. It has two summits, one of which was consecrated to Apollo and the Muses, the other to Bacchus. It was anciently called Larnassos, from larnax, an ark, because Deucalion's ark stranded there after the flood. After the oracle of Delphi was built at its foot it received the name of Parnassos. It is celebrated as one of the chief seats of Apollo and the Muses, and an inspiring source of poetry and song.

Parthen'ope. One of the sirens, whose dead body was washed ashore on the present site of Naples. She threw herself into the sea out of love for Ulysses.

Patroclus. The gentle and amiable friend of Achilles in Homer's Iliad.

Pau'guk. Name given to the great power, death, in American-Indian mythology.

Pau'puk-kee'wis. In American-Indian folk-lore a mischievous magician, who is pursued by Hiawatha, goes through a series of wonderful transformations in his endeavors to escape, and finally becomes an eagle.

Pax. The goddess of peace, worshipped in Greece under the name Irene. Pax wears a crown of laurel, and holds in her hand the branch of an olive tree.

Pe'boan. In American-Indian folk-lore the personification of winter in form of a great giant who shook the snow from his hair and turned water into stone by his breath.

Pegasus. The winged horse which sprang from the blood of Medusa when her head was struck off by Perseus. He was called Pegasus because he made his appearance near the sources of Oceanus.

Pe'leus. King of the Myrmidons at Phthia, in Thessaly. Having, in conjunction with his brother Telamon, murdered his half-brother Phocus, he was expelled by Æacus from Ægina, and went to Thessaly. He was purified from the murder by Eurymion, who gave Peleus his daughter Antigone in marriage, and a third part of his kingdom.

Pe'lias. The name of the spear of Achilles, which was so large that none could wield it but the hero himself.

Pe'li-on. A high mountain in Thessaly celebrated in mythology. Near its summit was the cave of the Centaur Chiron. The giants, in their war with the gods, are said to have attempted to heap Ossa and Olympus on Pelion, or Pelion and Ossa on Olympus, in order to scale heaven. On Pelion the timber was felled with which the ship Argo was built.

Pe'lops. A Phrygian prince, grandson of Jupiter, and son of Tantalus. Expelled from Phrygia, he came to Elis, where he married Hippodamia, daughter of Enomaus, whom he succeeded on the throne. By means of the wealth he brought with him, his influence became so great in the peninsula that it was called after him "the Island of Pelops."

Pena'tes. The Penates were also domestic or household gods, but they were not a distinct class by themselves, because the master of the dwelling was allowed to select any deity according to his pleasure, to watch over his family affairs, or preside over particular parts of them.

Penel'ope. The faithful wife of Ulysses, who being importuned, during his long absence, by numerous suitors for her hand, postpones making a decision among them until she shall have finished weaving a funeral pall for her father-in-law, Lærtæus. Every night she secretly unravels what she has woven by day, and thus puts off the suitors till Ulysses returns.

Pe'ri. Peris are delicate, gentle, fairy-like beings of Eastern mythology, begotten by fallen spirits. They direct with a wand the pure in mind the way to heaven. These lovely creatures, according to the Koran, are under the sovereignty of Eblis; and Mohammed was sent for their conversion, as well as for that of man.

Per'se. A daughter of Oceanus, and wife of Helios (the sun), by whom she became the mother of Aetes, Circe, Pasiphae, and Perseus.

Per'se's. A name given to Hecate, as the daughter of Perseus by Asteria.

Perse'phone. The Greek name of Proserpine. Homer describes her as the wife of Hades (Pluto), and the formidable, venerable, and majestic queen of the shades, who rules over the souls of the dead, along with her husband.

Per'seus. He was one of the most distinguished of the early heroes. He was the son of Jupiter and Danaë, educated by Polydectus on the Island Seriphus. His chief exploit was the destruction of the gorgon Medusa, whose head he struck off with a sword given to him by Vulcan. From the blood that fell, sprang the winged horse Pegasus, on which Perseus afterwards passed over many lands. Of his subsequent achievements, the most remarkable were his changing King Atlas into a high rock or mountain, by means of Medusa's head, and his deliverance of Andromeda, when bound and exposed to be devoured by the sea-monster.

Phæ'dra. Daughter of Minos, and wife of Theseus, who falsely accused her step-son Hippolytus.

Phæ'ton. A son of Sol, or, according to most mythologists, of Phœbus and Clymene. Anxious to display his skill in horsemanship, he was so presumptuous as to request his father to allow him to drive the chariot of the sun across the heavens for one day. Helios was induced by the entreaties of his son and of Clymene to yield, but the youth being too weak to check the horses, they rushed out of their usual track, the chariot was upset, and caused great mischief; Libya was parched into barren sands, and all Africa was more or less injured, the inhabitants blackened, and vegetation nearly destroyed. Zeus killed him with a flash of lightning, and hurled him down into the River Eridanus. His sisters, the Heliadæ or Phæthontiadæ, who had yoked the horses to the chariot, were metamorphosed into poplars, and their tears into amber.

Pha'on. A boatman at Mitylene, is said to have been originally an ugly old man; but having carried Aphrodite (Venus) across the sea without accepting payment, the goddess gave him a box of ointment, with which, when he anointed himself, he grew so beautiful that Sappho became enamored of him; but when the oint-

ment had all been used Phaon returned to his former condition, and Sappho, in despair, drowned herself.

Philoct'e'tes. The most celebrated archer in the Trojan War. He was the friend and armor-bearer of Hercules, who bequeathed to him his bow and the poisoned arrows, for having set fire to the pile on Mount Æta, on which Hercules perished.

Philomela. A daughter of Pandion, King of Athens. Her sister Procne had married Tereus, King of Thrace, and being separated from Philomela spent her time in great melancholy. Tereus treated Philomela with great cruelty. In poetry we frequently find the nightingale alluded to as Philomela.

Phœ'be. The goddess of the moon, and sister of Phœbus; a name of Diana. See Diana.

Phœ'bus. The god of archery, prophecy, and music; was the son of Jupiter and Latona, and brother of Diana (Artemis). He was god of the sun, as Diana, his sister, was the goddess of the moon.

Phœnix. A fabulous bird described as being as large as an eagle; its head finely crested with a beautiful plumage, its neck covered with gold-colored feathers, its tail white, and its body purple or crimson.

Phyl'lis. (1) A daughter of King Sithon of Thrace, who hung herself, thinking that she was deserted by her lover, and was changed by the gods into an almond tree. (2) A country girl in Virgil's third and fifth Eclogues; hence, a rustic maiden in general.

Pire'ne. A celebrated fountain of Corinth, at which Bellerophon is said to have caught the horse Pegasus. It gushed forth from the rock in the Acrocorinthus, was conveyed down the hill by subterraneous conduits, and fell into a marble basin, from which the greater part of the town was supplied with water. The poets frequently used Pirenis in the general sense of Corinthian.

Ple'a'des. Means the "sailing stars," because the Greeks considered navigation safe at the return of the Pleiades, and never attempted it after those stars disappeared. The Pleiades were the seven daughters of Atlas and Pleione, named Electra, Alcyone, Celaeno, Maia, Sterope, Taygete, and Merope. They were transformed into stars, one of which (Merope) is invisible out of shame, because she alone married a human being. Some call the invisible star "Electra," and say she hides herself from grief for the destruction of the city and royal race of Troy.

Pluto. He was a second brother of Jupiter, and received, as his portion in the division of empire, the infernal regions, or the world of shades. Under this idea the ancients imagined the existence of regions situated down far below the earth. The chief incident in the history of Pluto is his seizure and abduction of Proserpine, who thereby became his wife, and the queen of the lower world.

Plu'tus. The god of riches, was probably of allegorical rather than mythological origin, since his name in Greek is but the common term for wealth.

Pluvius. "The sender of rain," a surname of Jupiter among the Romans, to whom sacrifices were offered during long-protracted droughts.

Podall'rius. The son of Æsculapius, and brother of Machaon, with whom he led the Thessalians of Tricca against Troy. He was, like his brother, skilled in the medical art.

Pol'las. Meaning "the goddess protecting the city," a surname of Athena at Athens, where she was worshipped as the protecting divinity of the acropolis.

Poll'les. A son of Priam and Hecuba, and father of Priam the younger, was slain by Pyrrhus.

Pol'lux. A son of Jupiter and Leda, brother to Castor.

Polydo'rus. (1) King of Thebes, son of Cadmus and Harmonia, husband of Nycteis, and father of Labdacus. (2) Son of Priam and Hecuba. When Ilium was on the point of falling into the hands of the Greeks, Priam intrusted Polydorus and a large sum of money to Polymnestor or Polymnestor, King of the Thracian Chersonesus.

Pol'phym'nia. Daughter of Jupiter and Mnemosyne. One of the Muses, who presided over singing and rhetoric.

Pol'y-phe'mus. A son of Neptune, and one of the Cyclops, who dwelt in Sicily. He was a cruel monster, of immense size and strength, and had but one eye, which was in the middle of his forehead. He dwelt in a cave near Mount Ætna, and fed his flocks upon the mountain. He fell in love with the nymph Galatea, but as she rejected him for Acis, he destroyed the latter by crushing him under a huge rock. When Ulysses landed in Sicily, he, with twelve of his companions, got caught in the cave of Polyphemus, and six of the number were eaten by the tremendous cannibal. The rest were in expectation of the same fate, but their cunning leader enabled

them to escape, by contriving to intoxicate Polyphemus, and then destroying his single eye with a fire-brand.

Polyxena. The daughter of Priam and Hecuba, was beloved by Achilles.

Pomona. A nymph at Rome, who was supposed to preside over gardens and to be the goddess of fruit trees.

Ponemah. In American-Indian mythology the name of the land of the future life, or the spirit-land.

Poseidon. Called Neptune by the Romans; was the god of the Mediterranean Sea. He was a brother of Zeus (Jupiter), and Hades (Pluto), and it was determined by lot that he should rule over the sea. The palace of Poseidon was in the depth of the sea, near Æge, where he kept his horses with brazen hoofs and golden manes. With these horses he rides in a chariot over the waves of the sea, which become smooth as he approaches, while the monsters of the deep play around his chariot. Poseidon, in conjunction with Apollo, is said to have built the walls of Troy for Laomedon.

Priam. King of Troy when that city was sacked by the allied Greeks. His wife's name was Hecuba; she was the mother of nineteen children, the eldest of whom was Hector. When the Greeks landed on the Trojan coast Priam was advanced in years, and took no active part in the war. Once only did he venture upon the field of battle, to conclude the agreement respecting the single combat between Paris and Menelaus. After the death of Hector, Priam went to the tent of Achilles to ransom his son's body for burial, and obtained it. When the gates of Troy were thrown open by the Greeks concealed in the wooden horse, Pyrrhus, the son of Achilles, slew the aged Priam.

Prætus. Twin brothers of Acrisius and son of Abas. In the dispute between the two brothers for the Kingdom of Argos, Prætus was expelled, whereupon he fled to Iobates in Lycia, and married Antea, the daughter of the latter. With the assistance of Iobates, Prætus returned to his native land, and Acrisius gave him a share of his kingdom, surrendering to him Tiryns, Midea, and the coast of Argolis.

Pro-metheus. A son of Iapetus and Clymene, the brother of Epimetheus, and the father of Deucalion. He made men of clay, and animated them by means of fire which he stole from heaven; for this he was chained by Jupiter to Mount Caucasus, where an eagle, or, as some say, a vulture, preyed by day upon his liver, which grew again by night. The word means forethought, and one of his brothers was Epimetheus or afterthought.

Proserpine. Known as Persephone also. A goddess, daughter of Jupiter and Ceres. The seizure and abduction of Proserpine by Pluto has been subject of many tales.

Psyche. "The soul," occurs in the later times of antiquity as a personification of the human soul. Psyche was the youngest of the three daughters of a king, and excited by her beauty the jealousy and envy of Venus. In order to avenge herself, the goddess ordered Cupid or Amor to inspire Psyche with a love for the most contemptible of all men; but Cupid was so stricken with her beauty that he himself fell in love with her. He accordingly conveyed her to a charming spot, where unseen and unknown he visited her every night, and left her as soon as the day began to dawn. But her jealous sisters made her believe that in the darkness of night she was embracing some hideous monster, and accordingly once, while Cupid was asleep, she drew near to him with a lamp, and, to her amazement, beheld the most handsome and lovely of the gods. In the excitement of joy and fear, a drop of hot oil fell from her lamp upon his shoulder. This awoke Cupid, who censured her for her mistrust, and fled. Psyche's happiness was now gone, and after attempting in vain to throw herself into a river, she wandered about from temple to temple, inquiring after her lover, and at length came to the palace of Venus. There her real sufferings began, for Venus retained her, treated her as a slave, and imposed upon her the hardest and most humiliating labors. Psyche would have perished under the weight of her sufferings had not Cupid, who still loved her in secret, invisibly comforted and assisted her in her toils. With his aid she at last succeeded in overcoming the jealousy and hatred of Venus; she became immortal, and was united to him forever. In this pleasing story Psyche evidently represents the human soul, which is purified by passions and misfortunes, and thus prepared for the enjoyment of true and pure happiness. In works of art Psyche is represented as a maiden with the wings of a butterfly, along with Cupid in the different situations described in the allegory.

Pukwa'na. The smoke from the calumet or peace-pipe among American Indians. The pipe was made from stone found near the head waters of the Mississippi. A quarry, located near the mountains, was famous among the Indians, who had made the adjacent territory

neutral ground. Here they came and provided themselves with pipes. To apply the stone to any other use than that of pipe-making would have been sacrilege in their mind. From the color, they even fancied it to have been made, at the great deluge, out of the flesh of the perishing Indian.

Pukwudjies. The pygmies of American-Indian folk-lore; little wild men of the woods.

Pygmalion. A grandson of Agenor. He made a beautiful statue, which he fell so deeply in love with, that Venus, at his earnest petition, gave it life. In Gilbert's comedy of Pygmalion and Galatea, the sculptor is a married man, whose wife (Cynisca) was jealous of the animated statue (Galatea), which, after enduring great misery, voluntarily returned to its original state. This, of course, is mixing up two Pygmalions, wide as the poles apart.

Pylades. Son of Anaxibia, sister of Agamemnon. His father was King of Phocis; and after the death of Agamemnon, Orestes was secretly carried to his father's court. Here Pylades contracted that friendship with Orestes which became proverbial.

Pyramus. The lover of Thisbe, who, on account of her supposed death, stabbed himself under a mulberry tree. Thisbe, afterward, finding the body of her lover, killed herself on the same spot with the same weapon; and the fruit of the mulberry has ever since been as red as blood. (See Thisbe.)

Pyrrhus. Known also as Neoptolemus, a son of Achilles, remarkable for his cruelty at the siege of Troy. He was slain at Delphi, at the request of his own wife, by Orestes.

Pythia. The priestess of Apollo and Delphi. She is represented as crowned with laurels and seated on a tripod similarly adorned and placed over a chasm whence arose a peculiar vapor. Whoever inhaled this intoxicating air was thrown into convulsive ravings, which were thought to be an evidence of divine inspiration. The prophetic influence was at first variously attributed to different gods, but was at length assigned to Apollo only. A priestess, called the Pythia, was appointed to inhale the hallowed air and utter inspired words, which were interpreted by the priests.

Pythion. The monster serpent hatched from the mud of Deucalion's deluge. He lived in the caves of Mount Parnassus, but was slain by Apollo, who founded the Pythian games in commemoration of his victory, and received in consequence the surname Pythius.

Rachaders. In Indian mythology, the second tribe of giants or evil genii, who had frequently made the earth subject to their kings, but were ultimately punished by Shiva and Vishnu.

Radegaste. In Slavonic mythology, a tutelary god of the Slavi. The head was that of a cow, the breast was covered with an ægis, the left hand held a spear, and a cock surmounted its helmet.

Ragnarok (twilight of the gods). The day of doom, when the present world and all its inhabitants will be annihilated. Vidar of Vali will survive the conflagration, and reconstruct the universe. In Scandinavian mythology is the belief taught that after this time the earth or realm will become imperishable and happiness sure.

Rahu. In Hindu mythology, the demon that causes eclipses. One day Rahu stole into Valhalla to quaff some of the nectar of immortality. He was discovered by the Sun and Moon, who informed against him, and Vishnu cut off his head. As he had already taken some of the nectar into his mouth, the head was immortal, and he ever afterwards hunted the Sun and Moon, which he caught occasionally, causing eclipses.

Rak'shas. Evil spirits in Hindu myths, who guard the treasures of Kuvera, the god of riches. They haunt cemeteries and devour human beings; assume any shape at will, and their strength increases as the day declines. Some are hideously ugly, but others, especially the female spirits, allure by their beauty.

Ravana. according to Indian mythology, was fastened down between heaven and earth for 10,000 years by Siva's leg, for attempting to move the hill of heaven to Ceylon. He is described as a demon giant with ten faces.

Ravens. According to an oracle from the gods, delivered at ancient Athens, ravens prognosticate famine and death because they bear the characters of Saturn, the author of these calamities, and have a very early perception of the bad disposition of that planet.

Rem'ba. A Hindoo goddess of pleasure.

Rhadamanthus. A son of Jupiter and Europa, brother of Minos, and King of Lycia. He was so renowned for his justice and equity, that, after death, he was made one of the three judges in the under-world.

Rhamnus. A daughter of Nox, and otherwise known as Nemesis. Having belonged with the original

deities, those mysterious beings who were regarded with awe by gods and men, she is allowed the same rank among the modern heathen deities, and was particularly worshipped at Rhannus in Attica, where she had a celebrated statue.

Saturn. This was one of the most ancient of the gods, called Chronos by the Greeks and Saturnus by the Romans. He was said to be the son of Uranos and Titia, i. e., the heavens and the earth, and to have possessed the first government of the universe. His wife was Rhea, who was his sister. Saturn and his five brethren were called Titans, probably from their mother; Rhea and her five sisters likewise Titanides. Saturn seized upon the government of the universe by his superiority over his father and brothers; yet pledged himself to rear no male children; accordingly he is represented as devouring his sons as soon as born. But this fate, three of them, Jupiter, Neptune, and Pluto, escaped, through the artifice of Rhea, their mother, who gave him stones to devour instead of the children at their birth. Jupiter aided Saturn in recovering his throne, after he had been driven from it by his brothers, the Titans, and bound in Tartarus. But soon he made war, himself, upon Saturn, and seized the government.

Satyr. A sylvan deity, or demi-god, represented as a monster, half man and half goat; having horns on his head, a hairy body, with the feet and tail of a goat. They belong in the train of Bacchus, and have been distinguished for lasciviousness and riot. Although mortal, they are superior to the cares and sorrows of mortal life.

Scylla. A maiden whose body the enchantress Circe changed below the waist into frightful monsters always barking. The old Greek story is, that Circe was jealous of Scylla, and so deformed her by pouring the juice of poisonous herbs into the water in which she bathed. This sudden metamorphosis so terrified Scylla, that she threw herself into the sea, and became the rocks which bear her name.

Sedrat. The lotus tree which stands on the right-hand side of the invisible throne of Allah. Its branches extend wider than the distance between heaven and earth. Its leaves resemble the ears of an elephant. Each seed of its fruit encloses a houri; and two rivers issue from its roots. Numberless birds sing among its branches, and numberless angels rest beneath its shade.

Silenus. The older satyrs were generally termed Sileni; but one of these Sileni is commonly the Silenus, who always accompanies Dionysus (Bacchus), whom he is said to have brought up and instructed. He is represented as a jovial old man, with a bald head, pug nose, and rubicund visage, and generally as intoxicated, and, therefore, riding on an ass or supported by satyrs. He was fond of music and dancing and is often accompanied by the flute. But it is a peculiar feature in his character that he was an inspired prophet, yet, when he was drunk and asleep he was in the power of mortals, who might compel him to prophesy and sing by surrounding him with chains of flowers. Like the sea-gods, Silenus was noted for wisdom; and it would, therefore, appear that a Silen was simply a river-god; and the name probably comes from the Greek verb, signifying to roll, expressive of the motion of the streams. The connection between Silenus, Bacchus, and the Naiades thus becomes easy of explanation, all being deities relating to moisture.

Silvanus or Sylvanus. A deity presiding over woods, forests, and fields. He is also called the protector of the boundaries of fields.

Sirens. They were a sort of sea-goddesses, said by some to be two in number, by others, three, and even four. Homer mentions but two, and describes them as virgins, dwelling upon an island, and detaining with them every voyager who was allured thither by their captivating music. They would have decoyed even Ulysses, on his return to Ithaca, but were not permitted. By others they were described as daughters of the river-god Achelous, and companions of Proserpine, after whose seizure they were changed into birds, that they might fly in search of her. In an unhappy contest with the Muses in singing they lost their wings as a punishment. Others make them sea-nymphs, with a form similar to that of the Tritons, with the faces of women and the bodies of flying fish. Their fabled residence was placed by some on an island near Cape Pelorus in Sicily; by others, on the islands or rocks called Sirennussæ, not far from the promontory of Surrentum on the coast of Italy. Various explanations of the fable of the Sirens have been given. It is commonly considered as signifying the dangers of indulgence in pleasure.

Sirius. Known in mythology as the faithful dog of Orion, and set in the heavens as a bright star by Diana

when she mourned the display of her archery which caused Orion's death.

Sol. Although the Greeks and Romans worshipped Apollo as the god and dispenser of light, and in view of this attribute named him Phœbus, yet they conceived another distinct divinity, distinguished from Apollo especially in the earlier fables, under the literal name applied to designate the sun, viz. Sol. These words, therefore, were employed to express not only the actual body in the heavens, but also a supposed being having a separate and personal existence.

Somnus. The personification and god of sleep, is described as a brother of Death and as a son of Night.

Specter of the Brocken. Among German myths, a singular colossal apparition seen in the clouds, at certain times of the day, by those who ascend the Brocken, or Blocksberg, the highest mountain of the Hartz Mountains.

Sphinx. A monster said to be a daughter of Chimaera, in the neighborhood of Thebes. Seated on a rock, she put a riddle to every Theban that passed by, and whoever was unable to solve it was killed by the monster. This calamity induced the Thebans to proclaim that whoever should deliver the country of the sphinx should obtain the kingdom and Jocasta as his wife. The riddle ran as follows: "What is that which has one voice, and at first four feet, then two feet, and at last three feet, and when it has most is weakest?" (Edipus explained the enigma by saying that it was man, who, when an infant, creeps on all fours, when a man, goes on two feet, and when old, uses a staff, a third foot. The monster immediately flung herself into the sea and perished. The form of the so-called Egyptian sphinxes is that of a winged lion with a human head and bust, always in a lying attitude, whereas the Greek sphinxes are represented in any attitude which might suit the fancy of the poet.

Styx. The word, or name, comes from the Greek, meaning to abhor, and Styx is called the River of Hate and represented as the river of the lower world. The classic fables concerning it are of Egyptian origin. It was said to flow nine times round the infernal regions. The third river, Cocytus, flows out of the River Styx and the murmur of its waters, the sound of which imitates howlings, is inexpressibly dismal; Phlegethon, the fourth river, rolls slowly along its waves of fire. As a mythical being, Styx is described as a daughter of Oceanus and Tethys. As a nymph, she dwelt at the entrance of hades, in a lofty grotto which was supported by silver columns. She became the divinity by whom the most solemn oaths were sworn. When one of the gods had to take an oath by Styx, Iris fetched a cup full of water from the Styx, and the god, while taking the oath, poured out the water.

Tantalus. The son of Jupiter, and king of Lydia, who, according to some legends, was punished for betraying the secrets of his father by being placed in a lake, in the infernal regions, whose waters fled from him when he sought to quench his thirst, and amid trees laden with fruit, whose boughs avoided every effort he made to seize them.

Tartarus. A dark abyss under the earth in which the Titans were chained when their father feared their strength. The music of Orpheus penetrated its depths and caused the condemned to cease their toil. The name has come to signify an inner region of hell, to which the gods sent the exceptionally depraved.

Telamon. A son of Æacus and Endeis, and brother of Peleus. Having assisted Peleus in slaying their half-brother Phocus, Telamon was expelled from Ægina, and came to Salamis, where he was made king. He afterward became the father of Atlas. Telamon himself was one of the Calydonian hunters and one of the Argonauts. He was also a great friend of Hercules, whom he joined in his expedition against Laomedon of Troy, which city he was the first to enter. Hercules, in return, gave to him Hesione, a daughter of Laomedon.

Telemachus. The son of Ulysses and Penelope. He was an infant when his father went to Troy; and when he had been absent nearly twenty years, Telemachus went to Pylos and Sparta to gather information concerning him. He was hospitably received by Nestor, who sent his own son to conduct Telemachus to Sparta. Menelaus also received him kindly, and communicated to him the prophecy of Proteus concerning Ulysses. From Sparta Telemachus returned home; and on his arrival there he found his father, whom he assisted in slaying the suitors. (See Penelope.)

Themis. The goddess of justice was one of the most celebrated of the Titanides, or daughters of Uranus and Titia. To her is ascribed the first uttering of oracles, and also the first introduction of sacrifices.

Thersites. The ugliest and most scurrilous of the Greeks before Troy. He spared, in his revilings, neither prince nor chief, but directed his abuse principally against Achilles and Ulysses. He was slain by Achilles for deriding his grief for Penthesilea. The name is often used to denote a calumniator.

Theseus. He became king of Athens, finding the sword and sandals of his father, Ægeus. Of the many adventures of Theseus, one of the most celebrated was his expedition against the Amazons. He is said to have assailed them before they had recovered from the attack of Hercules, and to have carried off their queen, Antiope. The Amazons, in their turn, invaded Attica, and penetrated into Athens itself, and the final battle, in which Theseus overcame them, was fought in the very midst of the city. Theseus figures in almost all the great heroic expeditions.

Thesplan Maids, The. The nine Muses. So called from Thespia, in Bœotia, near Mount Helicon, often called Thesplan Rupes.

Thetis. One of the daughters of Nereus and Doris, was a marine divinity, and dwelt—like her sisters, the Nereids—in the depths of the sea, with her father Nereus. She there received Dionysus (Bacchus) on his flight from Lycurgus, and the god in his gratitude presented her with a golden urn. When Vulcan was thrown down from heaven, he was likewise received by Thetis. Thetis rejected the offers of Zeus, because she had been brought up by Hera, and the god, to revenge himself, decreed that she should marry a mortal.

Thor. In Scandinavian mythology, the eldest son of Odin and Frigga; strongest and bravest of the gods. He launched the thunder, presided over the air and the seasons, and protected man from lightning and evil spirits. His wife was Sif ("love"); his chariot was drawn by two he-goats; his mace or hammer was called Mjolner; his belt was Megingjard, whenever he put it on his strength was doubled; his palace was Thrudvangr. It contained 540 halls; Thursday is Thor's day. The word means "Refuge from terror."

Titans. The enterprises of the Titans are celebrated in the ancient fables of the Greeks. They have been mentioned in the account of Saturn, to whom they were brothers, being generally considered as sons of Uranus or Cælus and Titæa, or Gaia. The oldest was called Titan, and from him, or their mother, they derived their common name.

Tithonus. A son of Laomedon, king of Troy. He was so beautiful that Aurora became enamored of him, and persuaded the gods to make him immortal; but, as she forgot to ask for eternal youth, he became decrepit and ugly, and was, therefore, changed by her into a cicada.

Titanus. A famous giant, son of Jupiter and Terra. His body was so vast that it covered nine acres of ground. He had dared to offer an insult to Juno and in punishment was chained like Prometheus while a vulture feasted on his liver. He is mentioned by Virgil.

Trifon. Son of Neptune, who dwelt with his father and mother in a golden palace in the bottom of the sea, or, according to Homer, at Agæe. Later writers describe him as riding over the sea on sea-horses or other monsters.

Trolls. Dwarfs of Northern mythology, living in hills or mounds; they are represented as stumpy, misshapen, and humpbacked, inclined to thieving, and fond of carrying off children or substituting one of their own offspring for that of a human mother. They are called hill-people, and are especially averse to noise, from a recollection of the time when Thor used to fling his hammer after them.

Truth. A daughter of Time, because Truth is discovered in the course of Time. Democritus says that Truth lies hidden at the bottom of a well.

Troy. The classic poets say that the walls of this famous city were built by the magic sound of Apollo's lyre.

Tyr. In Norse mythology, he was a warrior deity, and the protector of champions and brave men; he was also noted for his sagacity. When the gods wished to bind the wolf Fenrir, Tyr put his hand into the demon's mouth as a pledge that the bonds should be removed again. But Fenrir found that the gods had no intention of keeping their word, and revenged himself in some degree by biting the hand off. Tyr was the son of Odin and brother of Thor.

Ulysses. Called "Odysseus" by the Greeks, one of the principal Greek heroes in the Trojan War, was a son of Laertes, or, according to a later tradition, of Sisyphus, and was married to Penelope, the daughter of Icarius, by whom he became the father of Telemachus. During the siege of Troy he distinguished himself by his valor, prudence, and eloquence, and after the death of Achilles,

contended for his armor with the Telamonian Ajax, and gained the prize. He is said by some to have devised the stratagem of the wooden horse. The most celebrated part of his story comes after the Trojan War. Among his adventures he entered the cave of the Cyclops and escaped with some sheep. One of the gods gave to him a bag of winds which should carry him home, but the winds were let loose and his ships driven to an island inhabited by the sorceress Circe. After many wanderings and strange adventures, a ship was provided to convey him to Ithaca, from which he had been absent twenty years. During his absence his father Laertes, in grief and old age, had withdrawn into the country; his mother Anticlea had died; his son Telemachus grown to manhood, and his wife Penelope had rejected all the offers that had been made to her by the importunate suitors from the neighboring islands. In order that he might not be recognized, Athena metamorphosed Ulysses into an unsightly beggar. He was kindly received by Eumæus, the swineherd, made himself known to him, and a plan of revenge was resolved on. Penelope, with great difficulty, was made to promise her hand to him who should conquer the others in shooting with the bow of Ulysses. As none of the suitors were able to draw this bow, Ulysses himself took it up, and, directing his arrows against the suitors, slew them all. Ulysses now made himself known to Penelope. The people rose in arms against Ulysses; but Athena, who assumed the appearance of Mentor, brought about a reconciliation.

Valhalla. In Scandinavian mythology the palace of immortality wherein are received the souls of heroes slain in battle.

Valkyrs. The battle-maidens of Scandinavian mythology. They were mounted on swift horses and held drawn swords. They rushed with battle and selected those destined to death and conducted them to Valhalla. The number of Valkyrs differs greatly according to the various mythologists, and ranges from three to sixteen, the greater part of them, however, naming only nine.

Venus. The goddess of beauty, and mother of love. She is said to have sprung from the foam of the sea, and was immediately carried to the abode of the gods on Olympus, where they were all charmed with her extreme beauty. According to other legends she was the daughter of Jupiter and Dione. She bore as many names as there are aspects of love, and finally they were regarded as the names of different deities. Sparrows and doves were customarily yoked to her chariot; her girdle inspired all hearts with passion for the wearer; and her son, Cupid, was her attendant and minister. The myrtle was sacred to her. Her favorite residence was at Cyprus.

Ves'ta. The ancient goddess of fire. Æneas was believed to have brought the eternal fire of Vesta from Troy, along with the images of the Penates; and the priests, consuls, and dictators, before entering upon their official functions, sacrificed, not only to the Penates, but also to Vesta at Lavinium. In the ancient Roman house, the hearth was the central part, and around it all the inmates daily assembled for their common meal (cœna); every meal thus taken was a fresh bond of union and affection among the members of a family, and at the same time an act of worship of Vesta, combined with a sacrifice to her and the Penates.

Vish'nú. In Hindu mythology one of the great deities of the Hindu triad, ranking as the "Preserver," after Brahma, the "Creator," and before Siva, the "Destroyer." It is believed that he has appeared on earth nine times, his tenth "avatar," or incarnation, having yet to come.

Vulcan. The god of fire. Traces of the worship of fire are found in the earliest times.

Wo'den. The Anglo-Saxon form of the Scandinavian god Odin; Wednesday is called after him.

Zem. The sacred well of Mecca. According to Arab tradition, this is the very well that was shown to Hagar when with Ishmael in the desert. It is supposed to be in the heart of the city of Mecca.

Zeus. Called "Jupiter" by the Romans, the greatest of the Olympian gods, was a son of Cronus (Saturnus), and Rhea. When Zeus and his brothers distributed among themselves the government of the world by lot, Poseidon obtained the sea, Hades the lower world, and Zeus the heavens and the upper regions, but the earth became common to all. According to Homer, Zeus dwelt on Mount Olympus in Thessaly, which was believed to penetrate into heaven itself. He is called the father of gods and men. He is the supreme ruler, who with his counsel manages everything; the founder of law and order, whence Dice, Themis, and Nemesis are his assistants. Everything good, as well as bad, comes from Zeus; according to his own choice he assigns good or evil to mortals; fate itself was subordinate to him.

NAMES IN FICTION, LITERARY PLOTS, AND ALLUSIONS

A-bad'don. The Hebrew name of an evil spirit or destroying angel called Apollyon in Greek. In mediæval literature he is regarded as the chief of the demons of the seventh hierarchy and the one who causes wars, and uproars. Klopstock has introduced him in his Messiah under the name of Abad'onna. He represents him as a fallen angel still bearing traces of his former dignity and repenting of his part in the rebellion against God. In Bunyan's "Pilgrim's Progress," he meets and fights with Pilgrim.

Abdall'ah. Life of Mohammed, Washington Irving. In Mohammedan legend it is said that Abdallah, the father of Mohammed, was so beautiful, that when he married Amina, 200 virgins broke their hearts from disappointed love.

Ab-di'el. Paradise Lost, Milton. The name of the seraph, who, when Satan stirred up a revolt, boldly withstood him.

Abon'de. A character in French literature that corresponds to our Santa Claus, the good fairy who comes at night, especially New Year's night, to bring toys to children while they sleep.

Ab'on Hassan. Arabian Nights. As related in "Arabian Nights," Abon Hassan is a merchant of Bagdad who is carried in his sleep to the bed of the Caliph Haroun-al-Raschid and on awaking is made to believe himself the caliph. Twice in this way he was made to believe himself caliph and afterward became in reality the caliph's favorite and companion.

A-brax'as. In Persian literature Abraxas denotes a supreme being. In Greek notation it stands for the number 365. In old tales or romances Abraxas presides over 365 impersonated virtues, one of which is supposed to prevail on each day of the year. In the Second Century the word was employed by the Basilidians for the deity; it was also the principle of the Gnostic hierarchy, and that from which sprang their numerous Æons.

Ab'sa-lom. Absalom and Achitophel, Dryden. A name given by Dryden, in his satirical poem "Absalom and Achitophel," to the Duke of Monmouth, a natural son of Charles II. Like Absalom, the son of David, Monmouth, was remarkable for his personal beauty, his popularity, and his undutifulness to his father.

Ab'solute, Captain. The Rivals, Sheridan. A character in Sheridan's comedy, "The Rivals." He is distinguished for his gallant, determined spirit, his quickness of speech, and dry humor.

Absolute, Sir Anthony. The Rivals, Sheridan. An amusing character in Sheridan's "Rivals." He is represented as testy, positive, impatient, and overbearing, but yet of a warm and generous disposition.

Abu'dah. A merchant of Bagdad. He finds the only way to rid himself of the torment of an old hag by whom he is haunted is "to fear God and keep His commandments."

A-ca'di-a. The name is said to be derived from "Shubenacadie, the name of one of the principal rivers" of Nova Scotia; in old grants called "L'Acadie," and "La Cadie," the original, and now the poetic, name of Nova Scotia. In 1753, the French inhabitants were seized, forcibly removed, and dispersed among the English colonists on the Atlantic Coast. Longfellow has made this event the subject of his poem "Evangeline."

A-chi'o-phel. Absalom and Achitophel, Dryden. Achitophel, a nickname given to the first Earl of Shaftesbury by his contemporaries, and made use of by Dryden in his poem "Absalom and Achitophel," a satire designed as a defense of Charles II. against the Whig party. There is said to be a striking resemblance between the character and career of Shaftesbury and those of Achitophel, or Achitophel, the treacherous friend and counselor of David, and the fellow-conspirator of Absalom.

A-cra'si-a. Faëry Queen, Spenser. A witch represented as a lovely and charming woman, whose dwelling is the Bower of Bliss, which is situated on an island floating in a lake or gulf, and is adorned with everything in nature that can delight the senses. The word signifies intemperance. She is the personification of sensuous indulgence and intoxication. Sir Guyon, who illustrates the opposite virtue, is commissioned by the fairy queen to bring her into subjection, and to destroy her residence.

A'cres, Bob. The Rivals, Sheridan. A character in "The Rivals," celebrated for his cowardice and his peculiar method of allegorical swearing.

Acrostic. A form of verse in which the first letters of the lines form a word, usually a name. The Hebrews wrote a form of acrostic poetry in which the initial letters made their alphabet in regular order. Some of the Psalms of the Old Testament are on this plan, especially the one hundred and nineteenth psalm.

Ad'am. (1) Adam is a character frequently alluded to in the "Talmud." Many strange legends are related of him. He was buried, so Arabian tradition says, on Aboncais, a mountain of Arabia. (2) In *As You Like It*, Shakespeare, he is an aged servant to Orlando and offers to accompany Orlando in his flight and to share with him his carefully-hoarded savings of 500 pounds. (3) In *Comedy of Errors*, Shakespeare, Adam is an officer known by his dress, a skin-coat.

Adamas'tor. Luciad, Camoens. (1) A hideous phantom described by Camoens as the spirit of the stormy cape (Cape of Good Hope). (2) Adamastor is described as one of the giants who invaded heaven.

Ad'ams, Parson. Joseph Andrews, Fielding. A character in Fielding's story of "Joseph Andrews," distinguished for his goodness of heart, poverty, learning, and ignorance of the world, combined with courage, modesty, and a thousand oddities.

Ad'em'ar or Ad'e-ma-ro. Jerusalem Delivered, Tasso. An ecclesiastical warrior who besought the pope that he might be sent on the crusades. He was slain in an attack on Antioch but in the final attack on Jerusalem his spirit came with three squadrons of angels to aid the besiegers.

Adol'pha. Maid of Marliendorf, Knowles. Adolpha, the daughter of General Kleiner, Governor of Prague, and wife of Idemstein, is known for her "excess of too sweet nature," which Knowles in his romance pictures as a fault.

Ad'o-na'is. A poetical name given by Shelley to the poet Keats, on whose untimely death he wrote an elegy bearing this name for its title. The name was coined by Shelley probably to hint an analogy between Keats's fate and that of Adonis.

Æ-ne'as. The hero of Virgil's Æneid, son of Anchises and the goddess Venus, and to him is ascribed the foundation of the Roman Empire. He is called the "Pious Æneas," because he carried his father Anchises on his shoulders from burning Troy.

Æneid. Virgil introduces into his poem the outlines of the Roman history, and a number of interesting episodes. The three first books are not arranged in the order of time. The second book, which relates the downfall of Troy, and is the basis of the poem, is the first in time. The third, which relates the voyage of Æneas, till after his departure from Sicily for Italy, follows. The first, which relates the dispersion of his fleet, and his arrival in Africa, with his kind reception by Dido, succeeds the third. By this change the hero relates the downfall of his country, and the fortunes of his long and eventful voyage. Virgil's Æneid is an epic of national life. The idea which underlies the whole action of the poem is the great part played by Rome in the history of the world.

Adrastus. Jerusalem Delivered, Tasso. An Indian prince from the banks of the Ganges, who aided the King of Egypt against the crusaders. He was distinguished by his garment, a serpent's skin. Adrastus was slain by Rinaldo.

Agamem'non. A Tragedy by Æschylus. The first of a trilogy consisting of Agamemnon, Chophoræ, and Eumenides.

Agnes. (1) A young girl in Molière's "L'Ecole des Femmes," who affects to be remarkably simple and ingenuous. The name has passed into popular use, and is applied to any young woman unsophisticated in affairs. (2) A strong womanly character in David Copperfield, who proves a true friend to David's "child-wife," Dora, and to David himself. Later Dora dies and David marries Agnes.

Ag'a'pida. Fray Antonio. The imaginary chronicler of the "Conquest of Granada," written by Washington Irving.

Ag'ib. Arabian Nights' Entertainment. The third Calendar in the story of "The Three Calendars," in the "Arabian Nights."

A-gra-man'te or Ag'ra-mant. King of the Moors in Ariosto's poem of "Orlando Furioso."

Ag'ue-check. Sir Andrew. Twelfth Night, Shakespeare. A shapleton in "Twelfth Night," to whom life consists only of eating and drinking. He is stupid even to silliness, but so devoid of self-love or self-conceit that he is delightful in his simplicity.

Al'm'ed. Prince. Arabian Nights. Noted for a magic tent he possessed which would cover a whole army but might be carried in the pocket. He also possessed a magic apple which would cure all diseases.

A-lad'din. One of the best known characters in the "Arabian Nights Tales." Aladdin becomes possessed of a wonderful lamp and ring. On rubbing them, two genii appear, who are the slaves of anyone who possesses the lamp and ring. They obey Aladdin and perform most incredible deeds by their magic.

Al'A'raf (al'araf). The Mohammedan limbo. The subject of an uncompleted poem by Edgar A. Poe.

A-las'nam. The hero of a story in the "Arabian Nights' Entertainments" entitled "The History of Prince Zeyn Alasnam and the Sultan of the Genii." Alasnam has eight diamond statues, but had to go in quest of a ninth more precious still, to fill the vacant pedestal. The prize was found in the lady who became his wife, at once the most beautiful and the most perfect of her race.

Al-ba'nia, Al'ba-ny. A name given to Scotland or the Scottish Highlands in old romances and early histories.

Al'bi-on. An ancient name of Briton, now used only in poetic allusion. Some say the name is derived from the lofty white cliffs on the south coast. Others derive it from the name of a fabulous giant, Albion, son of Neptune, who called the island after his own name, and ruled it forty-four years.

Albra'ca. Orlando Innamorata, Bojardo. A castle of Cathay to which Angelica retires in grief at being scorned and shunned by Rinaldo, with whom she is deeply in love. Here she is besieged by Agricane, King of Tartary, who resolves to win her, notwithstanding her indifference to his suit.

Al-cesté. Le Misanthrope, Molière. A noble but misanthropic man, the hero of Molière's comedy.

Al-cl'na. Orlando Innamorato, Bojardo. A fairy represented as carrying off Astolfo. She reappears in great splendor in Ariosto's "Orlando Furioso."

Al'di-bo-ron'ti-phos'co-phor'ni-o. A character in Henry Carey's burlesque tragedy "Chrononhototologos."

Aldine Edition. This name is now applied to some elegant editions of English works. The original Aldine editions were books from the press of Aldus Manutius, printed in the years 1490-1597. These books have been highly prized both for their literary value and their handsome exterior. The Aldus printing establishment was kept up for 100 years. The distinguishing mark of the Aldine books is an anchor entwined with a dolphin. Collections of these books have been made. Many of the works are now very rare and are highly prized.

Al'din-gar, Sir. A character in an ancient legend, and the title of a celebrated ballad, preserved in Percy's "Reliques." This ballad relates how the honor of Queen Elanor, wife of Henry Plantagenet, impeached by Sir Aldingar, her steward, was submitted to the chance of a duel, and how an angel, in the form of a little child, appeared as her champion, and established her innocence.

Alexandrian Codex. A manuscript of the Scriptures in Greek, which belonged to the library of the patriarchs of Alexandria, in Africa, A. D. 1098. In 1628, it was sent as a present to Charles I., and was placed in the British Museum. It is on parchment, in uncial letters, and contains the Septuagint version (except the Psalms), a part of the New Testament, and the Epistles of Clemens Romanus. This is much consulted by Biblical scholars, especially in the critical study of the epistles.

Alice Brand. Lady of the Lake. Sir Walter Scott. Alice signed Urgan the dwarf thrice with the sign of the cross, and he became "the fairest knight in all Scotland"; when Alice recognized in him her own brother.

Al'an-a-Dale. A friend of Robin Hood's in the ballad. He is introduced into Sir Walter Scott's "Ivanhoe" as Robin Hood's minstrel.

All's Well that Ends Well, a comedy by Shakespeare. The hero and heroine are Bertram, Count of Roussillon, and Hel'ena, a physician's daughter, who are married by the command of the king of France, but part because Bertram thought the lady not sufficiently well-born for him. Ultimately, however, all ends well.

All'worthy, Mr. Tom Jones, Fielding. Distinguished for his benevolence. This character is said to be drawn from Fielding's friend Ralph Allen.

Alp. Siege of Corinth, Byron. The hero of this poem.

Alph. Kubla Khan, Coleridge. A name invented by Coleridge and applied to a river mentioned in this poem.

Al'qui-fe. A personage that figures in all the books of the lineage of Amadis as a powerful wizard.

Al-Rakin. A fabulous dog connected with the legend of the "Seven Sleepers." The Mohammedans have given him a place in paradise.

Al-Siraf. A bridge from this world to the next extending over the abyss of hell. This narrow bridge, less than the thread of a famished spider, must be passed over by every one who would enter the Mohammedan paradise.

Am'-a-dis de Gaul. The hero of an ancient and celebrated Portuguese romance. A French version was printed in 1555.

Aman'da. A young woman who impersonates spring in Thompson's "Seasons."

A-mal'mon, or A-may'mon. An imaginary king of the East, one of the principal devils who might be bound or restrained from doing hurt from the third hour till noon, and from the ninth hour till evening. He is alluded to in Shakespeare's "Merry Wives of Windsor."

Ama'urot. Utopia, Sir Thomas More. Amaurot was the chief city in Utopia.

Amaurote. A bridge in Utopia.

Am'e'lia. The title of one of Fielding's novels, and the name of its heroine, who is distinguished for her tenderness and affection. The character of Amelia is said to have been drawn from Fielding's wife.

Aml'ne. In Arabian Nights a female character who leads her three sisters by her side as a leash of hounds.

Aml'nté. Les Précieuses Ridicules, Molière. A contradictory character in this comedy. She dismisses her admirers for proposing to marry her, scolds her uncle for not carrying himself as a gentleman, and marries a valet whom she believes to be a nobleman.

Am'let, Richard. The name of a gamester in Vanbrugh's "Confederacy."

Am'o-ret. The name of a lady married to Sir Scudamore, in Spencer's "Faery Queen." She is the type of a devoted, loving wife. (2) The heroine of Fletcher's pastoral drama, "The Faithful Shepherdess."

A'mys and Amy'llon. Two faithful friends. The Pyrlades and Orestes of the feudal ages. Their adventures are the subjects of ancient romances. An abstract of this early romance is found in Ellis' "Specimens of Early English Metrical Romances."

Anacreontic Verse. Commonly of the jovial or Bacchanalian strain, named after Anacreon, of Teos, the Greek lyric poet, born at Teos, an Ionian city in Asia Minor. He removed to Abdera, in Thrace, when Teos was taken by the Persians, but he lived chiefly at Samos, under the patronage of Polycrates. After the death of Polycrates, he went to Athens at the invitation of the tyrant Hipparchus. He died at the age of 85, probably about the year 550 B. C. In his poems Anacreon sung chiefly the praises of love and wine, to the enjoyment of which his life would also appear to have been dedicated. Many fragments of his songs are preserved, which are models of delicate grace, simplicity and ease.

Anagram, a transposition of the letters of a name or sentence, the change of one word or phrase into another, by reading the letters backwards, or by transposing them.

An-as-ta's-us. Anastasius, Hope. The hero of this novel purports to be a Greek, who, to escape the consequences of his own crimes and villainies, becomes a renegade, and passes through a long series of the most extraordinary vicissitudes.

Ancient Man. Idylls of the King, Tennyson. Meaning Merlin, the old magician, King Arthur's protector and teacher.

Ancient Mariner. Rime of the Ancient Mariner, Coleridge. The ancient mariner, for the crime of having shot an albatross, a bird of good omen to voyagers, is doomed to undergo terrible suffering. Dreadful penalties are visited upon his companions, who have made themselves accomplices in his crime. The penalties are at last remitted in consequence of his repentance. When pity enters his heart he can pray, and the dead albatross, bound about his neck, falls off. The ship moves on and he returns to his home port. There he encounters a hermit to whom he relates his story. At certain times the agony of remorse returns and drives him on, like the Wandering Jew, from land to land, compelled to relate the tale of his suffering and crime as a warning to others, and as a lesson of love and charity towards all God's creatures. The conception of this poem and the mystical imagery of the skeleton-ship are said to have been borrowed by Coleridge from a dream.

Andrews, Joseph. The hero in a novel by the same name, written by Fielding, to ridicule Richardson's "Pamela." Fielding presents "Joseph Andrews" as a brother to the modest and prudish Pamela, and pictures him as a model young man.

Andreolus and the Lion. A story of a runaway slave who befriended a lion, and was in turn befriended by the lion. This story is found in the "Gesta Romanorum" and in "Æsop's Fables."

Angelica. An infidel princess of exquisite beauty in Bojardo's "Orlando Innamorato" and Ariosto's "Orlando Furioso."

Angelus Domini. A prayer of the Roman Catholic Church, embodying a passage in Scripture beginning with these words. It was ordered by Pope John XXII., in 1326, to be repeated three times a day, morning, noon, and night, when the church-bell gives the people warning.

An-tiph'o-lus of Eph'e-sus, An-tiph'o-lus of Syr'a-cuse. Twin brothers, sons of Ægeon and Æmilia, in Shakespeare's "Comedy of Errors."

An-to-ni-o. (1) The "Merchant of Venice" in Shakespeare's play of that name, the friend to Bassanio, and the object of Shylock's hatred. (2) The usurping Duke of Milan, and brother to Prospero, in Shakespeare's "Tempest." (3) The father of Proteus, in Shakespeare's "Two Gentlemen of Verona." (4) A minor character in Shakespeare's "Much Ado about Nothing." (5) A sea-captain, friend to Sebastian, in Shakespeare's "Twelfth Night."

Antony and Cleopatra. Historical tragedy by Shakespeare which may be considered as a continuation of Julius Cæsar. In the opening scene of Julius Cæsar absolute power is lodged in one man. In the conclusion of Antony and Cleopatra a second Cæsar is again in possession of absolute power and the entire Roman world is limited under one imperial ruler. There are four prominent characters in this play: Cleopatra, voluptuous, fascinating, gross in her faults, but great in the power of her affections; Octavius Cæsar, cool, prudent, calculating, avaricious; Antony, quick, brave, reckless, prodigal; Enobarbus, a friend of Antony, at first jocular and blunt, but transformed by penitence into a grief-stricken man who dies in the bitterness of despair.

Aonian Mount. Milton says his muse is to soar above "the Aonian Mount," i. e., above the flight of fable and classic themes, because his subject was "Jehovah, lord of all."

Ape-man'tus. A churlish philosopher in Shakespeare's play, "Timon of Athens."

Apocalypse. The Greek name of the last book of the New Testament, termed in English "Revelations." It has been generally attributed to the Apostle St. John, but some wholly reject it as spurious. In the first centuries many churches disowned it, and in the Fourth Century it was excluded from the sacred canon by the council of Laodicea, but was again received by other councils, and confirmed by that of Trent, held in the year 1545. Most commentators suppose it to have been written after the destruction of Jerusalem, about A. D. 96; while others assign it an earlier date. Its figures and symbols are impressive.

Apocrypha. The word originally meant secret or hidden and it is said that the books of the Apocrypha are not found in either the Chaldean or the Hebrew language. These books were not in the Jewish canon, but they were received as canonical by the Catholic Church, by the Council of Trent. The apocryphal writings are ten in number: Baruch, Ecclesiasticus, Wisdom of Solomon, Tobit, Judith, two books of the Maccabees, Song of the Three Children, Susannah, and Bell and the Dragon. Their style proves that they were a part of the Jewish-Greek literature of Alexandria, within three hundred years before Christ; and as the Septuagint Greek version of the Hebrew Bible came from the same quarter, it was often accompanied by these Greek writings, and they gained a general circulation. No trace of them is found in the Talmud; they are mostly of legendary character, but some of them are of value for the historical information, for their moral and maxims, and for the illustrations they give of ancient life.

Apollyon. An evil spirit introduced by Bunyan in his allegorical romance, "Pilgrim's Progress." See Abaddon.

Arabian Nights Entertainments. consisting of one thousand and one stories, told by the Sultana of the Indies to divert the Sultan from the execution of a bloody vow he had made to marry a lady every day and have her head cut off next morning, to avenge himself for the disloyalty of the first Sultana. The story on which all the others hang is familiar. Scheherazade, the generous, beautiful young daughter of the vizier, like another Esther, resolves to risk her life in order to save the poor maidens of her city whom the Sultan is marrying and beheading at the rate of one a day. She plans to tell an interesting story each night to the Sultan, breaking off in a very exciting place in order that the Sultan may be tempted to spare her life so that he may hear the sequel.

Ar'den, Enoch. The hero of Tennyson's poem of the same name, a seaman who is wrecked on an uninhabited, tropical island, where he spends many years, and who returns home at last only to find that his wife, believing him to be dead, has married his old play-fellow and rival, and is prosperous and happy. In a spirit of heroic self-sacrifice, he determines not to undeceive her, and soon dies of a broken heart.

Ar'cher, Beaux' Stratagem, Farquhar. A servant to Aimwell and an amusing fellow.

Ar-chi-ma'go or Ar'chi-mage, Faery Queen, Spencer. As the name implies a hypocrite or deceiver. He is an enchanter in the "Faery Queen," and is opposed to holiness embodied in the Red Cross Knight. He wins the confidence of the knight in the disguise of a reverend hermit, and by the help of Duessa, or Deceit, separates him from Una, or Truth.

Ar-ci'te, Palamon and Arcite, Chaucer. Palamon and Arcite in the first story told by Chaucer in his "Canterbury Tales." Chaucer borrowed this story from Boccaccio, who, in his turn, borrowed it from a more ancient mediæval tale. Dryden later put the same story into verse. Dryden pronounced the word Ar'cite' or Ar-ci'te'. Arcite, a young Theban knight, made prisoner by Duke Theseus, is shut up in a prison in Athens with Palamon. Both the captives fall in love with Emily, the Duke's sister-in-law. Both gain their liberty and Emily is promised by the duke to the one who wins in a tournament. Arcite wins but is killed by a fall from a horse and Emily marries Palamon. This story is better known through Dryden's "Palamon and Arcite."

Ar-e-thu'sa. The name of a sylph in Pope's "Rape of the Lock."

Argalia, Orlando Innamorato, Bojardo. A brother to Angelica in this romantic poem. He is celebrated as the possessor of an enchanted lance which threw whomsoever it touched. Ferrau eventually killed him, and Astolfo obtained the lance.

Ar-mi'da, Jerusalem Delivered, Tasso. The most important character in this poem.

Ar-nolphe', L'Ecole des Femmes, Moliere. A selfish and morose cynic.

Ar'ga-lus. An unhappy lover in Sir Philip Sidney's "Arcadia."

Argan. The hero of Moliere's comedy "Le Malade Imaginaire."

Ar'ga-li'a. A brother to Angelica, in Bojardo's "Orlando Innamorato." He is celebrated as the possessor of an enchanted lance which overthrew whomsoever it touched.

Ar'i-el. In the denomenclology of the Cabala, a water spirit; in the fables of the Middle Ages, a spirit of the air, the guardian angel of innocence; in Shakespeare's "Tempest," an airy and tricky spirit, once imprisoned in a tree but released by Prospero and now becomes his messenger, assuming any shape, or rendering himself invisible, in order to execute the commands of his master.

Ar-i-o-dan'tes. A lover in Ariosto's "Orlando Furioso."

Arm'i'da, Jerusalem Delivered, Tasso. A beautiful sorceress with whom Rinaldo fell in love. By a talisman he is disenchanted. Not being able to allure him back, Armida rushes into the midst of a combat and is slain.

A'roun-dight. The sword of Lancelot of the Lake.

Ar-sin'oc, Le Misanthrope, Moliere. A prudish character in this comedy.

Ar'te-gal, also written Artegall, Arthegal, and Artegale. (1) A legendary king of Briton mentioned by Geoffrey of Monmouth in his chronicles and by Milton in his History of Britain. (2) A character in Spencer's "Faery Queen" representing justice. (3) The hero in a poem by William Wordsworth, entitled "Artegall and Eldore."

Arthur, King. A poetical character, based on historical traditions. The Arthur of the old Welsh bards was a warrior chieftain ruling over fierce and war-like tribes. Every generation of poets have added something to this picture until the Arthur of modern romance is the Christian gentleman as Tennyson pictures him in his "Idylls of the King" surrounded by his chivalrous knights, all bound together in one quest, the Holy Grail.

Arthurian Romances. These may be divided into six parts: (1) The romance of the "San Graal." (2) "The Merlin," which celebrates the birth and exploits of King Arthur. (3) "The Launcelot." (4) The search for "Quest of the San Graal." (5) The "Mort d'Arthur" or death of Arthur. (6) "Sundry Tales."

Arthur's Drinking-Horn. No one could drink from this horn who was either unchaste or unfaithful.

Arthur's Sword. Escal'ibur or Excal'iber. Geoffrey calls it Caliburn, and says it was made in the isle of Avalon, by Merlin.

Arthur's Round Table. It contained seats for 150 knights. Three were reserved, two for honor, and one (called the "siege perilous") for Sir Galahad, destined to achieve the quest of the Holy Grail.

As'ca-part. The name of a giant whom Bevis of Southampton conquered. This is a favorite story of the old British romancers. The effigy of As'ca-part may be seen on the city gates of Southampton. He is said to have been thirty feet high, and to have carried Sir Bevis, his wife, and horse, under his arm. Allusions to him occur in Shakespeare, Drayton, and other English poets.

Ash'ton, Sir William. The Lord Keeper of Scotland; a prominent character in Scott's "Bride of Lammermoor."

As'mo-de'us. In the Jewish demonology, an evil spirit, the demon of vanity, or dress. In modern times he has been spoken of as the destroying demon of matrimonial happiness.

As-pa'ti-a. The unfortunate heroine of Beaumont and Fletcher's play "The Maid's Tragedy."

As'tolat. The home of Elaine in Tennyson's "Idylls of the King."

As-to'lo or As-to'l'pho. A celebrated character in the romantic tales and poems founded upon the supposed adventures of Charlemagne and his Paladins.

As You Like It, a comedy by Shakespeare. A French duke, driven from his dukedom by his brother, sought a refuge in the forest of Arden with a few of his followers. Here they lived a free and easy life. Rosalind, the daughter of the banished duke, remained at court with her cousin Celia. At a wrestling match Rosalind fell in love with Orlando, who threw his antagonist, a giant and professional athlete. The usurping duke (Frederick) now banished her from the court, but her cousin Celia resolved to go to Arden with her, so Rosalind, in boy's clothes, and Celia as a rustic maiden, started to find the deposed duke. Orlando being driven from home by his elder brother, also went to the forest of Arden, and was taken under the duke's protection. Here he met the ladies, and a double marriage was the result—Orlando married Rosalind, and his elder brother—Oliver married Celia. The usurper retired to a religious house, and the deposed duke was restored to his dominions.

Ath'a-lie, Athalie, Racine. Daughter of Ahab and Jezebel in Racine's famous tragedy by this name.

Auburn. The name of a village immortalized by Oliver Goldsmith in his "Deserted Village"; it has been identified with Lissoy, in Ireland, near Athlone.

Au'drey. A country wench, in Shakespeare's "As You Like It."

Autol'ycus. The craftiest of thieves. He stole the flocks of his neighbors, and changed their marks. Si'syphus outwitted him by marking his sheep under their feet. Shakespeare introduces him in "The Winter's Tale" as a peddler, and says he was called the son of Mercury.

Av'a-lon, or A-vil'ion. The earthly paradise of the Britons. In Middle-Age romance, the name of an ocean island, and of a castle. It is represented as the abode of Arthur and Oberon and Morgan le Fay. It is most fully described in the old French romance of "Ogier le Danois." It is the Island Kingdom to which King Arthur is finally borne by the mysterious barge in Tennyson's "Passing of Arthur." Some identify Avalon with the modern Glastonbury.

Aver'nus. A lake in Campania so called from the belief that its vapors would kill all life. Poets call it the entrance to the infernal regions.

Ay'mer, Prior. A Benedictine Monk, prior of Jorvaulx Abbey, in Sir Walter Scott's "Ivanhoe."

Ay'mon. A semi-mythical personage who figures in romances.

Aza'zil, Paradise Lost, Milton. Represented in this poem as Satan's standard bearer. According to the Koran, when God commanded the angels to worship Adam, Azazel replied, "Why should the son of fire fall down before a son of clay?" and God cast him out of heaven.

A'zo. The name given by Byron to the Prince of Este, in his poem of "Parisina."

Az'rafil. In the Koran the archangel commissioned to blow the trumpet of the resurrection.

Babes in the Wood. Wonderful Gent's Last Will, Ancient Ballad. According to some authorities this old story in verse was founded on the deed of King Richard III., of England, who made his two young nephews prisoners in the Tower of London from which they disappeared. It was believed that they were mur-

dered by his orders. A common tale, much liked by English children, in its many forms, grew from this ballad. Perhaps the best known was the one in which the lost babes were covered with leaves by the birds in the woods.

Baboon, Lewis. History of John Bull, Arbuthnot. A name given to Louis XIV. of France. The name Philip Baboon was given in the same writing to Philip Bourbon, Duke of Anjou.

Backbite, Sir Benjamin. School for Scandal, Sheridan. A vacantly busy man who peddled scandal.

Bagstock, Joe. Dombey and Son, Dickens. The insistent and selfish "J. B.," "old J. B.," and "Joey B." of the story.

Baillif, Harry. Canterbury Tales, Chaucer. The jolly landlord at Tabard Inn, where the Canterbury Pilgrims gathered in making ready for their journey.

Balafre. Quentin Durward, Scott. Name given to an old archer belonging to the Scottish Guards.

Balderstone, Caleb. Bride of Lammermoor, Scott. A bore and an intrusive buffoon who tries to appear rich but lives in discomfort and often in hunger and want. His pretensions have often been laughingly quoted.

Baldwin. Jerusalem Delivered, Tasso. The brother of Godfrey of Bouillon. In the tale of "Reynard the Fox" the name, Baldwin, is given to one of the beasts.

Balmawhapple. Waverly, Scott. An obstinate stupid-faced blundering Scotch laird.

Balthazar. Comedy of Errors, Shakespeare. A merchant ordered to furnish impossible merchandise. In "Much Ado About Nothing" Balthazar appears as servant to Don Pedro. Balthazar is also the name of one of the Wise Men who followed the star to Bethlehem.

Balwhidder. Annals of the Parish, Galt. A sincere, kind, talkative Scotch Presbyterian clergyman. With natural prejudices and old-fashioned ways he is too "easy" to carry on his parish work with zeal. His friends enjoy Balwhidder's jokes.

Banquo. Macbeth, Shakespeare. Athane of Scotland said to belong to the Eleventh Century and ancestor of the Stuarts. In fiction made immortal as the innocent laird murdered by Macbeth. Banquo's ghost is more famous than Banquo himself.

Barabas. The Jew of Malta, Marlowe. A monster, the hero of the tragedy, who wears a big nose and invents infernal machines.

Bardell, Mrs. Pickwick Papers, Dickens. The landlady, a widow who sues Mr. Pickwick for breach of promise to marry her.

Bard of Avon. Name given to Shakespeare who was born and buried in Stratford-on-Avon.

Bard of Ayrshire. A name often given to Robert Burns, the great poet of Scotland, who was a native and resident of the county of Ayr.

Bard of Hope. A title sometimes given to Thomas Campbell, author of "The Pleasures of Hope," one of the most beautiful didactic poems in the language.

Bard of Memory. A name used to designate the poet Rogers, author of "The Pleasures of Memory."

Bard of Rydal Mount. An epithet sometimes applied to the poet Wordsworth, who resided at Rydal, a chapelry of England, in the County of Westmoreland. His dwelling overlooked a beautiful view of Lake Rydal.

Bardolph. Merry Wives of Windsor, Shakespeare. A follower of Falstaff, known as "the knight of the burning lamp," from his red nose. He is a poor, low-bred drunkard.

Barkis. David Copperfield, Dickens. Remembered by the much-quoted "Barkis is willing," his form of proposing marriage to his beloved Clara Pegotty.

Barley-Corn, Sir John. Tam O'Shanter, Burns. Name given to the personification of a malt liquor made from barley. Sir Barley-corn has also been noticed by the authors Scott and Hawthorne. The name comes down to us from an old English pamphlet of uncertain date in which Sir John Barley-corn is arraigned in court, tried by jury and acquitted.

Barnaby Rudge. Barnaby Rudge, Dickens. A half-witted lad who wanders about with a pet raven. They flit together through many adventures, including a No-popery riot.

Basilliseo. Soliman, and Perseda, old Play. A boasting knight who became so popular with his foolish bragging that his name grew into a proverb.

Bassanio. Merchant of Venice, Shakespeare. The lover of Portia who won her when he chose a leaden casket in which her portrait was hidden.

Bath, Major. Amelia, Henry Fielding. A noble-minded gentleman, pompous in spite of poverty, and

striving to live according to the "dignity and honor of man." He tries to hide his poverty under bold speech even when found doing menial service.

Battle, Sarah. Essays of Elia, Lamb. Sarah considered whilst the business of life and literature one of the relaxations. When a young gentleman, of a literary turn, said to her he had no objection to unbend his mind for a little time by taking a hand with her, Sarah declared "Whist was her life business; her duty; the thing she came into the world to do. She unbent her mind afterwards over a book."

Bayard. Old Poems and Romances. Bayard was a famous horse belonging to the four sons of Amoyon, a semi-mythical character. He seemed but an ordinary horse when one person rode, but if the four mounted, the horse accommodately grew in length. Among wonderful things related of him his hoof-prints have been found on rocks and in deep forests. Bayard is also known as the property of Amadis de Gaul in an old Portuguese romance. He was found under the watch of a dragon whom a wizard knight charmed and then rescued the horse. In French tales Bayard is represented to be yet living in some of the forests of France but disappears when disturbed. Bayard is also the name of the horse belonging to Fitz-James in Scott's poem, "Lady-of-the-Lake." Bayard's Leap" belongs to this story. It is said that Rinaldo was riding on his favorite steed, when a demon sprang behind him, but the animal in terror took three tremendous leaps and unhorsed the fiend.

Bayes. The Rehearsal, George Villiers. This farce, or satire, was written about the year 1670 and its wit has been much quoted. In its present form the hero, Bayes, is intended to represent Dryden as at the head of heroic rhymes. He is shown as greedy for applause; impatient of censure or criticism; inordinately vain, yet obsequious to those who, he hopes, will gratify him by returning his flattery, and, finally, as anxiously mindful of the minute parts of what, even in the whole, is scarce worthy of attention.

Beatrice. Divine Comedy, Dante. Daughter of an illustrious family of Florence for whom Dante had a great love. In his poem she is represented as being his guide through paradise. Beatrice is also the name of the heroine of Shakespeare's "Much Ado About Nothing." Of her Mrs. Jameson says: "The extraordinary success of this play in Shakespeare's own day, and ever since, in England, is to be ascribed more particularly to the parts of Benedict and Beatrice, two humorous beings, who incessantly attack each other with all the resources of raillery. In Beatrice, high intellect and high animal spirits meet, and excite each other like fire and air. In her wit there is a touch of insolence, not infrequent in women when the wit predominates over reflection and imagination. In her temper, too, there is a slight infusion of the ternagant. But Beatrice, though willful, is not wayward; she is volatile, not unfeeling."

Beauty and the Beast. Fairy Tale, Mme. Villeneuve. Off-repeated in stories for children. Beauty and the Beast are known in many forms. In the original tale young and lovely Beauty saved the life of her father by putting herself in the power of a frightful, but kind-hearted, monster, whose respectful affection and deep melancholy finally overcame her aversion to his hideousness, and induced her to consent to marry him. By her love Beast was set free from enchantment and allowed to assume his own form, a handsome and graceful young prince.

Bede, Adam. Adam Bede, George Elliot. An ideal workman, hero of the novel.

Bedivere. Tales of the Round Table. Bedivere was the last knight of King Arthur's Round Table. He had served as a butler, was of much importance and was sent by the dying king to throw his sword, Excalibur, into the lake. A hand and arm rose from the lake, caught the sword, flourished it three times and sank. Bedivere watched King Arthur's departure for Avalon, the "Isle of the Blest." This knight is noticed, under the name Bedver, in Geoffrey's British History.

Beggar's Daughter. Reliques, Percy. First known as the Beggar's daughter of Bethnal Green, a beautiful girl named Bessie, who is wooed by a knight, and whose father turns out to be a son of Simon de Montford, living in disguise as a blind beggar. The story was dramatized by Sheridan Knowles.

Belch, Sir Tony. Twelfth Night, Shakespeare. Uncle to Olivia, a jolly, care-free fellow, type of the roisters of Queen Elizabeth's days.

Belinda. Rape of the Lock, Pope. Poetical name of the heroine whose real name was said to be Arabella Fermor. In a frolic Lord Petre cut a lock from the lady's hair, this was so much resented that it broke the

great friendship between the two families. The poem, "Rape of the Lock," was written to bring the people into a better temper and lead to reconciliation. Belinda is also the name of the heroine in a novel written by Maria Edgeworth.

Bell, Adam. Old Ballad. A famous wild outlaw belonging to the north country and celebrated for his skill as an archer.

Bell, Laura. Pendennis, Thackeray. One of the sweetest heroines in English literature.

Bell-man. L'Allegro, Milton. The watchman who patrolled the streets and called out the hour of night. Sometimes he repeated scraps of pious poetry in order to charm away danger.

Bell, Peter. Peter Bell, a Tale in verse, Wordsworth. A wandering tinker, subject of Wordsworth's poem, whose hard heart was touched by the fidelity of an ass to its dead master. Shelley wrote a burlesque of this poem, entitled "Peter Bell the Third," intended to ridicule the ludicrous puerility of language and sentiment which Wordsworth often affected. This burlesque was given the name of the Third because it followed a parody, already published as "Peter the Second."

Bell-the-Cat. Name given to a nobleman at Lauder, Scotland, early in the Sixteenth Century. King James II. called an assembly of Scottish barons to resist a threatened invasion of his realm by Edward IV., of England. After long discussion one of the barons related the nursery tale of a convention of mice in which it was proposed to hang a bell on the cat's neck, to give warning of her presence. No one would serve on the Mouse Committee. To the story Archibald Douglas responded by saying "I will bell the cat" and was afterward known by the name, Bell-the-cat.

Beloved Physician. Bible. Name given to St. Luke and first suggested in the Apostle Paul's letter to the Colossians.

Belphebe. Faery Queen, Spencer. A delicate and graceful flattery offered to Queen Elizabeth through the huntress, Belphebe, intended as a likeness of the Queen. The name taken from belle, meaning beautiful, and Phoebe, a name sometimes bestowed on Diana.

Belvawney, Miss. Nicholas Nickleby, Dickens. She belonged to the wonderful Portsmouth theater, always took the part of a page and gloried in silk stockings.

Belvidera. Venice Preserved, Otway. The beautiful heroine of the almost forgotten tragedy. Sir Walter Scott said "more tears have been shed, probably, for the sorrows of Belvidera and Monimia than for those of Juliet and Desdemona."

Benedick. Much Ado About Nothing, Shakespeare. A young lord of Padua who is gentleman, wit, and soldier. He was a pronounced bachelor, but after a courtship full of witty sayings and coquetry he marries the lovely Beatrice. From this gentleman comes the name Benedict or Benedict, applied to married men who were not going to marry.

Benengell, Cid Hamet. Don Quixote, Cervantes. Supposed to be a writer of chronicles among the Moors and claimed as authority for the tales of adventure recorded by Cervantes. The name, Cid Hamet, has been often quoted by writers.

Ben Hur. General Lew Wallace. Messala, the Roman playmate and young friend of Ben Hur, afterward became his remorseless enemy. Ambitious, hard, and cruel, when he came into power he made Ben Hur a galley slave, confiscated his property and imprisoned the mother and sister. Ben Hur escaped, returned later as a wealthy Roman, and entered in the famous chariot race against Messala who had put up enormous sums in wagers. Messala recognized Ben Hur and hoped to win the race and bring him to final ruin; but Messala himself was thrown and seriously injured. His cruelties were made known and he was at last slain by his wife, Isha, the daughter of Balthasar.

Bennet, Mrs. Amelia, Fielding. An improper character.

Benvolio. Romeo and Juliet, Shakespeare. One of Romeo's friends who would "quarrel with a man that had a hair more or a hair less in his beard than he had." Mercutio says to him, "Thou hast quarreled with a man for coughing in the street."

Beowulf. Anglo-Saxon Poem. He was a Gothic warrior who slew the monster Grendel, which infested the great hall of Hrothgar, King of the West Danes. This great poem of over 6,000 lines is divided into two parts. The first part describes the beautiful palace of King Hrothgar, the ravages wrought by the fiend Grendel and his mother, and the deliverance wrought by the hero Beowulf. The second part describes the combat between the aged King Beowulf and the dragon which was wasting the land of the Goths. The Beowulf who

took part in Hygelac's historical expedition against the Hæware is probably historical, but the Beowulf of the four great exploits of the poem, the swimming match with Breca, and the contests with Grendel, with his dam, and with the dragon, is probably a character allied to the Norse divinities.

Bertram. **Guy Mannerling, Scott.** The character was suggested by James Annesley, Esq., rightful heir of the earldom of Anglesey, of which he was dispossessed by his uncle Richard. He died in 1743. Bertram was also the name of the haughty and dissolute count, husband of Helena in Shakespeare's comedy "All's Well that Ends Well."

Blanca. **Othello, Shakespeare.** Cassio's sweetheart. **Bibblio'mancy,** a mode of divination much practiced during many ages. The diviner opened the Bible and observed the first passage which occurred or upon entering a place of worship took notice of the first words of the Bible heard after entering. The application was often very fanciful, and depended rather upon the mere sound of the words than upon their proper signification, or the scope of the passage. Prayer and fasting were sometimes used as a preparation for a mode of consulting the divine oracles, than which nothing could be more contrary to their purpose and spirit, and which was in harmony only with the notions and practices of heathenism.

Bibliomani'a, signifies book-madness. It is a passion for rare and curious books. While the ordinary collector is satisfied with the possession of works which are valuable, either on account of their established reputation or as assisting him in his literary or professional pursuits, the bibliomaniac is actuated by other motives. With him utility is of secondary importance, rarity being the first and great requisite. Thus even a common book becomes valuable in his eyes if it be one of a few copies thrown off on vellum or on large paper, or if it has been bound by Derome, Bozerian, Lewis, or Payne; and for the same reason, he sometimes prefers an inferior to a better article. The formation of complete sets of such books as the "Elzevir Republics" (see Elzevir), or of the works of a single author, provided they be scarce, is a favorite pursuit with many.

Bigendians. **Gulliver's Travels, Swift.** The name of a religious party in the imaginary Empire of Lilliput who made it a matter of duty and conscience to break their eggs at the large end. They were regarded as heretics by the law, which required all persons to break the smaller end of their eggs, under pain of heavy penalties in case of disobedience.

Bilfil. **Tom Jones, Fielding.** Allworthy's nephew, a talebearer.

Birch, Harvey. **The Spy, Cooper.** The chief character of the novel.

Black-eyed Susan. **Ballad, John Gay.** The heroine of the popular sea-song.

Blatant Beast. **Faery Queen, Spenser.** A belov'ing monster typical of slander; or, an impersonation of what we now call "Vox Populi," or the "Voice of the People."

Blimber. **Miss Cornelia.** **Dombey and Son, Dickens.** The daughter of Dr. Blimber, the head of a first-class educational establishment conducted on the forcing or cramming principle. She is a very learned, grave, and precise young lady, "no light nonsense about her," who has become "dry and sandy with working in the graves of deceased languages."

Blouzallinda. **Shepherd's Week, John Gay.** The country girl, heroine of this pastoral poem, written more than one hundred and fifty years ago, but quoted as a picture of the poverty and rudeness of rural life at that time.

Bobadil. **Captain.** **Every Man in His Humor, Jonson.** A boasting coward, who passes himself off with young and simple people for a Hector.

Boeuf. **Front de.** **Ivanhoe, Scott.** One of King John's followers. A ferocious scoundrel.

Bols. **Gulbert.** **Blair de.** **Ivanhoe, Scott.** A brave but cruel, crafty, and dissolute commander of the Knights Templar.

Boniface. **The Beaux' Stratagem, Farquhar.** A fine representation of an English landlord. Hence applied to landlords generally.

Bontemps. **Roger.** **Song, Beranger.** Known in France as the personification of care-free leisure. The equivalent, among the French peasantry, for the English proverb, "There's a good time coming," is "Roger Bontemps." This one of Beranger's most celebrated songs was written in 1814.

Bottom. **Nick.** **A Midsummer Night's Dream, Shakespeare.** A man who fancies he can do everything, and do it better than anyone else. Shakespeare

has drawn him as profoundly ignorant, and with an overflow of self-conceit. Oberon, the fairy king, desiring to punish Titania, his queen, commissioned Puck to watch her till she fell asleep, and then to anoint her eyelids with the juice of a plant called "love-in-idleness," the effect of which, when she awoke, was to make her dote upon Bottom, upon whom Puck had fixed an ass's head.

Bowling. **Tom.** **Roderick Random, Smollett.** A name made almost famous as hero of the novel. Critics have said "The character of Tom Bowling, in 'Roderick Random,' will be regarded in all ages as a happy exhibition of those naval heroes to whom Britain is indebted for so much of her happiness and glory." The Tom Bowling referred to in Dibdin's famous song was Captain Thomas Dibdin, brother of Charles Dibdin, who wrote the song.

Box and Cox. **Farce, Morton.** Principal characters in the farce known as a "dramatic romance of real life."

Brag. **Jack.** **Jack Brag, Theodore Hook.** Hero of the novel and a spirited embodiment of the arts employed by a vulgar pretender to creep into aristocratic society, and of his ultimate discomfiture. General Burgoyne figures in an old ballad known as "Sir Jack Brag."

Bramble. **Matthew.** **Humphrey Clinker, Smollett.** Noted character in the novel described as "an odd kind of humorist," afflicted with the gout, and "always on the fret," but full of generosity and benevolence.

Brass. **Sally.** **Sampson.** **Old Curiosity Shop, Dickens.** Brother and sister, well mated, he a shyster-lawyer and she getting ahead of him in villany. Sampson was dishonest, sentimental, and affected in manner, and both are interesting characters to read about.

Brentford. **the two Kings of.** **The Rehearsal, Villiers.** Much question has been raised as to who was to be ridiculed under these characters. The royal brothers, Charles II. and James II., have been suggested, others say the fighting Kings of Granada. In the farce the two kings are represented as walking hand in hand, as dancing together, as singing in concert, and, generally, as living on terms of the greatest intimacy and affection.

Brick. **Mr. Jefferson.** **Martin Chuzzlewit, Dickens.** A ranting American politician who makes a ridiculous figure as editor.

Brook Farm. The full name was "Brook Farm Institute of Agriculture and Education," a stock company of nearly 70 members, located on a farm of 200 acres at West Roxbury, Mass. Among the members were George Ripley, Charles A. Dana, George William Curtis, Margaret Fuller and Nathaniel Hawthorne. Among their frequent visitors were Ralph Waldo Emerson, Theodore Parker, Bronson Alcott. This idyllic life lasted about five years, from 1841 to 1846. Brook Farm was a financial failure but it was important in intellectual results. Hawthorne has written the story of the experiment in "Blithedale Romance."

Brown. **Tom.** **Tom Brown's School Days and Tom Brown at Oxford, Thomas Hughes.** The hero of these stories of school days, a typical English school-boy and undergraduate.

Brunehild. **Nibelungen-lied.** The story of Brunehild holds large place in ancient German romance. She was, herself, a warrior, proud and skillful and she promised to be the bride of the man who could conquer her in three trials, in hurling the lance, in throwing the stone, and in leaping after the stone when thrown. By the arts and bravery of Siegfried, she was deluded into marrying Gunther, King of Burgundy; but, discovering the trick, she planned and accomplished the destruction of Siegfried, and the humiliation of Chriemhild, his wife.

Bumble. **Mr. Oliver Twist, Dickens.** A pompous, disagreeable beadle who figures largely in the beginning of the story. The name, Bumble, has since attached itself to the office.

Bunthorne. **Patience, Sullivan.** A gloomy poet showing most distinctly in his gloom surrounded by the characters of a comic opera. He was inserted as a satire on the æsthetic craze, turning into ridicule the imitators of Rossetti.

Bunsby. **Jack.** **Dombey and Son, Dickens.** A commander of a ship looked up to as an oracle by his friend Captain Cuttle. He is described as wearing a "rapt and imperturbable manner," and seeming to be "always on the lookout for something in the extremest distance."

Burchell. **Mr.** **Vicar of Wakefield, Goldsmith.** A prominent character who passes himself off as a poor man, but is really a baronet in disguise. He is noted for his habit of crying out "Fudge!" by way of expressing his strong contempt for the opinions of others.

Burd. **Helen.** **Scotch Ballad.** A traditional name standing for constancy. She was carried to England by fairies and imprisoned in a castle. The youngest brother

of the fair Burd Helen was guided by the enchanter Merlin and accomplished the perilous task of rescuing his sister. This is recited in the line "Childe Roland to the dark tower came," quoted by Shakespeare. Only a fragment of the old ballad has been preserved.

Buskin. Tragedy. The Greek tragic actors used to wear a sandal some two or three inches thick, to elevate their stature. To this sole was attached a very elegant buskin.

Buz-Fuz, Serjeant. *Pickwick Papers*, Dickens. A pompous, chaffing lawyer, who bullies Mr. Pickwick and the witnesses in the famous breach of promise suit, Bardell vs. Pickwick.

Byfield. A New England parish the scene of an historical novel by John Lewis Ewell. Here lived the ancestor of Longfellow, to whom the poet dedicated "The Village Blacksmith," himself a blacksmith, keeping his accounts in peculiar orthography. According to the deed of sale in 1681, the Byfield Indians got a larger price from the first English settlers than was paid for Manhattan Island.

Cabala. The oral law of the Jews delivered down from father to son by word of mouth. It is the usual belief that God instructed Moses, and Moses his brother Aaron, and so on from age to age.

Cabalistic Science. This science consists mainly in understanding the combination of certain letters, words, and numbers, said to be significant.

Cadmean Victory. A victory purchased at great expense of life. The allusion is to the armed men who sprang out of the ground from the teeth of the dragon sown by Cadmus. These men fell foul of each other, and only five of them escaped death.

Cal'us, Doctor. *Merry Wives of Windsor*, Shakespeare. A physician in the comedy who adds a touch of humor. He is most conspicuous as the lover of Anne Page.

Calandrino. A simpleton frequently introduced in Boccaccio's "Decameron"; expressly made to be befooled and played upon. His mishaps, as Macaulay states, "have made all Europe merry for more than four centuries."

Cal'eb. (1) The enchantress who carried off St. George in infancy. (2) A character in Dryden's satire of "Absalom and Achitophel," meant for Lord Grey, one of the adherents of the Duke of Monmouth.

Cal'eb Quo'tem. A parish clerk or jack-of-all-trades, in Coleman's play "The Review, or Ways of Windsor," Coleman borrowed the character from "Throw Physic to the Dogs," an old farce.

Cal'i-ban. A savage and deformed slave of Prospero in Shakespeare's "Tempest." He is represented as being the "freckled whelp" of Syracus, a foul hag, who was banished from Argier (or Algiers) to the desert island afterward inhabited by Prospero. From his rude, uncouth language we get the phrase "Caliban style," "Caliban speech," meaning the coarsest possible use of words.

Cal'i-dore. A knight in Spenser's "Faery Queen," typical of courtesy, and said to be intended for a portrait of Sir Philip Sidney.

Ca-lis'ta. The name of a celebrated character in Rowe's "Fair Penitent."

Callipolis, Battle of Alcazar. George Peele. A character in the "Battle of Alcazar," used by Sir Walter Scott and others as a synonym for lady-love, sweetheart, charmer. Sir Walter always spells the word Callipolis, but Peele calls it Calipolis.

Caly-don. A forest celebrated in the romances relating to King Arthur and Merlin.

Camara'l-zaman, Prince. *Arabian Nights*. One of the stories of the Arabian Nights and the name of a prince who fell in love with Badou'ra, Princess of China, the moment he saw her.

Ca-ma'e-ho. *Don Quixote*, Cervantes. A character in an episode in "Don Quixote," who gets cheated out of his bride after having made great preparations for their wedding.

Cam'ba-lo, or Cam'bel. *Faery Queen*, Spenser. A brother of Candace. He challenged every suitor to his sister's hand, and overthrew all except Tri'amond, who married the lady.

Cam'ba-lu. In the "Voyages" of Marco Polo the chief city of the province of Cathay.

Cam'bucan. A Tartar king identical with Genghis Khan. The King of the far East sent Cambucan, a "steed of brass, which, between sunrise and sunset, would carry its rider to any spot on the earth." All that was required was to whisper the name of the place in the horse's ear, mount upon his back, and turn a pin set in his ear. When the rider had arrived at the place required, he had to turn another pin, and the horse instantly decended, and, with another screw of the pin,

vanished till it was again required. This story is begun by Chaucer in the "Squire's Tale," but was never finished.

Cam'e-lot. A parish in Somersetshire, England (now called Queen's Camel), where King Arthur is said to have held his court. In this place there are still to be seen vast intrenchments of an ancient town or station — called by the inhabitants "King Arthur's Palace."

Ca'mille. A member of the Parisian demimonde and the heroine of a play dramatized from the novel of "La Dame aux Camélias," by Alexander Dumas, the younger.

Can'a-ce. *Faery Queen*, Spenser. A paragon among women, the daughter of King Cambucan to whom the King of the East sent as a present a mirror and a ring. The mirror would tell the lady if any man on whom she set her heart would prove true or false, and the ring (which was to be worn on her thumb) would enable her to understand the language of birds and to converse with them. Can'ace was courted by a crowd of suitors, but her brother gave out that anyone who pretended to her hand must encounter him in single combat and overthrow him. She ultimately married Tri'amond, son of the fairy Agapé.

Can-dide. The hero of Voltaire's novel so called. All sorts of misfortunes are heaped upon him, and he bears them all with philosophical indifference.

Can'ida. A sorceress, alluded to by Horace, who could bring the moon from heaven.

Candor, Mrs. A most energetic slanderer in Sheridan's "School for Scandal."

Ca'ora. Description of *Gulana*, Raleigh. A river, on the banks of which are a people whose heads grow beneath their shoulders. Their eyes are in their shoulders, and their mouths in the middle of their breasts. The original picture is found in Hakluyt's "Voyages," 1598.

Cap'u-let. The head of a noble Veronese house in Shakespeare's tragedy of "Romeo and Juliet," — hostile to the house of Montague. He is at times self-willed and tyrannical, but a jovial and testy old man.

Cap'u-let, Lady. The proud and stately wife of Capulet, and mother of Juliet.

Carad'oe. A Knight of the Round Table. Also in history, the British chief whom the Romans called Caractacus. Caradoc is the hero of an old ballad entitled "The Boy and the Mantle."

Carker. A scoundrelly clerk in Dickens's "Dombey and Son."

Car'ton, Sidney. A hero transformed by unselfish love in Dickens's "Tale of Two Cities." He voluntarily goes to the guillotine to save his successful rival in love.

Car-ras'co, Sanson. A waggish bachelor of Salamanca, in Cervantes' romance, "Don Quixote."

Ca's'ca. *Julius Cæsar*, Shakespeare. A bluntness Roman, one of the conspirators against Julius Cæsar.

Cas-san'dra. A daughter of Priam, King of Troy, gifted with the power of prophecy; but Apollo, whom she had offended, brought it to pass that no one believed her predictions. Shakespeare makes use of this character in "Troilus and Cressida."

Ca-sel'ia. The name of a musician and old friend of Dante, immortalized by him in his poem "La Divina Commedia."

Cassib'elan. Great-uncle to Cymbeline, in Shakespeare's play by that name.

Cas si-o. A Florentine and lieutenant of Othello, and a tool of Iago, in Shakespeare's tragedy of "Othello." Iago made Cassio drunk, and then set on Roderigo to quarrel with him. Cassio wounded Roderigo. Othello suspended Cassio, but Iago induced Desdemona to plead for his restoration. This interest in Cassio, confirmed the jealous rage of Othello to murder Desdemona and kill himself. After the death of Othello, Cassio was appointed governor of Cyprus.

Castle Dangerous. A keep belonging to the Douglas family, which gives its name to one of Sir Walter Scott's "Tales of my Landlord." It was so called by the English because it was always retaken from them by the Douglases.

Castle of Indolence. The title of a poem by Thomson, and the name of a castle described in it as situated in a pleasing land of drowsiness, where every sense was steeped in the most luxurious and enervating delights.

Cas'tlewood, Beatrix. The heroine of Thackeray's novel "Henry Esmond," a picture of splendid, lustrous, physical beauty.

Caudle, Mrs. Margaret. The feigned author of a series of certain lectures delivered to her husband, Job Caudle, who was a patient sufferer under this form of persistent nagging by his wife. The real author of these humorous lectures was Douglas Jerrold.

Caulline, Sir. The hero of an ancient English ballad preserved in Percy's "Reliques."

Cave of Mammon. The abode of the god of riches, described in the second book of Spenser's "Faery Queen."

Cax'ton, Pi-sis'tra-tus. The hero of Bulwer Lytton's novel "The Caxtons," and of its sequel "My Novel."

Ce-cil'ia, St. A patron saint of the blind, also patroness of musicians, and "inventor of the organ." According to tradition, an angel fell in love with her for her musical skill, and used nightly to visit her. A crown of martyrdom was bestowed both upon her and her husband. Dryden and Pope have written odes in her honor, and both speak of her charming an angel by her musical powers.

Ced'ric. A Saxon thane in Scott's "Ivanhoe."

Ce'lia, Faëry Queen, Spenser. (1) Mother of Faith, Hope, and Charity. She was herself known as Heavenlyness and lived in the hospices Holiness. (2) Celia, cousin to Rosalind in Shakespeare's Comedy "As You Like It." Celia is a common poetical name for a lady or a lady-love.

Ceph'alus and Procris. Cephalus was the husband of Procris, who, out of jealousy, deserted him. Cephalus went in search of her, and rested awhile under a tree. Procris discovered him, and crept through some bushes to ascertain if a rival was with him. Cephalus heard the noise and, thinking it to be made by some wild beast, hurled his javelin into the bushes and slew Procris. When the unhappy man discovered what he had done, he slew himself in anguish of spirit with the same javelin. This story is alluded to in "Pyramus and Thisbe," in Shakespeare's "Midsummer Night's Dream," where they are humorously misnamed "Shafalus and Procus."

Chadband, The Rev. A clerical character in Dickens' "Bleak House." He will always stand as a type of hypocritical piety.

Chanticleer. The cock, in the tale of "Reynard the Fox," and in Chaucer's "Nonne Prestes Tale."

Charlemagne. The romance of Charlemagne and his Paladins is of French origin, as the romances of King Arthur and the Knights of the Round Table is of Celtic or Welsh origin. According to one tradition Charlemagne is not dead, but waits crowned and armed, in Odenberg, near Salzburg, till the time of antichrist, when he will wake up and deliver Christendom. According to another tradition, Charlemagne appears in seasons of plenty. He crosses the Rhine on a golden bridge, and blesses both corn-fields and vineyards.

Char'mi-an. A kind-hearted but simple-minded female attendant on Cleopatra in Shakespeare's play of "Antony and Cleopatra."

Chaucer's Canterbury Tales. The plan of the "Canterbury Tales" affords artistic scope for introducing a company of pilgrims on their way to the shrine of Thomas à Becket. It represents all classes of society and presents a series of tales of great interest set in the midst of beautiful descriptions of nature. The stories best worth reading are: "The Clerk's Tale" (Griseldis); "The Knight's Tale" (Palamon and Arcite); "The Man of Law's Tale" (Constance); "The Prioress's Tale" (Hugh of Lincoln); "The Priest's Tale" (Chanticleer and Pertelote).

Chery and Fair-Star. Countess d'Auluoys's Fairy Tales. Two children of royal birth, whom their father's brothers and their mother's sisters cast out to sea; they are found and brought up by a Corsair and his wife. Ultimately they are told of their birth by a green bird and marry each other. A similar tale is found in "The Arabian Nights."

Cheer'y-ble Brothers, The. A firm of benevolent London merchants in Dickens' "Nicholas Nickleby."

Chev'y Chase. The subject and the title of an famous old English ballad. The event which is commemorated is probably the battle of Otterburn, which happened in August, 1388, but it is impossible to reconcile the incidents of the poem with history.

Chib'labas. The musician in Longfellow's "Hiawatha," personifying harmony in nature.

Childe Harold. Childe, so often used in old English ballads, is a title of honor as "Childe Harold," "Childe of Ellechilde Waters," "Childe Roland," "Childe Tristram," "Childe Arthur," etc. In Byron's poem "Childe Harold," the "Childe" is the poet himself represented as a man, sated of the world roaming from place to place. In canto I., he visits Portugal and Spain; in canto II., Turkey in Europe; in canto III., Belgium and Switzerland; and in canto IV., Venice, Rome, and Florence.

Children in the Wood. Two characters in an ancient and well-known ballad entitled "The Children in the Wood, or The Norfolk Gent's Last Will and Testa-

ment." This is said to be a disguised recital of the alleged murder of his nephews by Richard III. This is the story as related in Percy's "Reliques." The master of Wayland Hall, Norfolk, on his deathbed left a little son, three years old, and a still younger daughter, named Jane, to the care of his wife's brother. If the children died before they came to their majority, their uncle was to inherit their estate. After twelve months had elapsed, the uncle hired two ruffians to murder the two babes. As they went along one of the ruffians relented, and killed his fellow; then, putting down the children in a wood, left them. The poor babes gathered blackberries to allay their hunger, but died during the night, and "Robin Redbreast" covered them over with strawberry leaves. Addison says of the ballad referred to, that it is "one of the darling songs of the common people."

Chil'lingly, Kenelm. The hero in a novel by this name by Bulwer.

Chin-gach'gook. A sagamore of the Mohicans, and father of Uncas, in Cooper's "Leather-Stocking Tales."

Chlo'e, Daphnis and Chloe Longue. (1) The shepherdess loved by Daphne. (2) "Paul and Virginia" by St. Pierre is founded on this romance. (3) Chloe is also a shepherdess in Shakespeare's "As You Like It."

Chœ'reas. The lover of Callir'rhoë, in Cha'riton's Greek romance.

Chriemhild or Chriemhilde. The heroine of the German epic poem, the "Nibelungen Lied." She is represented as a woman of the rarest grace and beauty, and rich beyond conception. By the treacherous murder of her husband she is transformed into a furious creature of revenge. For plot of this epic cycle, see Kreimhild.

Chris'ta-bel. (1) The subject and heroine of an old romance by Sir Eglamour of Artois. (2) The heroine of an ancient ballad "Sir Caulline." (3) The lady in Coleridge's poem "Christabel."

Chris'tian. The hero of John Bunyan's allegory "Pilgrim's Progress." He flees from the "City of Destruction," and journeys to the "Celestial City." He starts with a heavy burden on his back, but it falls off when he stands at the foot of the cross. All his trials on the way are depicted.

Christian'a. The wife of Christian, who started with her children and Mercy from the "City of Destruction," forms the subject of Bunyan's "Pilgrim's Progress," part II. She was placed under the guidance of Mr. Great-Heart, and met her husband at the Celestial City.

Christopher, St. The giant that carried a child over a brook, and said, "Chylde, thou hast put me in grete peryll. I might bere no greater burden." The Chylde was the Christ and the burden was the "Sin of the world." This has been a favorite theme for painters.

Chris'tus, a Mystery. A dramatic trilogy by Henry W. Longfellow; Part I, "Divine Tragedy," Part II, "The Golden Legend"; Part III, "New England Tragedies."

Chrysalde. A character in Molière's "L'École des Femmes"; a friend of Arnolphe.

Chrysale. An honest, simple-minded, hen-pecked tradesman, in the same comedy by Molière.

Chuz'le-wit, Martin. The hero of Dickens's novel of the same name.

Chuz'le-wit, Jonas. A miser and a murderer, the opposite type of character from Martin.

Cid Campeador is the name given in histories, traditions, and songs to the epic hero of Spain. So greatly was he honored that he was called "Mio Cid el Campeador," my lord the champion. Relics of the "Blessed Cid," as he is still called in Spain, such as his sword, shield, banner, and drinking-cup, are still held in great reverence by the populace. The numerous "Cid Romances" that were first published in the Sixteenth Century, contain the most romantic improbabilities concerning the life and deeds of the "Cid." The most interesting chronicle of the "Cid" for English readers was written by Robert Southey.

Cim-me'ri-ans. A people described by Homer dwelling "beyond the ocean-stream," in a land where the sun never shines.

Cinderel'la. Heroine of a fairy tale. She is the drudge of the house, while her elder sisters go to fine balls. At length a fairy enables her to go to the prince's ball; the prince falls in love with her, and she is discovered by means of a glass slipper which she drops, and which will fit no foot but her own. She is represented as returning good for evil and heaping upon her half-sisters every kindness a princess can show.

Ci-pan'go. A marvelous island, described in the "Voyages" of Marco Polo, the Venetian traveler. It is represented as lying in the eastern seas, some 1,500 miles from land, and of its beauty and wealth many stories,

are related. Columbus and early navigators made a diligent search for this island.

Clare, Ada. The wife of Carstone, and one of the most important characters in Dickens' "Bleak House."

Clem-en-t'ina, The Lady. A beautiful and accomplished woman, deeply in love with Sir Charles Grandison, in Richardson's novel of this name.

Clifford, Paul. An attractive highwayman and an interesting hero in Bulwer's novel by the same name. He is familiar with the haunts of low vice and dissipation, but afterward is reformed and elevated by the power of love.

Clinker, Humphrey. The hero of Smollett's novel entitled, "The Expedition of Humphrey Clinker," a philosophic youth who meets many adventures. Brought up in the work-house, put out by the parish as apprentice to a blacksmith, he was afterward employed as a hostler's assistant. Having been dismissed from the stable, and reduced to great want, he at length attracts the notice of Mr. Bramble, who takes him into his family as a servant. He becomes the accepted lover of Winifred Jenkins, and at length turns out to be a natural son of Mr. Bramble.

Clo'ten. A rejected lover of Imogen, in Shakespeare's play of "Cymbeline."

Clorinda, Jerusalem Delivered, Tasso. Clorinda, the heroine of this poem, is represented as an Amazon inspiring the most tender affection in others, especially in the Christian chief Tancred; yet she is herself susceptible of no passion but the love of military fame.

Clout, Collin. A name that Spenser applies to himself in the "Faery Queen" and "Shepherd's Calendar." Collin Clout also is introduced into Gay's pastorals.

Cœlebs. The hero of a novel by Hannah More, "Cœlebs in Search of a Wife."

Col-lean, May. The heroine of a Scottish ballad.

Cologne, The Three Kings of. A name given to the three magi who visited the infant Saviour, and whose bodies are said to have been brought by the Empress Helena from the East to Constantinople, whence they were transferred to Milan. Afterward, they were removed to Cologne and placed in the principal church of the city, where, says Cressy, "they are to this day celebrated with great veneration." Their names are commonly said to be Jaspas, Melchior, and Balthazar.

Comedy of Errors, Shakespeare. Twin brothers of exact likeness named Antipholus are served by attendant slaves named Dromio also of striking resemblance. The humor of the play lies in the complications that arise. The two brothers are lost at sea with their servants and are picked up by different vessels. After long separation they all reappear in Ephesus. There is great entanglement of plot until both brothers face each other in a trial before the duke and all is explained.

Co'mus. In Milton's poem entitled "Comus: a Masque," he is represented as a base enchanter, who endeavors, but in vain, to beguile and entrap the innocent by means of his enchantments.

Consuelo. The heroine of George Sand's novel of the same name, an impersonation of noble purity sustained amidst great temptations.

Co-phet-u-a. An imaginary African king, of whom a legendary ballad told that he fell in love with a beggar maid and married her. This ballad is found in Percy's "Reliques." Many poets have made use of the story. Tennyson has given us a modern version in "The Beggar Maid."

Cop'per-field, David. The hero of Dickens' novel of the same name. This is said to be Dickens' favorite among his works and somewhat autobiographic.

Corde'lia, King Lear, Shakespeare. The youngest of Lear's three daughters, and the one that truly loved him.

Cor'y-don. A shepherd in one of the "Idyls of Theocritus," and one of the Eclogues of Virgil. Used by Shakespeare and later poets to designate a rustic swain.

Cos'tard. A clown, in Shakespeare's "Love's Labors Lost," who apes the display of wit and misapplies, in the most ridiculous manner, the phrases and modes of combination in argument that were then in vogue.

Cov'er-ley, Sir Roger. One of the members of the imaginary club under whose direction the "Spectator" was professedly edited. He was a kind-hearted, simple-minded, type of an English Squire in the time of Queen Anne. He figures in thirty papers of the "Spectator."

Crabtree. A character in Smollett's novel, "The Adventures of Peregrine Pickle."

Crane, Ichabod. The name of a Yankee school-master, whose adventures are related in the "Legend of Sleepy Hollow," in Irving's "Sketch-book."

Crawley, Rawdon. The husband of Becky Sharp in "Vanity Fair," Thackeray's novel without a hero.

Creakle, Mr. A tyrannical and cruel school-master in Dickens' "David Copperfield."

Cres'si-da. The heroine of Shakespeare's play, "Troilus and Cressida," also the heroine of one of Chaucer's "Canterbury Tales."

Croaker. A character in Goldsmith's comedy, "The Good-natured Man."

Crum'mies, Vincent. A theatrical head of a theatrical family in Dickens' "Nicholas Nickleby."

Cru'soe, Rob'in-son. The hero of De Foe's great novel; a ship-wrecked sailor who for many years leads a solitary existence on an uninhabited island of the tropics, where he employed the most admirable ingenuity in providing for his daily wants.

Cuneiform Letters. Wedge-shaped letters which occur in old Persian and Babylonian inscriptions. This is probably the oldest form of writing.

Cymbeline. A mythical king of Britain and the hero of Shakespeare's play of the same name. Imogen, daughter of Cymbeline, king of Britain, married clandestinely Posthumus Leonatus; and Posthumus, being banished for the offense, retired to Rome. One day, in the house of Philario, the conversation turned on the merits of wives, and Posthumus bet his diamond ring that nothing could tempt the fidelity of Imogen. Through the villainy of Iachimo Cymbeline was forced to believe Imogen untrue. The villainy was in time disclosed and the beautiful character of Imogen revealed.

Cut'tle, Captain. A character in Dickens' "Dombey and Son," good-humored, eccentric, pathetic in his simple credulity.

Day'onet, Sir. In the romance "Le Mort d'Arthur" he is called the fool of King Arthur.

Dal-getty, Rittmaster Dugald. A soldier of fortune in Sir Walter Scott's "Legend of Montrose," distinguished for his pedantry, conceit, valor, vulgar assurance, knowledge of the world, greediness, and a hundred other qualities, making him one of the most amusing, admirable, and natural characters ever drawn by the hand of genius.

Dam'o-cles, a flatterer in the court of Dionysius of Syracuse. By way of answer to his constant praises of the happiness of kings, Dionysius seated him at a royal banquet, with a sword hung over his head by a single horsehair. In the midst of his magnificent banquet, Damocles, chancing to look upward, saw a sharp and naked sword suspended over his head. A sight so alarming instantly changed his views of the felicity of kings. The phrase signifies now evil foreboding or dread, a tantalizing torment.

Dam'on and Py'thas, or Ph'in'tias, two noble Pythagoreans of Syracuse, who have been remembered as models of faithful friendship. Pythias having been condemned to death by Dionysius, the tyrant of Syracuse, begged to be allowed to go home, for the purpose of arranging his affairs, Damon pledging his own life for the reappearance of his friend. Dionysius consented, and Pythias returned just in time to save Damon from death. Struck by so noble an example of mutual affection, the tyrant pardoned Pythias, and desired to be admitted into their sacred fellowship.

Dandle Dinmont. A jovial, true-hearted store-farmer, in Sir Walter Scott's "Guy Mannering."

Dantes'que. Dante-like—that is, a minute life-like representation of the infernal horrors, whether by words, as in the poet, or in visible form, as in Doré's illustrations of the "Inferno."

Daph'nis and Chio'e. A pair of lovers in the pastoral romance of the same name written by Longus in Greek prose in the Fourth Century.

Darby and Joan. A married couple said to have lived, more than a century ago, in the village of Healaugh, in the West Riding of Yorkshire, and celebrated for their long life and conjugal felicity. They are the hero and heroine of a ballad called "The Happy Old Couple," which has been attributed to Prior, but is of uncertain authorship. Timperley says that Darby was a printer in Bartholomew Close, who died in 1730, and that the ballad was written by one of his apprentices by the name of Henry Woodfall.

Da'res. One of the competitors at the funeral games of Anchises in Sicily, described in the fifth book of "Virgil's Æneid."

David. He was the uncle of King Arthur. St. David first embraced the ascetic life in the Isle of Wight, but subsequently removed to Menevia, in Pembrokeshire, where he founded twelve convents.

David, in Dryden's satire called "Absalom and Achitophel," represents Charles II.; Abalom, his beautiful but rebellious son, represents the Duke of Monmouth.

Davy, Henry IV., Shakespeare. The varlet of justice Shallow, who so identifies himself with his master that he considers himself half host half varlet. Thus

when he seats Bardolph and Page at table, he tells them they must take "his" good will for their assurance of welcome.

Dawfyd The Betrothed, Scott. "The one-eyed" freebooter chief.

Dawkins, Oliver Twist, Dickens. Known by the sobriquet of the "Artful Dodger." He is one of Fagin's tools. Jack Dawkins is a scamp, but of a cheery, buoyant temper.

Deans, Douce Davie. A poor herdsman at Edinburgh, and the father of Effie and Jeanie Deans, in Sir Walter Scott's novel, "The Heart of Mid-Lothian."

Deans, Effie. A beautiful but unfortunate character in Sir Walter Scott's "Heart of Mid-Lothian."

Deans, Jeanie. The heroine of "The Heart of Mid-Lothian," characterized by her kindness, sturdiness, and good sense. She journeys from Edinburgh to London, and obtains pardon for her sister Effie, condemned for child murder.

De'bon. One of the heroes who accompanied Brute to Britain. According to British fable, Devonshire is the county or share of Debon.

Decameron. A volume of one hundred tales told by Boccaccio. Ten ladies and their gentlemen assembled in one place agree that each shall tell one story every day for the entertainment of the rest. Thus ten stories daily are told for ten consecutive days. Chaucer borrowed the plan but reconstructed it for his "Canterbury Tales."

Dedlock, Sir Leicester. A character in **Black House**, by Charles Dickens. An honorable and truthful man but of such fixed ideas that no man could shake his prejudices. He had an idea that the one thing of greatest importance to the world was a certain family by the name of Dedlock. He loved his wife Lady Dedlock and believed in her implicitly. His pride had a terrible fall when he learned the secret of her life before her marriage and knew the terrible fact she had been hiding from him that she had a daughter.

Dedlock, Lady. Wife of Sir Leicester, beautiful, and apparently cold and heartless but suffering constant remorse. The daughter's name is Esther Summerson, the heroine of the novel.

Dedlock, Volumina. Cousin of Sir Leicester, a young lady of sixty, who had the disagreeable habit of entering into other people's business.

Deerslayer. The hero of a novel by the same name, by James Fenimore Cooper. A strong fine character, honorable, truthful, brave, without cultivation but without reproach. This character appears under different names in five of Cooper's novels. "The Deerslayer," "The Pathfinder," "The Last of the Mohicans," "The Pioneers," and "The Prairie."

Defarge, Mons. Tale of Two Cities, Dickens. Keeper of a wine shop in the Faubourg St. Antoine, in Paris. He is a bull-necked, implacable-looking man.

Defarge, Mde, his wife, a dangerous woman, everlastingly knitting.

Del'phi. A famous oracle of Apollo in Phocis, at the foot of Mount Parnassus. [Erroneously written Delphos by early English writers.]

Delphin Classics. For the use of the dauphin, son of Louis XIV. (1674-91), the writings of thirty-nine Latin authors were collected and published in sixty volumes. Notes and an index were added to each work. An edition of the Delphin classics was published in London in the year 1818.

Delphine. The title of a novel by Mme. de Staël and the name of its heroine.

Delphine, Madame. Old Creole Days, George W. Cable. A free quadroon connected with the splendor of La Fitts, the smuggler and patriot. Madame Delphine disowned her beautiful daughter Olive in order to assure to her the rights of a white woman.

Demetrius. Midsummer Night's Dream, Shakespeare. The young Athenian to whom Egeus promised his daughter Hermia in marriage.

De Profundis. "Out of the Depths." The 130th Psalm is so called from the first two words in the Latin version. In the Roman Catholic Liturgy it is sung when the dead are committed to the grave.

Deronda, Daniel. One of George Eliot's strongest character sketches in her novel by the same name.

Deserted Village. A poem by Goldsmith in which he describes rural England. He calls the village Auburn, but tells us it was the seat of his youth, every spot of which was dear and familiar to him. He pictures familiar persons, the preacher, the teacher, pastimes, and favorite haunts.

Desmas. The repentant thief is so called in "The Story of Joseph of Arimathea." Longfellow, in "The Golden Legend," calls him Dumachus. The impenitent thief is called Gestas, but Longfellow calls him Titus.

Dhu, Roderick. A highland chieftain and outlaw in Scott's poem "Lady of the Lake," cousin of Ellen Douglas, and also her suitor. He is slain by James-Fitz-James.

Dido. The daughter of Belus, King of Tyre, and the wife of Sichæus, whom her brother Pygmalion murdered for his riches. Not far from the Phœnician colony of Utica she built the city of Carthage. According to Virgil, when Æneas was shipwrecked upon her coast, in his voyage to Italy, she hospitably entertained him, fell in love with him, and, because he did not requite her passion, stabbed herself in despair.

Dies Iræ, the name generally given (from the opening words) to the famous medieval hymn on the Last Judgment. On account of the solemn grandeur of the ideas which it brings before the mind, as well as the deep and trembling emotions it is fitted to excite, it soon found its way into the liturgy of the Church. The authorship of the hymn has been ascribed to Gregory the Great, St. Bernard of Clairvaux, Umberto, and Frangipani, the last two of whom were noted as church-hymnists.

Diggon, Davie. A shepherd in the "Shepherd's Calendar," by Spenser. He tells Hobbinol that he drove his sheep into foreign lands, hoping to find better pasture; but he was amazed at the luxury and profligacy of the shepherds whom he saw there, and the wretched condition of the flocks.

Dimmesdale, Arthur. In Hawthorne's romance "The Scarlet Letter," a Puritan minister of great eloquence and spirituality, in Colonial New England, who secretly commits adultery and afterwards makes a public confession.

Dinah, Aunt. In Sterne's "Tristram Shandy." She leaves Mr. Walter Shandy £1,000, which he fancies will enable him to carry out all the schemes that enter into his head.

Dinah, Friendly. The Bashful Man, Moncrieff. Daughter of Sir Thomas Friendly.

Dinah. St. Ronan's Well, Scott. Daughter of Sandie Lawson, landlady of the Spa hotel.

Dinah. A character in Mrs. Stowe's "Uncle Tom's Cabin."

Ding'ley Hall. Pickwick Papers, Dickens. The home of Mr. Wardle and his family, and the scene of Tupman's love adventure with Miss Rachel.

Diomedes or Diomed. Iliad, Homer. King of Ætolia, in Greece, brave and obedient to authority. He survived the siege of Troy; but on his return home found his wife untrue to him. He fled to Italy and remained in exile.

Dirios, Count. One of Charlemagne's paladins, an ideal of valor, generosity, and truth.

Divine Comedy. Dante's immortal work, the "Divina Commedia," was written during the period 1300-18, and has been translated into English by Cary, Longfellow, and others. Dante called it a comedy only because the ending was not tragical, and the epithet divine was given to it in admiration. The name "Commedia" signifies lowly, written in the common tongue, or as some explain, "comedy" also signifies ending happily. The "Divine Comedy" is an epic poem, divided into three parts; Inferno, Purgatorio, Paradiso. The poet depicts a vision, in which he is conducted, first by Virgil (human reason) through hell and purgatory; and then by Beatrice (revelation), and finally by St. Bernard through the several heavens, where he beholds the true God. In all parts of the regions thus traversed, there arise conversations with noted personages. The deepest questions of philosophy and theology are discussed and solved; and the social and moral condition of Italy, with the corruptions of Church and State, are depicted with indignation. Fifty-two years after the poet's death, the Republic of Florence, set apart an annual sum for public lectures to explain the "Divine Comedy" to the people in one of the churches, and Boccaccio himself was appointed first lecturer.

Doctour of Phisikes, Tale. Is the Roman story of Virginius, given by Livy. Told by Chaucer in "Canterbury Tales."

Doctor Syntax. The hero of a work entitled "The Tour of Dr. Syntax in Search of the Picturesque." Doctor Syntax is a simple-minded, pious, henpecked clergyman, but of excellent taste and scholarship who left home in search of the picturesque. His adventures are told in eight-syllable verse by William Combe. "Dr. Syntax's Horse." Grizzle, all skin and bone.

Dods. The old landlady in Scott's novel called "St. Ronan's Well." An excellent character, a mosaic of oddities, all fitting together, and forming an admirable whole. She was so good a housewife that a cookery book of great repute bears her name.

Dodson, The Three Warnings, Mrs. Thrale. A youth called upon by Death on his wedding day. Death told him he must go with him. "With you I!" the hapless youth cried, "young as I am." Death then told him he would not disturb him yet, but would call again after giving him three warnings. When he was 80 years of age, Death called again. "So soon returned?" old Dodson cried. "You know you promised me three warnings." Death then told him that as he was "lame, and deaf, and blind," he had received his three warnings.

Dodson and Fogg. The lawyers employed by the plaintiff in the famous case of "Bardell v. Pickwick," in the "Pickwick Papers," by Charles Dickens.

Doeg, Absalom and Achitophel, Dryden. Doeg was Saul's herdsman, who had charge of his mules and asses. He told Saul that the priests of Nob had provided David with food; whereupon Saul sent him to put them to death, and eighty-five were ruthlessly massacred.

Dogberry and Verges. Two ignorant conceited constables, in Shakespeare's "Much Ado About Nothing."

Dolly Murry. A character in Crabbe's "Borough" who was devoted to playing cards. She died at the card table.

Dolly Varden, Barnaby Rudge, Dickens. Daughter of Gabriel Varden, locksmith. Dolly dressed in the Watteau style, and was lively, pretty, and bewitching.

Dolopatos, Sandabar's Parables. The Sicilian king, who placed his son Lucien under the charge of "seven wise masters." The son fell under the father's fury and was condemned to death. By astrology the prince discovered that if he could tide over seven days his life would be saved; so the wise masters amused the king with seven tales, and the king relented. The prince himself then told a tale which embodied his own history; the eyes of the king were opened, and the queen was condemned to death.

Dom'bey, Dombey and Son, Dickens. Mr. Dombey, a self-sufficient, purse-proud, frigid merchant, who feels satisfied there is but one Dombey in the world, and that is himself. When Paul was born, his ambition was attained, his whole heart was in the boy, and the loss of the mother was but a small matter. The boy's death turned his heart to stone.

Dombey, Florence. A motherless child, hungering and thirsting to be loved, but regarded with indifference by her father, who thinks that sons alone are worthy of regard.

Dombey, Little Paul. A pathetic child in Dickens' novel "Dombey and Son." He is a delicate, thoughtful boy, the only son of a rich and pompous London merchant.

Dom-dan'l-el. A cave in the region adjoining Babylon, the abode of evil spirits. By some traditions said to have been originally the spot where the prophet Daniel imparted instruction to his disciples. In another form, the Domdaniel was a purely imaginary region, subterranean, or submarine, the dwelling-place of genii and enchanters.

Do'mesday Book, or Doo'msday Book, the name of one of the oldest and most valuable records of England, containing the results of a statistical survey of that country made by William the Conqueror, and completed in the year 1086. The origin of the name—which seems to have been given to other records of the same kind—is somewhat uncertain; but it has obvious reference to the supreme authority of the book in doom or judgment on the matters contained in it.

Dom'nic'al Letter, or Sunday Letter, is one of the seven letters A, B, C, D, E, F, G, used in almanacs, etc., to mark the Sundays throughout the year. The first seven days of the year being marked in their order by the above letters in their order, then the following seven, and all consecutive sets of seven days to the end of the year are similarly marked; so that the 1st, 8th, 15th, 22d, etc., days of the year are all marked by A; and the 2d, 9th, 16th, 23d, etc., by B; and so on. The days being thus marked, it is evident that on whatever day the first Sunday of the year falls, the letter which marks it will mark all the other Sundays in the year, as the number of the letters and of the days in the week is the same. As the common year consists of fifty-two weeks and one day over, the dominical letters go backwards one day every common year. If the dominical letter of a common year be G, F will be the dominical letter for the next year.

Dom'nie, Sampson. Guy Mannerling, Scott. A village schoolmaster and scholar, poor as a church mouse, and modest as a girl. He cites Latin like a "porcus literarum," and exclaims "Prodigious!" He has fallen to the leeward in the voyage of life. He is no uncon-

mon personage in a country where a certain portion of learning is easily attained by those who are willing to suffer hunger and thirst in exchange for acquiring Greek and Latin.

Don Ad'ri-a-no de Ar-ma'do. A pompous, fantastical Spaniard in Shakespeare's "Love's Labor's Lost," "who has a mint of phrases in his brain." His language is fantastically out of proportion to the thought. He uses "examples suited only to the gravest propositions and impersonations, or apostrophes to abstract thoughts impersonated, which are, in fact, the natural language only of the most vehement agitations of the mind."

Don-a-tel'lo. The hero of Hawthorne's romance "The Marble Faun." He is a young Italian with a singular likeness to the Faun of Praxiteles. He leads an innocent but purely animal existence, until a sudden crime awakens his conscience and transforms his whole nature.

Don Cher'u-blm. The "Bachelor of Salamanca," in Le Sage's novel of this name; a man placed in different situations of life, and made to associate with all classes of society, in order to give the author the greatest possible scope for satire.

Don'e-gild, Man of Law's Tale, Chaucer. Mother of Alla, King of Northumberland, hating Constance, the wife of Alla, because she was a Christian, she put her on a raft with her infant son, and turned her adrift. When Alla returned from Scotland and discovered this cruelty of his mother, he put her to death. The tradition of St. Mungo resembles the "Man of Law's Tale" in many respects.

Don'et, the first grammar put into the hands of scholars. It was that of Donatus the grammarian, who taught in Rome in the Fourth Century, and was the preceptor of St. Jerome.

Don Giovan'ni. Mozart's best opera.

Don Ju'an is a legendary and mythical personage like Dr. Faustus. Don Juan is presented in the life of a profligate who gives himself up so entirely to the gratification of sense, especially to the most powerful of all the impulses, that of love, that he acknowledges no higher consideration, and proceeds to murder the man that stands between him and his wish, fancying that in so doing he had annihilated his very existence. He then defies that Spirit to prove to his senses his existence. The Spirit returns and compels Don Juan to acknowledge the supremacy of spirit, and the worthlessness of a merely sensuous existence. The traditions concerning Don Juan have been dramatized by Tirso de Molina; thence passed into Italy and France. Glück has a musical ballet of Don Juan, and Mozart has immortalized the character in his opera of "Don Giovanni." His adventures form the subject of a half-finished poem by Byron.

Don Quix'ote. The hero of a celebrated Spanish romance of the same name by Cervantes. Don Quixote is represented as "a gaunt country gentleman of La Mancha, full of genuine Castilian honor and enthusiasm, gentle and dignified in his character, trusted by his friends, and loved by his dependents," but "so completely crazed by long reading the most famous books of chivalry, that he believes them to be true, and feels himself called on to become the impossible knight-errant they describe, and actually goes forth into the world to defend the oppressed and avenge the injured, like the heroes of his romances." The fame of Cervantes will always rest upon this incomparable satire upon the foolish and extravagant romances of chivalry.

Doorm, Idyls of the King; Enid, Tennyson. An earl called "the Bull," who tried to make Enid his handmaid; but, when she would neither eat, drink, nor array herself in bravery at his bidding, "he smote her on the cheek"; whereupon Geraint slew the "russet-bearded earl" in his own hall.

Do'ra, David Copperfield, Dickens. The child-wife to David, affectionate and tender-hearted. She was always playing with her poodle and saying simple things to her "Dody." She could never be his helper but she looked on her husband with idolatrous love. When quite young she died.

Do-ras'tus. The hero of an old popular "history" or romance, upon which Shakespeare founded his "Winter's Tale." It was written by Robert Greene, and was first published in 1588, under the title of "Pandosto, the Triumph of Time."

Dorothea. The heroine of Goethe's celebrated poem of "Hermann und Dorothea."

Dorrit, Edward, and "Little," Little Dorrit, Dickens. The father of the Marshalsea prison and his interesting daughter. It is a fine picture of innocent, affectionate, child-life in the midst of the trying circumstances of a debtor's prison.

Dory, John. A character in "Wild Oats" or "The Strolling Gentleman," a comedy by John O'Keefe.

Do-the-Boys' Hall. Nicholas Nickleby, Dickens. A school for boys kept by a Mr. Squeers, a puffing, ignorant, over-bearing brute, whose system of education consisted of alternately beating and starving.

Doubling Castle. The castle of the giant Despair, in which Christian and Hopeful were incarcerated, but from which they escaped by means of the key called "Promise," which was able to open any lock in the castle.

Dous'ter-swiv'el. A German schemer, in Sir Walter Scott's novel of "The Antiquary."

Drac. A sort of fairy in human form, whose abode is the caverns of rivers. "Faire le drac," same as "Faire le diable." Irish, "Play the Puck"; English, "Play the deuce."

Dragon, A. The device on the royal banner of the old British kings. The leader was called the pendragon. Geoffrey of Monmouth says, "When Aurelius was king, there appeared a star at Winchester of wonderful magnificence and brightness, darting forth a ray, at the end of which was a flame in form of a dragon."

Drama of Exile, A. A poem by Elizabeth Barrett Browning (1844). The exile is Eve, driven out of paradise into the wilderness, Lucifer, Gabriel, and Christ are introduced into the poem, as well as Adam and Eve.

Dramatic Unities, The Three. One catastrophe, one locality, one day. These are Aristotle's unities of time, place, and action. To these the French have added a fourth, the unity of uniformity, i. e., in tragedy all the "dramatis personæ" should be tragic in style, in comedy comic, and in farce farcical.

Drap, Drayton. One of Queen Mab's maids of honor.

Draw'can-sir. The name of a blustering, bullying fellow in the celebrated mock-heroic play of "The Rehearsal," written by George Villiers, Duke of Buckingham, assisted by Sprat and others. He is represented as taking part in a battle, where, after killing all the combatants on both sides, he makes an extravagantly boastful speech. From the popularity of the character, the name became a synonym for a braggart.

Driv'er, Guy Mannering, Scott. Clerk to Mr. Pleydell, advocate, Edinburgh.

Dro'mio. The Brothers Dromio. The brothers exactly alike, who serve two brothers exactly alike, in Shakespeare's "Comedy of Errors," based on the "Menæchmi of Plautus."

Dry-as-Dust, The Rev. An imaginary personage who serves to introduce Scott's novels to the public.

Dudu. One of the three beauties of the harem, into which Juan, by the sultana's order, had been admitted in female attire.

Du-e's-sa. A foul witch, in Spenser's "Faery Queen," who under the assumed name of Fidessa, and the assumed character of a distressed and lovely woman, entices the Redcross Knight into the House of Pride. The knight having left the palace, is overtaken by Duessa, and drinks of an enchanted fountain, which paralyzes him, in which state he is attacked, defeated, and imprisoned by the giant Orgoglio. Duessa becomes the paramour of Orgoglio, who decks her out in gorgeous ornaments, gives her a gold and purple robe to wear, puts a triple crown on her head, and sets her upon a monstrous beast with seven heads. Prince Arthur slays Orgoglio and rescues the knight. Duessa is stripped of her gorgeous disguise and is found to be a hideous hag.

Duff, Jamie, Guy Mannering, Scott. The idiot boy attending Mrs. Bertram's funeral.

Dulcinea-del Toboso. A country girl whom Don Quixote courts as his lady love.

Du-maine. A lord attending on the King of Navarre, in Shakespeare's "Love's Labor's Lost."

Dun'can. (1) A king of Scotland immortalized in Shakespeare's tragedy of "Macbeth." Shakespeare represents him as murdered by Macbeth, who succeeds to the Scottish throne, but according to history he fell in battle. (2) A Highland hero in Scott's "Lady of the Lake."

Dunder, Sir David, of Dunder Hall. A conceited, whimsical old gentleman, who forever interrupts a speaker with "Yes, yes, I know it," or "Be quiet, I know it." "Ways and Means," by Colman.

Dun-dreary, Lord. A grotesque character in Taylor's comedy, "Our American Cousin"; noted for his aristocratic haughtiness of manner. The character is said to have been created by the actor Sothern.

Du'ran'dal', written also **Durandart, Durindana, and Durlindana.** The name of the marvelous sword of Orlando, the renowned hero of romance. It is said to have been the workmanship of the faeries, who endued

it with such wonderful properties that its owner was able to cleave the Pyrenees with it at a blow.

Du-ran-darte. A fabulous hero of Spain, celebrated in the ancient ballads of that country and in the romances of chivalry. Cervantes has introduced him, in "Don Quixote," in the celebrated adventure of the knight in the cave of Montesinos.

Dur'den, Dame. (1) The heroine of a popular English song. She is described as a notable housewife, and the mistress of five serving-girls and five laboring men. The five men loved the five maids. (2) A sobriquet playfully applied to Esther Summerson, the heroine of Dickens's "Bleak House."

Dur'ward, Quen'tin. The hero of Scott's novel of the same name; a young archer of the Scottish guard in the service of Louis XI. of France. When Liège is assaulted, Quentin Durward and the Countess Isabelle, who has been put into his charge, escape on horseback. The countess publicly refuses to marry the Duc d'Orléans, to whom she has been promised, and ultimately marries the young Scotchman.

Dwarf, The Black. A novel by Sir Walter Scott. The black dwarf is a fairy of the most malignant character; a genuine northern Duerger, and once held by the dalesmen of the border as the author of all the mischief that befell their flocks and herds. In Scott's novel the "Black Dwarf" is introduced under the "aliases" of Sir Edward Mauley; Elshander, the recluse; Cannie Elshie; and the Wise Wight of Mucklestane Moor.

Dwarf, Alberich. In the "Nibelungen Lied" the dwarf "Alberich" is the guardian of the famous "hoard" won by Siegfried from the Nibelungs. The dwarf is twice vanquished by the hero, who gets possession of his "Tarn-kappé" (cloak of invisibility).

Dwarf, Peter. An allegorical romance by Ludwig Tieck. The dwarf is a castle specter that advises and aids the family; but all his advice turns out evil, and all his aid productive of trouble.

Earnscliffe, Patrick. Black Dwarf, Scott. The young laird of Earncliffe.

Eblis. The name given by the Arabians to the prince of the apostate angels, whom they represent as exiled to the infernal regions for refusing to worship Adam at the command of the Supreme. Eblis alleged, in justification of his refusal, that he himself had been formed of ethereal fire, while Adam was only a creature of clay.

Eckhardt, The Faithful. A legendary hero of Germany, represented as an old man with a white staff, who, in Eisleben, appears on the evening of Maundy Thursday, and drives all the people into their houses, to save them from being harmed by a terrible procession of dead men, headless bodies, and two-legged horses, which immediately after passes by. Other traditions represent him as the companion of the knight, Tannhäuser, and as warning travelers from the Venusberg, the mountain of fatal delights in the old mythology of Germany. Tieck has founded a story upon this legend, which has been translated into English by Carlyle, in which Eckhardt is described as the good servant who perishes to save his master's children from the seducing fiends of the mountain. The German proverb, "Thou art the faithful Eckhardt; thou warnest everyone," is founded upon this tradition.

Eclecta. the "Elect" personified in "The Purple Island," by Phineas Fletcher. She is the daughter of Intellect and Voletta (free-will).

Ector, Sir. The foster-father of King Arthur, and lord of many parts of England and Wales. Father of Sir Kay, seneschal to King Arthur.

Edda. There are two religious codes, so called, containing the ancient Scandinavian mythology. One is in verse, composed in Iceland in the Eleventh Century, by Sæmund Sigfusson, "the Sage"; and the other in prose, compiled a century later by Snorri Sturluson, who wrote a commentary on the first edda.

E'den-hall, The Luck of. A painted goblet in the possession of the Musgrave family of Eden-hall, Cumberland, said to have been left by the faeries on St. Cuthbert's Well. The tradition runs, that the luck of the family is dependent on the safe keeping of this goblet. The German poet Uhland embodied the legend in a ballad, translated into English by Longfellow.

Edgar. Son to Gloucester, in Shakespeare's tragedy of "Lear." He was disinherited for his half-brother, Edmund.

Edgar or Edgar'do. Master of Ravenswood, in love with Lucy Ashton in Scott's "Bride of Lammermoor."

E'dith. The "Maid of Lorn" in Scott's "Lord of the Isles, who married Ronald when peace was restored after the battle of Bannockburn.

Edith, The Lady. Ivanhoe, Scott. Mother of Athelstane "the Unready" (thane of Coningsburgh).

Edith Granger. Daughter of the Hon. Mrs. Skewton, married to Colonel Granger of "Ours," who died within two years. Edith became Mr. Dombey's second wife, but the marriage was altogether unhappy.

Edith Plantagenet, The Lady. The Talsman, Scott. Called "The Fair Maid of Anjou," a kinswoman of Richard I., and attendant on Queen Berengaria.

Edmund. A bastard son of Gloucester in Shakespeare's tragedy of "King Lear."

Edward, Sir. The Iron Chest, Coleman. He commits a murder, and keeps a narrative of the transaction in an iron chest. Later, he trusts the secret to his secretary, Wilfred, and the whole transaction now became public.

Edward. Count Robert of Paris, Scott. Brother of Hereward, the Varangian guard. He was slain in battle.

Edwin. (1) The hero of Goldsmith's ballad entitled "The Hermit." (2) The hero of Mallet's ballad "Edwin and Emma." (3) The hero of Beattie's "Minstrel."

Edryn. Idylls of the King (Enid), Tennyson. Son of Nudd. A suitor for the hand of Enid and an evil genius of her father, who opposed him. Later, Edryn went to the court of King Arthur and became quite a changed man—from a malicious "sparrowhawk" he was converted into a courteous gentleman.

Egeus. Father of Hermia in Shakespeare's "Midsummer Night's Dream."

Egil. Brother of Weland, a great archer. The story related is similar to the William Tell story. There are many such stories. One day, King Nidung commanded him to shoot at an apple placed on the head of his own son. Egil selected two arrows, and being asked why he wanted two, replied, "One to shoot thee with, O tyrant, if I fail." Such stories, though probably not true to fact, are true to the spirit of patriotism, and are worth repeating.

Eglantine, Madame. The prioress in Chaucer's "Canterbury Tales," who was "full pleasant and amiable of port." She was distinguished for the ladylike delicacy of her manners at table, and for her partiality to "small hounds," and a peculiar mixture in her manner and dress of feminine vanity and slight worldliness, together with an ignorance of the world. She is noted for her partiality to lap-dogs, her delicate oath, "by Seint Eloy," her "entuning the service sweetly in her nose," and her speaking French "after the scole of Stratford atte Bowe."

Eglamour. (1) A character in Shakespeare's "Two Gentlemen of Verona," who is an agent of Silvia in her escape. (2) (Sir.) A valiant knight of the Round Table, celebrated in the romances of chivalry, and in an old ballad. (Written also "Eglamore.")

Egyptian Thief. A personage alluded to by the Duke in Shakespeare's "Twelfth Night." The reference is to the story of Thyamis, a robber-chief and native of Memphis.

Elfr. Harold the Dauntless, Scott. A Danish maid, who assumes boy's clothing, and waits on Harold "the Dauntless," as his page.

E-laine. A mythic lady in the romances of King Arthur's court. She is called "the lily maid of Astolat" in Tennyson's "Idylls of the King." For love of Sir Launcelot she died, and then at her request was borne on a barge to the castle of King Arthur, holding a lily in one hand and a letter to Launcelot in the other. According to Sir Thomas Malory, Elaine was sister of King Arthur by the same mother. She married Sir Nentres of Carlot, and was by King Arthur the mother of Mordred.

Elber-ich. In German hero legends, a dwarf who aided the Lombard Emperor Otton to win the daughter of the Soldan of Syria. He is identical with the Oberon of French and English fairy mythology.

Elbow. A constable, in Shakespeare's "Measure for Measure," modest and well-meaning, though of simple mind and the object of wit among those who are wiser but not better.

El Dorado. A name given by the Spaniards to an imaginary country, supposed, in the Sixteenth Century, to be situated in the interior of South America, between the rivers Orinoco and Amazon, and abounding in gold and all manner of precious stones. Expeditions were fitted out for the purpose of discovering this fabulous region; and, though all such attempts proved abortive, the rumors of its existence continued to be believed down to the beginning of the Eighteenth Century.

E-lec'tra. The daughter of Agamemnon and Clytemnestra, and the heroine of a tragedy by Sophocles and of another by Euripides. She saved the life of her

brother, Orestes, and afterwards assisted him to avenge their father's death. (See Agamemnon, Clytemnestra, and Orestes.)

Elf-land. The realm ruled over by Oberon, King of Faery.

Elgitha. Ivanhoe, Scott. A female attendant at Rotherwood on the Lady Rowena.

El'i-dure. A legendary King of Britain, fabled to have been advanced to the throne in place of his brother, Artegall, or Arthgallo. Returning to the country after a long exile, Artegall accidentally encountered his brother, who received him with open arms, took him home to the palace, and reinstated him in his old position, abdicating the throne himself. Wordsworth has taken the story of these two brothers for the subject of a poem.

El'm. The Messiah. Klopstock. The guardian angel of Libbeus the Apostle. Libbeus, the tenderest and most gentle of the apostles, at the death of Jesus also died from grief.

Elliott, Hobbie. There are seven by this name in the "Black Dwarf," by Sir Walter Scott. The farmer Elliott himself and his bride-elect, Grace Armstrong; Mrs. Elliott, Hobbie's grandmother; John and Harry, Hobbie's brothers; Lilius, Jean, and Arnot, Hobbie's sisters.

El'ope. Milton gives this name to the dumb serpent which gives no warning of its approach.

El'speth. (1) A character in Sir Walter Scott's "Antiquary." (2) An old servant to Dandie Dinmont, in Scott's "Guy Mannering."

Elsie. The daughter of Gottlieb, a farm tenant of Prince Henry of Hohenack, who offered her life as a substitute for the prince. She was rescued as she was about to make the sacrifice. Longfellow has told this story in "The Golden Legend."

Elzevier, or Elzevir. The name of a celebrated family of printers at Amsterdam, Leyden, and other places in Holland, whose beautiful editions were chiefly published between the years 1583 and 1680. These editions are unrivaled both for beauty and correctness. It is said that the Elzeviers generally employed women to correct the press, under the conviction that they would be less likely than men, on their own responsibility, to introduce alterations into the text. They printed in all about two thousand books, of which nine hundred sixty-eight were in Latin, forty-four in Greek, one hundred twenty-six in French, thirty-two in Flemish, eleven in German, ten in Italian, and twenty-two in Oriental languages. Rare editions of the Elzeviers are highly valued by collectors.

En'elye. The sister-in-law of "Duke Theseus," beloved by the two knights, Palamon and Arcyte.

E-mile. The hero of Jean Jacques Rousseau's novel of the same name, in which he has depicted his ideal of a perfectly educated young man.

E-mil'i-a. (1) A lady attending Hermione in Shakespeare's "Winter's Tale." (2) Wife to Iago, and waiting woman to Desdemona, in the tragedy of "Othello," a woman of thorough vulgarity and loose principles, united to a high degree of spirit, energetic feeling, strong sense, and low cunning. (3) The sweetheart of Peregrine Pickle in Smollett's novel "The Adventures of Peregrine Pickle."

Em'ly, Little. David Copperfield, Dickens. Daughter of Tom, the brother-in-law of Dan'el Peggotty, a Yarmouth fisherman, by whom the orphan child was brought up. David Copperfield and Em'ly were at one time playfellows. While engaged to Ham Peggotty (Dan'el's nephew), Little Em'ly runs away with Steerforth, a friend of David's, who was a handsome but unprincipled gentleman. Being subsequently reclaimed, she emigrates to Australia with Dan'el Peggotty and old Mrs. Gummidge.

Empyre'an. According to Ptolemy, there are five heavens, the last of which is pure elemental fire and the seat of Deity: this fifth heaven is called the empyrean (from the Greek "en-pur," in fire).

Endell, Martha. David Copperfield, Dickens. A poor girl, to whom Em'ly goes when Steerforth deserts her.

En-dym'i-on. A beautiful shepherd boy whom Diana kissed while he lay asleep on Mount Latmus. The story was made the subject of an English poem by Keats, in memory of his much-loved friend, the poet Shelley.

En'id. A mythical lady mentioned in a Welsh triad as one of the three celebrated ladies of Arthur's court—a beautiful picture of conjugal patience and affection. Her story is told in the "Mabinogion," and in Tennyson's "Idylls of the King." In the midst of an impure court she is the personification of purity.

Enigma. The origin of the enigma is doubtful. Gale thinks that the Jews borrowed their enigmatical

forms of speech from the Egyptians. The philosophy of the Druids was altogether enigmatical. In Nero's time the Romans were often obliged to have recourse to this method of concealing truth under obscure language.

Eolian Harp. **Baruch.** There is a Rabbinical story of the aerial harmony of the harp of David, which, when hung up at night, was played upon by the north wind.

Epigram. A short pointed or antithetical poem; or any short composition happily or antithetically expressed.

Epitaphs. **Boileau.** They were used by the ancient Jews, by the Athenians, the Romans, and most of the nations of antiquity: their date is referred in England to the earliest times. In the epitaphs of the ancients arose the epigram.

Epithalamium was a species of poem which it was the custom among the Greeks and Romans to sing in chorus near the bridal-chamber of a newly married couple. Anacreon, Stesichorus, and Pindar composed poems of this kind, but only scanty fragments have been preserved. Spenser's "Epithalamium," written on the occasion of his marriage, is one of the finest specimens of this kind of verse.

Eppe. **St. Ronan's Well, Scott.** One of the servants of the Rev. Josiah Gargill. In the same novel is Eppe Anderson, one of the servants at the Mowbray Arms, Old St. Ronan's, held by Meg Dodds.

Eppe. In George Eliot's "Silas Marner" the child of Godfrey Cass, brought up and adopted by Silas Marner, whose love transformed him from a miser into a tender, loving father.

Ep'i-men'i-des. A philosopher and poet of Crete, who probably lived in the Sixth or Seventh Century, B. C. He is said to have fallen asleep in a cave, when a boy, and to have remained in that state for fifty-seven years. On waking and going out into the broad daylight, he was greatly perplexed and astonished to find everything around him altered. But what was more wonderful still, during his long period of slumber, his soul, released from its fleshly prison, had been busily engaged in the study of medicine and natural philosophy; and when it again became incarnated, Epimenides found himself a man of great knowledge and wisdom. Goethe has written a poem on the subject, "Des Epimenides Erwachen." (See Klaus, Peter, and Winkle, Rip Van.)

Erl-king. King of the elves, who prepares mischief for children, and even deceives men with his seductions. He is said to haunt the Black Forest. Goethe has a ballad called "The Erl King."

Ermangarde of Baldringham, Lady. **The Betrothed, Scott.** Aunt of the Lady Eveline Berenger, "the betrothed."

Ermeine. The wife of Reynard, in the tale of "Reynard the Fox."

Ermina. The heroine of Tasso's "Jerusalem Delivered," who fell in love with Tancred. When the Christian army besieged Jerusalem, she dressed herself in Clorinda's armor to go to Tancred, but, being discovered, fled, and lived awhile with some shepherds on the banks of the Jordan. Meeting with Vafri'no, sent as a secret spy by the crusaders, she revealed to him the design against the life of Godfrey, and, returning with him to the Christian camp, found Tancred wounded. She cured his wounds, so that he was able to take part in the last great day of the siege.

Ernest, Duke. A poetical romance by Henry of Veldig (Waldeck), contemporary with Frederick Barbarossa. It is a mixture of Greek and Oriental myths and hero adventures of the Crusader.

Error. **Faery Queen, Spenser.** A monster who lived in a den in "Wandering Wood," and with whom the Red Cross Knight had his first adventure. She had a brood of 1,000 young ones of sundry shapes, and these cubs crept into their mother's mouth when alarmed, as young kangaroos creep into their mother's pouch. The knight was nearly killed by the stench which issued from the foul fiend, but he succeeded in "rafting" her head off, whereupon the brood lapped up the blood, and burst with satiety.

Esca-lus. An ancient and kindhearted lord, in Shakespere's "Measure for Measure," whom Vincentio, the Duke of Vienna, joins with Angelo as his deputy during a pretended absence on a distant journey.

Esca-nes. A lord of Tyre, in Shakespere's "Pericles."

Esmeralda. **Notre Dame de Paris, Victor Hugo.** A beautiful gipsy-girl, who, with tambourine and goat, dances in the "place" before Notre Dame.

Esmond, Henry. A cavalier and fine-spirited gentleman in reign of Queen Anne. Hero of Thackeray's novel by same name.

Es-sel'ta. The heroine of Dickens's novel of "Great Expectations."

Es-tot'i-land or Es-tot'i-land'-a. An imaginary region in America, near the Arctic Circle, referred to by Milton as "cold Estotiland," and variously fabled to have been discovered by Frisian fisherman in the Fourteenth Century, and by a Pole named John Scalve, in 1477.

Etzel, i. e., Attila. King of the Huns a monarch ruling over three kingdoms and more than thirty principalities: being a widower, he married Kriemhild, the widow of Siegfried. In the Nibelungen-Lied, where he is introduced, he is made very insignificant.

Euphrasy. **Paradise Lost, Milton.** The herb eye-bright: so called because it was once supposed to be efficacious in clearing the organs of sight. Hence, the archangel Michael purged the eyes of Adam with it, to enable him to see into the distant future.

Euphu-es. The principal character in Lyly's two famous works, entitled "Euphuës, or the Anatomy of Wit," and "Euphuës and His England." These works are remarkable for their pedantic and fantastical style, and for the monstrous and overstrained conceits with which they abound. Euphuës is represented as an Athenian gentleman, distinguished for the elegance of his person and the beauty of his wit, and for his amorous temperament and roving disposition. He gained a bosom friend, Philautus, and then robbed him of his lover, Lucilla. The lady is false to both, the friends are reconciled, and Euphuës returns to Athens and philosophy. The peculiarities of Lyly's style are a perpetual striving after alliteration and antithesis, and a most ingenious stringing together of similes. This book immediately became the rage in the court circles, and for many years was the court standard. From this book we get our words; euphuistic, euphuism, meaning an affected, bombastic style of language.

Eulalie, St. In the calendar of saints there is a virgin martyr called Eulalie. She was martyred by torture February 12, 308. Longfellow calls Evangeline the "Sunshine of St. Eulalie."

Eulen-spie'gel. The hero of a German tale, which relates the pranks and drolleries of a wandering cottager of Brunswick.

Evan Dhu M'Combich. **Waverley, Scott.** The foster-brother of M'Clvor.

Evan Dhu of Lochiel. **Legend of Montrose, Scott.** A Highland chief in the army of Montrose.

Evangeline. The heroine of Longfellow's poem. The subject of the tale is the expulsion of the inhabitants of Aca'dia (Nova Scotia) from their homes by order of George II., and the life-long wanderings of Evangeline in search of her lover, Gabriel. It is a story of a woman's love and devotion.

Evan'gelist. in Bunyan's "Pilgrim's Progress," represents the effectual preacher of the Gospel, who opens the gate of life to Christian.

Every Man in His Humor. A comedy by Ben Jonson. Every person in the play is liable to be duped by his special humor; Captain Bobadil's humor is bragging; Kiteley's is jealousy; Stephen's is stupidity; Knowell's is suspicion; Dame Kiteley's, like her husband's, is jealousy.

Evir-Alien. **Fingal, Ossian.** The white-armed daughter of Branno, an Irishman. "A thousand heroes sought the maid: she refused her love to a thousand. The sons of the sword were despised, for graceful in her eyes was Ossian."

Evelina. The heroine in a novel by the same name, by Miss Burney.

Excal'ibur. Meaning of the words: "liberated from the stone." The name of Arthur's far-famed sword, which he unfixed from a miraculous stone, though previously two hundred and one of the most puissant barons in the realm had singly been unable to extract it. In consequence of this remarkable feat, Arthur was chosen and proclaimed king by general acclamation. When about to die, he sent an attendant to throw the weapon into a lake hard by. Twice eluding the request, the squire at last complied. A hand and arm arose from the water, and caught the sword by the hilt, flourished it thrice, and then sank into the lake, and was seen no more. [Written also "Excalibor," "Escalibar," "Escalibor," and "Caliburn."]

Ezzelin, Sir. Lara, Byron (1814). The gentleman who recognizes Lara at the table of Lord Otho, and charges him with being Conrad the Corsair. A duel ensues, and Ezzelin is never heard of more. A serf used to say that he saw a huntsman one evening cast a dead body into the river which divided the lands of Otho and Lara, and that there was a star of knighthood on the breast of the corpse.

Eyre, Jane. The heroine of Charlotte Brontë's novel of the same name, a governess in the family of a Mr. Rochester, to whom she is finally married.

Faa, Gabriel. **Guy Mannering, Scott.** Nephew of Meg Merrilies. One of the huntsmen at Liddesdale.

Fab'laux. The metrical fables of the Trouvères, or early poets north of the Loire, in the Twelfth and Thirteenth Centuries. The word fable, in this case, is used very widely, for it includes not only such tales as "Reynard the Fox," but all sorts of familiar incidents of knavery and intrigue, all sorts of legends and family traditions. The fabliau of "Aucassin and Nicolette" is full of interesting incidents, and contains much true pathos and beautiful poetry.

Fadla Deen. The hypercritical Grand Chamberlain in Thomas Moore's poem "Lalla Rookh." Fadlaadeen's criticism upon the several tales which make up the romance are very racy and full of humor; and his crest-fallen conceit when he finds out that the poet was the prince in disguise is well conceived.

Faery or Feeble Land. The land of the fays or fairies. The chief fay realms are Av'alon, an island somewhere in the ocean. Oberon's dominions, situate "in wilderness among the holtis hairy"; and a realm somewhere in the middle of the earth, where was Pari Banou's palace.

Faery Queen. A metrical romance, in six books, of twelve cantos each, by Edmund Spenser. The hero, Prince Arthur, arriving at the court of Glouana, the Faery Queen, in Fairyland, finds her holding a solemn festival during twelve days. At the court there is a beautiful lady, for whose hand twelve most distinguished knights are rivals, and in order to settle their pretensions these twelve heroes undertake twelve separate adventures. The first book contains the legend of the Red Cross Knight, who is the allegorical representative of "Holiness," while his mistress Una represents true "Religion"; and the action of the knight's exploit shadows forth the triumph of Holiness over the enchantments and deceptions of Heresy. The second book is the legend of Sir Guyon. The third book is the legend of Britomart — a female champion — or "Chastity." Britomart is Diana, or Queen Elizabeth the Britoness. The fourth book is the legend of Cambel and Tri'amond (fidelity). The fifth book is the legend of Ar'tegale (justice). The sixth book is the legend of Sir Cal'idore (courtesy). The remaining books were never completed. The plan of the "Faery Queen" is borrowed from the Orlando Furioso, but the creative power of Spenser is more original, and his imagery more striking, than Ariosto's.

Fag. A lying servant to Captain Absolute in Sheridan's "Rivals."

Fa'gin. An old Jew in Dickens's "Oliver Twist," who employs young persons of both sexes to carry on a systematic trade of robbery.

Fain'all, Mr. and Mrs. Noted characters in Congreve's Comedy "The Way of the World."

Faineant, Le Noir (the Black Idler). In Sir Walter Scott's "Ivanhoe," a name applied to Richard Cour de Lion, in disguise, by the spectators of a tournament, on account of his indifference during a great part of the action, in which, however, he was finally victorious.

Falkland. In Godwin's novel called "Caleb Williams." He commits murder, and keeps a narrative of the transaction in an iron chest. Williams, a lad in his employ, opens the chest, and is caught in the act by Falkland. The lad runs away, but is hunted down. This tale, dramatized by Colman, is entitled "The Iron Chest."

Fairy. Fairy-lore of the nursery grows out of belief in Providence, the Good and the Bad. Good fairies are called fairies, elves, elle-folks, and fays; the evil ones are urchins, ouphes, ell-maids, and ell-women.

Fairy of the Mine. A malevolent being supposed to live in mines, busying itself with cutting ore, turning the windlass, etc., and yet effecting nothing.

Fair Maid of Perth. The title of a novel by Sir Walter Scott, and the name of the heroine.

Fairservice, Andrew. A shrewd Scotch gardener at Osbaldistone Hall in "Rob Roy," Sir Walter Scott.

Faithful. One of the allegorical personages in Bunyan's "Pilgrim's Progress," who dies a martyr before completing his journey.

Faithful, Jacob. The title and hero of a sea tale, by Captain Marryat (1835).

Faikenham Ghost. A ballad by Robert Bloomfield, author of "The Farmer's Boy." The ghost was a donkey.

Fakreddin's Valley. Over the several portals of bronze were these inscriptions: (1) "The Asylum of Pilgrims"; (2) "The Traveler's Refuge"; (3) "The Depository of the Secrets of All the World."

Fal'staff, Sir John. A famous character in Shakespeare's comedy of the "Merry Wives of Windsor," and in the first and second parts of his historical drama of "Henry IV." He is as perfect a comic portrait as was ever sketched. In the former play, he is represented as in love with Mrs. Ford and Mrs. Page, who make a butt and a dupe of him; in the latter, he figures as a soldier and a wit; in both he is exhibited as a monster of fat, sensual, mendacious, boastful, and cowardly. In Henry V. his death is described by Mrs. Quickly.

Fang. A sheriff's officer, in the second part of Shakespeare's "King Henry IV."

Fang, Charles Dickens's "Oliver Twist." A bullying insolent magistrate, who would have sent Oliver Twist to prison, on suspicion of theft, if Mr. Brownlow had not interposed.

Fa'ta Morgana. The name of a potent fairy, celebrated in the tales of chivalry, and in the romantic poems of Italy. She was a pupil of the enchanter Merlin, and the sister of Arthur, to whom she discovered the intrigue of his queen, Geneura, or Guinever, with Lancelot of the Lake. In the "Orlando Innamorato" of Boiardo, she appears at first as a personification of Fortune, inhabiting a splendid residence at the bottom of a lake, and dispensing all the treasures of the earth, but she is afterward found in her proper station subject to the all potent Demogorgon. Also, as sister to King Arthur and pupil of Merlin. She lived at the bottom of the lake and dispensed good fortune as she liked.

Fata Ale'na, Boiardo Orlando Innamorato (1495). Sister of Fata Morgana. She carried off Astolfo on the back of a whale to her isle, but turned him into a myrtle tree when she tired of him.

Fat Boy, The. A laughable character in Dickens's "Pickwick Papers"; a youth of astonishing obesity, whose employment consists in alternate eating and sleeping.

Fathom, Ferdinand, Count. The title of a novel by Shollet, and the name of its principal character, a complete villain, who proceeds step by step to rob his benefactors and finally dies in misery and despair.

Fat'-ma. (1) A female worker, in the story of "Aladdin," in the "Arabian Nights' Entertainments." (2) The last of the wives of Blue-Beard, and the only one who escaped being murdered by him.

Faust. The hero and title of a celebrated tragedy by Goethe, the materials of which are drawn in part from the popular legends of Dr. Faustus, a famous magician of the Sixteenth Century. Faust is a student who is toiling after knowledge beyond his reach, and who afterwards deserts his studies, and makes a pact with the Devil (Mephistopheles), in pursuance of which he gives himself up to the full enjoyment of the senses, until the hour of his doom arrives, when Mephistopheles reappears upon the scene, and carries off his victim as a condemned soul. This mystical personage dates back to the time of the Reformation.

Faus'tus. The hero of Marlowe's tragedy of the same name; represented as a vulgar sorcerer tempted to sell his soul to the Devil (Mephistopheles), on condition of having a familiar spirit at his command, the possession of earthly power and glory, and unlimited gratification of his sensual appetites, for twenty-four years; at the end of which time, when the forfeit comes to be exacted, he shrinks and shudders in agony and remorse, imploring yet despairing of the mercy of heaven. This has been the theme of many writers. It is the subject of an opera by Gounod.

Faw, Tibble, Redgauntlet, Scott. The ostler's wife, in Wandering Willie's tale.

Feast of Lemuria. The festival called "Lemuria" was held on the 9th, 11th, and 13th of May, and was accompanied with ceremonies of washing hands, throwing black beans over the head, etc., and the pronunciation nine times of these words: "Begone, ye specters of the house!" which deprived the Lemurie of their power to harm. Ovid describes the Lemurie in the fifth book of his "Fasti."

Feast of Lights. Christmas was called the "Feast of Lights" in the Western or Latin Church, because at this feast they used more candles or lights, symbolic of Christ, The Light of all lights.

Felton, Septimius. Septimius Felton is the mystical hero in Hawthorne's novel by the same name.

Fe-ne'la. A fairy-like creature, a deaf and dumb attendant on the Countess of Derby, in Sir Walter Scott's "Peveril of the Peak."

Fen-ton. A character in Shakespeare's "Merry Wives of Windsor," who woos the rich Anne Page for her money, but soon discovers inward treasures in her which quite transform him.

Fer Amorz. **Lalla Rookh, Thomas Moore.** Fer Amorz in Lalla Rookh is the young Cashmerian poet,

who relates poetical tales to Lalla Rookh, in her journey from Delhi to Lesser Buchar'ia. Lalla Rookh is going to be married to the young sultan, but falls in love with the poet. On the wedding morn she is led to her future husband, and finds that the poet is the sultan himself, who had gallantly taken this course to win the heart of his bride and beguile her journey.

Ferdinand. (1) A character in Shakespere's "Tempest." He is a son of the King of Naples, and falls in love with Miranda, the daughter of Prospero, a banished Duke of Milan. (2) King of Navarre, a character in "Love's Labor's Lost."

Ferrers, Endymion. The hero of Benjamin Disraeli's novel "Endymion."

Ferrex and Porrex. Two sons of Gorboduc, a mythical British king. Porrex drove his brother from Britain, and when Ferrex returned with an army he was slain, but Porrex was shortly after put to death by his mother. One of the first, if not the very first, historical plays in the English language was "Ferrex and Porrex," by Thomas Norton and Thomas Sackville.

Fib, Nymphidia, Drayton. One of the fairy attendants to Queen Mab.

Fidelie, Cymbeline, Shakespere. The name assumed by Imogen, when, attired in boy's clothes, she started for Milford Haven to meet her husband Posthumus.

Fidele. Subject of an elegy by Collins.

Fidessa, Faery Queen, Spenser. The companion of Sansfoy; but when the Red Cross Knight slew that "faithless Saracen," Fidessa turned out to be Duessa, the daughter of Falsheod and Shame. The sequel must be sought under the word Duessa.

Fine-Ear, Fairy Tales (Fortunio), Comtesse D'Aunoy. One of the seven attendants of Fortunio. He could hear the grass grow, and even the wool on a sheep's back. This is an old, old story. It is also found in Grimm's Fairy Tales. There the hero is "Fortunio." In the German tale "Fortunio" the fairy gave her a horse named Comrade, not only of incredible swiftness, but all-knowing, and endowed with human speech; she also gave her an inexhaustible turkey-leather trunk, full of money, jewels, and fine clothes. By the advice of Comrade, she hired seven gifted servants, named Strongback, Lightfoot, Marksman, Fine-ear, Boisterer, Tringuet, and Grugeon. Fortunio goes forth disguised as a warrior, meets her king and marries him.

Finetta, The Cinder Girl. A fairy tale by the Comtesse D'Aunoy. This is merely the old tale of Cinderella slightly altered.

Fin'gal, or Fin-gal'. A mythical hero, whose name occurs in Gaelic ballads and traditions, and in Macpherson's "Poems of Ossian."

Fires of St. John. A representative play of the school to which Sudermann belongs. The whole group of plays of which "The Fires of St. John" is a type register a movement of revolt against the conventionalities of life in Germany as Ibsen's dramas express the revolt against the conventionalities of life in Northern Europe.

Firmin, Philip. The hero of Thackeray's novel, "The Adventures of Philip."

Fle'ance. A son of Banquo, in Shakespere's tragedy of "Macbeth." The legend relates that after the assassination of his father he escaped to Wales, where he married the daughter of the reigning prince, and had a son named Walter. This Walter afterwards became lord high steward of Scotland, and called himself Walter the Steward. From him proceeded in a direct line the Stuarts of Scotland, a royal line which gave James VI. of Scotland, James I. of England. This myth has been seriously accepted by some as fact.

Fledgeby, Our Mutual Friend, Dickens. An overreaching cowardly sneak who pretends to do a decent business under the trade name of Pubsey & Co.

Flo-ren'ti-us. A knight whose story is related in the first book of Gower's "Confessio Amantis." He bound himself to marry a deformed hag, provided she taught him the solution of a riddle on which his life depended.

Florlan, The Foundling of the Forest, W. Diamond. Discovered in infancy by the Count de Valmont, and adopted as his own son. Florlan is light-hearted and volatile, but with deep affection, very brave, and the delight of all who knew him.

Flor'nel. A female character in Spenser's "Faery Queen," of great beauty, but so timid that she feared the "smallest monstrous mouse that creeps on floor," and was abused by everyone. She was noted for sweetness of temper amid great trials. The word Florimel signifies "honey-flower."

Flor'zel. A prince of Bohemia, in Shakespere's "Winter's Tale," in love with Perdita.

Flu-el'en. A Welsh captain, who is an amusing pedant, in Shakespere's "Henry V."

Flying Dutchman. A spectral ship, seen in stormy weather off the Cape of Good Hope, and considered ominous of ill-luck. Captain Marryat has taken this theme for his novel "The Phantom Ship."

Folk. Fairies, also called "people," "neighbors," "wights." The Germans have their Kleine volk (little folk), the Swiss their hill people and earth people. See Fairies.

Ford. Mr. and Mrs. Ford are characters in "The Merry Wives of Windsor." Mrs. Ford pretends to accept Sir John Falstaff's protestations of love, in order to punish him by her devices.

Fortin-bras. Prince of Norway, in Shakespere's tragedy "Hamlet."

Fortunatus. You have found Fortunatus's purse. Are in luck's way. The nursery tale of Fortunatus records that he had an inexhaustible purse. It is from the Italian fairy tales.

Fortunio's Horse. Comrade, not only possessed incredible speed, but knew all things, and was gifted with human speech. (See "Fine-ear.")

Forty Thieves. In the tale of Ali Baba (Arabian Nights' Entertainments). Represented as inhabiting a secret cave in a forest, the door of which would open and shut only at the sound of the magic word "Sesame," the name of a kind of grain. One day, Ali Baba, a wood-monger, accidentally discovered the secret, and made himself rich by carrying off gold from the stolen hoards. The captain tried several schemes to discover the thief, but was always outwitted by Morgia'na, the wood-cutter's female slave.

Foxley, Squire Matthew. Redgauntlet, Sir W. Scott. A magistrate who examines Darsie Latimer (Sir Arthur Darsie Redgauntlet), after he had been attacked by the rioters.

Francesco. The "Iago" of Massinger's "Duke of Milan."

Frank'en-stein. The hero in Mrs. Shelley's romance of the same name. As a young student of physiology he constructs a monster out of the horrid remnants of the churchyard and dissecting-room, and endues it, apparently through the agency of galvanism, with a sort of spectral and convulsive life. This existence, rendered insupportable to the monster by his vain craving after human sympathy, and by his consciousness of his own deformity, is employed in inflicting the most dreadful retribution upon the guilty philosopher. It is a parody on the creature man, powerful for evil, and the instrument of dreadful retribution on the student, who usurped the prerogative of the Creator.

Freeport, Sir Andrew. The name of one of the members of the imaginary club under whose direction the "Spectator" was professedly published. He is represented as a London merchant of great eminence and experience, industrious, sensible, and generous.

Friar Lawrence. The Franciscan monk who attempted to befriend the lovers in "Romeo and Juliet."

Friar's Tale, The. In The Canterbury Tales, Chaucer. An arch-deacon employed a sumpnour as his secret spy to find out offenders, with the view of exacting fines from them. In order to accomplish this more effectually, the sumpnour entered into a compact with the Devil, disguised as a yeoman. Those who imprecated the Devil were to be dealt with by the yeoman-devil, and those who imprecated God were to be the sumpnour's share.

Friar Tuck. Chaplain and steward of Robin Hood. Introduced by Sir Walter Scott in "Ivanhoe." He is a self-indulgent, combative Falstaff, a jolly companion to the outlaws in Sherwood Forest.

Friday. Robinson Crusoe's faithful man Friday pictured by De Foe.

Frol'lo, Archdeacon Claude. A noted character in Victor Hugo's "Notre-Dame de Paris," absorbed in a bewildering search after philosopher's stone.

Front de Bœuf. Ivanhoe, Sir W. Scott. A follower of Prince John of Anjou, and one of the knight's challengers.

Froth, Master. A foolish gentleman in Shakespere's "Measure for Measure." His name explains his character.

Fudge Family. A name under which the poet Moore satirized the absurdities of his traveling countrymen, who, having been long confined at home by the wars waged by Napoleon flocked to the continent after his defeat at Waterloo. The family is composed of a hack-writer and spy, his son, a young dandy of the first water, and his daughter, a sentimental damsel, and Madame Le Roy, in love with a Parisian linen-draper, whom she has mistaken for one of the Bourbons in disguise. There is also a tutor and "poor relation" of this

egregious family, who is an ardent Bonapartist and Irish patriot.

Funk, Peter. A person employed at petty auctions to bid on articles put up for sale, in order to raise their price; probably so called from such a name having frequently been given when articles were brought in.

Fus'bos, Utopia, Sir Thomas Moore. Minister of state to Artaxaminous, King of Utopia.

Fyrapel, Sir. The leopard, the nearest kinsman of King Lion, in the beast epic of "Reynard the Fox" (1498).

Ga'bri-el. The name of an angel described in the Scriptures as charged with the ministration of comfort and sympathy to man. In the New Testament, he is the herald of good tidings, declaring the coming of the predicted Messiah and of his forerunner. In Jewish and Christian tradition he is one of the seven archangels. Gabriel has the reputation, among the Rabbins, of being a distinguished linguist, having taught Joseph the seventy languages spoken at Babel. The Mohammedans hold him in even greater reverence than the Jews. He is called the spirit of truth, and is believed to have dictated the Koran to Mohammed. Milton posts him at "the eastern gate of paradise," as "chief of the angelic guards," keeping watch there. The Talmud describes him as the prince of fire, and as the spirit who presides over thunder.

Gads'hill. A companion of Sir John Falstaff, in the First Part of Shakespeare's "King Henry IV."

Galahad, Sir. A celebrated knight of the Round Table who achieved the quest of the Holy Grail. Tennyson has made him the subject of one of his idylls. In Malory he is also represented as the perfect knight clad in wonderful armor. He was the only knight who could sit in the "Siege Perilous" a seat reserved for the "knight without a flaw," who achieved the quest of the holy grail.

Gafapas. A giant of marvelous height in the army of Lucius, King of Rome. He was slain by King Arthur.

Gal-a-te'a. A sea nymph beloved by the Cyclops Polyphemus, who in his jealous rage destroyed her lover Acis with a rock torn from the mountain side. W. S. Gilbert in his drama "Pygmalion and Galatea" represents the artist as creating a piece of sculpture so perfect that he loves it with such a passion that he awakens it into life.

Ga-laph-ro-ne or Gal'a-fron. A king of Cathay and father of Angelica in Bojardo's "Orlando Innamorato" and Ariosto's "Furioso."

Gamp, Mrs. A nurse who is a prominent character in Dickens's novel of "Martin Chuzzlewit." She is celebrated for her constant reference to a certain Mrs. Harris, a purely imaginary person, for whose feigned opinions and utterances she professes the greatest respect, in order to give the more weight to her own.

Gan, Ga-ne-lo-ne, Ga-ne-lon or Ga'no. A count of Mayence, and one of the Paladins of Charlemagne, whom he betrayed at the battle of Roncesvalles; always represented as a traitor, engaged in intrigues for the destruction of Christianity. He figures in the romantic poems of Italy, and is placed by Dante in his "Inferno."

Gander-Cleugh. "Jolly-cliff," that mysterious place where a person makes a goose of himself, in "Tales of My Landlord," Sir Walter Scott.

Gan'elon. The character of Sir Ganelon was marked with spite, dissimulation, and intrigue, but he was patient, obstinate, and enduring. He loved solitude, disbelieved in the existence of moral good, and has become a by-word for a false and faithless friend. Dante has placed him in his "Inferno."

Garcia, Pedro. A mythical personage, of whom mention is made in the preface to Gil Blas, in which is related how two scholars of Salamanca discovered a tombstone with the inscription, "Here lies interred the soul of the Licentiate Pedro Garcia," and how, on digging beneath the stone, was found a leathern purse containing a hundred ducats.

Gareth. In Arthurian romance a knight of the Round Table, who was first a scullion in King Arthur's kitchen, but afterwards became champion of the Lady Linet, or Lynette, whose sister Lions, or Lyonors, he delivered from Castle Perilous.

Gargamelle's. The mother of Gargantua in Rabelais' celebrated romance of this name.

Gargan'tua. The hero of Rabelais' celebrated romance of the same name, a gigantic personage, about whom many wonderful stories are related. He lived for several centuries, and at last begot a son, Pantagruel, as wonderful as himself. The "Pleasant Story of the Giant Gargantua and of his Son Pantagruel," so satirized the monastic orders of his time that it was denounced by the spiritual authorities. Francis I., however, protected the author, and allowed him to print the third part of it in 1545.

Gargan'tuan. Enormous, inordinate, great beyond all limits. The word refers to the hero of the romance Gargantua.

Gargery, Mrs. Joe. Great Expectations, Dickens. Pip's sister. A virago, who kept her husband and Pip in constant awe. Joe Gargery, a blacksmith, married to Pip's sister. A noble-hearted, simple-minded young man, who loved Pip sincerely. Joe Gargery was one of nature's gentlemen.

Gaspar or Caspar (the white one), one of the three Magi or kings of Cologne. His offering to the infant Jesus was frankincense, in token of divinity.

Gaunt, Griffith. Hero of a novel by Charles Reade, of same title.

Gavotte's. Name given to a certain dance common among people in the upper Alps.

Ga'wain, Sir. A nephew of King Arthur, and one of the most celebrated knights of the Round Table; noted for his sagacity and wonderful strength. He was surnamed "the courteous." His brothers were Agravaine, Gaheris, and Gareth.

Ge'bir. A legendary Eastern prince, said to have invaded Africa and to have given his name to Gibraltar. He is the subject of a poem of the same name by Walter Savage Landor.

Gae'l-at-ley, Da'vie. The name of a poor fool in Sir Walter Scott's novel of "Waverley."

Gen'e-vieve'. (1) The heroine of a ballad by Coleridge. (2) Under the form "Genoveva," the name occurs in a German myth as that of the wife of the Count Palatine Siegfried, in the time of Charles Martel. Upon false accusations her husband gave orders to put her to death, but the servant intrusted with the commission suffered her to escape into the forest of Ardennes, where she lay concealed, until by accident her husband discovered her retreat, and recognized her innocence. This legend is often repeated in the folk tales of Germany. Tieck and Miller have given in modern versions and Raupach has made it the subject of a drama.

Genev'ra. A lady in Ariosto's "Orlando Furioso." Her honor is impeached, and she is condemned to die unless a champion appears to do combat for her. Her lover, Ariodantes, answers the challenge, kills the false accuser, and weds the dame. Spenser has a similar story in the "Faery Queen," and Shakespeare availed himself of the main incident in his comedy of "Much Ado About Nothing." From Italian romances "Genev'ra" has been taken as subject of "The Mistletoe Bough," by T. Haynes Bayley, and as both title and subject of a metrical tale by Samuel Rogers, in which he tells of a young Italian, who, upon her wedding-day, secreted herself, from motives of frolic, in a self-locking oaken chest, the lid of which shut down and held her captive. Many years afterward the chest was opened and revealed the skeleton.

Gen'li. Protecting spirits or tutelar deities analogous to the guardian angels of the Christian faith. The Persian and Indian genii had a corporeal form, which they could change at pleasure. They were not attendant spirits, but fallen angels. They were naturally hostile to man, though compelled sometimes to serve them as slaves. The Roman genii were guardian spirits, unseen but helpful.

Georg'ics. A bucolic poetical composition, treating of farm-husbandry and the tillage of the soil. The most famous example of the kind is that by Virgil, 31 B. C., in four books.

Ge-raint', Sir. One of the knights of the Round Table. His story is told in Tennyson's "Idylls of the King," under "Geraint and Enid."

Ger'aldine. A name frequently found in romantic poetry. The name is said to have been adopted from the heroine, connected with Surrey, whose praises he celebrates in a famous sonnet, and who has been the occasion of much controversy among his biographers and critics. There is no doubt that the lady called Geraldine was an Irish lady named Elizabeth Fitzgerald, the daughter of Gerald Fitzgerald. This sonnet led to the adoption of the name into the class of romantic names.

Gertrude of Wyoming. Heroine of a poem by Thomas Campbell.

Gla'ur. Byron's tale called "The Giaour" is represented as told by a fisherman, a Turk, who had committed a crime which haunted him all his life. See Hassan.

Ges'ta Romano'rum. Compiled by Pierre Bercheur, prior of the Benedictine Convent of St. Eloi, Paris. A collection of old romances which has been the storehouse for our best story writers. Shakespeare, Spenser, Gower, and many later writers have gone to this source. It took its present form in England about the beginning of the Fourteenth Century, the foundation

coming from Roman writers to which were added moralizing paragraphs and sometimes other religious and mystical tales.

Gibbie, Goose. A half-witted boy in Scott's "Old Mortality."

Gibbie, Sir. A simple-hearted, fine character in George Macdonald's novel by the same name.

Giant Despair. Pilgrim's Progress, Bunyan. A giant who is the owner of Doubting Castle, and who, finding Christian and Hopeful asleep upon his grounds, takes them prisoners, and thrusts them into a dungeon.

Giant Grim. A giant who seeks to stop the march of the pilgrims to the Celestial City, but is slain in a duel by Mr. Great-heart, their guide. **Giant Slay-good.** A giant slain in a duel by Mr. Great-heart.

Gil Blas. The title of a famous romance by LeSage, and the name of its hero. The tale is full of adventures and Gil Blas is represented as squire to a lady and brought up by his uncle, canon Gil Peres. Gil Blas went to Dr. Godinez's school of Oviedo and gained the name of being a great scholar. He had fair abilities and good inclinations, but was easily led astray by his vanity, full of wit and humor, but lax in his morals. Duped at first, he afterwards played the same devices on others. As he grew in years, his conduct improved, and when his fortune was made he became an honest man.

Gilpin, John. A citizen of London, and "a train-band captain," whose adventures are related in Cowper's humorous poem, "John Gilpin's Ride." After being married twenty years his wife proposed a holiday, they agreed to make a family party, and dine at the Bell, at Edmonton. Mrs. Gilpin, her sister, and four children went in the chaise, and Gilpin promised to follow on horseback. The horse being fresh, began to trot, and then to gallop, and John a bad rider grasped the mane with both his hands. On went the horse, off flew John Gilpin's cloak, together with his hat and wig. He flew through Edmonton, and never stopped till he reached Ware, when his friend the calendar, furnished him with another hat and wig, and Gilpin galloped back again, till the horse stopped at his house in London.

Glaucus. A fisherman of Boeotia who has become the fisherman's patron deity.

Glaucus, son of Hippolytus. Being smothered in a tub of honey, he was restored to life by Esculapion.

Glo'ri-a-na. In Spenser's "Faery Queen," the "greatest glorious queen of Faery land."

Gloss. In Biblical criticism, an explanation of purely verbal difficulties of the text, to the exclusion of those which arise from doctrinal, historical, ritual, or ceremonial sources. From an early period, these verbal difficulties were the object of attention, and the writers who devoted themselves to the elucidation were called "glossators," and their works "glossaria."

Glumdalca, Tom Thumb, Feilding. Queen of the giants, captive in the court of King Arthur.

Glum-dal-cilch. Gulliver's Travels, Swift. A girl nine years old, and only forty feet high. Being such a "little thing," the charge of Gulliver was committed to her during his sojourn in Brobdingnag.

Glumms, Peter Wilkins, Robert Fulbeck. The male population of the imaginary country Nornabdsgrutt, visited by Peter Wilkins. Both males and females had wings which served both for flying and for clothes.

Gnome. (1) A pithy and sententious saying commonly in verse, embodying some moral sentiment or precept. The gnome belongs to the same generic class with the proverb; but it differs from a proverb in wanting the common and popular acceptance. The use of gnomes prevailed among all the early nations, especially the Orientals, and the literatures of most countries abound with them. In the Bible, the book of Proverbs, part of Ecclesiastes, and still more the apocryphal book of Ecclesiasticals, present numberless illustrations of the highest form of this composition. (2) In ancient times the name gnome represented one of the classes of imaginary beings which are supposed to be the presiding spirits in the mysterious operations of nature in the mineral and vegetable world.

Gobbo, Launcelot. A clown in Shakespere's "Merchant of Venice." He left the service of Shylock the Jew for that of Bassanio a Christian. Launcelot Gobbo is one of the famous clowns of Shakespere.

Gobbo, Old. Father to Launcelot Gobbo in "Merchant of Venice." He was stone blind.

Goblins and Bogles. Familiar demons of popular superstition, a spirit which lurks about houses. It is also called hobgoblin. Goblin is used in a serious sense by Shakespere in "Hamlet," where the ghost is supposed to be a "spirit of health or goblin damned."

God Save the King. The national anthem of Great Britain, and by adoption that of Prussia and the

German states. Its words are apparently imitated from the Domine Salvum of the Catholic Church service.

Gold Bug, The. Found in Poe's most successful tale, by same name. Scene laid on Sullivan's Island, near Charleston, S. C., and the cipher made to concern Captain Kidd's buried treasure.

Golden Legend, The. The title of an ecclesiastical work in 177 sections, dating from the Thirteenth Century, written by one James de Voragine, a Dominican monk, and descriptive of the various saints' days in the Roman Calendar. It is deserving of study as a literary monument of the period, and as illustrating the religious habits and views of the Christians of that time.

Gold of Nibelungen, The. Unlucky wealth. "To have the gold of Nibelungen" is to have a possession which seems to bring a curse with it. Icelandic Edda.

Go'neril. The oldest of the three daughters to King Lear, in Shakespere's tragedy. Having received her moiety of Lear's kingdom, the unnatural daughter first abridged the old man's retinue, then gave him to understand that his company was not wanted and sent him out a despairing old man to seek refuge where he could find it. Her name is proverbial for filial ingratitude.

Go'za'lo. An honest old counselor in Shakespere's "Tempest," a true friend to Prospero.

Goody Blake. A character in Wordsworth's poem entitled "Goody Blake and Harry Gill." A farmer forbids old Goody Blake to carry home a few sticks, which she had picked up from his land, and in revenge she invokes upon him the curse that he may "never more be warm"; and ever after "his teeth they chatter, chatter still."

Goody Two-Shoes. The name of a well-known character in a nursery tale by Oliver Goldsmith. Goody Two-Shoes was a very poor child, whose delight at having a pair of shoes was unbounded. She called constant attention to her "two shoes" which gave her the name.

Gordian Knot. A great difficulty. Gordius, a peasant, chosen King of Phrygia, dedicated his wagon to Jupiter, and fastened the yoke with a rope so ingeniously that no one could untie it. Alexander was told that "whoever undid the knot would become king" and he cut the knot with his sword.

Gra'ci-o-sa. A princess in an old and popular fairy tale—the object of the ill-will of a step-mother named Grognon, whose malicious designs are perpetually thwarted by Percinet, a fairy prince, who is in love with Graciosa.

Graal, Grail, or Greal (a word derived probably from the old French, perhaps Celtic, "gréal"). In the legends and poetry of the Middle Ages, we find accounts of the Holy Graal—San Graal—a miraculous chalice, made of a single precious stone, sometimes said to be an emerald, which possessed the power of preserving chastity, prolonging life, and other wonderful properties. It is fabled to have been preserved and carried to England by Joseph of Arimathea. It remained there many years, an object of pilgrimage and devotion, but at length it disappeared, one of its keepers having violated the condition of strict virtue in thought, word, and deed, which was imposed upon those who had charge of it. The quest of this cup forms the most fertile source of adventures to the knights of the Round Table. The story of the Sangreal or Sangraal was first written in verse by Troyes (end of the Tenth Century), thence into Latin, and finally turned into French prose by order of Henry III. It commences with the genealogy of our Saviour, and details the whole Gospel history; but the prose romance begins with Joseph of Arimathea. Its quest is continued in Percival, a romance of the Fifteenth Century. The legend of the graal was introduced into German poetry in the Thirteenth Century by Wolfram von Eschenbach, who took Guot's tales of Percival and Titarel as the foundation of his poem, but filled it with deep allegorical meanings.

Gradgrind. A hardware merchant in Dickens's "Hard Times." He is a man of hard facts and cultivates the practical. His constant demand in conversation is for "facts." He allows nothing for the weakness of human nature, and deals with men and women as a mathematician with his figures.

Gradgrind, Mrs. Wife of Thomas Gradgrind. A little thin woman, always taking physic, without receiving from it any benefit.

Gradgrind, Tom. Son of the above, a sullen young man, much loved by his sister.

Grandison, Louise. A faithful daughter and sister. **Grandison, Sir Charles.** The hero of Richardson's novel "The History of Sir Charles Grandison." Designed to represent his ideal of a perfect hero—a union of the good Christian and the perfect English gentleman.

Gratia'no'. A friend to Antonio and Bassano in Shakespeare's "Merchant of Venice." He "talks an infinite deal of nothing, more than any man in Venice." (2) Brother to Brabantio, in Shakespeare's tragedy of "Othello." (3) A character in the Italian popular theater called "Commedia dell'Arte." He is represented as a Bolognese doctor, and has a mask with a black nose and forehead and red cheeks.

Gray, Auld Rob'in. The title of a popular Scotch ballad written by Lady Anne Lindsay, and name of its hero. Auld Robin Gray was a good old man married to a poor young girl whose lover was thought to have been lost at sea, but who returns to claim her hand a month after her marriage.

Great-heart, Mr. In Bunyan's "Pilgrim's Progress," the guide of Christian's wife and children upon their journey to the Celestial City.

Gre'mio. In Shakespeare's "Taming of the Shrew," an old man who wishes to wed Bianca.

Grendel, Beowulf. An Anglo-Saxon epic. The half-brute, half-man monster from which Beowulf delivered Hrothgar, King of Denmark. Night after night Grendel crept stealthily into the palace called Heorot, and slew sometimes as many as thirty of the inmates. At length Beowulf, at the head of a mixed band of warriors, went against it and slew it.

Griffin. A chimerical creature, which the fancy of the moderns has adopted from that of the ancient world. The Griffin is variously described and represented, but the shape in which it most frequently appears is that of an animal having the body and legs of the lion with the beak and wings of the eagle. Like all other monsters, griffins abound in the legendary tales of the Teutonic nations. (Same as Gryphon.)

Griffin-feet. Fairy Tales, Comtesse D'Aunoy. The mark by which the Desert Fairy was known in all her metamorphoses.

Grimalkin. A cat, the spirit of a witch. Any witch was permitted to assume the body of a cat nine times.

Grimwig. Oliver Twist, Dickens. An irascible old gentleman, who hid a very kind heart under a rough exterior. He was always declaring himself ready to "eat his head" if he was mistaken on any point on which he passed an opinion.

Gri-selda, The Patient. A lady in Chaucer's "Clerk of Oxenford's Tales" immortalized by her virtue and her patience. The model of womanly and wifely obedience, she comes victoriously out of cruel and repeated ordeals. The story of Griselda is first told in the Decamerone. Boccaccio derived the incidents from Petrarch, who seems to have communicated them also to Chaucer, as the latter refers to Petrarch as his authority.

Grub Street, London, is thus described in Dr. Johnson's Dictionary: "Originally the name of a street near Moorfields, in London, much inhabited by writers of small histories, dictionaries, and temporary poems, whence any production is called Grub Street." The name in its appropriate sense, was freely used by Pope, Swift, and others.

Grundy. "What will Mrs. Grundy say?" What will our rivals or neighbors say? The phrase is from Tom Morton's "Speed the Plough," but "Mrs. Grundy" is not introduced into the comedy as one of the "dramatis personæ." The solicitude of Dame Ashfield, in this play, as to "what will Mrs. Grundy say," has given the latter great celebrity, the interrogatory having acquired a proverbial currency.

Gu'drun, Edda, Samund Sigfusson. A lady married to Sigurd by the magical arts of her mother; and on the death of Sigurd to Atli (Attila), whom she hated for his cruelty, and murdered. She then cast herself into the sea, and the waves bore her to the castle of King Jonakun, who became her third husband.

Gu'drun. North-Saxon poem. A model of heroic fortitude and pious resignation. She was the daughter of King Hettel (Attila), and the betrothed of Herwig, King of Heligoland.

Guen'dolen. A fairy whose mother was a human being.

Gull'den-steren. The name of a courtier in Shakespeare's tragedy, Hamlet.

Gull'iv-ver, Lemuel. The imaginary hero of Swift's celebrated satirical romance known as "Gulliver's Travels." He is represented as being first a surgeon in London, and then a captain of several ships. After having followed the sea for some years he makes in succession four extraordinary voyages.

Guppy, Mr. Bleak House, Dickens. A weak, commonplace youth, who has the conceit to propose to Esther Summerson, the ward in Chancery.

Gurth. Ivanhoe, Sir Walter Scott. The swine-herd of Rotherwood.

Gur'ton, Gammer. The heroine of an old English comedy, long supposed to be the earliest in the language, but now ranked as the second in point of time.

Guy'on. The impersonation of Temperance or Self-government in Spenser's "Faery Queen." He destroyed the witch Acrasia, and her bower, called the "Bower of Bliss." His companion was Prudence. "Sir Guyon represents the quality of Temperance in the largest sense: meaning the virtuous self-government which holds in check not only the inferior sensual appetites but also the impulses of passion and revenge."

Guy, Sir, Earl of Warwick. The hero of a famous English legend, which celebrates the wonderful achievements by which he obtained the hand of his lady-love, the Fair Felice, as well as the adventures he subsequently met with in a pilgrimage to the Holy Land. He is reputed to have lived in the reign of the Saxon King Athelstan. The romance of Sir Guy, mentioned by Chaucer in the "Canterbury Tales," cannot be traced further back than the earlier part of the Fourteenth Century. His existence at any period is very doubtful.

Guy Mannerling. The second of Scott's historical novels. It contains the excellent characters, Dandy Dinmont, the shrewd and witty counselor Pleydell, the desperate seabeaten villainy of Hatteraick, the uncouth devotion of that gentless of all pedants poor Domine Sampson, and the savage crazed superstition of the gypsy-dweller in Dernelough.

Ha'dad. One of the six Wise Men led by the guiding star to Jesus.

Ha'gen. The murderer of Siegfried, in the German epic, the "Nibelungenlied." He is a pale-faced dwarf, who knows everything and whose sole desire is mischief. After the death of Siegfried he seized the "Nibelung hoard," and buried it in the Rhine, intending to appropriate it. Kriemhild invited him to the court and had him slain.

Hal-dee'. A beautiful young Greek girl in Byron's poem, "Don Juan." She is called the "beauty of the Cyclades."

Ha'kim. The Talisman, Scott. Saladin, in the disguise of a physician, visited Richard Cour de Lion in sickness: gave him a medicine in which the "talisman" had been dipped, and the sick king recovered.

Ham'let. In Shakespeare's tragedy of the same name, son to the former, and nephew to the reigning King of Denmark. The ghost of his father appears to him, and urges him to avenge his murder upon his uncle. But the prince feigns madness, and puts off his revenge from day to day by "thinking too precisely on the event." Hamlet's mother had married Claudius, King of Denmark, after the death of her former husband. Claudius prepared poisoned wine, which he intended for Hamlet: but the queen, not knowing it was poisoned, drank it and died. Hamlet, seeing his mother fall dead, rushed on the king and killed him almost by accident, and is killed himself by a poisoned rapier in the hands of Laertes. (See "Ophelia.")

Hans von Rip'pach. A fictitious personage, to ask for whom was a joke among German students.

Hans wurst. A pantomimic character formerly introduced into German comedies. It corresponds to the Italian "Macaroni," the French "Jean Potage," and the English "Jack Pudding."

Hard'cas'le, Mr. A character in Goldsmith's comedy of "She Stoops to Conquer," represented as proxy and hospitable.

Hardeastle, Mrs. A very "genteel" lady indeed. Tony Lumpkin is her son by a former husband.

Hard Times. A novel by Dickens, dramatized under the title of "Under the Earth" or "The Sons of Toil." Bounderby, a street Arab, raised himself to banker and cotton prince. When past fifty years of age, he married Louisa, daughter of Thomas Gradgrind. The bank was robbed, and Bounderby believed Stephen Blackpool to be the thief, because he had dismissed him from his employ. The culprit was Tom Gradgrind, the banker's brother-in-law, who escaped out of the country. In the dramatized version, the bank was not robbed, but Tom removed the money to another drawer for safety.

Har'le-quin. The name of a well-known character in the popular extemporized Italian comedy.

Har'lowe, Cla-ris'sa. The heroine of Richardson's novel entitled "The History of Clarissa Harlowe." In order to avoid a marriage urged upon her by her parents, she casts herself on the protection of Lovelace, who grossly abuses the confidence thus reposed in him. He subsequently proposes to marry her, but Clarissa rejects the offer.

Har'old, Childe. Childe Harold's Pilgrimage, Byron. A man of gentle birth and peerless intellect, who exhausted all the pleasures of youth and early

manhood, and loathed his fellow-bacchanals and the "laughing dames in whom he did delight." To banish his disgust and melancholy, he determines to travel; but, though he traverses some of the fairest portions of the earth, the feelings of bitterness and desolation still prey upon him.

Haroun-al-Raschid. Caliph of the Abbasside race, contemporary with Charlemagne, and, like him, a patron of literature and the arts. Many of the tales in the "Arabian Nights" are placed in the caliphate of Haroun-al-Raschid.

Har-pa'gon. The hero of Molière's comedy of "L'Avare," represented as a wretched miser.

Har-pl-er or Har-per. Some mysterious personage referred to by the witches in Shakespeare's tragedy, "Macbeth."

Hass'an. The Giaour, Byron. Caliph of the Ottoman Empire, noted for his hospitality and splendor. In his seraglio was a beautiful young slave named Leila, who loved a Christian called the Gia'ur. Leila is put to death by an emir, and Hassan is slain by the Giaour. Caliph Hassan has become the subject of popular romance.

Hassan, Al. The Arabian emir of Persia, father of Hinda, in Moore's "Fire-worshippers."

Hat'to. In German legend, an Archbishop of Mentz in the Tenth Century, who, for his hard-heartedness to the poor in time of famine, was eaten by mice in the "Mouse Tower" on an island in the Rhine near Bingen. Robert Browning has made this legend the subject of a poem.

Have'lock the Dane. A fisherman, known as Grim, rescued an infant named Havelock, whom he adopted. This infant was the son of the King of Denmark, and when the boy was restored to his royal sire Grim was laden with gifts. He built the town which he called after his own name. This is the foundation of the mediæval tales about "Havelock the Dane."

Hazlewood, Sir Robert. The old baronet of Hazlewood.

Hazlewood, Charles. Guy Manning, Scott. Son of Sir Robert. In love with Lucy Bertram, whom he marries.

Heart of Mid-lo'thi-an. The tolbooth, or old jail of Edinburgh, Middleton being the old name of Edinburgh County. It is the title of one of Sir Walter Scott's novels.

Heep, Uri'ah. David Copperfield, Dickens. A detestable character who, under the garb of the most abject humility, conceals a diabolic malignity. Mrs. Heep, Uriah's mother, was a character equally to be despised for her hypocritical assumption of humility.

Hef's or Hela's Kingdom. Frequent allusions in Norse poetry to the kingdom of the lower world. Many of its descriptions are said to be a source from which our Puritan ancestors derived images of the region of the unhappy dead.

Helen-a. (1) A lady in Shakespeare's "Midsummer Night's Dream," in love with Demetrius. (2) The heroine of Shakespeare's "All's Well that Ends Well," in love with Bertram, who marries her against his will and leaves her, but is finally won by the strength of her affection. (3) A character in an old popular tale, reproduced in Germany by Tieck.

Her'mann and Dor'o'-the'a. The hero and heroine of Goethe's poem of the same name.

Her'megild. Canterbury Tales, Chaucer. The wife of the lord-constable of Northumberland. She was converted by Constance, but was murdered by a knight. Hermegild at the bidding of Constance restored sight to a blind Briton.

Her'mi-a. A lady in Shakespeare's "Midsummer Night's Dream," in love with Lysander.

Her-mi'o-ne. The heroine of the first three acts of Shakespeare's "Winter's Tale."

Her-na'ni or Er-na'ni. The hero of Victor Hugo's tragedy of the same name, and of Verdi's opera, founded on the play. He was a Spanish noble in revolt against the Emperor Charles V. and killed himself from a high sense of honor.

He'ro and Le-an'der. A pair of lovers in a late Greek poem. Hero dwelt on the Hellespont and Leander, who lived opposite, swam the strait to visit her. He was drowned, and Hero, in grief, cast herself into the sea.

Hex'am, Lizzie. The heroine of Dickens's novel, "Our Mutual Friend."

Hiawa'tha. A mythical person believed by the North American Indians to have been sent among them to clear their rivers, forests, and fishing-grounds, and to teach them the arts of peace. When the white man came then Hiawatha knew that the time of his departure was at hand, when he must go "to the kingdom of Ponemah, the land of the Hereafter." Longfellow gathered these myths from the Algonquin legends

Hil'de-brand. The nestor of German romance, a magician and champion.

Hil'da. A New England girl of the most sensitive delicacy and purity of mind, in Hawthorne's romance, "The Marble Faun." She is an artist, living in Rome, and typifies perhaps the conscience.

Hil'desheim. In an old German legend, the monk of Hildesheim, doubting how a thousand years with God could be "only one day," listened to the melody of a bird, as he supposed, for only three minutes, but found that he had been listening to it for a hundred years.

Hob'bi-did'ance. The name of one of the fiends mentioned by Shakespeare in "Lear," and taken from the history of the Jesuits' impostures.

Hod'e-kin. A famous German kobold, or domestic fairy-servant: so called because he always wore a little felt hat pulled down over his face.

Holo'-fer'nes. (1) A pedant living in Paris, under whose care Gargantua is placed for instruction. (2) A pedantic schoolmaster in Shakespeare's "Love's Labor's Lost."

Holt, Felix. The hero of George Eliot's novel by the same name.

Hom'illes. The later entries in the Peterborough "Chronicle" and a few homilies are almost all that we have left of the literature of the Twelfth Century. Some of these homilies are copied or imitated from those of Ælfric.

Hon'ey-comb', Will. One of the members of the imaginary club by whom the "Spectator" was professedly edited. He is distinguished for his graceful affectation, courtly pretension, and knowledge of the gay world.

Honeyman, Charles. A fashionable preacher in Thackeray's novel, "The Newcomes."

Hope'ful. A pilgrim in Bunyan's "Pilgrim's Progress," who accompanies Christian to the end of his journey.

Hop'-o'-my-Thumb'. A character in the tales of the nursery. Tom Thumb and Hop-o'-my-Thumb are not the same, although they are often confounded. Tom Thumb was the son of peasants, knighted by King Arthur, and was killed by a spider. Hop-o'-my-Thumb was a nix, the same as the German "daumling," the French "le petit ponce," and the Scotch "Tom-a-lin" or "Tamlane." He was not a human dwarf, but a fay.

Hora'tio. Hamlet, Shakespeare. An intimate friend of Hamlet, a prince, a scholar, and a gentleman.

Hora'tius, Cocles. Captain of the bridge-gate over the Tiber. He and two men to help him held the bridge against vast approaching armies. Subject and title of a poem by Lord Macaulay.

Hornbook. The primer or apparatus for learning the elements of reading, used in England before the days of printing, and common down to the time of George II. It consisted of a single leaf, containing on one side the alphabet, large and small, in black letter or in Roman, with perhaps a small regiment of monosyllables. Then followed a form of exorcism and the Lord's Prayer, and, as a finale, the Roman numerals. The leaf was usually set in a frame of wood, with a slice of transparent horn in front—hence the name of "hornbook." Copies of the hornbook are now exceedingly rare.

Hor'ner, Jack. The name of a celebrated personage in the literature of the nursery. A Somersetshire tradition says that the plums which Jack Horner pulled out of the Christmas pie alluded to the title deeds of the abbey estates at Wells, which were sent to Henry VIII. in a pasty, and abstracted on the way by the messenger, a certain Jack Horner.

Hortense'. Bleak House, Dickens. The vindictive French maid-servant of Lady Dedlock. In revenge for the partiality shown by Lady Dedlock to Rosa, Hortense murdered Mr. Tulkinghorn, and tried to throw the suspicion of the crime on Lady Dedlock.

House of Fame. Of this poem it has been said that of itself it might have given fame to Chaucer. Under the form of a dream, it gives a picture of the "Temple of Glory," crowded with aspirants for immortal renown, and adorned with statues of great poets and historians.

Hous'sain. A prince in the "Arabian Nights" who had a flying carpet which would carry him whithersoever he wished.

Hubbard, Old Mother. A well-known nursery rhyme. "Mother Hubbard's Tale," by Edmund Spenser, is a satirical fable in the style of Chaucer.

Hu'bert de Burgh. Justice of England, created Earl of Kent, introduced by Shakespeare into "King John." He is the one to whom the young prince addresses his piteous plea for life. The lad was found dead soon afterwards, either by accident or foul play.

Hu'bert, Saint. The legend of Saint Hubert makes him a patron saint of huntsmen.

Hu'di-bras. The title and hero of a celebrated satirical poem by Samuel Butler. Hudibras is a Presbyterian justice of the time of the Commonwealth.

Hugh of Lincoln. A legendary personage who forms the subject of Chaucer's "Priores's Tale," and also of an ancient English ballad. Wordsworth has given a modernized version of this tale.

Hugo Hugonet. Castle Dangerous, Scott. Minstrel of the Earl of Douglas.

Humphrey. The imaginary collector of the tales in "Master Humphrey's Clock," by Charles Dickens.

Humpy Dumpty. The hero of a well-known nursery rhyme. The name signifies humped and dumpy, and is the riddle for an egg.

Huon of Bordeaux, Sir. A hero of one of the romances of chivalry bearing this name.

Hur'al Oyun. In the fairy tales found in the Koran, these are the black-eyed daughters of paradise. They are created from muck and are free from all physical weakness and are always young. It is held out to every male believer that he will have seventy-two of these girls as his household companions in paradise.—From the Koran.

Hy'las. A beautiful boy, beloved by Hercules, who was drawn into a spring by the enamored nymphs. The story has been treated by Bayard Taylor, and by William Morris in his "Life and Death of Jason."

Hypatia. Of this romance its author, Charles Kingsley, said: "My idea in the romance is to set forth Christianity as the only really democratic creed and philosophy: above all, spiritualism as the most exclusively aristocratic creed."

Hypapanti. The Feast of Purification is called Festum Hypapanti.

Hyperion or Hyperion. This myth has formed a favorite theme for English poets. In Keats' "Hyperion" nature and classic imagery are combined with exquisite delicacy.

Hypocrites' Isle. An island described by Rabelais in one of his satires. He pictures this island of "Hypocrites" as wholly inhabited by people of low and defiled natures, as, by sham saints, spiritual comedians, seducers, and "such-like sorry rogues who live on the aims of passengers like the hermit of Lamont."

I'ago. Othello, Shakespeare. Othello's ensign and the villain of the play. Iago is said to be a character next to a devil, yet not quite a devil, which Shakespeare alone could execute without scandal.

Idleness, The Lake of. Faery Queen, Spenser. Whoever drank thereof grew instantly "faint and weary." The Red Cross Knight drank of it, and was readily made captive by Orgoglio.

Idylls of the King. Tennyson has told the purpose and the meaning of these Idylls. Taken together they form a parable of the life of man. Each Idyll taken as a separate picture represents the war between Sense and Soul. In Lancelot and Guinevere the lower nature leads them astray and there is intense struggle before the higher nature prevails. In Vivien, Ettarre, Tristram, and Modred the base and sensual triumph. In Arthur, Sir Galahad and Percival, it is the victory of the spiritual.

Ignaro. Faery Queen, Spenser. Foster-father of Orgoglio. Spenser says this old man walks one way and looks another, because ignorance is always "wrong-headed."

Iliad. The tale of the siege of Troy, an epic poem in twenty-four books. It is written in Greek hexameters, and commemorates the deeds of Achilles and other Greek heroes at the siege of Troy. The date of its composition may, with much probability, be assigned to the Ninth Century B. C., and the poem is so deficient in continuity, and contains so much that is inconsistent and irrelevant with the main topic, that it has been thought by many critics to have been the performance of several persons, although its authorship is still nominally accredited to Homer. Books one, two, and three are introductory to the war. Paris proposes to decide the contest by single combat, and Menelaus accepts the challenge. Paris, being overthrown, is carried off by Venus, and Agamemnon demands that the Trojans should give up Troy in fulfillment of the compact, and the siege follows. The gods take part and frightful slaughter ensues. At length Achilles slays Hector and the battle is at an end. Old Priam, going to the tent of Achilles, craves the body of his son Hector; Achilles gives it up, and the poem concludes with the funeral rites of the Trojan hero. Virgil continues the tale from this point, shows how the city was taken and burnt, and then continues with the adventures of Æneas, who escapes from the burning city, and makes his way to Italy.

Illuminating. The art of adorning manuscripts and books with ornamented letters and paintings, which

was practiced in the Middle Ages, prior to the introduction of printing, by artists, generally monks, called "illuminators." Manuscripts, containing portraits, pictures, and emblematic figures, form a valuable part of the riches preserved in the principal libraries in Europe.

Im'o-gen. The wife of Posthumus, and the daughter of Cymbeline in the play of Shakespeare's under title Cymbeline. "Of all Shakespeare's women," says Hazlitt, "she is, perhaps, the most tender and the most artless."

Improvvisato'ri. Poets who utter verses without previous preparation on a given theme. Among the ancients, Greece was the land of improvisation. In modern times, it has been almost entirely confined to Italy, where Petrarch introduced the practice of singing improvised verses to the lute.

Incanta'tion. Is derived from a Latin root meaning simply "to sing." It is the term in use to denote one of the most powerful and awe-inspiring modes of magic, resting on a belief in the mysterious power of words solemnly conceived and passionately uttered.

Incipac Rock. It is dangerous for navigators, and therefore the abbot of Aberbrothok fixed a bell on a float, which gave notice to sailors. Southey says that Ralph the Rover, in a mischievous joke, cut the bell from the buoy, and it fell into the sea, but on his return voyage his boat ran on the rock, and Ralph was drowned. Precisely the same tale is told of St. Goven's bell.

Infer'no, The. Divine Comedy, Dante. Epic poem in thirty-four cantos. Inferno is the place of the souls who are wholly given up to sin. The ascent is through Purgatorio to Paradiso.

Innocents Abroad. Twain. Travelers seeing Europe without any illusions. The fun consists in an irreverent application of modern commonsense to historic associations, ridiculing sentimental humbug. An air of innocence and surprise adds to the drolleries of their adventures.

Interludes, The. Springing from the Moralities and bearing some resemblance to them, though nearer the regular drama, are the Interludes, a class of compositions in dialogue, much shorter and more merry and farcical. They were generally played in the intervals of a festival.

Invocation. An address at the commencement of a poem, in which the author calls for the aid of some divinity, particularly of his muse.

Iphigeni'a. The heroine of Euripides' tragedy "Iphigenia in Aulis," and of Goethe's tragedy "Iphigenie auf Tauris." She was placed on the altar in a rash vow by her father. Artemis at the last moment snatched her from the altar and carried her to heaven, substituting a hind in her place. The similarity of this legend to the Scripture stories of Jephthah's vow and Abraham's offering of his son Isaac is noticeable.

I'ras. A strongly delineated character in "Ben Hur, a Tale of The Christ," by Lew Wallace.

Iras. A female attendant on Cleopatra in Shakespeare's play, "Antony and Cleopatra."

I'saac of York. A wealthy Jew, the father of Rebecca, in Sir Walter Scott's novel, "Ivanhoe."

Isabel'l'a. The heroine in Shakespeare's comedy, "Measure for Measure."

Is'lands of the Blest. Imaginary islands in the west. Hither the favorites of the gods were conveyed without dying, and dwelt in never-ending joy. The name first occurs in Hesiod's "Works and Days." This phrase is often used in modern literature.

I'sland of Lanterns. In the celebrated satire of Rabelais, an imaginary country inhabited by false pretenders to knowledge. The name was probably suggested by the "City of Lanterns," in the Greek romance of Lucian. Swift has copied this same idea in his Island of Laputa.

Is'land of St. Bran'dan. A marvelous flying island, the subject of an old and widely-spread legend of the Middle Ages. Though the Island of St. Brendan has been a disappointment to voyagers it has been a favorite theme with poets.

I-thu'ri-el. In Milton's "Paradise Lost," an angel commissioned by Gabriel to search through paradise, in company with Zephon, to find Satan, who had eluded the vigilance of the angelic guard, and effected an entrance into the garden. It is related that Ithuriel found Satan "squat like a toad, close at the ear of Eve," and transformed him by a touch of his spear to his proper shape.

I'van-hoe. The hero of Sir Walter Scott's novel of the same name. He figures as Cedric of Rotherwood's disinherited son, the favorite of King Richard I., and the lover of the Lady Rowena, whom, in the end, he marries. The scene is laid in England in the reign of Richard I., and we are introduced to Robin Hood in Sherwood Forest, banquets in Saxon halls, tournaments, and all the pomp of ancient chivalry. Rowena, the

heroine, is quite thrown into the shade by the gentle, meek, yet high-souled Rebecca.

Ivanovitch, Ivan. An imaginary personage, who is the embodiment of the peculiarities of the Russian people, in the same way as John Bull represents the English, and Jean Crapaud the French character, and Brother Jonathan the American character.

Ivory Gate of Dreams. Dreams which delude pass through the ivory gate, but those which come true through the horn gate.

Jack and the Bean-Stalk. A nursery legend said to be an allegory of the Teutonic Al-fader: the "red hen" representing the all-producing sun, the "money-bags" the fertilizing rain, and the "harp" the winds.

Jack-in-the-Green. A prominent character in May-pole dances.

Jack Robinson. A famous comic song by Hudson.

Jack Sprat. The hero of a nursery rhyme. Jack and his wife form a fine combination in domestic economy.

Jack, the Giant-killer. The name of a famous hero in the literature of the nursery, the subject of one of the Teutonic or Indo-European legends, which have become nationalized in England and America.

Jaques. A lord attending upon the exiled duke, in Shakespere's "As You Like It." A contemplative character who thinks and does—nothing. He is called the "melancholy Jaques," and affects a cynical philosophy. He could "suck melancholy out of a song, as a weasel sucks eggs."

Jaquenetta. Love's Labor's Lost, Shakespere. A country wench courted by Don Adriano de Armado.

Jarley, Mrs. The proprietor of a waxwork show in Dickens's "Old Curiosity Shop." She has lent her name to a popular game of parlor tableaux.

Jarndyce. A prominent figure in Dickens's "Bleak House," distinguished for his philanthropy, easy good-nature and good sense, and for always saying, "The wind is in the east," when anything went wrong with him. The famous suit of "Jarndyce vs. Jarndyce," in this novel, is a satire upon the Court of Chancery.

Jarvie, Baillie Nic'ol. A prominent character in Sir Walter Scott's novel "Rob Roy." He is a magistrate of Glasgow.

Jek'yll, Doctor, and Mr. Hyde. The duplex hero of Robert Louis Stevenson's singular romance of the same name. Doctor Jekyll is a benevolent and upright physician, who by means of a potion is able to transform himself for a time into a second personality, Mr. Hyde, of a brutal and animal nature.

Jelly-by, Mrs. A character in Dickens's novel "Bleak House," a type of sham philanthropy. She spends her time and energy on foreign missions to the neglect of her family. Mrs. Jellyby is quite overwhelmed with business correspondence relative to the affairs of Borrioboola Gha.

Jen'kins, Win'tred. The name of Miss Tabitha Bramble's maid in Smollett's "Expedition of Humphry Clinker." She makes ridiculous blunders in speaking and writing.

Jenkinson, Ephraim. A green old swindler, whom Dr. Primrose met in a public tavern. Dr. Primrose sold the swindler his horse, Old Blackberry, for a draft upon Farmer Flamborough.

Jeroboam Sermon. One of Dr. Emmons's sermons which made a great noise at the time. It was known as his Jeroboam Sermon. It was written on the occasion of Jefferson's inauguration as president, and although Jefferson is not named, the delineation of the character of Jeroboam is such that no one can doubt the personal application intended.

Jerusalem Delivered. An epic in twenty books, by Torquato Tasso (1544-1595). The crusaders, encamped on the plains of Torto'sa, chose Godfrey for their chief, and Alandine, King of Jerusalem, made preparations of defense. The Christian army having reached Jerusalem, the King of Damascus sent Armi'da to beguile the Christians. It was found that Jerusalem could never be taken without the aid of Rinaldo. Godfrey, being informed that the hero was dallying with Armi'da in the enchanted island, sent to invite him back to the army; he returned, and Jerusalem was taken. Armi'da fled into Egypt, and offered to marry any knight who slew Rinaldo. The love of Rinaldo returned, he pursued her and she relented. The poem concludes with the triumphant entry of the Christian army into the Holy City, and their devotions at the tomb of the Redeemer. The two chief episodes are the loves of Olindo and Sophronia, and of Tancred and Corinda.

Jes'sa-my Bride. A by-name given to Miss Mary Horneek, afterward Mrs. Gwyn. She was a contemporary and friend of Goldsmith. Also title of a novel by F. F. Moore.

Jes'si-ca. The beautiful daughter of Shylock, in Shakespere's "Merchant of Venice."

Jew, The Wandering. An imaginary person in a legend connected with the history of Christ's passion. As the Saviour was on the way to the place of execution, overcome with the weight of the cross, he wished to rest on a stone before the house of a Jew, who drove him away with curses. Driven by fear and remorse, he has since wandered, according to the command of the Lord, from place to place, and has never yet been able to find a grave. Romances have been founded on this character ranking among the best in literature.

Jones, Tom. The hero of Fielding's novel entitled "The History of a Foundling," represented as a model of generosity, openness, and manly spirit, though thoughtless and dissipated.

Joy'euse, La. The sword of Charlemagne as mentioned in romances of chivalry.

Joyeuse Garde, La. The residence of the famous Lancelot du Lac.

Juan, Don. A legendary personage made the hero of many dramatic romances and poems. (See Don Juan.)

Judith. The heroine in the book by the same name in the Apocrapha. She was a beautiful Jewess of Bethulia, who, when her town was besieged by Holofernes, the general of Nebuchadnezzar, attended him in his tent, and, when he was drunk, killed him, whereupon her townsmen fell upon the Assyrians and defeated them with great slaughter. The tale is not mentioned by Josephus, and has, from an early period, been held to be an allegory. It has frequently furnished poets and painters with subjects.

Kadr, Al. The night on which the "Korân" was sent down to Mahommed. Al Kadr is supposed to be the seventh of the last ten nights of Ramadan, or the night between the twenty-third and twenty-fourth days of the month.

Kay. A foster-brother of King Arthur, and a rude and boastful knight of the Round Table. He was the butt of King Arthur's court. Called also "Sir Queux." He appears in the "Boy and the Mantle," in Percy's "Reliques." Sir Kay is represented as the type of rude boastfulness, Sir Gawain of courtesy, Sir Lancelot of chivalry, Sir Mordred of treachery, Sir Galahad of chastity, Sir Mark of cowardice.

Ke-ha'ma. A Hindoo rajah, who obtains and sports with supernatural power. His adventures are related in Southey's poem entitled "The Curse of Kehama."

Kent, Earl of. A rough, plain-spoken, but faithful nobleman in Shakespere's "King Lear," who follows the fallen fortunes of the king, disguised as a servant, under the assumed name of Caius.

Ken'wigs. A family in Dickens's novel "Nicholas Nickleby," including a number of little girls who differed from one another only in the length of their frilled pantalettes and of their flaxen pigtails tied with bows of blue ribbon.

Kil-ken'ny Cats. Two cats, in an Irish story, which fought till nothing was left but their tails. It is probably a parable of a local contest between Kilkenny and Irishtown, which impoverished both boroughs.

King Cam-by'ses. The hero of "A Lamentable Tragedy" of the same name, by Thomas Preston, contemporary of Shakespere. A ranting character known to modern readers by Falstaff's allusion to him in Shakespere's first "Henry IV."

King Ester-mere. The hero of an ancient and beautiful legend, which, according to Bishop Percy, should seem to have been written while a great part of Spain was in the hands of the Saracens or Moors, whose empire was not fully extinguished before the year 1491.

King Horn. A metrical romance which was very popular in the Thirteenth Century. King Horn is a beautiful young prince who is carried away by pirates; but his life is spared, and after many wonderful adventures he weds a princess, and regains his father's kingdom.

King Log and King Stork. Characters in a celebrated fable of Æsop, which relates that the frogs, grown weary of living without government, petitioned Jupiter for a king. Jupiter accordingly threw down a log among them, which made a satisfactory ruler till the frogs recovered from their fright and discovered his real nature. They, therefore, entreated Jupiter for another king, whereupon he sent them a stork, who immediately began to devour them.

Klaus, Peter. The hero of an old popular tradition of Germany—the prototype of Rip Van Winkle—represented as a goatherd.

Knick'er-bock'er, Die'drich. The imaginary author of a humorous fictitious "History of New York," written by Washington Irving.

Knights of the Round Table. King Arthur's knights were so called because they sat with him at a round table made by Merlin for King Leodegrance. This king gave it to Arthur on his marriage with Guinevere, his daughter.

Knight's Tale, The. *Canterbury Tales*, Chaucer. Two Theban knights, Palamon and Arcite, captives of Duke Theseus, used to see from their dungeon window the duke's sister-in-law, Emily, and fell in love with her. Both captives having gained their liberty, contended for the lady by single combat. Arcite was victor, but being thrown from his horse was killed, and Emily became the bride of Palamon.

Koppenberg. The mountain of Westphalia to which the pied piper (Bunting) led the children, when the people of Hamelin refused to pay him for killing their rats. Browning's poem, "The Pied Piper," tells the tale.

Kriemhild. A beautiful Burgundian lady, daughter of Dancrat and sister of Gunther. She first married Siegfried, King of the Netherlands, and next Etzel, King of the Huns. In the first part of the "Nibelungenlied," Kriemhild brings ruin on herself by a tattling tongue. In the second part of the great epic she is represented as bent on vengeance, and after a most terrible slaughter both of friends and foes, she is killed by Hildebrand.

Kubla Khan. Coleridge says that he composed the poem in a dream immediately after reading a description of the Khan Kubla's palace, and he wrote it down on awaking.

Lacædæmonian Letter. The smallest of all letters (in Greek alphabet).

Laconic. Very concise and pithy. The name came from the Spartan manner of curt speech. A Spartan was called a Lacon from name of his country, Laconia.

Lady-day. The twenty-fifth day of March, anniversary of the Annunciation.

Lady of Lyons, The. Pauline Deschappelles, daughter of a Lyonsese merchant. She rejected the suits of Beauseant, Glavis, and Claude Melnotte, who therefore combined. Claude, who was a gardener's son, aided by the other two, passed himself off as Prince Como, married Pauline, and brought her home to his mother's cottage. The proud beauty was very indignant, and Claude left her to join the French army. He became a colonel, and returned to Lyons. He found his father-in-law on the eve of bankruptcy, and that Beauseant had promised to satisfy the creditors if Pauline would consent to marry him. Pauline was heartbroken; Claude revealed himself, paid the money required, and carried home the bride.

Lady of the Lake and Arthur's Sword. The Lady of the Lake gave to King Arthur the sword "Excalibur." She ordered King Arthur to sail out into the lake and take the sword as they could see it rising in the water. He sailed out with the knight and Merlin, came to the sword that a hand held up, and took it by the handles, and the arm and hand went under the lake again. This Lady of the Lake asked in recompense the head of Sir Balin, because he had slain her brother; but the king refused the request. Balin, who was present, exclaimed "Evil be ye found! Ye would have my head; therefore ye shall lose thine own." With his sword he smote off her head in the presence of King Arthur.

Lady of the Lake, The. much celebrated in the poem of Sir Walter Scott, was Ellen Douglas, once a favorite of King James; but when her father fell into disgrace, she retired with him into the vicinity of Loch Katrine.

Lagado. The name of a city belonging to the King of Laputa. Lagado is celebrated for its grand academy of projectors, who try to extract sunbeams from cucumbers, to calcine ice into gunpowder. In the description of this fancied academy, Swift ridicules the pretenders in philosophy and science.

Laertes was the son of Polonius, Lord-chamberlain of Denmark, and brother of Hamlet's beloved Ophelia. The king persuades him to challenge Hamlet, after Ophelia wanders in mind and he calls him out in "friendly" duel, but poisons his own rapier. He wounds Hamlet and in the scuffle which ensues, the combatants change swords, and Hamlet wounds Laertes, so that both die.

Lake of the Cat. Name given to Lake Erie until the last of the Seventeenth Century.

Lampoon. A personal satire, often bitter and malignant. These libels, carried to excess in the reign of Charles II., acquired the name of lampoons from the burden sung to them: "Lampone, lampone, camerada lampone."

Lake Poets. The. Wordsworth, Southey, and Coleridge, who lived about the lakes of Cumberland.

Lame Dog's Diary. The provincial life of a little English village is reflected in this clever diary, supposed

to be kept by an invalid officer who returned, crippled, from the Boer War. The suggestion of the diary came from a winning, tantalizing young widow, who cheered the invalid by her amusing, paradoxical talk. The diarist and his sister Paestrina are true English types — quiet gentlefolk.

Lamps of Sleep. A wonderful knight of a mythical land had an equally wonderful Black Castle. In the mansion of the Knight of the Black Castle were seven lamps, which could be quenched only with water from an enchanted fountain. So long as these lamps kept burning, everyone within the room fell into a deep sleep, from which nothing could rouse them.

Land of Beulah. The paradise in which souls wait before the resurrection. In "Pilgrim's Progress" the land from which the pilgrims enter the Celestial City. The name is found in Isaiah lxii, 4.

Land of Bondage. Name given to Egypt in the Bible.

Land of Cakes. A name sometimes given to Scotland, because oatmeal cakes are a common national article of food, particularly among the poorer classes.

Land of Nod. In common speech sleepy-land or land of dreams.

Land of Promise. The land promised to Abraham — Canaan.

Land of Shadows. A place of unreality, sometimes meaning land of ghosts.

Land o' the Leal. An unknown land of happiness, loyalty, and virtue. Caroline Oliphant, Baroness Nairne, meant heaven in her song and this is now its accepted meaning. (Leal faithful, and "Land of the leal" means the land of the faithful.)

Land of Wisdom. A name given to Normandy, in France, because of the wise customs which have prevailed there, and also because of the skill and judgment of the people in making laws.

Land of Veda. Name often given to India.

Landlady's Daughter. She rowed Flemming "over the Rhine-stream, rapid and roaring wide," and told him the story of the Liebenstein.

Lantern-Land. The land of literary charlatans, whose inhabitants, graduates in arts, doctors, professors, and artists of all grades, waste time in displaying their wonderful learning. The home of egotists.

Lantern of Demosthenes. This edifice, in Athens, stood in the street of the tripods, so called from the circumstance that in it were erected numerous tripods, which had been obtained as prizes in the musical or theatrical contests.

Laodicean. One indifferent to religion, like the Christians of that Church mentioned in the Book of Revelation.

Laputa. The name of a flying island described by Swift in "Gulliver's Travels." It is said to be "exactly circular, its diameter 7,837 yards, or about four miles and a half, and consequently contains ten thousand acres." The inhabitants are chiefly speculative philosophers, devoted to mathematics and music; and such is their habitual absent-mindedness, that they are compelled to employ attendants — called "flappers" — to rouse them from their profound meditations. This is done by striking them gently on the mouth and ears with a peculiar instrument consisting of a blown bladder with a few pebbles in it, fastened on the end of a stick.

Last of the Mo'licans. The Indian chief, Uncas, is so called by Cooper, in his novel of that title.

Latitudinarians. Persons who hold very loose views of Divine inspiration and what are called orthodox doctrines.

Laughing Philosopher. The. Democritus of Abdera, a celebrated philosopher of antiquity, contemporary with Socrates; so called because he made a jest of man's follies, sorrows, and struggles. He is contrasted with Heraclitus, "The Weeping Philosopher."

Launfal, Sir. Steward of King Arthur. Detesting Queen Guinevere, he retired to Carlyoun, and fell in love with a lady named Tryamour. She gave him an unfeeling purse, and told him if he wished to see her, he was to retire into a private room, and she would be with him. Sir Launfal now returned to court, and excited much attention by his great wealth. Guinevere made advances to him, but he would not turn from the lady to whom he was devoted and lauded her praises. At this repulse, the angry queen complained to the king, and declared to him that she had been insulted by his steward. Arthur bade Sir Launfal produce this paragon of women. On her arrival, Sir Launfal was allowed to accompany her to the Isle of Oléron; and no one ever saw him afterwards. * * James Russell Lowell has a poem entitled "The Vision of Sir Launfal."

Laureate Poet. An officer appointed by the crown to compose odes, etc., in honor of grand state occasions

The appellation seems to have originated in a custom of the English universities of presenting a laurel wreath to graduates; the new graduate being then styled "Poeta Laureatus." The king's laureate was simply a graduated rhetorician in the service of the king. R. Whittington, in 1512, seems to have been the last man who received a rhetorical degree at Oxford. The earliest mention of a poet-laureate in England occurs in the reign of Edward IV., when John Key received the appointment. In 1630, the first patent of the office was granted. The salary was fixed at £100 per annum, with a tierce of canary; which latter emolument was in Southey's time, commuted into an annual payment of £27. It used to be the duty of the laureate to write an ode on the birthday of the sovereign, and on the occasion of a national victory; but this custom was abolished towards the end of the reign of George III. The poets who have held this office are Edmund Spenser, 1591-1599; Samuel Daniel, 1599-1619; Ben Jonson, 1619-1637. Interregnum. William Davenant, Knight, 1660-1668; John Dryden, 1670-1689; Thomas Shadwell, 1689-1692; Nahum Tate, 1692-1715; Nicholas Rowe, 1715-1718; Lawrence Eusebius, 1718-1730; Colley Cibber, 1730-1757; William Whitehead, 1757-1783; Thomas Warton, 1785-1790; Henry James Pye, 1790-1813; Robert Southey, 1813-1843; William Wordsworth, 1843-1850; Alfred Tennyson, 1850-1892, Alfred Austin, 1896.

Laus Deo. A poem by Whittier. Called forth by the passing of the constitutional amendment abolishing slavery; suggested to the poet as he sat in the Friends, meeting-house in Amesbury, and listened to the bells proclaiming the fact.

Lavinia and Palemon. Lavinia was the daughter of Acasto, patron of Palemon. Through Acasto Palemon gained a fortune and wandered away from his friend. Acasto lost his property, and dying, left a widow and daughter in poverty. Palemon often sought them, but could never find them. One day, a lovely modest maiden came to glean in Palemon's fields. The young squire was greatly struck with her exceeding beauty and modesty, but she was known as a pauper and he dared not give her more than passing glance. Upon inquiry, he found that the beautiful gleaner was the daughter of Acasto; he proposed marriage, and Lavinia was restored to her rightful place.

Lavaine. Son of the Lord of As'tolat, who accompanied Sir Lancelot when he went to tilt for the ninth diamond. Lavaine is described as young, brave, and a true knight. He was brother to Elaine.

Lawyer's Alcove. Name given to a volume of poems selected from the best poems by lawyers, for lawyers, and about lawyers. Included in this volume are Shakespeare's "Sonnet CXXXIV"; Blackstone's "A Lawyer's Farewell to his Muse"; "Justice," by John Quincy Adams; Landon's "At the Buckingham Sessions"; "The Judicial Court of Venus," by Jonathan Swift; Saxe's "Briefless Barrister" and his "The Lawyer's Valentine"; "General Average," by William Allen Butler; "The Festival of Injustice" by Carlton, and Riley's "Lawyer and Child."

Lay of the Last Minstrel. Ladye Margaret [Scott] of Branksome Hall, the "flower of Teviot," was beloved by Baron Henry of Cranstown, but a deadly feud existed between the two families. A goblin lured Ladye Margaret's brother into a wood, where he fell into the hands of the Southerners. At the same time an army of 3,000 English marched to Branksome Hall to take it, but hearing that Douglas, was on the march against them, the two chiefs agreed to decide the contest by single combat. Victory fell to the Scotch, when it was discovered that "Sir William Deloraine," the Scotch champion, was in reality Lord Cranstown, who then claimed and received the hand of Ladye Margaret as his reward. This united the two houses.

Lazarre. This hero's relation to history is so shadowy as to be no burden, and yet sufficiently well-defined to serve as a lure to the imagination. He is the supposed Dauphin of France, the son of Louis XVI. and Marie Antoinette, who, according to the full chronicles of his time, died in prison, but whose removal to America is hinted in certain footnotes to history. However this may have been, one Eleazar Williams, the reputed son of a half-breed Indian who lived in northern New York in the early years of the last century, was not without reason for believing himself the lost Dauphin. Mrs. Catherwood has written a romance under this name taking this character as her hero.

Lazy Lawrence. One of the dwellers in Lubberland in the story of which he is pictured. It tells of his birth and breeding, how he served the school-master, his wife, the squire's cook, and the farmer, which, by the laws of Lubberland, was accounted high treason; his arraign-

ment and trial, and happy deliverance from the many treasons laid to his charge.

Leander. The story of Hero and Leander is so old and so well known as to nearly belong to mythology. A young man of Abydos, who swam nightly across the Hellespont to visit his lady-love, Hero, a priestess of Sestos. One night he was drowned in his attempt, and Hero leaped into the Hellespont also.

Lear. A fabulous or legendary King of Britain, and the hero of Shakespeare's tragedy of the same name. He had three daughters, and when four score years old, wishing to retire from the active duties of sovereignty, resolved to divide his kingdom between them. By elaborate but false professions of love and duty on the part of two daughters (Goneril and Regan), King Lear was persuaded to disinherit the third (Cordelia), who had before been deservedly more dear to him, and to divide his kingdom between her sisters. The tragedy is wrought out in the ungrateful conduct of the older sisters and the suffering of Lear. The beauty of the play in the exquisite character Cordelia, who is in every respect a "perfect woman."

Leather-Stocking Tales. Five stories or romances written by James Fenimore Cooper. The same hero, Leather-Stocking, or Natty Bumppo, figures in all in his life among the Indians. Natty had learned wood-lore as the young Indian learned it. He knew the calls of the wild animals far across the wilderness. He could follow the deer and bear to their haunts. He could trace the path of the wolf by the broken cobwebs glistening in the sunlight; and the cry of the panther, was a speech as familiar as his own tongue. When he was thirsty he made a cup of leaves, and drank in the Indian fashion. He lay down to rest with that sense of security that comes only to the forester. These tales take Leather-Stocking from young manhood to old age following the fortunes of the American Indian tribes. The order in which his story is told in these volumes is the "The Deerslayer," "The Last of the Mohicans," "The Pathfinder," "The Pioneers" and "The Prairie." He is also known by the name of Hawkeye in one part of his story. The best writers on the American Indian are thus quoted in our literatures: James F. Cooper, the romancer of the Indian; Henry W. Longfellow, the poet of the Indian; Francis Parkman, the historian of the Indian; Helen Hunt Jackson, the novelist of the Indian.

Legend. Anciently, a kind of rubric containing the prayers appointed to be read in Roman Catholic churches. In later times, the word was employed to denote a chronicle or register of the lives of saints, because they were to be read on the festivals of the saints. The way in which a credulous love of the wonderful, exaggeration of fancy, and ecclesiastical enthusiasm, at times even pious fraud, mixed themselves up in these narratives with true history, caused stories of a religious or ecclesiastical nature generally to be designated as "legends," to distinguish them from real history. The word has been much used in connection with the wild tales of ancient times, especially those known among the peasantry of Europe. Among the mediæval collections of legends, that drawn up by the Genoese archbishop, Jacobus de Voragine, in the second half of the Thirteenth Century, under the title of "Legenda Aurea" (the Golden Legends), or "Historia Lombardica," is the most celebrated.

Legion of Hon'or, The. An order conferred in recognition of military and civil merit, instituted by Napoleon I., while First Consul, May 19, 1802. It consists of different grades, as grand-crosses (of whom there are eighty), grand-officers (500), officers (4,000), and legionaries (whose number is not limited). The highest functionary is the "chancellor." The splendid edifice erected in Paris during the first empire, and known as the "Palace of the Legion of Honor," after having been partially destroyed during the Communist outbreak has been rebuilt.

Leonline Verses. These fancies were common in the Twelfth Century, and were so called from Leoninus, a canon of the Church of St. Victor, in Paris, the inventor. In English 'verse, any meter which rhymes middle and end is called a Leonline verse.

Léthe. A personification of oblivion often referred to in literature. The tradition is that the soul, at the death of the body, drank of the River Léthe that it might carry into the world of shadows no remembrance of earth and its concerns.

Letterpress. Printed matter. The word is often used to distinguish printed words from engraving.

Lexicon. A vocabulary, or book containing an alphabetical arrangement of the words of a language, with an explanation of the meaning or sense of each. The term is chiefly used with reference to dictionaries or word-books of the Greek and Hebrew languages.

Libations. With the prayers among all ancient peoples were usually joined the libations, or drink offerings. These consisted generally of wine, part of which was poured out in honor of the gods, and part of it drunk by the worshiper. The wine must be pure, and offered in a full cup. Sometimes there were libations of water, of honey, of milk, and of oil.

Light of the Harem. Name given to the bride of Selim in the poem *Lalla Rookh*. She was the Sultana Nour-mahal, afterwards called Nourjaham ("light of the world").

Ligela. Written by Poe. Suggested by a dream in which the eyes of the heroine produced the wonderful effect described in the story. Its theme is the conquest of death through the power of will.

Liguorians. A congregation of missionary priests, called also Redemptorists, founded in 1732, by St. Alphonsus.

Lilli-Burle-ro. A song with the refrain of "Lilli-burlo, bullen-a-lal" was written by Lord Wharton, and contributed much to the great revolution of 1688. The whole army, and at last the people, both in city and country, sang it perpetually. The words are also said to have been used as a sort of war-cry during the persecution of the Protestants by the Irish Papists in 1641.

Lilliput. An imaginary country described in "Gulliver's Travels," where an ordinary man becomes a great giant beside the small people of the land. Lilliputian used to designate small ways of expressing malice or jealousy. Among amusing characters in Lilliput land were the Little-Endians and Big-Endians who made up two religious factions, which waged incessant war on the subject of the right interpretation of the fifty-fourth chapter of the "Blun'deal": "All true believers break their eggs at the convenient end." The godfather of Calin, the reigning Emperor of Lilliput, happened to cut his finger while breaking his egg at the big end, and therefore commanded all faithful Lilliputians to break their eggs in future at the small end. The Blefuscudians called this decree rank heresy, and determined to exterminate the believers of such an abominable practice from the face of the earth. Hundreds of treatises were published on both sides, but each empire put all those books opposed to its own views into the "Index Expurgatorius," and not a few of the more zealous sort died as martyrs for daring to follow their private judgment in the matter.

Limbo. A place where the souls of good men not admitted into heaven wait the general resurrection. A similar place exists for the souls of unbaptized children. Still another Limbo is a Fool's Paradise, a place for all nonsense. This old superstitious belief has been used by Dante and Milton in their poems.

Literati. Men of letters, scholars of note.

Lithgow's Bower. A favorite residence of the kings and queens of Scotland, especially of Mary of Guise; and here the unfortunate Mary Queen of Scots was born in 1542.

Little Brother. An appellation made popular through the tale bearing the name. Josiah Flynt ran away from home when he was three years old and had been doing it frequently ever after. His first piece of fiction was naturally based on trampdom. His hero is a boy-tramp, a little fellow whose irresistible impulse to view the great world around him causes him to become a "Prushun" to an old inhabitant of Hoboland. He wished people to see where a number of stray boys land, for he had found out that a great many of the so-called "kidnapped" youngsters are in reality simple runaways with romantic temperaments.

Little Citizens. Characters in a New York school teacher's stories of her East Side Jewish charges. Human nature and American Yiddish dialect are alike faithfully rendered.

Little Dorrit. The heroine and title of a novel by Dickens. Little Dorrit was born and brought up in the Marshalsea prison, where her father was confined for debt.

Little John. A big, stalwart fellow, named John Little, who encountered Robin Hood, and gave him a sound thrashing, after which he was rechristened, and Robin stood godfather. Little John is introduced by Sir Walter Scott in "The Talisman."

Little Masters. A name applied to certain designers belonging in the Sixteenth and Seventeenth Centuries. Called little because their designs were on a small scale, fit for copper or wood. The most famous are Jost Amman, for the minuteness of his work; Hans Burgkmair, who made drawings in wood illustrative of the triumph of the Emperor Maximilian; Hans Sebald Beham; Albert Altdorfer, and Heinrich Aldegraver. Albert Dürer and Lucas van Leyden brought the art into notice and it became popular.

Little Nell. Old Curiosity Shop, Dickens. The prominent character of the story, pure and true, though living in the midst of selfishness and crime. She was brought up by her grandfather, who was in his dotage, and who tried to eke out a narrow living by selling curiosities. At length, through terror of Quilp, the old man and his grandchild stole away, and led a vagrant life.

Llewellyn. A legendary Welsh prince who, on returning from hunting, found his baby boy missing and his favorite greyhound, Gelert, covered with blood. Thinking that the hound had eaten him, he killed it. But, on searching more carefully, the child was found alive under the cradle clothes, and near him the body of a huge wolf which had been killed by the faithful hound.

Lochiel. Is the title of the head of the clan Cameron.

Lochinvar. A young Highlander, in the poem of Marmion, was much in love with a lady whose fate was decreed, that she should marry a "laggard." Young Lochinvar persuaded the too-willing lassie to be his partner in a dance; and while the guests were intent on their amusements, swung her into his saddle and made off with her before the bridegroom could recover from his amazement.

Locksley. So Robin Hood is sometimes called, from the village in which he was born.

Locksley Hall. A poem by Tennyson, in which the hero, the lord of Locksley Hall, having been jilted by his cousin Amy for a rich boor, pours forth his feelings in a flood of scorn and indignation. The poem is understood to have been occasioned by a similar incident in the poet's own life, but this has been questioned.

Lochin, or Loeline. Father of Sabri'na, and eldest son of the mythical Brutus, King of ancient Britain. On the death of his father he became King of Loegria.

Loegrin or Lo'gres. England is so called by Geoffrey of Monmouth, from Logrine, eldest son of the mythical King Brute.

Logograph. Among the French, a kind of riddle, which consists in some elision or mutilation of words; it may be defined as being between an enigma and a rebus.

Logos. This word, as occurring at the beginning of the gospel of St. John, was early taken to refer to the "second person of the Trinity, i. e., Christ." Yet the precise meaning of the Apostle, who alone makes use of the term in this manner, and only in the introductory part of his gospel; whether he adopted the symbolizing usage in which it was employed by the various schools of his day; which of their differing significations he had in view, or whether he intended to convey a meaning quite peculiar to himself;—these are some of the innumerable questions to which the word has given rise, and which, though most fiercely discussed ever since the first days of Christianity, are far from having found a satisfactory solution.

Lo-hen-grin. The Knight of the Swan: the hero of a romance by Wolfram von Eschenbach, a German minnesinger of the Thirteenth Century, and also of a modern music drama by Richard Wagner. He was the son of Parsival, and came to Brabant in a ship drawn by a white swan, which took him away again when his bride, disobeying his injunction, pressed him to discover his name and parentage.

Lord Linnithgow. A character growing into favor and while it does not prove that the end justifies the means, certainly suggests that the "means" may be excused if sufficiently prominent men sanction them. In his desire to serve his party, and incidentally himself, this Lord blackmails a man, but, when the party chief rewards the blackmailer by a seat in parliament, it seemed reasonable, that the Lord should once more hold up his head in society as one who had quite regained a possibly lost self-esteem. To the perplexed lady-love such hope as this is offered: "If it is not easy to be quite good, it is impossible to be wholly bad." "Lord Linnithgow," has value in giving an up-to-date glimpse of political life in England. When an indignant moralist recently ventured to point out Mr. Cecil Rhodes's deficiencies, Mr. Kipling rejoined: "Why, man, but he is building an empire!" (Morley Roberts.)

Lotos-Eaters. Tennyson has a poem called "The Lotos-Eaters," a set of islanders who live in a dreamy idleness, weary of life, and regardless of all its stirring events.

Love Doctor, The. L'Amour Medecin. A comedy by Molière written about the year 1663. Lucinde, the daughter of Sganarelle, is in love, and the father calls in four doctors to consult upon the nature of her malady. They see the patient, and retire to consult together, but talk about Paris, about their visits, about the topics of the day; and when the father enters to know what opinion they have formed, they all prescribe different remedies, and pronounce different opinions. Lisette

then calls in a "quack" doctor (Clitandre, the lover), who says that he must act on the imagination, and proposes a seeming marriage, to which Sganarelle assents. The assistant being a notary, Clitandre and Lucinde are married.

Love's Labor's Lost. Ferdinand, King of Navarre, with three lords named Biron, Dumain, and Longaville, agree to spend three years in study, during which time no woman was to approach the court. The compact signed all went well until the princess of France, attended by Rosaline, Maria, and Katharine, besought an interview respecting certain debts said to be due from the King of France to the King of Navarre. The four gentlemen fell in love with the four ladies. The love of the king sought the princess, by right, Biron loved Rosaline, Longaville admired Maria, and Dumain adored Katharine. In order to carry their suits, the four gentlemen, disguised as Muscovites, presented themselves before the ladies; but the ladies being warned of the masquerade, disguised themselves also, so that the gentlemen in every case addressed the wrong lady. A mutual arrangement was made that the suits should be deferred for twelve months and a day; and if, at the expiration of that time, they remained of the same mind, the matter should be taken into serious consideration. (Shakespeare.)

Love's of the Angels. A rhymed story written by Thomas Moore. It may be called the stories of three angels, and was founded on the Eastern tale of "Harūt and Marūt, and the rabbinical fictions of the loves of" "Uzziel and Shanchazai." (1) The first angel fell in love with Lea, whom he saw bathing. She returned love for love, but his love was carnal, hers heavenly. He loved the woman she loved the angel. At last the angel gave to her the pass-word which should open the gates of heaven. She pronounced it, and rose through the air into paradise. The angel degenerated and became no longer an angel of light, but "of the earth, earthy." (2) The second angel was Rubi, one of the seraphs. He loved Liris, who asked him to come in all his celestial glory. He did so; and she, rushing into his arms, was burnt to death; but the kiss she gave him became a brand on his face forever. (3) The third angel was Zaraph, who loved Nama. It was Nama's desire to love without control, and to love holily; but as she fixed her love on a creature, and not on the Creator, both she and Zaraph were doomed to live among the things that perish. When the end of all shall come, Nama and Zaraph will be admitted into the realms of everlasting love.

Lover's Vows. Altered from Kotzebue's. Baron Wildenhaim, in his youth, seduced Agatha Friburg, and then forsook her. She had a son Frederick, who became a soldier. While on furlough, he came to spend his time with his mother, and found her in abject poverty and almost starved. A poor cottager took her in, while Frederick, who had no money, went to beg charity. Count Wildenhaim was out with his gun, and Frederick asked alms of him. The count gave him a shilling; Frederick demanded more, and, being refused, seized the baron by the throat. The keepers arrived and put him in the castle dungeon. Here he was visited by the chaplain, and it came out that the count was his father. The chaplain being appealed to, told the count the only reparation he could make would be to marry Agatha and acknowledge the young soldier to be his son. This advice he followed, and Agatha Friburg, the beggar, became the baroness Wildenhaim of Wildenhaim Castle.

Loving Cup. A large cup passed round from guest to guest at state banquets and city feasts. On the introduction of Christianity, the custom of wassailing was not abolished, but it assumed a religious aspect. The monks called the wassail bowl the loving cup. In the universities the term "Grace Cup" is more general. Immediately after grace the silver cup, filled with wine, is passed round. The master and wardens drink welcome to their guests; the cup is then passed to all the guests. A loving or grace cup should have two handles, and some have four. This ceremony, of drinking from one cup and passing it round, was observed in the Jewish paschal supper, and our Lord refers to the custom in the words, "Drink ye all of it."

Lubberland. An imaginary country of idleness and luxury. The name has been applied to certain cities in burlesque.

Lugg-nagg. An imaginary island whose inhabitants have the gift of eternal life lacking with it the gift of immortal health and strength.

Lumbercourt, Lord. A voluptuary, greatly in debt, who consented, for a good money consideration, to give his daughter to Egerton McScyophant. Egerton, however, had no fancy for the lady, but married Constantia, the girl of his choice. His lordship was in alarm

lest this should be his ruin; but Sir Pertinax told him the bargain should still remain good if Egerton's younger brother, Sandy, were accepted by his lordship instead. To this his lordship readily agreed.

Lumbercourt, Lady Rudolpha, daughter of Lord Lumbercourt, who, for a consideration, consented to marry Egerton McScyophant; but as Egerton had no fancy for the lady, she agreed to marry Egerton's brother Sandy on the same terms.

Lure of the Labrador Wild, The. A recital of the ill-fated expedition to Labrador undertaken by Leonidas Hubbard, Jr., during the summer of 1903. The party consisted of Mr. Hubbard, Mr. Wallace, and a half-breed Cree Indian named Elson, who proved himself a veritable hero. As is generally known, the object of the party was to reach the interior of Labrador over a portion of that country unexplored, or at least untraveled by white men. This purpose was only partially carried out. The winter came on long before Hubbard was ready to turn back, the provisions were exhausted, game was scarce, and the fish failed to rise to the fly. On the return journey toward the coast Hubbard gave out and had to be left behind until aid could be brought. Wallace succeeded in finding some provisions which had been thrown aside on the inland trip and had returned within a few hundred feet of Hubbard's tent, but without finding it. Elson, the half-breed, managed to reach a trapper's camp and sent back a relief expedition, which picked up Wallace, and later found the body of Hubbard, who had died of starvation.

Lusiad, The. The only Portuguese poem that has gained a world-wide celebrity. It was written by Luiz de Camões, appeared in 1572, and was entitled "Os Lusíadas," the "Lusitanians," i. e., the Portuguese—the subject being the conquests of that nation in India. It is divided into ten cantos, containing 1,102 stanzas. It has been translated into English, but it has never been popular out of Portugal. The Lusiad celebrates the chief events in the history of Portugal, and is remarkable as the only modern epic poem which is pervaded by anything approaching the national and popular spirit of ancient epic poems. Bacchus was the guardian power of the Mohammedans, and Venus or Divine Love of the Lusitians. The fleet first sailed to Mozambique, then to Melinda (in Africa), where the adventurers were hospitably received and provided with a pilot to conduct them to India. In the Indian Ocean, Bacchus tried to destroy the fleet; Venus, however, calmed the sea, and Gama arrived at India in safety. Having accomplished his object, he returned to Lisbon. Among the most famous passages are the tragic story of Inez de Castro, and the apparition of the giant Adamastor, who appears as the Spirit of the Storm to Vasco de Gama, when crossing the Cape. The versification of "The Lusiad" is extremely charming. The best edition of "The Lusiad" was published in Paris (1817), reprinted in 1819, and again, in 1823. "The Lusiad" has been translated into Spanish, French, Italian, English, Polish, and German.

Lusitania. The ancient name of Portugal; so called from Lusus, the companion of Bacchus in his travels. He colonized the country, and called it "Lusitania," and the colonists "Lusians."

Lustrum. The solemn offering made for expiation and purification by one of the censors in the name of the Roman people at the conclusion of the Census. The animals offered in sacrifice were a boar, sheep, and bull. They were led round the assembled people on the Campus Martius before being sacrificed. As the census was quinquennial, the word "lustrum" came to signify a period of five years.

Luther's Postil Gospels. Advent, Christmas, and Epiphany sermons, first published in Latin in 1521, and dedicated to his protector, the Elector Frederick. Translated immediately into German, Luther's postils, i. e., homilies, on the Gospels are esteemed the best of his sermons.

Lybius, Sir. A very young knight who undertook to rescue the lady of Sinadone. After many adventures with knights, giants, and enchanters, he entered the palace. Presently the whole edifice fell to pieces and a horrible serpent coiled round his neck. The spell being broken, the serpent turned into the lady of Sinadone herself, rejoicing in her rescue she wed the young knight. (Libaux, a romance.)

Lycidas. The name under which Milton celebrates the untimely death of Edward King, who was drowned in the passage from Chester to Ireland, August 10, 1637. He was the son of Sir John King, secretary for Ireland.

Lydia. Daughter of the King of Lydia, was sought in marriage by Alcestes, a Thracian knight; his suit was refused, and he repaired to the King of Armenia, who gave him an army, with which he laid siege to Lydia.

He was persuaded by the king's daughter to raise the siege. The King of Armenia would not give up the project, and Alcestes slew him. Lydia now sets him all sorts of dangerous tasks to "prove his love," all of which he surmounted. Lastly, she induced him to kill all his allies, and when this was done she mocked him. Alcestes pined and died, and Lydia was doomed to endless torment in hell, where Astolpho saw her, to whom she told her story. (Orlando Furioso, bk. XVII.)

Lyd-la Lan'gulsh. The heroine of Sheridan's comedy of "The Rivals," distinguished for the extravagance of her romantic notions.

Lyre. The name of the earliest known of all stringed instruments of music, invented, according to Egyptian tradition, by the god Mercury, and regarded among poets, painters, and statues as an emblem of Apollo and the Muses. It is supposed to have had, originally, only three strings; afterwards it had eleven. The lyre of Terpander and Olympus had only three strings; the Scythian lyre had five; that of Simonides had eight. It was played with a plectrum, or stick of ivory or polished wood, and sometimes with the fingers. It is said to have been primarily constructed of tortoise-shell. Amphion built Thebes with the music of his lyre. The very stones moved of their own accord into walls and houses. Ari'ón charmed the dolphins by the music of his lyre, and when the bard was thrown overboard one of them carried him safely to Tm'narus. Hercules was taught music by Linus. One day, being reproved, the strong man broke the head of his master with his own lyre. Orpheus charmed savage beasts, and even the infernal gods, with the music of his lyre.

Lyric. Literally, pertaining to the lyre. In poetry a name originally applied to what was sung or recited with an accompaniment to the lyre, but it is now applied to odes, ballads, and other verses, such as may be set to music. Lyrics were originally employed in celebrating the praises of gods and heroes, and its characteristic was melodiousness. The Greeks cultivated it with effect, particularly Anacreon and Sappho, but among the Romans, Horace was the first and principal lyric poet. It has been said that all poets are singers and these singers are divided into three classes. First, the lyric poet, who can sing but one tune with his own voice. Second, the epic poet, who with his own voice can sing several tunes. Third, the true dramatist, who has many tongues and can sing all tunes.

Mab, Queen. Romeo and Juliet, Shakespeare. The origin of the name is obscure. By some it is derived from the Midgard of the Eddas. The name is given by the English poets of the Fifteenth and succeeding centuries to the imaginary queen of the fairies.

Mabinogion. A series of Welsh tales, chiefly relating to Arthur and the Round Table. A MS. volume of some 700 pages is preserved in the library of Jesus College, Oxford.

Macbeth. The tale of Macbeth and Banquo was borrowed from the legendary history of Scotland, but the interest of the play is not historical. It is a tragedy of human life, intensely real, the soul, with all its powers for good or evil, deliberately choosing evil. The three witches in the desert place, in thunder, lightning, storm, strike the keynote of evil suggestion. The awfulness of soul destruction is felt in Macbeth and Lady Macbeth as in no other of Shakespeare's dramas.

Mac-leath, Captain. A highwayman who is the hero of Gay's Beggar's Opera.

Machiavelism. The name came from a writing by Machiavelli, under the title "De Principatibus" (the Prince), a famous treatise written probably to gratify the Medici, and in which are expounded those principles of political cunning and artifice, intended to promote arbitrary power, ever since designated "machievism."

Mac-Ivor. Waverley. Scott. Fergus Mac-Ivor is a prominent character in the novel, and his sister, Flora Mac-Ivor, the heroine. They are of the family of a Scottish chieftain.

Macreons. The Island of. Pantagruel, Rabelais. The title is given to Great Britain, derived from a Greek word, meaning long-lived, "because no one is put to death there for his religious opinions," Rabelais says the island "is full of antique ruins and relics of popery and ancient superstitions."

McFingal. The hero of Trumbull's political poem of the same name; represented as a burly New England squire, enlisted on the side of the Tory party of the American Revolution, and constantly engaged in controversy with Honorius, the champion of the Whigs.

Madass'ma, Queen. An important character in the old romance called "Amadis de Gaul"; her constant attendant was Elis'abat, a famous surgeon, with whom she roamed in solitary retreats.

Madge Wildfire. The insane daughter of old Meg Murdohson, the gypsy thief. Madge was a beautiful but giddy girl, whose brain was crazed by her own downfall and the murder of her infant.

Madoc. A poem by Southey; is founded on one of the legends connected with the early history of America. Madoc, a Welsh prince of the Twelfth Century, is represented as making the discovery of the Western world. His contests with the Mexicans form the subject.

Madrigal. Is a short lyric poem, generally on the subject of love, and characterized by some epigrammatic terseness or quaintness, and composed of a number of free and unequal verses, confined neither to the regularity of the sonnet, nor to the subtlety of the epigram. The madrigals of Tasso are noted in Italian poetry.

Magi. The three "Wise Men" who followed the star to Bethlehem. The traditional names of the three Magi are Melchior, represented as an old man with a long beard, offering gold; Jasper, a beardless youth who offers frankincense; Balthazar, a black, or Moor, who tenders myrrh.

Magic Rings. These are mentioned by Plato, Cicero, and other writers and supposed to make the wearer invisible.

Magic Staff. The story of the magic staff belongs to the days of legends and seems to be of French origin, but has found its way into other lands. This staff would guarantee the bearer from all the perils and mishaps incidental to travelers. According to earliest traditions the staff was a willow branch cut on the eve of All Saints' Day.

Magic Wands. These are found in many old tales or writings. In Tasso's "Jerusalem Delivered" the hermit gave to Charles the Dane and Ubaldo a wand, which, being shaken, infused terror into all who saw it, and in Spenser's Faery Queen the palmer who accompanied Sir Guyon had a wand of like virtue. It was made of the same wood as Mercury's caduceus.

Magna'la. The best-known in the long list of Cotton Mather's works was his "Magnalia Christi Americana," purporting to be an ecclesiastical history of New England, from its first planting in 1620 to the year 1698, but including also civil history, an account of Harvard College, of the Indian Wars, and the witchcraft troubles, and a large number of biographies.

Magna'no. Hudibras, Butler. One of the leaders of the rabble that attacked Hudibras at a bear-baiting.

Magnificat. In the ritual of the Roman Catholic Church, the name given to the "Song of the Virgin Mary," derived from the opening invocation in the Latin Vulgate.

Maidens' Castle. An allegorical castle mentioned in Malory's "History of Prince Arthur." It was taken from a duke by seven knights, and held by them till Sir Galahad expelled them. It was called "The Maidens' Castle," because these knights made a vow that every maiden who passed it should be made a captive.

Maid Marian. A half mythical character, but the name is said to have been assumed by Matilda, daughter of Robert Lord Fitzwalter, while Robin Hood remained in a state of outlawry. The name is considered the foundation of the word marionettes, from Maid Marian's connection with the Morris dance, or May-day dance, at which she was said to appear.

Maid of Athens. Made famous by Lord Byron's song of this title. Twenty-four years after this song was written, an Englishman sought out "the Athenian maid," and found a beggar without a vestige of beauty.

Maid of Saragossa. Childe Harold, Byron. A young Spanish woman distinguished for her heroism during the defense of Saragossa in 1808-09. She first attracted notice by mounting a battery where her lover had fallen, and working a gun in his room.

Mal'aprop. Mrs. A character in Sheridan's "Rivals," noted for her blundering use of words.

Mal-bee'co. "Faery Queen," Spenser. The husband of a young wife, Helinore, and himself a crabbed, jealous old fellow.

Malen'grin. A character in Spenser's "Faery Queen," who carried a net on his back "to catch fools with." The name has grown to mean the personification of guile or flattery.

Malep'ardus. The castle of Master Reynard the Fox, in the beast epic of "Reynard the Fox."

Malvol'sin. Ivanhoe, Scott. One of the challenging knights at the tournament (Sir Philip de Malvoisin). Sir Albert de Malvoisin was a preceptor of the Knights Templar.

Mambrino. Poems, Ariosto, etc. A king of the Moors, who was the possessor of an enchanted golden helmet, which rendered the wearer invulnerable, and which was the object of eager quest to the Paladins of Charlemagne. This helmet was borne away by the

knight Rinaldo. In "Don Quixote" we are told of a barber who was caught in a shower of rain, and who, to protect his hat, clapped his brazen basin on his head. Don Quixote insisted that this basin was the helmet of the Moorish king; and, taking possession of it, wore it as such.

Managarm. *Prose Edda.* The largest and most formidable of the race of giants. He dwells in the Iron-wood, Jamvid. Managarm will first fill himself with the blood of man, and then will he swallow up the moon. This giant symbolizes war, and the "Iron wood" in which he dwells is the wood of spears.

Manfred. Subject of a poem by Byron, written under this title. Manfred sold himself to the prince of darkness, and received from him seven spirits to do his bidding. They were the spirits of "earth, ocean, air, night, mountains, winds, and the star of his own destiny." Wholly without human sympathies, the count dwelt in splendid solitude among the Alpine Mountains. He loved Astarte, and was visited by her spirit after her death. In spirit form she told Manfred that he would die the following day; and when asked if she loved him, she sighed "Manfred," and vanished.

Mantallini. *Nicholas Nickleby, Dickens.* The husband of madame; he is a man-doll, noted for his white teeth, his oaths, and his gorgeous morning gown. This "exquisite" lives on his wife's earnings, and thinks he confers a favor on her by spending. Madame Mantallini is represented as a fashionable milliner near Cavendish Square, London.

Marcellus. *Hamlet, Shakespeare.* An officer of Denmark, to whom the ghost of the murdered king appeared before it presented itself to Prince Hamlet.

Marchioness. *The Old Curiosity Shop, Dickens.* A half-starved maid of-all-work, in the service of Sampson Brass and his sister Sally. She was so lonesome and dull, that it afforded her relief to peep at Mr. Swiveller even through the keyhole of his door. Mr. Swiveller called her the "marchioness," when she played cards with him, "because it seemed more real and pleasant" to play with a marchioness than with a domestic. While enjoying these games they made the well-known "orange-peel wine."

Mariana in the Moated Grange. In Tennyson's poem by this name, a young damsel who sits in the moated grange, looking out for her lover, who never comes. (2) In Shakespeare's "Measure for Measure" Mariana is a lovely and lovable lady, betrothed to Angelo, who, during the absence of Vincentio, the Duke of Vienna, acted as his lord deputy. Her pleadings to the duke for Angelo are wholly unrivaled.

Marplot. "The busy body." A blundering, good-natured, meddlesome young man, very inquisitive, too officious by half, and always bungling whatever he interferes in. Character found in comedies written by Mrs. Centlivre.

Martin's Summer. St. Halcyon days: a time of prosperity; fine weather. Mentioned by Shakespeare in Henry VI., etc.

Masora. A critical work or canon, whereby is fixed and ascertained the reading of the text of the Hebrew version of the Bible.

Masques. Dramatic representations made for a festive occasion, with a reference to the persons present and the occasion. Their personages were allegorical. They admitted of dialogue, music, singing, and dancing, combined by the use of some ingenious fable into a whole. They were made and performed for the court and the houses of the nobles, and the scenery was gorgeous and varied. According to Hollinshed's Chronicle, the first masque performed in England was at Greenwich, in 1512. Shakespeare, as well as Beaumont and Fletcher, have frequently introduced masques into their plays. Milton himself made them worthy by writing "Comus." H. W. Longfellow wrote the "Masque of Pandora," taking the story from Hawthorne's "Wonder Book."

Mauth Dog. *Lay of the Last Minstrel, Scott.* A black specter spaniel that haunted the guard-room of Peeltown in the Isle of Man. A drunken trooper entered the guard-room while the dog was there, but lost his speech, and died within three days.

Mavournin. Irish for "darling."

Mayeux. The name of a hunchback, who figures prominently in numberless French caricatures and romances.

Mazepa. *Poem, Byron.* Mazepa in poem under same title was a Cossack of noble family who became a page in the court of the King of Poland, and while in this capacity intrigued with Theresia, the young wife of a count, who discovered the amour, and had the young page lashed to a wild horse, and turned adrift.

Measure for Measure. *Shakespeare.* There was a law in Vienna that made it death for a man to live with

a woman not his wife; but the law was so little enforced that the mothers of Vienna complained to the duke of its neglect. So the duke deputed Angelo to enforce it; and, assuming the dress of a friar, absented himself awhile, to watch the result. Scarcely was the duke gone, when Claudio was sentenced to death for violating the law. His sister Isabel went to intercede on his behalf, and Angelo told her he would spare her brother if she would become his Phryne. Isabel told her brother he must prepare to die, as the conditions proposed by Angelo were out of the question. The duke, disguised as a friar, heard the whole story, and persuaded Isabel to "assent in words," but to send Mariana (the divorced wife of Angelo) to take her place. This was done: but Angelo sent the provost to behead Claudio, a crime which "the friar" contrived to avert. Next day, the duke returned to the city, and Isabel told her tale. The end was, the duke married Isabel, Angelo took back his wife, and Claudio married Juliet.

Meeting of the Waters. Title of a poem by Moore, better known under the name "Sweet Vale of Avoca." "The Meeting of the Waters" forms a part of that beautiful scenery which lies between Rathdrum and Arklow, in the county of Wicklow, Ireland; and these lines were suggested by a visit to this romantic spot in the summer of 1807.

Meg Merillies. A prominent character in Scott's "Guy Mannering," a half-crazy gypsy or sibyl.

Mel'stersingers. In Germany an association of master tradesmen, to revive the national minstrelsy, which had fallen into decay with the decline of the minnesingers or love-minstrels (1350-1523). Their subjects were chiefly moral or religious, and constructed according to rigid rules.

Mel'ster, Wilhelm. Hero and title of a philosophic novel by Goethe. The object is to show that man, despite his errors and shortcomings, is led by a guiding hand, and reaches some higher aim at last. This is considered to be the first true German novel.

Melis'sa. *Orlando Furioso, Ariosto.* The prophetic who lived in Merlin's cave. Bradamant gave her the enchanted ring to take to Rogaero: so, assuming the form of Atlantes, she not only delivered Rogaero, but disenchanted all the forms metamorphosed in the island, where he was captive.

Mel'notte, Claude. *Lady of Lyons, Bulwer.* The son of a gardener in love with Pauline, "the Beauty of Lyons," but treated by her with contempt. Beauseant and Glavis, two other rejected suitors, conspired with him to humble her.

Melyhalt. A powerful female subject of King Arthur's court. Sir Galiot invaded her domain, but she forgave his trespass and chose him for her knight and chevalier.

Menard. *The Road to Frontenac, Merwin.* The hero of the novel, a leader among Indians and white men during the making of New France. From Quebec he goes west, holding control of affairs in spite of treachery in both races. His companions are chiefly French, amid whom figure a Jesuit and two Indians, and the story contains much of that romantic charm peculiar to early French pioneer life, whence Longfellow and other poets and story-tellers have drawn inspiration.

Mengtse. The fourth of the sacred books of China, so called from its author, Mengtse, Latinized into Mencius. This great work was written in the Fourth Century B. C., and contains the wisdom of the age. These are some of its teachings: "Humanity, righteousness, propriety, knowledge, are as natural to man as his four limbs." "Humanity is internal, righteousness is external." In this same book Mencius taught that government is from God, but for the people whose welfare is the supreme good. The phrase "mother of Meng," which has been borrowed from the Chinese, signifies "a great teacher."

Menteur, Le (Fr. The Liar). *Comedy by Corneille.* The propensities of the leading character give the play its name and lead to the complications of the plot. This is generally considered Corneille's best comedy and the most important before the time of Molière.

Merchant's Tale. *The Chaucer.* Is substantially the same as the first Latin metrical tale of Adolphus, and is not unlike a Latin prose tale given in the appendix of Wright's edition of Æsop's Fables. It is the story of the betrayal of an old husband by a young wife. The story is evidently of Oriental origin and very old. Boccaccio and Chaucer may have borrowed it from the "Commedia Lydis." The well-known incident of the pear tree is found in all these sources. An interesting account of these sources has been given by the Chaucer Society Publications under "Origins and Analogues of the Tales." Pope used this story as his basis for "January and May."

Merchant of Venice. Antonio, the merchant, in Shakespeare's play, signs a bond in order to borrow money from Shylock, a Jew, for Bassanio, the lover of Portia. If the loan was repaid within three months, only the principal would be required; if not, the Jew should be at liberty to claim a pound of flesh from Antonio's body. The ships of Antonio being delayed by contrary winds, the merchant was unable to meet his bill, and the Jew claimed the forfeiture. Portia, in the dress of a law doctor, conducted the defense, and saved Antonio by reminding the Jew that a pound of flesh gave him no drop of blood.

Merlin. The name of an ancient Welsh prophet and enchanter. He is often alluded to by the older poets, especially Spenser, in his "Faery Queen," and also figures in Tennyson's "Idylls of the King." In the "History of Prince Arthur" by Malory, Merlin is the prince of enchanters and of a supernatural origin. He is said to have built the Round Table and to have brought from Ireland the stones of Stonehenge on Salisbury Plain.

Merlin's Cave. In Dynevor, near Carmarthen, noted for its ghostly noises of rattling iron chains, groans, and strokes of hammers. The cause is this: Merlin set his spirits to fabricate a brazen wall to encompass the city of Carmarthen, and, as he had to call on the Lady of the Lake, bade them not slacken their labor till he returned; but he never did return, for Vivian held him prisoner by her wiles.

Messiah, The. An epic poem in fifteen books, by F. G. Klopstock. The subject is the last days of Jesus, His crucifixion and resurrection.

Midsummer Night's Dream. Egeus promised his daughter, Hermia, to Demetrius. She loved Lysander and fled from Athens with her lover. Demetrius went in pursuit of her, followed by Helena, who doted on him. All four came to a forest and fell asleep. Oberon and Titania had quarreled, and Oberon, by way of punishment, dropped on Titania's eyes during sleep some love-juice, or "Love in Idleness," the effect of which is to make the sleeper fall in love with the first thing seen when waking. The first thing seen by Titania was Bottom the weaver, wearing an ass's head. In the meantime King Oberon dispatched Puck to the lovers and with the juice Puck changed their vision and made all content. It has been suggested that in this play Shakespeare may have borrowed hints from Chaucer. "The Tempest" and "Midsummer Night's Dream" are called Shakespeare's fairy plays.

Miliden'do, Gulliver's Travels. Swift. The metropolis of Lilliput, the wall of which was two feet and a half in height, and at least eleven inches thick. The emperor's palace, called Belfab'orac, was in the center of the city.

Miles Standish. In "Courtship of Miles Standish," a poem by H. W. Longfellow. From this poem the robust figures of the Puritan captain, in his haps and mishaps, and of John Alden and Priscilla, are now part of our national treasures.

Miller, Daisy. Name of heroine and title of the story by Henry James. An American girl traveling in Europe, where her innocence, ignorance, and disregard of European customs and standards of propriety, put her in compromising situations and frequently expose her conduct to misconstruction.

Minneha'ha, Hiawatha, H. W. Longfellow. The daughter of the arrow-maker of Daco'tah, and wife of Hiawatha. She was called Minnehaha from the waterfall of that name.

Minnesingers, or Minnesingers. A name given to the German lyric poets of the Middle Ages, on account of love being the principal theme of their lays, the German word "minne" being used to denote a pure and faithful love.

Miracle Plays. See "Mysteries."

Miranda. The Tempest, Shakespeare. The daughter of Prospero the exiled Duke of Milan, and niece of Antonio, the usurping duke. She is brought up on a desert island, with Ariel, the fairy spirit, and Caliban, the monster, as her only companions.

Miri'am. A beautiful and mysterious woman in Hawthorne's romance "The Marble Faun," for love of whom Donatello commits murder, thus becoming her partner in crime.

Miserere. A title given in the Roman Catholic Church to the fifty-first Psalm, usually called the "psalm of mercy."

Mortality, The. An old play in which the characters were the Vices and Virtues, with the addition afterwards of allegorical personages, such as Riches, Good Deeds, Confession, Death, and any human condition or quality needed for the play. These characters were brought together in a rough story, at the end of which Virtue triumphed.

Morris Dance. Or the Moorish dance, was introduced into England in the reign of Edward III. It was a prominent feature of the May Day and other outdoor festivities.

Moriturus Salutamus. A "hymn to age," written by H. W. Longfellow, for the jubilee reunion of Bowdoin's Class of 1825. It contains a number of classic allusions, and an entire tale from the "Gesta Romanorum."

Mortality, Old. Old Mortality. Scott. A religious itinerant, who frequented country churchyards and the graves of the covenanters. He was first discovered at Ganderleugh, clearing the moss from the grey tombstones, renewing with his chisel the half-defaced inscriptions, and repairing the decorations of the tombs.

Mu'alo. The Fair God, Lew Wallace. The old paba or prophet who assured Nenetzin that she was to be the future queen in her father's palace.

Muck'lebucket. The Antiquary, Scott. Name of a conspicuous family, consisting of Saunders Mucklebucket, the old fisherman of Musselrag; Old Elspeth, mother of Saunders; Maggie, wife of Saunders; Steenie, the eldest son, who was drowned; Little Jennie, Saunders' child.

Munchausen, The Baron. A hero of most marvelous adventures, and the fictitious author of a book of travels filled with most extravagant tales. The name is said to refer to Hieronymus Karl Friedrich von Münchhausen, a German officer in the Russian Army, noted for his marvelous stories.

Mussel Slough Affair. Octopus, Norris. The basis of plot for the novel and name given to an actual piece of history almost unknown in the East when the wheat-growers of the San Joaquin Valley came into conflict with the railroad which they believed was trying to defraud them of their land.

Mysteries and Miracle-plays. Were dramas founded on the historical parts of the Old and New Testaments, and the lives of the saints, performed during the Middle Ages, first in churches, and afterwards in the streets on fixed or movable stages. The mystery was a representation of any portion of the New Testament history concerned with a mysterious subject, such as the Incarnation, the Atonement, or the Resurrection. Miracles and mysteries were popular in France, Germany, Spain, Italy, and England. The fathers of the Reformation showed no unfriendly feeling towards them. Luther is reported to have said that they often did more good and produced more impression than sermons. In the alpine districts of Germany, miracle-plays were composed and acted by the peasants. They at last began to partake to a limited extent of the burlesque, which had brought miracle-plays into disrepute elsewhere. In England, the greatest check they received was from the rise of the secular drama. The first miracle-plays were an expedient employed by the clergy for giving religious instruction to the people, and for extending and strengthening the influence of the Church. The earliest "Miracle" on record is the "Play of St. Catherine," which was written about 1119, in French, and was a rude picture of the miracles and martyrdom of that saint. Some of the titles of these old plays are the "Creation of the World," the "Fall of Man," the story of "Cain and Abel," the "Crucifixion of Our Lord," the "Massacre of the Innocents," "The Play of the Blessed Sacrament," the "Deluge." They were generally written in mixed prose and verse. It was necessary to introduce some comic enlivenment, and this was done by representing the wicked personages of the drama as placed in ludicrous situations. The devil generally played the part of the clown or jester.

Na'la. A legendary King of India, whose love for Damayanti and subsequent misfortunes have supplied subjects for numerous poems.

Natty Bumppo. Called "Leather-stockings." He appears in five of Cooper's novels: (1) "The Deer-slayer"; (2) "The Pathfinder"; (3) "The Hawkeye," in "The Last of the Mohicans"; (4) "Natty Bumppo," in "The Pioneers"; and (5) as "The Trapper," in "The Prairie," in which he dies.

Ne'e'ra. The name of a girl mentioned by the Latin poets, Horace, Virgil, and Tibullus; sometimes also introduced into modern pastoral poetry as the name of a mistress or sweetheart.

Nepenthe. A care-dispelling drug, given Polydamna, wife of Tho'nis, King of Egypt, to Helen, a drink containing this drug "changed grief to mirth, melancholy to joyfulness, and hatred to love." The water of Ardenne had the opposite effects. Homer mentions this drug nepenthe in his "Odyssey." It is also mentioned in Poe's "Raven."

Next of Kin. Title given to a story by F. F. Moore, a sequel to his "Jessamy Bride," and noted for the group of people collected. Richard Brinsley Sheri-

dan may be called its hero, inasmuch as he is the lover of its heroine, Miss Linley, the famous singer, who became Sheridan's first wife. The whole remarkable family to which she belonged give title to the book. Garrick Goldsmith, Sir Joshua, Mrs. Thrale, Dr. Johnson, Thomas Sheridan, elocutionist and lexicographer, and father of Richard, Burke, and others.

Nestor. The name dates to ancient Grecian legend. Homer makes him the great counselor of the Grecian chiefs, and extols his eloquence as superior even to that of Ulysses. His authority was even considered equal to that of the immortal gods. Hence the name is often found in literature as an appellation denoting wisdom. Bryant has been called "The Nestor of Our Poets."

New Atlantis, The. An imaginary island in the middle of the Atlantic. Bacon, in his allegorical fiction so called, supposes himself wrecked on this island, where he finds an association for the cultivation of natural science and the promotion of arts. Called the "New" Atlantis to distinguish it from Plato's Atlantis, an imaginary island of fabulous charms.

Newcome, Colonel. A gallant, simple-hearted gentleman, a retired East Indian officer, in Thackeray's novel "The Newcomes." His unworldliness leads to the loss of his fortune, and he finally dies, poor and broken-hearted, in the Charter House hospital.

New England Primer. A book quoted as specimen of literature for children in early American days. A copy of the New England Primer, published in Walpole, N. H., in 1814, contains an illustrated alphabet. The letter "L" is illustrated by a lion with one of its paws resting upon a lamb which is lying down, and the following lines:

"The Lion bold
The Lamb doth hold."

New England Tragedies. Among the poems of H. W. Longfellow are the "New England Tragedies," and the "Divine Tragedy." These, it is said, are to be taken in connection with "The Golden Legend," the whole forming one connected work of art, somewhat as do the successive Arthurian legends of Tennyson.

New Jerusalem. The name by which in the Christian faith, heaven, or the abode of the redeemed, is symbolized. The allusion is to the description in the twenty-first chapter of the Book of Revelation.

New Pastoral. A poem by T. B. Read, truly American in character like its companion poem, "The Waggoner of the Alleghanies." The "New Pastoral" consists of a series of sketches of rustic and domestic life, mostly of primitive simplicity, and so truthful as to be not less valuable as history than attractive as poetry.

Nibelung, King. A king of the Nibelungen, a mythical Burgundian tribe, who gives name to the great mediæval epic of Germany, the "Nibelungen Lied." He bequeathed to his two sons a hoard or treasure beyond all price and incapable of diminution, which was won by Siegfried, who made war upon the Nibelungen and conquered them.

Nibelungen Lied. A historic poem generally called the German "Iliad." It is the only great national epic that European writers have produced since antiquity, and belongs to every country that has been peopled by Germanic tribes, as it includes the hero traditions of the Franks, the Burgundians and the Goths, with memorials of the ancient myths carried with them from Asia. The poem is divided into two parts, and thirty-two lieds or cantos. The first part ends with the death of Siegfried, and the second part with the death of Kriemhild. The death of Siegfried and the revenge of Kriemhild have been celebrated in popular songs dating back to the lyric chants now a thousand years old. These are the foundation of the great poem.

Nickleby, Mrs. Nicholas Nickleby, Dickens. The mother of the hero, Nicholas, a widow fond of talking and of telling long stories with no connection. She imagined her neighbor, a mildly insane man, was in love with her because he tossed cabbages and other articles over the garden wall. She had a habit of introducing, in conversation, topics wholly irrelevant to the subject under consideration, and of always declaring, when anything unanticipated occurred, that she had expected it all along, and had prophesied to that precise effect on divers (unknown) occasions. Nicholas Nickleby has to make his own way in the world. He first goes as usher to Mr. Squeers, schoolmaster at Dotheboys Hall; but leaves in disgust with the tyranny of Squeers and his wife, especially to a poor boy named Smike. Smike runs away from the school to follow Nicholas, and remains his humble follower till death. At Portsmouth, Nicholas joins the theatrical company of Mr. Crummles, but leaves the profession for other adventures. He falls in with the brothers Cherryble, who make him their clerk; and in this post he rises to be-

come a merchant, and ultimately marries Madeline Bray.

Nicknames by States. Names given to the inhabitants of the different States by popular use: Alabama, lizards; Arkansas, tooth-picks; California, gold-hunters; Colorado, rovers; Connecticut, wooden nutmegs; Delaware, musk-rats; Florida, fly-up-the-creeks; Georgia, buzzards; Illinois, suckers; Indiana, hoosiers; Iowa, hawk-eyes; Kansas, jay-hawkers; Kentucky, corn-crackers; Louisiana, creoles; Maine, foxes; Maryland, craw-thumpers; Michigan, Wolverines; Minnesota, gophers; Mississippi, tadpoles; Missouri, pukes; Nebraska, bug-eters; Nevada, sage-hens; New Hampshire, granite boys; New Jersey, blues or clam-catchers; New York, knickerbockers; North Carolina, tar-boilers and tuckoes; Ohio, buck-eyes; Oregon, web-feet and hard-cases; Pennsylvania, Pennanities and leather-heads; Rhode Island, gun-flints; South Carolina, weasels; Tennessee, whelps; Texas, beef-heads; Vermont, Green Mountain boys; Virginia, beadies; Wisconsin, badgers.

Nine Worthies, The. Famous personages often alluded to, and classed together, rather in an arbitrary manner, like the Seven Wonders of the World, the Seven Wise Men of Greece, etc. They have been counted up in the following manner:

Three Gentiles.	1. Hector, son of Priam.
	2. Alexander the Great.
	3. Julius Cæsar.
Three Jews.	4. Joshua, Conqueror of Canaan.
	5. David, King of Israel.
	6. Judas Maccabæus.
Three Christians.	7. Arthur, King of Britain.
	8. Charlemagne.
	9. Godfrey of Bouillon.

Noctes Ambrosianæ. A series of convivial fable talk, full of humor, although local in subject. They hold a high place in genial or recreative literature. They were mostly written by "Christopher North," the real John Wilson, and it is said that while Lockhart was writing "Vale'rius," he was in the habit of taking walks with Professor Wilson every morning, and of supping with Blackwood at Ambrose's, a small tavern in Edinburgh. One night Lockhart said, "What a pity there has not been a short-hand writer here to take down all the good things that have been said!" and next day he produced a paper from memory, and called it "Noctes Ambrosianæ." That was the first of the series.

North Americans of Yesterday. Name given to the Indians of North America by recent writers, among them F. S. Dellenbaugh in a work under same title. This work, a comparative study of North American Indian life and customs, is written on the theory that the races are of ethnic unity.

Nourmahal'. Lalla Rookh, Moore. "Light of the Haram." She was for a season estranged from the sultan, till he gave a grand banquet, at which she appeared in disguise as a lute-player and singer. The sultan was so enchanted with her performance, that he exclaimed, "If Nourmahal had so played and sung, I could forgive her all"; whereupon the sultana threw off her mask.

Novum Organum. The noted work of Roger Bacon, showing his system of philosophy. It was published in the year 1620.

Nuc'ta. Paradise and the Peri, Moore. The name given to the miraculous drop which falls from heaven, in Egypt, on St. John's Day, and is supposed to stop the plague.

Nun of Nidaros. Tales of a Wayside Inn, Longfellow. The abbess of the Drouthien convent, who heard the voice of St. John while she was kneeling at her midnight devotions.

Nut-Brown Maid. Reliques, Percy. The maid who was wooed by the "banished man." The "banished man" describes to her the hardships she would have to undergo if she married him; but finding that she accounted these hardships as nothing compared with his love, he revealed himself to be an earl's son, with large hereditary estates in Westmoreland, and married her.

O'bermann. The impersonation of high moral worth without talent, and the tortures endured by the consciousness of this defect. This name was given to the hero and imaginary author of a work of the same name by Etienne Pivert de Senancourt, a French writer.

O'beron. King of the Fairies, whose wife was Titania. Shakespeare introduces both Oberon and Titania in his "Midsummer Night's Dream." He and Titania, his queen, are fabled to have lived in India, and to have crossed the seas to Northern Europe to dance by the light of the moon.

O'beron the Fay. A humpy dwarf only three feet high, but of angelic face, lord and king of Mommur.

Odyssey. Homer's epic, recording the adventures of Odysseus ("Ulysses") in his voyage home from Troy. The poem opens in the island of Calypso, with a complaint against Neptune and Calypso for preventing the return of Odysseus to Ithaca. Telemachos, the son of Odysseus, starts in search of his father, accompanied by Pallas in the guise of Mentor. He goes to Pylos, to consult old Nestor, and is sent by him to Sparta; where he is told by Menelaus that Odysseus is detained in the island of Calypso. In the meantime, Odysseus leaves the island, and, being shipwrecked, is cast on the shore of Phœacia. After twenty years' absence Odysseus returns to his home. Penelope is tormented by suitors. To excuse herself, Penelope tells her suitors he only shall be her husband who can bend Odysseus's bow. None can do so but the stranger, who bends it with ease. Odysseus is recognized by his wife, and the false suitors are all slain and peace is restored to Ithaca.

Offerory. In the Roman Catholic Church a form of words, in the first part of the Mass, by which the priest offers the elements previously to their consecration. In the English communion service, the sentences read by the officiating clergyman, while the people are making their offerings.

O'gler the Dane. One of the paladins of the Charlemagne epoch. Also made the hero of an ancient French romance, and the subject of a ballad, whose story is probably a contribution from the stores of Norman tradition, Holger, or Olger Danske, being the national hero of Denmark. He figures in Ariosto's "Orlando Furioso."

O'Groat's. A name often alluded to in early English parables or sayings coming from the legend of "John O'Groat's House." This ancient building was supposed to stand on the most northerly point in Great Britain. John of Groat and his brothers were originally from Holland. According to tradition, the house was of an octagonal shape, being one room with eight windows and eight doors, to admit eight members of the family, the heads of eight different branches of it, to prevent their quarrels for precedence at table, which, on a previous occasion, had well-nigh proved fatal.

Oldbuck, Jonathan. Antiquary, Scott. The character whose whimsies gave name to the novel. He is represented as devoted to the study and accumulation of old coins, medals, and relics. He is irritable, sarcastic, and cynical from an early disappointment in love, but full of humor and a faithful friend.

Old Man of the Sea. In the "Arabian Nights," a monster encountered by Sindbad the sailor in his fifth voyage. After carrying him upon his shoulders a long time, Sindbad at last succeeds in intoxicating him, and effects his escape. The "Old Man of the Sea" was also made the title of a humorous and well-known poem by O. W. Holmes.

Old Red Sandstone. One of the most noted of Hugh Miller's famous writings on geological subjects. It revealed his discovery of fossils in a formation which, up to that time, had been deemed almost destitute of them.

Oliver. As You Like It, Shakespeare. Son and heir of Sir Rowland de Bois, who hated his youngest brother, Orlando, and whom he planned to murder by indirect methods. Orlando, finding it impossible to live in his brother's house, fled to the forest of Arden, where he joined the society of the banished duke. Oliver pursued him, and as he slept in the forest, a snake and a lioness lurked near to make him their prey. Orlando chanced to be passing, slew the two monsters and then found that the sleeper was his brother Oliver. Oliver's feelings underwent a change, and he loved his brother as much as he had before hated him. In the forest, the two brothers met Rosalind and Celia. The former, who was the daughter of the banished duke, married Orlando; and the latter, who was the daughter of the usurping duke, married Oliver.

Olivia. Twelfth Night, Shakespeare. A rich countess, whose love was sought by Orsino, Duke of Illyria; but having lost her brother, Olivia lived for a time in entire seclusion, and in no wise reciprocated the duke's love. Olivia fell in love with Viola, who was dressed as the duke's page, and sent her a ring. Mistaking Sebastian (Viola's brother) for Viola, she married him out of hand.

Opheila. Hamlet, Shakespeare. Daughter of Polonius, the chamberlain. Hamlet fell in love with her, but after his interview with the Ghost, finds that his plans must lead away from her. During his real or assumed madness, he treats her with undeserved and angry rudeness, and afterward, in a fit of inconsiderate rashness, kills her father, the old Polonius. The terrible shock given to her mind by these events completely shatters her intellect, and leads to her accidental death by drowning.

Organon. The name given to the first work on logic by Aristotle. He is said to have created the science of logic. The "Organon" has been enlarged and recast by some modern authors, especially by Mr. John Stuart Mill in his "System of Logic," into a structure commensurate with the vast increase of knowledge and extension of positive method belonging to the present day.

Orlando Furioso. An epic poem in forty-six cantos, by Ariosto, which occupied his leisure for eleven years, and was published in 1516. This poem, which celebrates the semi-mythical achievements of the paladins of Charlemagne, in the wars between the Christians and the Moors, became immediately popular, and has since been translated into all European languages, and passed through innumerable editions.

Ormulum. The "Ormulum" is a collection of metrical homilies, one for each day of the year, but the single existing copy gives the homilies for thirty-two days only. There are very few French words in the poem, but Scandinavian words and constructions abound. The writer, Orm, or Ormin, belonged to the East of England, and he and his brother Walter were Augustinian monks. He makes no use of rhyme, but his verses are smooth and regular.

Osbold's-stone. Rob Roy, Scott. A family name in the story which tells of the members: (1) the London merchant and Sir Hildebrand, the heads of two families; (2) the son of the merchant is Francis; (3) the offspring of the brother are Percival, the sot; Thorncliffe, the bully; John, the gamekeeper; Richard, the horse-jockey; Wilfred, the fool; and Rashleigh, the scholar, by far the worst of all. This last worthy is slain by Rob Roy, and dies cursing his cousin Frank, whom he had injured.

O'Shanter. See "Tam O'Shanter."

Osman. Sultan of the East, conqueror of the Christians, a magnanimous man. He loved Yara, a young Christian captive. This forms the subject of a once-famous ballad.

Osrick. A court fop in Shakespeare's "Hamlet." He is made umpire by Claudius in the combat between Hamlet and Laertes.

Osseo. Hiawatha, Longfellow. Son of the Evening Star. When broken with age, he married Owenee, one of ten daughters of a North hunter. She loved him in spite of his ugliness and decrepitude, because "all was beautiful within him." As he was walking with his nine sisters-in-law and their husbands, he leaped into the hollow of an oak tree and came out strong and handsome; but Owenee at the same moment was changed into a weak old woman. But the love of Osseo was not weakened. The nine brothers and sisters-in-law were transformed into birds. Owenee, recovering her beauty, had a son, whose delight was to shoot the birds that mocked his father and mother. An Algonquin legend gave the foundation of the story.

Othello's. A Moor of Venice, in Shakespeare's play of the same name. He marries Desdemona, the daughter of a Venetian senator, and is led by his ensign, Iago, a consummate villain, to distrust her fidelity and virtue. Iago hated the Moor both because Cassio, a Florentine, was preferred to the lieutenantcy instead of himself, and also from a suspicion that the Moor had tampered with his wife; but he concealed his hatred so well that Othello wholly trusted him. Iago persuaded Othello that Desdemona intrigued with Cassio, and urged him on till he murdered his bride.

Othello's Occupation's Gone. A phrase much quoted from the play "Othello," meaning "the task is ended," or that one has retired from active work.

Outre-Mer. A "Pilgrimage Beyond the Sea." This title was given to the work by H. W. Longfellow, published in 1835, and written before European travel was much known to Americans. It is a poetical prose work, not unlike the "Sketch-Book" of Washington Irving.

Pacolet. In "Valentine and Orson," an old romance, a character who owned an enchanted steed, often alluded to by early writers. The name of Pacolet was borrowed by Steele for his familiar spirit in the "Tatler." The French have a proverb, "It is the horse of Pacolet," that is, it is one that goes very fast.

Page. Merry Wives of Windsor, Shakespeare. Name of a family of Windsor, conspicuous in the play. When Sir John Falstaff made love to Mrs. Page, Page himself assumed the name of Brook. Sir John told the supposed Brook his whole "course of wooing."

Page. Mrs. Wife of Mr. Page, of Windsor. When Sir John Falstaff made love to her, she joined with Mrs. Ford to dupe him and punish him.

Page. Anne. Daughter of the above, in love with Fenton. Slender calls her "the sweet Anne Page."

Page, William. Anne's brother, a schoolboy.
Pale'mon. The Seasons, Thomson. The hero of an episode in Thomson's "Seasons," represented as the owner of harvest fields in which the lovely young Lavinia coming to glean, Palemon falls in love with her, and woos and wins her. (2) A character in Falconer's "Shipwreck," in love with the daughter of Albert, the commander.

Pall'mpsest. A parchment on which the original writing has been effaced, and something else has been written. The monks and others used to wash or rub out the writing in a parchment and use it again. As they did not efface it entirely, many works have been recovered by modern ingenuity. Thus Cicero's "De Republica" has been restored from an ancient manuscript which had been partly erased. There are relics of ancient learning of which even the mutilated members have an independent value, and this is especially true of Biblical manuscripts for criticism, and in a still broader sense, of all the remains of the ancient historians.

Palinurus. The pilot of Æneas, in Virgil's "Æneid" who fell asleep at the helm, and tumbled into the sea. The name is employed as a generic word for a steersman or pilot, and sometimes for a chief minister. Thus, Prince Bismarck was called the palinurus of William, Emperor of Germany.

Palladium. Something that affords effectual protection and safety. The Palladium was a colossal wooden statue of Pallas in the city of Troy, said to have fallen from heaven. The statue was carried away by the Greeks, and the city burned. The Scotch had a similar tradition attached to the great stone of Scone, near Perth. Edward I. removed it to Westminster, and it is still framed in the Coronation Chair of England. Stories connected with the palladium of a nation or a family are common in literature, as "Luck of Eden-hall," a poem by Longfellow.

Palet. A painter in Smollett's novel of "Peregrine Pickle." The absurdities of Palet are painted an inch thick.

Pame'la. Name of heroine and title of novel by Richardson. She is a simple country girl, and maid-servant of a rich young squire. She resists every temptation, and at length marries the young squire and reforms him. Pamela is very modest, bears her afflictions with much meekness, and is a model of maidenhood. The story is told in a series of letters which Pamela sends to her parents.

Pandarus. A son of Lycaon, and leader of the Lycians in the Trojan War, celebrated by Homer in the "Iliad." In mediæval romances, and by Shakespeare in "Troilus and Cressida," he is represented as procuring for Troilus the love and good graces of Chryseis—hence the word "pander."

Panegyric. An eulogistic harangue or oration, written or uttered in praise of a person or body of persons.

Pan-jan'drum, The Grand. A sort of mythical nonentity invented by Foote, the comic dramatist. The word occurs in Foote's farrago of nonsense, which he composed to test the memory of a person who said he had brought his memory to such perfection that he could remember anything by reading it over once.

Pantagruel. A character in a famous romance by Rabelais. The name is said to have been given him because he was born during the drought which lasted thirty and six months, three weeks, four days, thirteen hours, and a little more, in that year of grace noted for having "three Thursdays in one week." His father was Gargantua, the giant, who was four hundred four-score and forty-four years old at the time. He was chained in his cradle with four great iron chains, like those used in ships of the largest size. Being angry at this, he stamped out the bottom of his bassanet, which was made of weavers' beams. When he grew to manhood he knew all languages, all sciences, and all knowledge of every sort.

Pantagruelion Law Case. Pantagruel, Rabelais. This case, having nonplussed all the judges in Paris, was referred to a lord, Pantagruel for decision. After much "statement" the bench declared, "We have not understood one single circumstance of the defense." Then Pantagruel gave sentence, but his judgment was as unintelligible as the case itself. So, as no one understood a single sentence of the whole affair, all were perfectly satisfied.

Pan-urge. A celebrated character in Rabelais' "Pantagruel," and the real hero of the story; represented as an arrant rogue, a drunkard, a coward, and a libertine, but learned in the tongue, an ingenious practical joker, and a boon companion. He was the favorite of Pantagruel, who made him governor of Salmagondin,

and finally set out with him in quest of the oracle of the Holy Bottle.

Paradise and the Pe'ri. The second tale in Moore's poetical romance of "Lalla Rookh." The Peri laments her expulsion from heaven, and is told she will be readmitted if she will bring to the gate of heaven the "gift most dear to the Almighty." After several failures the Peri offered the "Repentant Tear," and the gates flew open to receive the gift.

Paradise Lost. The poem by Milton under this name opens with the awaking of the rebel angels in hell after their fall from heaven, the consultation of their chiefs how best to carry on the war with God, and the resolve of Satan to go forth and tempt newly created man to fall. Satan reaches Eden, and finds Adam and Eve in their innocence. This is told in the first four books. The next four books contain the Archangel Raphael's story of the war in heaven, the fall of Satan, and the creation of the world. The last four books describe the temptation and the fall of man, and tell of the redemption of man by Christ, and the expulsion from paradise.

Paradise Regained. In this poem Milton tells of the journey of Christ into the wilderness after his baptism, and its four books describe the temptation of Christ by Satan.

Pardoner's Tale. **Canterbury Tales.** Chaucer. Three rioters agreed to kill Death, and were directed to a tree under which he was to be found. At the foot of the tree they came upon a treasure, which all coveted. The younger of the three went to buy wine and the other two conspired to kill him on his return. He poisoned the wine and was slain by his brothers, who soon died from effect of the poison. Thus all found Death under the tree.

Pa'rian Chronicle. A chronological register of the chief events in the mythology and history of ancient Greece, found engraved on Parian marble.

Pa'rian Verse. Ill-natured satire; so called from Archilochos, a native of Paros.

Pa'ri-zade. A princess whose adventures in search of the Talking Bird, the Singing Tree, and the Yellow Water, are related in the "Story of the Sisters" in the "Arabian Nights' Entertainments."

Parley, Peter. Name assumed by Samuel Griswold Goodrich, an American. Above seven millions of his books were in circulation in 1859. Several piracies of this popular name have appeared.

Parody. A kind of writing in which the words of an author or his thoughts are, by some slight alterations, adapted to a different purpose.

Parthen'ope. One of the three syrens. She was buried at Naples. Naples itself was anciently called Parthenope, which name was changed to "Neap'olis" ("the new city") by a colony of Cumeans.

Par'ting-ton, Mrs. An imaginary old lady whose laughable sayings have been recorded by an American humorist, B. P. Shillaber.

Partlet. The hen in "The Nun's Priest's Tale," and in the famous beast-epic of "Reynard the Fox."

Par'z-val or Par'si-fal. The German name of Perceval, the hero and title of a metrical romance of the Twelfth Century, by Wolfram Von Eschenbach, and of a modern music drama by Richard Wagner. Parzival was brought up by a widowed mother in solitude, but when grown to manhood, two wandering knights persuaded him to go to the court of King Arthur. His mother consented to his going if he would wear the dress of a common jester. This he did, but soon achieved such noble deeds that Arthur made him a knight of the Round Table. Sir Parzival went in quest of the Holy Graal, which was kept in a castle called Graalburg, in Spain. He reached the castle, but having neglected certain conditions, was shut out, and, on his return to court, the priestess of Graalburg insisted on his being degraded from knighthood. Parzival then led a new life, and a wise hermit became his instructor. At length he reached such a state of purity and sanctity that the priestess of Graalburg declared him worthy to become lord of the castle. Lohengrin, "Knight of the Swan," was the son of Parzival.

Pastoral. Something descriptive of a shepherd's life; or a poem in which any action or passion is represented by its effects on a country life. The characteristics of this poem are simplicity, brevity, and delicacy.

Patient Griselda. A character in "Canterbury Tales," by Chaucer. She was robbed of children, reduced to poverty, and made to serve a rival, but bore all without complaint.

Pat'tieson, Peter. An imaginary assistant teacher at Ganderclench, and the feigned author of Scott's "Tales of My Landlord," which were represented as

having been published posthumously by his pedagogue superior, Jedediah Cleishbotham.

Paul-line'. The "Lady of Lyons" in Bulwer-Lytton's play of this name. She was married to Claude Melnotte, a gardener's son, who pretended to be a count.

Paul and Virginia. A pair of child lovers in Bernardin de St. Pierre's popular romance "Paul et Virginie." According to a tradition, or version, Paul and Virginia are brought up in the belief that they are brother and sister. Don Antonio is sent to bring her to Spain, and make her his bride. She is taken by force on board ship, but scarcely has the ship started, when a hurricane dashes it on rocks, and it is wrecked. Alhambra, a runaway slave, whom Paul and Virginia had befriended, rescues Virginia, who is brought to shore and married to Paul. Antonio is drowned.

Paul Pry. Paul Pry, John Poole. An idle, inquisitive, meddlesome fellow, who has no occupation of his own, and is forever poking his nose into other people's affairs. He always comes in with the apology, "I hope I don't intrude."

Peeping Tom of Coventry. A tailor of Coventry, the only soul in the town mean enough to peep at the Lady Godiva as she rode naked through the streets to relieve the people from oppression.

Peg-got'ty, Clara. The nurse of David Copperfield in Dickens' novel of this name. Being very plump, whenever she makes any exertion some of the buttons on the back of her dress fly off.

Peggotty, Dan'el. Brother of David Copperfield's nurse. Dan'el was a Yarmouth fisherman. His nephew, Ham Peggotty, and his brother-in-law's child, "little Em'ly," lived with him.

Peggotty, Em'ly. She was engaged to Ham Peggotty; but being fascinated with Steerforth she eloped. She was afterwards reclaimed, and emigrated to Australia.

Peggotty, Ham. Represented as the very beautiful of an uneducated, simple-minded, honest, and warm-hearted fisherman. He was drowned in his attempt to rescue Steerforth from the sea.

Pendennis. Name of title and hero of a novel by Thackeray, published in 1849 and 1850, was the immediate successor of "Vanity Fair." Literary life is described in the history of Pen, a hero of no very great worth.

Pendennis, Arthur. A young man of ardent feelings and lively intellect, but self-conceited and selfish.

Pendennis, Laura. His sister has been considered one of the best of Thackeray's characters.

Pendennis, Major. A tuft-hunter, who fawns on his patrons for the sake of wedging himself into their society.

Pendragon. A title conferred on several British chiefs in times of great danger, when they were invested with dictatorial power; thus Uter and Arthur were each appointed to the office to repel the Saxon invaders. The word means "chief of the kings."

Pennsylvania Farmer. A surname given to John Dickinson, a citizen of Pennsylvania. In the year 1768, he published his "Letters from a Pennsylvania Farmer to the Inhabitants of the British Colonies." These were republished in London, with a preface by Dr. Franklin, and were subsequently translated into French.

Penny-a-liner. A contributor to the local newspapers, but not on the staff. At one time these collectors of news used to be paid a penny a line on English newspapers, and the appellation is still in use.

Penny Dreadfuls. Penny sensational papers.

Pentateuch. A name given by Greek translators to the five books of the Old Testament ascribed to Moses. The chief aim of the Pentateuch is to give a description of the origin and history of the Hebrew people up to the conquest of Canaan, and the theocracy founded among them. Tradition, as preserved in the earliest historical records, mentions Moses as the writer of the complete Pentateuch, such as it is now, with the exception of a few verses describing the last moments of the lawgiver, which have been ascribed to Joshua.

Pepys' Diary. A writing which brought fame to Pepys, the author, was written in short-hand, and deciphered and published in 1825. It extends over the nine years from 1660 to 1669, and is the gossip chronicle of that gay and profligate time. We have no other book which gives so life-like a picture of that extraordinary state of society.

Peregrine Pickle. The hero and title of a novel by Smollett (1751). Peregrine Pickle is a savage, ungrateful spendthrift, fond of practical jokes, and suffering with evil temper the misfortunes brought on himself by his own wilfulness.

Per'o-nel'la. The subject of a fairy tale, represented as a pretty country lass, who, at the offer of a fairy, changes places with an old and decrepit queen, and receives the homage paid to rank and wealth, but afterward gladly resumes her beauty and rags.

Pe-tru'h'l-o. A gentleman of Verona, in Shakespeare's "Taming of the Shrew." A very honest fellow, who hardly speaks a word of truth, and succeeds in all his tricks. He acts his assumed character to the life, with untired animal spirits, and without a particle of ill-humor.

Pe'ver-II, Sir Geoff'frey. A country gentleman of strong High-church and Royalist opinions, in Sir Walter Scott's novel "Peveril of the Peak."

Phædo. An ancient and well-known work by Plato, in which the doctrine of the immortality of the soul is most fully set forth. It is in the form of a dialogue which combines with the abstract philosophical discussion, a graphic narrative of the last hours of Socrates, which, for pathos and dignity, is unsurpassed.

Philax, Fairy Tales, D'Aunoy. Philax was cousin to the Princess Imis. The fay Pagan shut them up in the "Palace of Revenge," a palace containing every delight except the power of leaving it. In the course of a few years, Imis and Philax longed as much for a separation as at one time they had wished for a union.

Philipp. The Madness of Philipp, Josephine Daskam. A representation of the unregenerate child—"the child of strong native impulses who has not yet yielded to the shaping force of education; the child, therefore, of originality, of vivacity, of humor, and of fascinating power of invention in the field of mischief."

Philippie. A word used to denote any discourse or declamation full of acrimonious invective. It derives its name from orations made by Demosthenes against Philip of Macedon, in which the orator bitterly attacked the king as the enemy of Greece.

Phillistines. Meaning the ill-behaved and ignorant. The word so applied arose in Germany from the Charles or Philisters, who were always quarreling with the students. Matthew Arnold applied the term Phillistine to the middle class in England.

Philo. The Messiah, Klopstock. A Pharisee, one of the Jewish sanhedrim, who hated Caiaphas, the high priest, for being a Sadducee. Philo made a vow that he would take no rest till Jesus was numbered with the dead. He commits suicide, and his soul is carried to hell by Obaddon, the angel of death.

Philitra, Faery Queen, Spenser. A lady of large fortune, betrothed to Bracidas; but, seeing the fortune of Amidas daily increasing, and that of Bracidas getting smaller, she attached herself to the more prosperous younger brother.

Phineas, Uncle Tom's Cabin, Mrs. Stowe. The quaker, an "underground railroad" man, who helped the slave family of George and Eliza to reach Canada, after Eliza had crossed the river on cakes of floating ice.

Phyllis. In Virgil's "Eclogues," the name of a rustic maiden. This name, also written Phillis, has been in common use as meaning any unsophisticated country girl.

Pickanin'ny. A young child. A West Indian negro word.

Plekwick, Mr. Samuel. The hero of the "Pickwick Papers," by Charles Dickens. He is a simple-minded, benevolent old gentleman, who wears spectacles and short black gaiters. He founds a club, and travels with its members over England, each member being under his guardianship. They meet many laughable adventures.

Pied Piper of Hamelin. Old German legend. Robert Browning, in his poem entitled "The Pied Piper," has given a metrical version. The legend recounts how a certain musician came into the town of Hamelin, in the country of Brunswick, and offered, for a sum of money, to rid the town of the rats by which it was infested. Having executed his task, and the promised reward having been withheld, he in revenge blew again his pipe, and drew the children of the town to a cavern in the side of a hill, which, upon their entrance, closed and shut them in forever.

Piers Plowman. The hero of a satirical poem of the Fourteenth Century. He falls asleep, like John Bunyan, on the Malvern Hills, and has different visions, which he describes, and in which he exposes the corruptions of society, the dissoluteness of the clergy, and the allurements to sin. The author is supposed to be Robert or William Langland. No other writings so faithfully reflect the popular feeling during the great social and religious movements of that century as the bitterly satirical poem, "The Vision of Piers Ploughman."

In its allegory, the discontent of the Commons with the course of legislation in Church and State found a voice.

Pietro, The Ring and the Book, Browning. The professed father of Pompilia, criminally assumed as his child to prevent certain property from passing to an heir not his own.

Pilgrim's Progress. Written by Bunyan in the form of a dream to allegorize the life of a Christian, from his conversion to his death. His doubts are giants, his sins a pack, his Bible a chart, his minister Evangelist, his conversion a flight from the City of Destruction, his struggle with besetting sins a fight with Apollyon, his death, a toilsome passage over a deep stream, which flows between him and heaven.

Pilot, The. Title of a sea-story by Cooper, which was called the "first sea-novel of the English language." It was published in the year 1823 and soon translated into Italian, German, and French. It is founded on the adventures of John Paul Jones.

Pinch, Tom. A character in Dickens's "Martin Chuzzlewit," distinguished by his guilelessness, his oddity, and his exhaustless goodness of heart.

Pippa Passes. The title of a dramatic poem by Robert Browning. Pippa is a light-hearted peasant maiden, who resolves to enjoy her holiday. Various groups of persons overhear her as she passes by singing, and some of her stray words act with secret but sure influence for good.

Platonic Love. Spiritual love between persons of opposite sexes. It is the friendship of man and woman, without mixture of what is usually called love. Plato strongly advocated this pure affection, and hence its distinctive name.

Pocket, Great Expectations, Dickens. Name of a family prominent in the story.

Pocket. A real scholar, educated at Harrow, and an honor-man at Cambridge, but, having married young, he had to take up the calling of "grinder" and literary fag for a living. Pip was placed in his care.

Pocket, Mrs. Daughter of a city knight, brought up to be an ornamental nonentity, helpless, shiftless, and useless. She was the mother of eight children, whom she allowed to "tumble up" as best they could, under the charge of her maid Flopson.

Pocket, Herbert. Son of Mr. Matthew Pocket, wonderfully helpful, but had not the stuff to push his way into wealth.

Pocket, Sarah. Sister of Matthew Pocket, a little dry, old woman, with a small face that might have been made of walnut-shell, and a large mouth.

Poetical Romances. These romances, native to the French, group themselves about great names, some having Alexander, some Charlemagne, as their central figure. One cluster, the Arthurian, is of English growth, and possesses the highest interest of all. Translations and imitations of these French romances slowly came into popular favor with the English people.

Polyglot. The word means, in general, an assemblage of versions in different languages of the same work, but is almost exclusively applied to manifold versions of the Bible. Besides the Bible, many other works, or small pieces, have been published in polyglot. Of smaller pieces, the Lord's Prayer has been the favorite, of which many collections have been published since the Fifteenth Century. Of these, the most comprehensive, and the most valuable, is the well-known "Mithridates" of Adelung, which contains the Lord's Prayer in more than 400 languages.

Poor Richard. The assumed name of Benjamin Franklin in a series of almanacs from 1732 to 1757. These almanacs contain maxims and precepts.

Popinjay. A butterfly man, a fop; so called from the popinjay or figure of a bird shot at for practice. The title is used by Scott in "Old Mortality"; by Shakespeare in "Henry IV.," and by others.

Portia, Merchant of Venice, Shakespeare. A rich heiress whom Bassanio loved and who defended Antonio.

Pot-bollers. Articles written and pictures of small merit drawn or painted for the sake of earning daily bread.

Potiphar Papers. A series of brilliant satiric sketches of society written by George W. Curtis in the year 1852, and afterward collected in book form.

Pres'ter, John. The name given, in the middle ages, to a supposed Christian sovereign and priest of the interior of Asia, whose dominions were variously placed. He has been the subject of many legends and is mentioned by Shakespeare in "Much Ado About Nothing."

Primrose, Rev. Charles. Vicar of Wakefield, Goldsmith. A clergyman, rich in heavenly wisdom, but poor indeed in all worldly knowledge.

Primrose, Mrs. Deborah. The doctor's wife, full of motherly vanity, and desirous to appear genteel. She could read without much spelling, and prided herself on her housewifery, especially on her gooseberry wine.

Primrose, George. Son of the vicar. He went to Amsterdam to teach the Dutch English, but never once called to mind that he himself must know something of Dutch before this could be done.

Primrose, Moses. Brother of the above, noted for giving in better a good horse for a gross of worthless green spectacles with copper rims.

Primrose, Olivia. The eldest daughter of the doctor. Pretty, enthusiastic, a sort of Hebe in beauty. "She wished for many lovers," and eloped with Squire Thornhill.

Primrose, Sophia. The second daughter of Dr. Primrose. She was "soft, modest, and alluring."

Priscilla, Courtship of Miles Standish, Longfellow. A Puritan maiden who is wooed by Captain Standish through the mediation of his friend, John Alden, who is in love with Priscilla. She prefers John Alden and marries him after the captain's supposed death. The captain, however, appears at the close of the wedding service, and the friends are reconciled.

Prospero, Tempest, Shakespeare. Rightful Duke of Milan, deposed by his brother. Drifted on a desert island, he practiced magic, and raised a tempest in which his brother was shipwrecked. Ultimately Prospero "broke his wand," and his daughter married the son of the King of Naples.

Pyncheon. The name of an ancient but decayed family in Hawthorne's romance "The House of the Seven Gables." There are: (1) Judge Pyncheon, a selfish, cunning, worldly man. (2) His cousin Clifford, a delicate, sensitive nature, reduced to childishness by long imprisonment and suffering. (3) Hepzibah, the latter's sister, an old maid who devotes herself to the care of Clifford. (4) A second cousin, Phoebe, a fresh, cheerful young girl, who restores the fallen fortunes of the family and removes the curse which rested on it.

Puss in Boots. The subject and title of a well-known nursery tale derived from a fairy story in the "Nights" of the Italian author Straparola, and Charles Perrault's "Contes des Fées." The wonderful cat secures a princess and a fortune for his master, a poor young miller, whom he passes off as the rich Marquis of Carabas.

Quasimodo, Notre Dame, Hugo. A misshapen dwarf one of the prominent characters in the story. He is brought up in the cathedral of Notre Dame de Paris. One day, he sees Esmeralda, who had been dancing in the cathedral close, set upon by a mob, and he conceals her for a time in the church. When, at length, the beautiful gypsy girl is gibbeted, Quasimodo disappears mysteriously, but a skeleton corresponding to the deformed figure is found after a time in a hole under the gibbet.

Quaver. The Virgin Unmasked, Fielding. A singing-master, who says, "if it were not for singing-masters, men and women might as well have been born dumb." He courts Lucy by promising to give her singing-lessons.

Queen La'be, Arabian Nights. The queen of magic, ruler over the Enchanted City. Beder, Prince of Persia is connected with her in the tale. She transforms men into horses, mules, and other animals. Beder marries her, defeats her plots against him, but is himself turned into an owl for a time.

Quickly, Mistress. Merry Wives of Windsor, Shakespeare. A serving woman to Dr. Cains, a French physician. She is the go-between of three suitors for "sweet Anne Page," and with perfect disinterestedness wishes all three to succeed.

Quickly, Mistress Nell. Hostess of a tavern in Eastcheap, frequented by Harry, Prince of Wales, Sir John Falstaff, and all their disreputable crew.

Quid'nunkis. Title and name of hero in a fable found or written by Gay in 1726. This hero was a monkey which climbed higher than his neighbors, and fell into a river. For a few moments the monkey race stood panic-struck, but the stream flowed on, the monkeys continued their gambols. The object of this fable is to show that no one is of sufficient importance to stop the general current of events or cause a gap in nature.

Quilp, Old Curiosity Shop, Dickens. A hideous dwarf, cunning, malicious, and a perfect master in tormenting. Of hard, forbidding features, with head and face large enough for a giant. He lived on Tower Hill, collected rents, advanced money to seamen, and kept a sort of wharf, containing rusty anchors, huge iron rings, piles of rotten wood, and sheets of old copper, calling himself a ship-breaker. He was on the point

of being arrested for felony, when he drowned himself.

Quillp, Mrs. Wife of the dwarf, a young, obedient, and pretty little woman, treated like a dog by her husband, whom she loved but more greatly feared.

Quintessence. "The fifth essence." In the modern and general sense, an epithet applied to an extract which contains the most essential part of anything. It is quite an error to suppose that the word means an essence five times distilled, and that the term came from the alchemists. The ancient Greeks said there are four elements or forms in which matter can exist—fire, or the imponderable form; air, or the gaseous form; water, or the liquid form; and earth, or the solid form. The Pythagoreans added a fifth, which they call "ether," more subtle and pure than fire, and possessed of an orbicular motion. This element, which flew upwards at creation, and out of which the stars were made, was called the "fifth essence"; quintessence, therefore, means the most subtle extract of a body that can be produced.

Quintillians. These were the disciples of Quintilla, who was said to be a prophetess. These so-called heretical Christians allowed women to become priests and bishops.

Quintus Fixlein. Title of a romance by Jean Paul Richter and the name of the principal character.

Quixote. See Don Quixote.

Quixote of the North. Charles XII. of Sweden, sometimes called in derision the Madman, was also called the Quixote of the North.

Quixotic. Like Don Quixote, or one who has foolish and impractical schemes—a would-be reformer.

Quodling, The Rev. Mr. Peveril of the Peak, Scott. Chaplain to the Duke of Buckingham.

Rad'gund. Faery Queen, Spenser. Queen of the fabled Amazons. Having been rejected by Belldant "the Bold," she revenged herself by degrading all the men who fell into her power by dressing them like women, and giving them women's work.

Ramona. Name of heroine and title of romance by Helen Hunt Jackson. Ramona saw the American Indian followed by "civilization" while retreating slowly but surely toward his own extinction, and had herself a share in the tragedy. Ramona is considered the great romance of Indian life.

Rasselas. An imaginary prince hero of the romance by Dr. Johnson bearing same title. According to the custom of his country, Abyssinia, he was confined in paradise, with the rest of the royal family. This paradise was in the valley of Amhara, surrounded by high mountains. It had only one entrance, a cavern concealed by woods, and closed by iron gates. He escaped with his sister Nekayah and Imlac the poet, and wandered about to find what condition or rank of life was the most happy. After careful investigation, he found no lot without its drawbacks, and resolved to return to the "happy valley."

Raud the Strong. Tales of a Wayside Inn. H. W. Longfellow. The viking who worshiped the gods and lived by fire and sword. King Olaf went against him sailing from Dronthem to Salten Fjord.

Ravenswood. Bride of Lammermoor, Scott. The lord of Ravenswood, an old Scotch nobleman and a decayed royalist. His son Edgar falls in love with Lucy Ashton, daughter of Sir William Ashton, Lord-Keeper of Scotland. The lovers plight their troth, but Lucy is compelled to marry Frank Hayston, heir of Bucklaw. The bride, in a fit of insanity, attempts to murder the bridegroom and dies. Bucklaw goes abroad. Colonel Ashton, seeing Edgar at the funeral of Lucy, appoints a hostile meeting; and Edgar, on his way to the place appointed, is lost in the quicksands. A prophecy, noted as a curse, hung over the family and was thus fulfilled.

Random. Roderick Random, Smollet. A young Scotch scapgrace in quest of fortune. At one time he revels in prosperity, again he is in utter destitution. He roams at random, in keeping with his name.

Rappaccini. Mosses from an Old Manse, Hawthorne. A doctor in whose garden grew strange plants whose juices and fragrance were poison. His daughter, nourished on these odors became poisonous herself, her lover found an antidote which she took, but the poison meant life and the antidote meant death to her.

Raymond. In Jerusalem Delivered by Tasso. Raymond was known as the Nestor of the Crusaders, slew Aladine, the king of Jerusalem, and planted the Christian standard upon the tower of David.

Rebecca. Ivanhoe, Scott. Daughter of Isaac the Jew, in love with Ivanhoe. Rebecca, with her father and Ivanhoe, as prisoners, are confined in Front de Beauf's castle. Rebecca is taken to the turret chamber and left with the old sibyl, but when Brian de Bois Guilbert comes to her, she spurns him with heroic dis-

dain. Ivanhoe, who was suffering from wounds received in a tournament, is nursed by Rebecca. After escape and adventure, and being again prisoner, the Grand Master commands the Jewish maiden to be tried for sorcery, and she demands a trial by combat. The demand is granted, when Brian de Bois Guilbert is appointed as the champion against her; and Ivanhoe undertakes her defense, slays Brian, and Rebecca is set free. In contrast with this strong character, Rowena seems insignificant even when she becomes the bride of Ivanhoe. Scott is said to have named Rebecca from the beautiful Rebecca Gratz of Philadelphia, described to him by Washington Irving.

Red-Cross Knight. The Red-Cross Knight is St. George, the patron saint of England, and, in the obvious and general interpretation, typifies Holiness, or the perfection of the spiritual man in religion. In Spenser's "Faery Queen" the task of slaying a dragon was assigned to him as the champion of Una.

Red-gaunt'let. One of the principal characters in Sir Walter Scott's novel of the same name, a political enthusiast and Jacobite, who scruples at no means of upholding the cause of the Pretender, and finally accompanies him into exile. His race bore a fatal mark resembling a horse-shoe which appeared on the face of Red-gauntlet as he frowned when angry.

Red-Riding-Hood. This nursery tale is, with slight variations, common to Sweden, Germany, and France. In Charles Perrault's "Contes des Fées" it is called "Le Petit Chaperon Rouge."

Representative Men. In this work Emerson, more nearly than in any of his other works, gives expression to his system as a whole. The topics are, (1) Plato, the Philosopher; (2) Swedenborg, the Mystic; (3) Montaigne the Skeptic; (4) Shakespeare, the Poet; (5) Napoleon, the Man of the World; (6) Goethe, the Writer. The mental portraits sketched under these six heads give us Emerson himself, so far as he is capable of being formulated at all.

Republic, The. A work composed by Plato 400 years before Christ. The "Republic" is not, as the title would suggest, a political work, like the "Politics" of Aristotle. The principles and government of an ideal moral organism, of which the rulers shall be types of fully developed and perfectly educated men, is the real subject. In the "Republic" we find the necessity of virtue to the very idea of social life proved in the first book; then the whole process of a complete moral and scientific education is set forth. It has been said that the most complete record of the beliefs or opinions of Plato are found in this work.

Reveries of a Bachelor. Name of a writing by D. G. Mitchell. This "Reveries" is a collection of sketches of life and character, painted in such a dream-like, delicate manner as to make the reader lose for the time being the full consciousness of his own reality. It has called forth a number of imitators more or less successful, no one of whom, however, is comparable to the original.

Reynard the Fox. The hero in the beast-epic, a celebrated epic fable of the Middle Ages, belonging to and terminating the series of poems in which "beasts" are the speakers and actors. It is written in Low-German, professedly by a Hinreck van Alekmer, and was printed in the year 1498. Before Jacob Grimm published the results of his laborious researches, it was believed that the poem printed at Lübeck in 1498 was the earliest literary embodiment, if not the direct source, of the fable. Grimm has shown that, in one form or another, the "beast-fable" goes back to the remotest antiquity, and is a common inheritance of the Aryan or Indo-Germanic races. According to many authorities this prose poem, in its present form, is a satire on the state of Germany in the Middle Ages. Reynard typifies the Church; his uncle, Isengrii the wolf, typifies the baronial element; and Nodel the lion, the regal. However that may be, in the real fable, Reynard the Fox has a constant impulse to deceive and victimize every body, whether friend or foe, but especially Isengrii; and, though the latter frequently reduces him to the greatest straits, he generally gets the better of it in the end. The work now consulted by general readers is Goethe's version which has been translated into English.

Rhapsody means songs strung together. The term was originally applied to the books of the "Iliad" and "Odyssey," which at one time were in fragments. Certain bards collected together a number of the fragments, enough to make a connected "ballad," and sang them as our minstrels sang the deeds of famous heroes.

Rigolette. The name of a female character in Eugene Sue's "Mysteries of Paris." It has acquired a proverbial currency, and is used as a synonym of "grissette."

Rinal'do. In Tasso's "Jerusalem Delivered" he belonged to the army of the Christians. He was the son of Bertoldo and Sophia, and nephew of Guelpho, but was brought up by Matilda. The name, Rinaldo, is also found in Bojardo's "Orlando Innamorato," in Ariosto's "Orlando Furioso," and in other romantic tales of Italy and France. He was one of Charlemagne's paladins, and cousin to Orlando. Having killed Charlemagne's nephew Berthelot, he was banished and outlawed. After various adventures and disasters, he went to the Holy Land, and, on his return, succeeded in making peace with the emperor.

Ring and the Book, The. An idyllic epic, by Robert Browning, founded on Italian history. Guido Franceschini, a Florentine Count of shattered fortune, married Pompilia, thinking her to be an heiress. Finding this a mistake the count treated Pompilia so brutally that she left him under the protection of Caponsacchi, a young priest, and being arrested at Rome, a legal separation took place. Pompilia sued for a divorce, but, pending the suit, gave birth to a son. The count murdered Pompilia, and Pietro and Violante, her supposed parents, but being taken red-handed, was brought to trial, found guilty, and executed.

Rip Van Winkle, Sketch Book, Irving. An indolent, good-natured fellow, living in a village on the Hudson. While shooting among the Catskill Mountains he meets with a stranger whom he helps in carrying a keg over rocks and cliffs; with him he joins a party who are silently rolling ninepins. Rip Van Winkle drinks deeply of the liquor they furnish, and falls into a sleep which lasts twenty years, during which the Revolutionary War takes place. After awaking, Rip returns to the village, finds himself almost forgotten and makes friends with the new generation. The name of the great actor, Joseph Jefferson, became so identified with this character that to the English-speaking world he was Rip Van Winkle.

Robert the Devil. The hero of an old French metrical romance of the Thirteenth Century, the same as Robert, first Duke of Normandy, who became an early object of legendary scandal. Having been given over to the Devil before birth, he ran a career of cruelties and crimes unparalleled, till he was miraculously reclaimed, did penance, and became a shining light, and married the emperor's daughter. In the Eleventh Century the romance was turned into prose, and of the prose story two translations were made into English. There was also a miracle play on the same subject. The opera of "Robert le Diable" was composed by Meyerbeer, in 1826.

Robin des Bois. In Germany, a mysterious hunter of the forest. Robin des Bois occurs in one of Eugene Sue's novels "as a well-known mythical character whose name is employed by French mothers to frighten their children."

Robin Goodfellow. Sometimes called Puck, son of Oberon, a domestic spirit, the constant attendant on the English fairy-court; full of tricks and fond of practical jokes. He is also considered the same as Loh-lie-by-the-fire, in some tales. His character and achievements are recorded in the well-known ballad beginning "From Oberon in Fairy-land." Wright, in his "Essays on the Literature, Superstitions, and History of England in the Middle Ages," suspects Robin Goodfellow to have been the Robin Hood of the old popular Morris dance.

Robin Hood. A famous English outlaw whose exploits are the subjects of many ballads, but of whose actual existence little or no evidence can be discovered. Various periods, ranging from the time of Richard I. to near the end of the reign of Edward II., have been assigned as the age in which he lived. He is usually described as a yeoman, and his chief residence is said to have been the forest of Sherwood, in Nottinghamshire. Of his followers, the most noted are Little John; his chaplain, Friar Tuck; and his companion, Maid Marian. The popular legends extol his personal courage and generosity, and his skill in archery. Scott introduces Robin Hood in two novels — "Ivanhoe" and "The Talisman." In the former he first appears as Locksley the archer, at the tournament.

Robinson Crusoe. A tale by Daniel Defoe. Robinson Crusoe went to sea, was wrecked, lived on an uninhabited island of the tropics, and relieved the weariness of life by numberless contrivances. At length he met a young Indian, whom he saved from death. He called him his "man Friday," and made him his companion and servant. This story has been translated into more languages than any other English book.

Rob Roy. The title and hero of a novel by Sir Walter Scott. It signifies "Rob the Red," and was the sobriquet of a famous Scottish outlaw, Robert MacGregor, the chief of the clan MacGregor.

Roderick Dhu, Lady of the Lake, Scott. An outlaw and chief of a band of Scots who resolved to win back what had been lost to the Saxons. In connection with Red Murruck he sought the life of the Saxon Fitz James.

Roderigo. In Shakespeare's "Othello," a Venetian in love with Desdemona, who when the lady eloped with Othello, hated the "noble Moor."

Roger Drake. Name of hero and title of novel by H. K. Webster. "Captain of Industry" is the added appellation to name of hero, who is interested in the working of a copper-mine, the founding of a trust, the change from the old-fashioned trust to the simple plan of one monster corporation, and the deadly business fight for supremacy found in modern industrial struggles.

Roland. The hero of one of the most ancient and popular epics of early French or Frankish literature, was, according to tradition, the favorite nephew and captain of the Emperor Charlemagne. In Italian romance he is called Rinal'do. He was slain in the valley of Roncesvalles as he was leading the rear of the army from Spain to France. The oldest version of the "Song of Roland," forming part of the "Chansons de Geste," which treat of the achievements of Charlemagne and his paladins, belongs to the Eleventh Century. Throughout the Middle Ages, the "Song of Roland" was the most popular of the many heroic poems, and William of Normandy, when on his way to conquer England, had it sung at the head of his troops, to encourage them on their march. At the present day, the traditional memory of the heroic paladin is still held in honor by the hardy mountaineers of the Pyrenees, amongst whose dangerous defiles the scene of his exploits and death is laid. Roland is the hero of Théroulde's "Chanson de Roland;" of Turpin's "Chronique;" of Bojardo's "Orlando Innamorato;" of Ariosto's "Orlando Furioso."

Romance of the Rose. A poetical allegory, begun by Guillaume de Lorris in the latter part of the Thirteenth Century, and continued by Jean de Meung in the former half of the Fourteenth Century. The poet dreams that Dame Idleness conducts him to the palace of Pleasure, where he meets many adventures among the attendant maidens, Youth, Joy, Courtesy, and others by whom he is conducted to a bed of roses. He singles out one, when an arrow from Love's bow stretches him fainting on the ground. Fear, Slander, and Jealousy are afterward introduced.

Romances. The French troubadours composed romances and sung them at the courts of the Norman kings. Richard I. was himself a troubadour. The subjects of the romances were generally the deeds of Charlemagne and his knights, or of King Arthur and his knights, and a little later tales of the Crusaders became popular. Old tales were retold, and the incidents were transferred to Eastern lands. From the time of Edward II. many of these tales were translated into English.

Ro'me-o. In Shakespeare's tragedy of "Romeo and Juliet," a son of Montague, in love with Juliet, the daughter of Capulet, who was the head of a noble house of Verona, in feudal enmity with the house of Montague.

Ro'mulus. The mythical founder of the city of Rome. His name is only a lengthened form of Romus, and he is, therefore, to be regarded as a symbolical representation of the Roman people.

Rosetta Stone. Found at Rosetta in the delta of the Nile, contains equivalent inscriptions in hieroglyphics and in Greek letters. The meaning of the Greek text being known the hieroglyphics could be translated.

Round Table, The. History of Prince Arthur, Sir T. Malory. A table made by Merlin for Uther the pendragon. Uther gave it to King Leodegrance of Camelot, and when Arthur married Guinevere (the daughter of Leodegrance), he received the table with a hundred knights as a wedding present. The table would seat 150 knights, and each seat was appropriated. What is usually meant by Arthur's Round Table is a smaller one for the accommodation of twelve favorite knights. King Arthur instituted an order of knighthood called "the knights of the Round Table," the chief of whom were Sir Lancelot, Sir Tristram, and Sir Lamerock or Lamerake. The "Siege Perilous" was reserved for Sir Galahad, the son of Sir Lancelot by Elaine.

Roussillon, Alice. The heroine of the romance, "Alice of Old Vincennes" by Maurice Thompson. Her guardian was Gaspard Roussillon, a successful trader with the Indians. "Eat frogs and save your scalps" was the plan of the Latin Creoles. "Papa Roussillon" was a frog-eater and the ruling spirit in his little village. The English and their Indian allies arranged their attack on the fort at Vincennes, and the American flag was in danger. Alice, with the help of a cripple boy, Jean, stole the flag, no search or questioning could reveal the whereabouts of either flag or thief, and at the end of

the siege it was produced, much to the amazement of General Hamilton. Alice forgot her flag for a moment in the appearance of her lover, Beverly, whom she had mourned as dead, but Jean raised it on a staff from which the stars and stripes still float.

Ruach. Pantagruel, Rabelais. The isle of winds, visited by Pantagruel and his companions. The people of this island live on wind, such as flattery, promises, and hope. The poorer sort are very ill-fed, but the great are stuffed with huge mill-draughts of the same unsubstantial puffs.

Ru'be-zahl. The name of a famous spirit of the Riesen-Gebirge in Germany, corresponding to the Puck of England. He is celebrated in innumerable sagas, ballads, and tales, under the various forms of a miner, hunter, monk, dwarf, giant, etc. He is said to aid the poor and oppressed, and show benighted wanderers their road, but to wage incessant war with the proud and wicked.

Rudge. Barnaby Rudge, Dickens. Barnaby, a half-witted lad, with pale face, red hair and protruding eyes, dressed in tawdry finery including peacock feathers in his hat, is the hero of the novel with his inseparable companion, a raven, also of much interest. Barnaby joined the Gordon rioters for the proud pleasure of carrying a flag and wearing a blue bow. He was arrested and lodged in Newgate, from whence he made his escape, with other prisoners, when the jail was burned but both he and his father being betrayed, were recaptured, brought to trial, and condemned to death. By the influence of Gabriel Varden, the locksmith, the poor half-witted lad was reprieved. Mr. Rudge, the father of Barnaby, supposed to have been murdered the same night as Mr. Haredale, to whom he was steward. Rudge himself was the murderer both of Mr. Haredale and also of his faithful servant, to whom the crime was attributed. After the murder, he was seen by many haunting the locality, and was supposed to be a ghost. He joined the Gordon rioters. Mrs. [Mary] Rudge, mother of Barnaby, and very like him, "but where in his face there was wildness and vacancy, in hers there was the patient composure of sorrow.

Ruggiero. Orlando Furioso, Ariosto. A young Saracen knight born of Christian parents, who falls in love with Bradamante, a Christian Amazon, and sister to Rinaldo. After numerous adventures and crosses, they marry and found the house of Este. Ruggiero is noted for the possession of a hippogriff, or winged horse, and also a veiled shield, the dazzling splendor of which, when suddenly disclosed, struck with blindness and astonishment all eyes that beheld it.

Rumpelstilzchen. Old German Tales. According to Grimm, this name is a compound, but the spirit represented is one familiar to all German children. The original story tells of him as a dwarf who spun straw into gold for a certain miller's daughter. He has since done favors to many people and paid visits from his mountain home only known by the results of his helpfulness.

Runes, the earliest alphabet in use among the nations of Northern Europe. The exact period of their origin is not known. They are found engraved on rocks, crosses, monumental stones, coins, medals, rings, brooches, and the hilts and blades of swords. There is no reason to believe that they were at any time in the familiar use in which we find the characters of a written language in modern times, nor have we any traces of their being used in books or on parchment.

Rupert, Knight. Formerly in the villages of Northern Germany, a personage clad in high buskins, white robe, mask, and enormous wig, who at Christmas time distributes presents to the children. Like St. Nicholas, he keeps watch over naughty children. The horseman in the May pageant is in some parts of Germany called Ruprecht, or Rupert.

Rustam. Persian Romances. He is the chief of the Persian mythical heroes, son of Zal, King of India, and descendant of Benjamin, the beloved son of Jacob. He delivered King Caicus from prison, but afterwards fell into disgrace because he refused to embrace the religious system of Zoroaster. Caicus sent his son Asferdian to convert him, and, as persuasion availed nothing, single combat was resorted to. The fight lasted two days, and then Rustam discovered that Asferdian bore a "charmed life." The valor of these two heroes is proverbial, and the Persian romances are full of their deeds. "Schrah and Rustam" form the subject of a poetical romance by Matthew Arnold.

Ruydera. Don Quixote, Cervantes. A duenna who had seven daughters and two nieces. They were imprisoned for 500 years in a cavern in Spain. Their ceaseless weeping stirred the compassion of Merlin, who converted them into lakes in the same province.

Sac'ri-pant, King. (1) King of Circassia, and a lover of Angelica, in Bojardo and Ariosto. (2) A personage introduced by Alessandro Tassoni, the Italian poet, in his mock-heroic poem, entitled the "Rape of the Bucket," represented as false, brave, noisy, and hectoring. The name is quoted as a synonym with vanity and braggart courage.

Sagas. The name given to those ancient traditions which form the substance of the history and mythology of the Scandinavian races: the language in which they are written is supposed to be the old Icelandic. In the "Edda" there are numerous sagas. As our Bible contains the history of the Jews, religious songs, moral proverbs, and religious stories, so the "Edda" contained the history of Norway, religious songs, a book of proverbs, and numerous stories. The original "Edda" was compiled and edited by Samund Sigfusson, an Icelandic priest and scald, in the Eleventh Century. It contains twenty-eight parts or books, all of which are in verse. Two hundred years later, Snorro Sturleson of Iceland abridged, rearranged, and reduced to prose the "Edda," and his work was called "The Younger Edda." In this we find the famous story called by the Germans the "Nibelungen Lied." Besides the sagas contained in the "Eddas," there are numerous others, and the whole saga literature makes over 200 volumes. Among them are the "Volsunga Saga" which is a collection of lays about the early Teutonic heroes. The "Saga of St. Olaf" is the history of this Norwegian king. "Frithjof's Saga" contains the life and adventures of Frithjof of Iceland. Snorro Sturleson, at the close of the Twelfth Century, made the second great collection of chronicles in verse, called the "Heimskringla Saga." This is a most valuable record of the laws, customs, and manners of the ancient Scandinavians.

Seasons. A well-known poem said to be the foundation of Thomson's literary fame. Its description of the phenomena of nature during an English year is minute, and the poem has been much read by foreigners.

St. Leon. The title of a novel by William Goodwin and the name of its hero, a man who becomes possessed of the elixir of life, and the secret of the transmutation of metals—acquisitions which only bring him misfortunes and much protracted misery.

St. Nicholas. The patron saint of boys. He is said to have been Bishop of Myra, and to have died in the year 326. The young were universally taught to revere him, and the popular fiction which represents him as the bearer of presents to children on Christmas eve is well known. He is the Santa Claus (or Klaus) of the Dutch.

St. Patrick's Purgatory. The subject and locality of a legend long famous throughout Europe. The scene is laid in Ireland, upon an islet in Lough Derg. The punishments undergone here are analogous to those described by Dante in his "Divina Commedia." The story was made the subject of a romance in the Fourteenth Century; and, in Spain, in the Seventeenth Century, it was dramatized by Calderon.

St. Swith'in. According to legend this saint was tutor to King Alfred and Bishop of Winchester, and many miracles are attributed to him, especially the rain of St. Swith'in's Day.

Salmagundi. The name of a periodical started by Washington Irving, his brother, and James K. Paulding, in the year 1807. The object of the paper was the same as that of the "Spectator," "to reform the town." The publishers became tired of their venture before their subscribers did, and only twenty numbers were issued. The political pieces were full of humor, but were not in support of any party. The wit and satire were connected with things local and would not be thoroughly understood now, or appreciated. The writers touched upon the follies of fashionable life as well as other follies of their day.

Salt-Box House. Title of book by J. D. Shelton and name given to an imaginary house supposed to stand in a Connecticut hill town more than a century ago. The life of the family to whom the house belonged is followed for three generations. The people, like most families of the same social station, had no sympathy with the war for colonial independence. They have little to do with political life, but in their every-day concerns, work and play, school and church, love and marriage, sickness and death, with their old-time customs, traditions and habits of thought they are very interesting. Miss Mary, the last mistress of the Salt-Box House, is a most attractive old maid.

Salt River. An imaginary river, up which defeated political parties are supposed to be sent to oblivion. The name and application said to have originated in the United States and in connection with a river of Kentucky. It is called an American cant or slang name.

Sam'bo. This term and the name Cuffey used to designate the negro race. Both used by Mrs. Stowe in her stories.

Samian Letter, The. The letter Y used by Pythagoras as an emblem of the paths of virtue and of vice.

Samian Sage. Pythagoras, said to have been born at Samos.

Sampson, Dominie. See Dominie Sampson.

Samson Agonistes. The principal character in Milton's sacred drama, "Samson Agonistes" or "Samson the Combatant." Samson blind and bound triumphs over his enemies. As in the Bible story, he grasps two of the supporting pillars and perishes in the general ruin.

Sancho Panza. The esquire and counterpart of Don Quixote in Cervantes' famous novel. He has much shrewdness in practical matters and a store of proverbial wisdom. He rode upon an ass which he dearly loved, and was noted for his proverbs.

Sandals of Theramenes. Which would fit any foot. Theramenes, one of the Athenian oligarchy, was nicknamed "the trimmer" from the name of a sandal or boot which might be worn on either foot, because no dependence could be placed on him. The proverb, "He walks in the sandals of Theramenes" is applied to those who speak fairly but do the things that promise to profit themselves.

Sandford and Merton. Harry Sandford and Tommy Merton, the two heroes of Thomas Day's once popular tale for the young, the "History of Sandford and Merton" (1783-1789).

Sanscrit. The ancient language of India, now extinct, from which most of the languages there spoken are derived. It belongs to the Aryan or Indo-European group of tongues. It was declared by Sir William Jones to be more perfect than the Greek, more copious than the Latin, and more refined than either. The earliest existing work is the "Vedas." These, and the "Puranas," are religious writings; but there are also Epic poems, dramas, and philosophical composition.

Santa Claus. In fable he was first known as patron saint of children. The vigil of his feast is still held in some places, but for the most part his name is now associated with Christmas-tide. The old custom used to be for someone, on December 5th, to assume the costume of a bishop and distribute small gifts to "good children." (See St. Nicholas.)

Santia'go. The war cry of Spain; adopted because St. James (Sant Iago) rendered, according to tradition, signal service to a Christian king of Spain in a battle against the Moors.

Satan. One of the names of the Devil, and that by which in the Bible, in poetry, and in popular legends, he is often designated. Those mediæval writers who reckoned nine kinds of demons, placed Satan at the head of the fifth rank, which consisted of cozeners, as magicians and witches. Milton represents him as the monarch of hell. His chief lords are Beelzebub, Moloch, Chemos, Thammuz, Dagon, Rimmon, and Belial. His standard-bearer, Azazel.

Satyrane, Faerie Queene, Spenser. A noble knight who delivered Una from the fauns and satyrs. The meaning seems to be that Truth, driven from the towns and cities, took refuge in caves and dens, where for a time it lay concealed. At length Sir Satyrane (Luther) rescues Una from bondage; but no sooner is this the case than she falls in with Archimago, to show how very difficult it was at the Reformation to separate Truth from Error.

Saunders, Clerk. The hero of a well-known Scottish ballad.

Saunders, Richard. A feigned name under which Dr. Franklin, in 1732, commenced the publication of an almanac, commonly called "Poor Richard's Almanac," of which the distinguishing feature was a series of maxims of prudence and industry in the form of proverbs.

Sawney. A sportive designation applied by the English to the Scotch. It is a corruption of "Sandie," the Scottish abbreviation of "Alexander."

Sawyer, Bob. Pickwick Papers, Dickens. A drinking young doctor who tries to establish a practice at Bristol, but without success. Sam Weller calls him "Mr. Sawbones."

Scalds, or Skalds. Court poets and chroniclers of the ancient Scandinavians. They resided at court, were attached to the royal suite, and attended the king in all his wars. These bards celebrated in song the gods, the kings of Norway, and national heroes. Few complete Skaldic poems have survived, but a multitude of fragments exist.

Scarlet Letter, The. Title of a romance by Nathaniel Hawthorne. The heroine, Hester Prynne, was condemned to wear conspicuously the letter "A" in scarlet, token of her sin as mother of her child, Pearl, whose father was not known. She was first exposed in dis-

grace on a raised scaffold, then served a term in prison, and afterward gained a moderate support for herself and child by embroidering. She refused to reveal the name of the father, although she might then be allowed to lay aside the letter. He was always near, held an important position, and lived a life of wearing remorse. After his death Hester Prynne took her child to another country, but returned to spend her old age in seclusion and comfort in the same place that had witnessed her punishment. She always bore herself proudly but not defiantly and brought to herself such love and respect that the scarlet letter became a badge of honor. Roger Chillingworth, Hester's husband, appeared as a learned foreign physician, visited her in prison but promised not to reveal his relation to her and devoted his life to learning her secret. The characters in the story are intense and the analysis of motives subtle.

Shah'rah. Arabian Nights. The Sultan of Persia. His reign was a despotism and his decrees absolute.

Scheherazade. Arabian Nights. The fabled relater of the stories in these "Entertainments." Among other decrees the sultan had decided upon a new wife for every day. Tradition or fable tells that Scheherazade, wishing to free Persia of this disgrace, requested to be made the sultan's wife. She was young and beautiful, of great courage and ready wit, had an excellent memory, knew history, was poet, musician, and dancer. Scheherazade obtained permission for her younger sister, Dinarzade, to sleep in the same chamber, and instructed her to say, "Sister, relate to me one of those stories." Scheherazade then told the sultan (under pretense of speaking to her sister) a story, but always contrived to break off before the story was finished. The sultan, in order to hear the end of the story, spared her life till the next night. This went on for a thousand and one nights, when the sultan's resentment was worn out, and his admiration of his sultana was so great that he revoked his decree.

Schle'mil, Peter. The title of a little work by Chamisso (1781-1838), and the name of its hero, a man who sells his shadow to an old man in gray (the Devil) who meets him just after he has been disappointed in an application for assistance to a nobleman. The name has become a by-word for any poor, silly, and unfortunate fellow.

Scourge of God. Attila, King of the Huns. A. P. Stanley says the term was first applied to Attila in the Hungarian Chronicles. It is found in a legend belonging to the Eighth or Ninth Century.

Scrooge, Ebenezer. Christmas Carol, Dickens. The prominent character, made partner, executor, and heir of old Jacob Marley, stock-broker. When first introduced, he is a grasping, covetous old man, loving no one and by none beloved. One Christmas, Ebenezer Scrooge sees three ghosts: The Ghost of Christmas Past; the Ghost of Christmas Present; and the Ghost of Christmas To-come. The first takes him back to his young life, shows him what Christmas was to him when a school-boy, and when he was an apprentice. The second ghost shows him the joyous home of his clerk, Bob Cratchit, who has nine people to feed on what seems a pittance, and yet could find wherewithal to make merry on this day; it also shows him the family of his nephew, and others. The third ghost shows him what would be his lot if he died as he then was, the prey of harpies, the jest of his friends on 'Change. These visions wholly change his nature, and he becomes benevolent, charitable, and cheerful, and makes Christmas a happy day for many within his reach.

Sedley, Mr. Vanity Fair, Thackeray. A wealthy London stock-broker, brought to ruin in the money market just prior to the battle of Waterloo. The old merchant tried to earn a living by selling wine, coals, or lottery-tickets by commission, but his bad wine and cheap coats found but few customers. Mrs. Sedley, wife of Mr. Sedley, a homely, kind-hearted woman, soured by adversity, and quick to take offense. Amelia Sedley, daughter of the stock-broker, educated at Miss Pinkerton's academy, and engaged to Captain George Osborne, son of a rich London merchant. After the ruin of Mr. Sedley George marries Amelia, and old Osborne disinherits him. George is killed in the Battle of Waterloo. Amelia is reduced to great poverty, but is befriended by Captain Dobbin, and after many years of patience and great devotion she consents to marry him. Joseph Sedley, vain, shy, and vulgar. He told of his brave deeds, and made it appear that he was Wellington's right hand; so that he obtained the sobriquet of "Waterloo Sedley." He became the "patron" of Becky Sharp, who fleeced him of all his money, and in six months he died under suspicious circumstances. Interest in the novel is centered on Amelia, an impersonation of virtue without intellect as contrasted with Becky Sharp, who is an im-

personation of intellect without virtue. The one has no head, the other no heart.

Selim, Bride of Abydos, Byron. The character of Selim is bold, full of enterprise, and faithful. The story runs that Selim was the son of Abdallah and cousin of Zuleika. When Giaffir murdered Abdallah, he took Selim and brought him up as his own son. The young man fell in love with Zuleika, who thought he was her brother; when she discovered he was Abdallah's son, she eloped with him. As soon as Giaffir discovered this he went after the fugitives, and shot Selim. Zuleika killed herself, and the old pacha was left childless. Selim, son of Akbar, in Arabian tales, marries Nourmahal, the "Light of the Harem."

Selith, The Messiah, Klopstock. One of the two guardian angels of the Virgin Mary and of John the Divine.

Sellock, Peveril of the Peak, Scott. A servant girl in the service of Lady and Sir Geoffrey Peveril of the Peak.

Senena, Madoc, Southey. A Welsh maiden in love with Caradoc. Under the assumed name of Mervyn she became the page of the Princess Goeryyl, that she might follow her lover to America, when Madoc colonized Caer-Madoc. Senena was promised in marriage to another; but when the wedding day arrived, the bride was nowhere to be found.

Sentimental Journey, The, By Laurence Sterne. It was intended to be sentimental sketches of his tour through Italy in 1764, but he died soon after completing the first part.

Septuagint. A Greek version of the books of the Old Testament; so called because the translation is supposed to have been made by seventy-two Jews, who, for the sake of round numbers, are usually called the "seventy interpreters." It is said to have been made at the request of Ptolemy Philadelphus, King of Egypt, about 280 B. C. It is that out of which all the citations in the New Testament from the Old are taken. It was also the ordinary and canonical translation made use of by the Christian Church in the earliest ages; and is still retained in the churches both of the East and West.

Sere'na, Faerie Queene, Spenser. Allured by the mildness of the weather, went into the fields to gather wild flowers for a garland, when she was attacked by the Blatant Beast, who carried her off in its mouth. Her cries attracted to the spot Sir Calidore, who compelled the beast to drop its prey.

Ses'ame. In Arabian tales given as the talismanic word which would open or shut the door leading into the cave of the forty thieves. In order to open it, the words to be uttered were, "Open, Sesame!" and in order to close it, "Shut, Sesame!" Sesame is a plant which yields an oily grain, and hence, when Cassim forgot the word, he substituted "barley," but without effect. Sesame has come into general use in connection with any word or act which will open the way for accomplishment of the thing desired.

Seven Bibles, The, or Sacred Books. (1) The "Bible" of Christians. (2) The "Eddas" of the Scandinavians. (3) The "Five Kings" of the Chinese. (4) The "Koran" of the Mohammedans. (5) The "Tri Pitikes" of the Buddhists. (6) The "Three Vedas" of the Hindoos. (7) "Zendavesta" of the Persians.

Seven Sleepers, The. The tale of these sleepers is told in divers manners. The best accounts are those in the "Koran"; "The Golden Legends," by Jacques de Voragine; the "De Gloria Martyrum," by Gregory of Tours; and the "Oriental Tales," by Caylus. According to one version they were seven noble youths of Ephesus, who fled in the Decian persecution to a cave in Mount Celion, the mouth of which was blocked up by stones. After 230 years they were discovered, and awoke, but died within a few days, and were taken in a large stone coffin to Marseilles. Another tradition is, that Edward the Confessor, in his mind's eye, saw the seven sleepers turn from their right sides to their left, and whenever they turn on their sides it indicates great disasters to Christendom. This idea was introduced by Tennyson in his poem, "Harold."

Seven Wise Masters is the title of a mediæval collection of novels, important both from its contents and its wide-spread popularity. The work is undoubtedly of Oriental origin, yet neither the period when it was composed, nor how far it spread through the East, is known, but it existed in Arabic as a translation from Indian sources before the Eleventh Century. The work became known in literature, sometimes in a complete form, sometimes only particular novels were reproduced, under all sorts of names, in verse and in prose. Latin versions began to appear about the beginning of the Thirteenth Century and parts have been translated into English.

Seven Wise Men. The collective designation of a number of Greek sages, who lived about 620-548 B. C., and devoted themselves to the cultivation of practical wisdom. Their moral and social experience was embodied in brief aphorisms, expressed in verse or in prose.

Sga'na'relle. The hero of Molière's comedy "Le Mariage Forcé." He is represented as a humorist of about fifty-three, who having a mind to marry a fashionable young woman, but feeling a doubt, consults his friends upon this momentous question. Receiving no satisfactory counsel, and not much pleased with the proceedings of his bride elect, he at last determines to give up his engagement, but is cudgeled into compliance by the brother of his intended.

Shallow. A braggart and absurd country justice in Shakespeare's "Merry Wives of Windsor," and in the second part of "King Henry the Fourth."

Shalott', The Lady of. The heroine of Tennyson's poem of the same name. She weaves into her web all the sights reflected in the mirror which hangs opposite her window; but when Sir Lancelot passes, she leaves her mirror and looks out of the casement at the knight himself, whereupon a curse comes upon her. She entered a boat bearing her name on the prow, floated down the river to Camelot, and died heart broken on the way.

Shandy, Mrs. The mother of Tristram Shandy in Sterne's novel of this name. She is the ideal of nonentity, a character individual from its very absence of individuality.

Shandy, Tristram. The nominal hero of Sterne's "The Life and Opinions of Tristram Shandy, Gent."

Shandy, Walter. The name of Tristram Shandy's father in Sterne's novel of this name, a man of an active and metaphysical, but at the same time a whimsical, cast of mind, whom too much and too miscellaneous learning had brought within a step or two of madness. The romance, "Tristram Shandy," is not built on a regular plot. The hero has no adventures, and the story consists of a series of episodes which introduce the reader to the home-life of an English country family. This family is one of the most amusing.

Sharp, Rebecca. The prominent character in Thackeray's "Vanity Fair," the daughter of a poor painter, dashing, selfish, unprincipled, and very clever, who manages to marry Rawdon Crawley, afterwards his excellency Colonel Crawley, C. B. He was disinherited on account of his marriage with Becky, then a poor governess, but she taught him how to live in splendor on no income. Lord Steyne introduced her to court, but her conduct with this peer gave rise to scandal, which caused a separation between her and Rawdon. She joins her fortunes with Joseph Sedley, a wealthy "collector," of Bogley Wollah, in India. Having insured his life and lost his money, he dies suddenly under very suspicious circumstances. Becky at last assumes the character of a pious, charitable Lady Bountiful, given to all good works.

Shepherdess, The Faithful. A pastoral drama by John Fletcher. The "faithful shepherdess" is Corin, who remains faithful to her lover although dead. Milton has borrowed from this pastoral in his "Comus."

Shepherd of Banbury. The ostensible author of a work entitled "The Shepherd of Banbury's Rules to judge of the Changes of Weather, grounded on Forty Years' Experience, etc.," a work of great popularity among the English poor.

Shepherd of Salisbury Plain, The. The hero and title of a religious tract by Hannah More. The shepherd is noted for his homely wisdom and simple piety.

Shepherd's Pipe. Pan, in Greek mythology, was the god of forests, pastures, and flocks, and was the attributed inventor of the shepherd's flute or pipe, a series of graduated tubes set together (open at one end and closed at the other), played by blowing across the open ends.

Shepherd's Calendar, The. Twelve eclogues in various metres, by Spenser, one for each month. January: Colin Clout (Spenser), bewails that Rosalind does not return his love. February: Cuddy, a lad, complains of the cold, and Thenot laments the degeneracy of pastoral life. March: Willie and Thomalin discourse of love. April: Hobbinol sings a song on Eliza. May: Palinode exhorts Piers to join the festivities of May, but Piers replies that good shepherds who seek their own indulgence expose their flocks to the wolves. June: Hobbinol exhorts Colin to greater cheerfulness. July: Morrel, a goat-herd, invites Thomalin to come with him to the uplands. August: Perigot and Willie contend in song, and Cuddy is appointed arbiter. September: Diggon Davie complains to Hobbinol of clerical abuses. October: On poetry. November: Colin, being asked by Thenot to sing, excuses himself because of his grief for Dido, but finally sings her elegy. December: Colin

again complains that his heart is desolate. Thenot is an old shepherd bent with age, who tells Cuddy, the herdsman's boy, the fable of the oak and the briar, one of the best-known fables included in the calendar.

Sheridan's Ride. A lyric by T. B. Read, one of the few things written during the heat of the Civil War that is likely to survive.

She Stoops to Conquer. This well-known comedy by Oliver Goldsmith is said to have been founded on an incident which actually occurred to its author. When Goldsmith was sixteen years of age, a wag residing at Ardagh directed him, when passing through that village, to Squire Fetherstone's house as the village inn. The mistake was not discovered for some time, but all concerned enjoyed the joke. "She Stoops to Conquer" is one of the gayest, pleasantest, and most amusing pieces of English comedy.

Shin'gebis. In Longfellow's "Hiawatha," the diver who challenged the North Wind and put him to flight in combat.

Shocky. The Hoosier School-master, Edw. Eggleston. The little lad from the poorhouse who adores the schoolmaster and early warns him of plans for upsetting his authority. He is also a small poet, not in rhyming, but in comprehension of things about him and in his way of looking at life, and he grows to be a helper in the "Church of the Best Licks," founded by the school-master. He is brother to Hannah whom the master loves. Shocky and Hannah and their companions in the story bring the speech and life of their people and their time into American literature.

Shylock. A sordid, avaricious, revengeful Jew, in Shakespere's "Merchant of Venice."

Siege Perilous, The. The Round Table contained sieges or seats in the names of different knights. One was reserved for him who was destined to achieve the quest of the holy graal. This seat was called "perilous," because if any one sat therein except he for whom it was reserved it would be his death. This seat finally bore the name of Sir Galahad.

Siegfried. The hero of various Scandinavian and Teutonic legends, particularly of the old German epic poem, the "Nibelungen Lied." He is represented as a young warrior of physical strength and beauty, and in valor superior to all men of his time. He cannot easily be identified with any historical personage.

Sikes, Bill. A brutal thief and housebreaker in Dickens's novel "Oliver Twist." He murders his mistress, Nancy, and in trying to lower himself by a rope from the roof of a building where he had taken refuge from the crowd, he falls and is choked in a noose of his own making. Sikes had an ill-conditioned savage dog, the beast-image of his master, which he kicked and loved, ill-treated and fondled.

Silken Thread, Gulliver's Travels. In the kingdom of Lilliput, the three great prizes of honor are "fine silk threads six inches long, one blue, another red, and a third green." The thread is girt about the loins, and no ribbon of the Legion of Honor, or Knight of the Garter, is worn more worthily or worn more proudly.

Sindbad the Sailor. A character in the "Arabian Nights," in which is related the story of his strange voyages and wonderful adventures.

Sinon. In Virgil's "Æneid" the cunning Greek, who, by a false tale, induced the Trojans to drag the Wooden Horse into Troy.

Sleeping Beauty. The heroine of a celebrated nursery tale which relates how a princess was shut up by fairy enchantment, to sleep a hundred years in a castle, around which sprang up a dense, impenetrable wood. At the expiration of the appointed time, she was delivered from her imprisonment and her trance by a gallant young prince, before whom the forest opened itself to afford him passage. Grimm derives this popular and widely diffused tale from the old northern mythology.

Slender. A silly youth in Shakespere's "Merry Wives of Windsor," who is an unsuccessful suitor for the hand of "Sweet Anne Page."

Slick, Sam. The title and hero of various humorous narratives, illustrating and exaggerating the peculiarities of the Yankee character and dialect written by Judge Thomas C. Haliburton. Sam Slick is represented as a Yankee clockmaker and peddler, full of quaint drollery, unsophisticated wit, knowledge of human nature, and aptitude in the use of what he calls "soft sawder."

Slop, Dr. The name of a choleric and uncharitable physician in Sterne's novel, "The Life and Opinions of Tristram Shandy, Gent."

Slough of Despond. Pilgrim's Progress, Bunyan. A deep bog, which Christian had to pass on his way to the Wicket Gate. Neighbor Pliable would not attempt to pass it, and turned back. While Christian was

floundering in the slough, Help came to his aid, and assisted him over.

Sly, Christopher. Taming of the Shrew, Shakespere. A keeper of bears and a tinker, son of a pedlar, and a sad drinker.

Song of Roland. An ancient song recounting the deeds of Roland, the renowned nephew of Charlemagne, slain in the pass of Roncesvalles. At the battle of Hastings, Taillefer advanced on horseback before the invading army, and gave the signal for onset by singing this famous song. (See Roland.)

Songs of the Sierras. A collection of poems by Joaquin Miller, which made him known on two continents within a year of their publication. The title explains the chief subject of the songs.

Spectator, The. A periodical famous in literature in which most of the articles were written by Addison or Sir Richard Steele. The first number was published in London in the year 1711, the last, No. 635, was issued in December, 1714. The most noted of Addison's writings is said to be the series of sketches in "The Spectator," of which Sir Roger de Coverley is the central figure, and Sir Andrew Freeport and Will Honeycomb the side ones. Sir Roger himself is an absolute creation; the gentle yet vivid imagination, the gay spirit of humor and the keen shrewd observation mark it a work of pure genius. In this Addison has given a delicacy to English sentiment, and a modesty to English wit which it never knew before. Dr. Johnson says, "to attain an English style, familiar but not coarse, and elegant, but not ostentatious, one must give his days and nights to the volumes of Addison."

Sphinx. A Greek word, applied to certain symbolical forms of Egyptian origin. The most remarkable Sphinx is the Great Sphinx at Gizeh, a colossal form, hewn out of the natural rock. Immediately in front of the breast is a small naos, or chapel, formed of three hieroglyphical tablets. Votive inscriptions of the Roman period, some as late as the Third Century, were discovered in the walls and constructions. On the second digit of the left claw of the Sphinx, an inscription, in pentameter Greek verses, by Arrian, was discovered. Another metrical and prosaic inscription was also found. In Assyria and Babylonia, representations of Sphinxes have been found, and the same are not uncommon on Phœnician works of art.

Squeers. Name of a family prominent in Dickens's "Nicholas Nickleby." Wackford Squeers, master of Dotheboy's Hall, Yorkshire, a vulgar, conceited, ignorant schoolmaster, overbearing and mean. He steals the boys' pocket money, clothes his son in their best suits, half starves them, and teaches them next to nothing. Ultimately he is transported for theft. Mrs. Squeers, a raw-boned, harsh, heartless virago, with no womanly feeling for the boys put under her charge. Miss Fanny Squeers, daughter of the schoolmaster. Miss Fanny falls in love with Nicholas Nickleby, but later hates him because he is insensible to the soft impeachment. Master Wackford Squeers, overbearing, self-willed and passionate. The picture of this family and their ways had great influence on the schools of England, by rousing the people to a knowledge of their management.

Squire of Dames. A personage introduced by Spenser in the "Faerie Queen," and whose curious adventures are there recorded. It is often used to express a person devoted to the fair sex.

Steerforth. David Copperfield, Dickens. The young man who led little Em'ly astray. When tired of his toy, he proposed to her to marry his valet. Steerforth, being shipwrecked off the coast of Yarmouth, Ham Peggotty tried to rescue him, but both were drowned.

Sten'or. A Grecian herald in the Trojan War, whom Homer describes as "great-hearted, brazen-voiced Sten'or, accustomed to shout as loud as fifty other men."

Steph'ano. (1) A drunken butler, in Shakespere's "Tempest." (2) A servant to Portia, in Shakespere's "Merchant of Venice."

Stiggins, Rev. Mr. A red-nosed, hypocritical "shepherd," or Methodist parson, in Dickens's "Pickwick Papers," with a great appetite for pineapple rum. He is the spiritual adviser of Mrs. Weller, and lectures on temperance.

Stone of Sa'dis. The Great Stone of Sardis, Stockton. In this stone the imaginary science of the future is joined to the actual science of to-day in an extremely plausible way. The North Pole is visited by a submarine vessel, a light is found capable of penetrating for miles into the interior of the earth, and finally the center of that earth is discovered to be an enormous diamond.

Storm-and-stress Period. In the literary history of Germany, the name given to a period of great intel-

lectual convulsion, when the nation began to assert its freedom from the fetters of an artificial literary spirit. The period derives its name from a drama of Klinger (1753-1831), whose high-wrought tragedies and novels reflect the excitement of the time.

Sur-name. The overname; either the name written over the Christian name, or given over and above it; an additional name. For a long time persons had no family name, but only one, and that a personal name. Plato recommended parents to give happy names to their children; and the Pythagoreans taught that the minds, actions, and successes of men were according to their names, genius, and fate. The popes changed their names at their exaltation to the pontificate, "a custom introduced by Pope Sergius." In France it was usual to change the name given at baptism, as was done in the case of two sons of Henry II. of France. They were christened Alexander and Hercules; but at their confirmation, these names were changed to Henry and Francis. It is usual for the religious at their entrance into monasteries to assume new names, to show they are about to lead a new life.

Swallow Barn. The three novels, "Swallow Barn," "Horse-Shoe Robinson," and "Rob of the Bowl," besides their value as works of art, are all careful historical studies giving admirable pictures of life in the Southern States in the earlier days of the republic. They were written by John P. Kennedy, who is quoted in literature as next after Cooper among American novelists.

Swivel-ler, Dick. A careless, light-headed fellow in Dickens's novel of the "Old Curiosity Shop," whose flowery orations and absurdities of quotation provoke laughter, but whose real kindness of heart enlists sympathy.

Tabard. The name of the Inn at Southwark where the pilgrims in Chaucer's "Canterbury Tales" assembled. It took its name from its sign, a tabard, or herald's jacket.

Tales of a Wayside Inn. Name given by Longfellow to a collection of short poems arranged by himself and collected together much in the same form as Chaucer's "Canterbury Tales." These "tales" were mostly gathered from old literatures and translated into Longfellow's own verse, only one, "The Birds of Killingworth," is said to be entirely original. Seven narrators are represented: the Landlord, the Student, the Spanish Cavalier, the Jew, the Sicilian, the Musician, and the Theologian. Four colonial tales are included in the work: "Paul Revere's Ride," "Elizabeth," "Lady Wentworth," and "The Rhyme of Sir Christopher."

Talmud is a Hebrew word meaning doctrine. It is the name applied to a work containing traditions respecting the usages and laws of the Jewish people. The law, among that people, was divided into the written and the unwritten. The written law embraced the five books of Moses; the unwritten was handed down orally; the oral being, in fact, explanatory of the written. But, in time, the oral came, also, to be put in writing, and formed the text of the Talmud. This was first done, it is believed, about the year 200. There are two separate commentaries on this text, which are distinguished as the Babylonian and the Jerusalem. The Talmud of Jerusalem consists of two parts, the "Mishna" and the "Gemara." The "Mishna" is more correct than the "Gemara," which is filled with dreams and foolish disputes. The Talmud of Babylon, which is of higher authority among the Jews than that of Jerusalem, was composed by Rabbi Aser, who lived near Babylon; he did not live to finish it, but it was completed by his disciples about 500 years after Christ.

Tam O'Shanter. The title of a poem by Burns, and the name of its hero, a farmer, who, riding home very late and very drunk from Ayr, in a stormy night, had to pass by the kirk of Alloway, a place reputed to be a favorite haunt of the Devil and his friends and emissaries. On approaching the kirk, he perceived a light gleaming through the windows; but having got courageously drunk, he ventured on till he could look into the edifice, when he saw a dance of witches. His presence became known and, in an instant all was dark, and Tam, recollecting himself, turned and spurred his horse to the top of her speed, chased by the whole fiendish crew. It is a current belief that witches, or any evil spirits, have no power to follow a poor wight any farther than the middle of the next running stream. Fortunately for Tam, the River Doon was near and Tam escaped while the witches held only the tail of his mare, Maggie. It has been said of "Tam O'Shanter" that in no other poem of the same length can there be found so much brilliant description, pathos, and quaint humor, nor such a combination of the terrific and the ludicrous.

Te Deum. A well-known hymn (so called from its first words) of the Roman Catholic Church, sung on all

occasions of triumph and thanksgiving, and a theme upon which the most celebrated composers have exercised their musical genius. The hymn is one of the most simple and at the same time the most solemn and majestic in the whole range of the hymnology of the Roman Catholic Church. Its authorship is uncertain.

Tannhauser. A famous legendary hero of Germany, and the subject of an ancient ballad of the same name. The noble Tannhäuser is a knight devoted to valorous adventures and to beautiful women. In Mantua, he wins the affection of a lovely lady, Lisaura, and of a learned philosopher, Hilario, with whom he converses frequently upon supernatural subjects. Enchanted by marvelous tales, he wishes for nothing less than to participate in the love of some beauteous elementary spirit, who shall, for his sake, assume the form of mortal woman. Hilario promises to grant even more than he has wished, if he will have courage to venture upon the Venusberg. Tannhäuser ascends the mountain and, hearing of his departure, Lisaura dies. Tannhäuser stays long on the enchanting mountain, but at last, moved to repentance, he obtains permission to depart. He hastens to Mantua, weeps over the grave of Lisaura, and thence proceeds to Rome, where he makes public confession of his sins to Pope Urban. The pope refuses him absolution, saying he can no more be pardoned than the dry wand which he holds can bud and bear green leaves. Tannhäuser, flees from Rome, and vainly seeks his former preceptor, Hilario. Venus appears before him, and, lures him back to the mountain, there to remain until the day of judgment. Meanwhile, at Rome the dry wand bears leaves. Urban, alarmed at this miracle, sends messengers in search of the unhappy knight; but he is nowhere to be found. This Tannhäuser legend is very popular in Germany, and is often alluded to by German writers. Tieck has made it the subject of a narrative, and Wagner of an opera which has gained great celebrity.

Tar-tuffe. A common nick-name for a hypocritical pretender to religion. It is derived from a celebrated comedy of the same name by Molière, in which the hero, a hypocritical priest, is so called.

Teazle, Lady. The heroine of Sheridan's comedy, "The School for Scandal," and the wife of Sir Peter Teazle, an old gentleman who marries late in life. She is represented as being "a lively and innocent, though imprudent, country girl, transplanted into the midst of all that can bewilder and endanger her, but with enough of purity about her to keep the blight of the world from settling upon her."

Teazle, Sir Peter. A character in Sheridan's play, "The School for Scandal," husband of Lady Teazle.

Tempest, The. This has been called one of Shakespeare's fairy plays. The story of it runs: Prospero, Duke of Milan, was dethroned by his brother Antonio, and left on the open sea with his three-year old daughter, Miranda, in "a rotten carcass of a boat." In this they were carried to an enchanted island, uninhabited except by a hideous creature, Caliban, the son of a witch. Prospero was a powerful enchanter, and soon had not only Caliban, but all the spirits of the region under his control, including Ariel, chief of the spirits of the air. Years afterward Antonio, Alfonso, Sebastian and other friends of the usurper came near the island. Prospero, by his magic, raises a storm which casts their ship on the shore and the whole party are spell-bound and brought to Prospero. Plots and counter-plots follow, bringing in Caliban and clowns, but all are made ridiculous and defeated by Prospero and Ariel.

Ten'son. A kind of poem among the troubadours which carries on a contention or dispute, apparently serious, and often concerning love. The ten'son was usually recited by two persons in alternating stanzas. The greater number of these are found in early Italian and French literature.

Ten Times One. A writing in story form by E. E. Hale. It is said that the inspiration of this story led to the founding of the "King's Daughters" Society.

Thaddeus of Warsaw. The hero and title of a novel by Jane Porter.

Thangbrand. Tales of a Wayside Inn. H. W. Longfellow. King Olaf's drunken priest, "short of stature and large of limb," who was sent to Iceland, found the people poring over their books, and sailed back to Norway to say to Olaf that there was "little hope of those Iceland men."

Thekla. The daughter of Wallenstein, in Schiller's drama of this name. She is an invention of the poet.

Theodorus. The name of a physician, in Rabelais's romance of "Gargantua." At the request of Poncecrates, Gargantua's tutor, he undertook to cure the latter of his vicious manner of living, and accordingly purged him canonically with Anticyrian hellebore, by which medicine he cleared out all the foulness and perverse

habit of his brain, so that he became a man of great honor, sense, courage, and piety.

Thorberg Skafthling. *Tales of a Wayside Inn.* **H. W. Longfellow.** The master-builder ordered by King Olaf to build a ship twice as long and twice as large as the "Dragon" built by Rand the Strong, which was stranded. Thorberg built the ship, watching his workmen closely, and when she was ready for launching King Olaf and the workmen were amazed to see every plank down her sides cut with deep gashes and more amazed to find that Thorberg had done the deed. From these gashes he then chipped and smoothed the sides, to the delight of all; she was christened the "Long Serpent" and the name of her builder recited in the Saga.

Thorpe, Harry. *The Blazed Trail.* **S. E. White.** The hero of the novel a vigorous young man, who, as a "land-looker," finds and takes up a valuable timber tract, against the crafty old corporation which seeks first to steal the timber, then to forestall him in buying it, and finally to ruin him. The true romance of the story is that of the forest and the titanic struggle of man against nature and against man.

Three Kings, Feast of the. A famous mediæval festival, identical with Epiphany. But the name is more particularly given to a kind of dramatic or spectacular representation of the incidents recorded in the second chapter of Matthew—as, the appearance of the wise men in splendid pomp at the court of Herod, the miraculous star, the manger at Bethlehem, the solemn and costly worship of the Babe—which was long very popular.

Three Kings of Cologne, The. The three "Wise Men" who followed the guiding star "from the East" to Jerusalem, and offered gifts to the babe Jesus.

Thunderer, The. Name popularly given to the English newspaper, the "London Times." The accepted version of the way in which the great journal got its name of "The Thunderer," is that Captain Sterling, one of the "staff," once wrote a sort of apology in reference to a mistaken assertion and used the phrase "We thundered out." This caught the public fancy, hence the name. Captain Sterling was a well-known figure in London political circles and was father of the more famous John Sterling, critic, essayist, and friend of Wordsworth, Coleridge, and De Quincey.

Thyrsis. Corydon and Thyrsis are favorite names given to shepherds by writers of pastoral poetry. So also, Phyllis and Thestylis are names often applied to rustic maidens or shepherdesses.

Tibbs or Tibs. A character in Goldsmith's "Citizen of the World," quoted as a "most useful hand." He will write you a receipt for the bite of a mad dog, tell you an Eastern tale to perfection, and understands the business part of an author so well that no publisher can humbug him."

Tigg, Montague. *Martin Chuzzlewit.* **Dickens.** A clever impostor, who lives by his wits. He starts a bubble insurance office and makes considerable gain thereby. Having discovered the attempt of Jonas Chuzzlewit to murder his father, he compels him to put his money in the "new company," but Jones afterwards murders him.

Timon. *Timon of Athens.* **Shakespeare.** The drama begins with the joyous life of Timon, and his hospitable extravagance, launches into his pecuniary embarrassment, and the discovery that his "professed friends" will not help him, and ends with his flight into the woods, his misanthropy, and his death. Introduced into the play is "Timon's Banquet." Being shunned by his friends in adversity, he pretended to have recovered his money, and invited his false friends to a banquet. The table was laden with covers, but when the contents were exposed, nothing was provided but lukewarm water.

Tiny Tim. *Christmas Stories.* **Dickens.** A striking character, the little son of Bob Cratchett, whose family were made happier by gifts from the converted Scrooge. (See Scrooge.)

Tirzah. *Ben Hur.* **General Lew Wallace.** A beautiful Jewish maiden, sister of Ben Hur. Their father had been a prince of Jerusalem, and died leaving a large estate. At the age of fifteen, Tirzah, with her mother, was imprisoned through the cruelty of Messala who coveted their property. They both became lepers and when released from prison were forced to live among the outcasts. They were healed by Jesus, Ben Hur, himself, witnessing the miracle. As soon as the change in their look had taken place he recognized them, and when the Jewish statutes had been complied with, Tirzah and her mother were united with their brother in their former home.

Tippecanoe. Name given to William Henry Harrison during the political canvass which preceded his election, on account of the victory gained by him over

the Indians in the battle which took place on the 6th of November, 1811, at the junction of the Tippecanoe and Wabash rivers.

Toby, Uncle. A character in Sterne's "Tristram Shandy." A captain who was wounded at the siege of Namur, and was obliged to retire from the service. He is the impersonation of kindness, benevolence, and simple-heartedness; his courage is undoubted, his gallantry delightful for its innocence and modesty.

Token, The. A collection of original articles, prose and poetry, by various contributors, issued first in the year 1824. This was the first "annual" that appeared in our country; it became popular and was continued for fifteen years under the supervision of "Peter Parley."

Tom, Dick, and Harry. An appellation very commonly employed to designate a crowd or rabble.

Tommy Atkins. *Barrack-room Ballads.* **Kipling.** The name is here used in its general meaning, a British soldier. The name came from the little pocket ledgers served out, at one time, to all British soldiers. In these manuals were to be entered the name, the age, the date of enlistment, etc. The War Office sent with each little book a form for filling it in, and the hypothetical name selected was "Tommy Atkins." The books were instantly so called, and it did not require many days to transfer the name from the book to the soldier.

Tom Sawyer. *Adventures of Tom Sawyer.* **Mark Twain.** An "elastic" youth whose performances delight both old and young readers. Queer enterprises influenced by the old superstitions among slaves and children in the Western States give reliable pictures of boy-life in the middle of the Nineteenth Century.

Tom the Piper. One of the characters in the ancient Morris dance, represented with a tabour, tabour-stick, and pipe. He carried a sword and shield, to denote his rank.

Tom Thumb. In legendary history a dwarf no larger than a man's thumb. He lived in the reign of King Arthur, by whom he was knighted. He was killed by the poisonous breath of a spider in the reign of the successor of King Arthur. Amongst his adventures it is told that he was lying one day asleep in a meadow, when a cow swallowed him as she cropped the grass. At another time, he rode in the ear of a horse. He crept up the sleeve of a giant, and so tickled him that he shook his sleeve, and Tom, falling into the sea, was swallowed by a fish. The fish being caught and carried to the palace, gave the little man his introduction to the king. The oldest version of this nursery tale is in rhyme.

Tonio. *Daughter of the Regiment.* **Donizetti.** The name of the youth who saved Maria, the sutler-girl from falling down a precipice. The two fall in love with each other, and the regiment consents to their marriage, provided Tonio will enlist under its flag. No sooner is this done than the marchioness of Berkenfield lays claim to Maria as her daughter, and removes her to the castle. In time, the castle is besieged and taken by the very regiment into which Tonio had enlisted, and, as Tonio had risen to the rank of a French officer, the marchioness consents to his marriage with her daughter.

Topsy. *Uncle Tom's Cabin.* **Mrs. Stowe.** A young slave-girl, who never knew whether she had either father or mother, and being asked by Miss Ophelia St. Clare how she supposed she came into the world, replied, "I specs I growed." Topsy illustrates the ignorance, low moral development, and wild humor of the African character, as well as its capacity for education.

Touchstone. A clown in Shakespeare's "As You Like It."

Townley Mysteries. Certain religious dramas; so called because the MS. containing them belonged to P. Townley. These dramas are supposed to have been acted at Widkirk Abbey, in Yorkshire.

Trad'dles. *David Copperfield.* **Dickens.** A simple, honest young man, who believes in everybody and everything and who is never depressed by his want of success. He had the habit of brushing his hair up on end, which gave him a look of surprise. Trad'dles was generally accompanied by "the dearest girl" and her numerous sisters.

Tragedy and Comedy. The earliest regular tragedy written in English was the play of "Gorboduc" by Thomas Sackville. This was acted in the year 1562. The first English comedy was "Ralph Royster Doyster," acted in 1551, and written by Nicholas Udall.

Triads. Three subjects more or less connected formed into one continuous poem or subject: thus the "Creation, Redemption, and Resurrection" would form a triad. The conquests of England by the Romans, Saxons, and Normans would form a triad. The Welsh triads, known in literature, are collections of historic facts,

mythological traditions, moral maxims, or rules of poetry disposed in groups of three.

Trim, Corporal. Uncle Toby's attendant, in Sterne's novel, "The Life and Opinions of Tristram Shandy, Gent.," distinguished for his fidelity and affection, his respectfulness, and his volubility.

Tristram, Sir. One of the most celebrated heroes of mediæval romance. His adventures form an episode in the history of Arthur's Court, and are related by Thomas the Rhymer, as well as by many romancers.

Trotwood, Betsey. David Copperfield, Dickens. A great-aunt to David whose daily trial seemed to be donkeys. A dozen times a day would she rush on the green before her house to drive off the donkeys and donkey-boys. She was a most kind-hearted woman, who concealed her tenderness under a snappish manner. Miss Betsey was the true friend of David Copperfield.

Troubadours were minstrels of Southern France in the Eleventh, Twelfth, and Thirteenth Centuries. They were the first to discard Latin and use the native tongue in their compositions. Their poetry was either about love and gallantry, or war and chivalry. In Northern France they were called *Trouvères* and the language employed was the *Walloon*. The troubadours were held in high esteem by the Court in England. They furnished literature for the readers, and so wielded potent influence over English thought and language.

Trovatore. *Il Trovatore*, Verdi. This opera is founded on a drama belonging to the Fifteenth Century. The story is that Trovatore, or the Troubadour, is Manrico, the supposed son of a gypsy but really a brother to the count. The princess Leonora falls in love with the troubadour, but the count is about to put Manrico to death, when Leonora intercedes on his behalf, and promises to give herself to him if he will spare her lover. The count consents; but while he goes to release his captive, Leonora kills herself by sucking poison from a ring. When Manrico discovers this sad calamity, he dies also.

Tuck, Friar. *Ivanhoe*, Scott. The father-confessor of Robin Hood and connected with Fountain's Abbey. He is represented as a clerical Falstaff, very fat and self-indulgent, very humorous, and somewhat coarse. His dress was a russet habit of the Franciscan order. He was sometimes girt with a rope of rushes. Friar Tuck also appears in the "Morris dance" on May-day.

Turvey-drop. *Bleak House*, Dickens. A conceited dancing-master, who imposes on the world by his majestic appearance and elaborate toilette. He is represented as living upon the earnings of his son, who has a most slavish reverence for him as a perfect "master of deportment."

Twelfth Night, a drama by Shakspeare. The story is said to have come from a novelette written early in the Sixteenth Century. A brother and sister, twins, are shipwrecked. Viola dressed like her brother becomes page to the duke Orsino. The duke was in love with Olivia, and as the lady looked coldly on his suit, he sent Viola to advance it, but the wilful Olivia, instead of melting towards the duke, fell in love with his beautiful page. Sebastian, the twin-brother of Viola, was attacked in a street brawl before Olivia and thinking him to be the page she invited him in. The result was the marriage of Sebastian to Olivia and the duke to Viola.

Twice-Told Tales. This name was given by the author, Nathaniel Hawthorne, to the tales included under its title, because some of them had been already published in the "Token," and other periodicals. They are mystical and though in prose form are the work of a poet. The tales are nearly all American in subject but treated from the spiritual rather than the practical side.

Two Gentlemen of Verona, a drama by Shakspeare, the story of which is taken from the "Diana" of Montemayor (Sixteenth Century). The plot resembles that of Twelfth Night, as Julia, disguised as a page, is a prominent figure.

Ubaldo. *Jerusalem Delivered*, Tasso. One of the older crusaders, who had visited many regions. He and Charles the Dane went to bring back Rinaldo from the enchanted castle.

Ube-da. *Don Quixote*, Cervantes. A noted artist who one day painted a picture, but was obliged to write under it, "This is a cock," in order that the spectator might know what was intended to be represented.

Ulin. *Tales of the Genii*, Ridley. An enchantress, who had no power over those who remained faithful to Allah and their duty; but if any fell into error or sin, she had full power to do as she liked. Thus, when Minsar (Sultan of India) mistrusted the protection of Allah, she transformed him into a toad.

Ul-ri-ca. A hideous old sibyl in Sir Walter Scott's "Ivanhoe."

Ultima Thule. The extremity of the world; the most northern point known to the ancient Romans. Pliny and others say it is Iceland.

Una. *Færie Queen*, Spenser. The personification of truth. She goes, leading a lamb and riding on a white ass, to the court of Gloriana, to crave that one of her knights might undertake to slay the dragon which kept her father and mother prisoners. The adventure is accorded to the Red Cross Knight. Being driven by a storm into "Wandering Wood," a vision is sent to the knight, which causes him to leave Una and she goes in search of him. In her wanderings a lion becomes her attendant. After many adventures, she finds St. George, "the Red Cross Knight," but he is severely wounded. Una takes him to the house of Holiness, where he is carefully nursed, and then leads him to Eden.

Uncle Tom. *Uncle Tom's Cabin*, Stowe, Mrs. A negro slave of unaffected piety, and most faithful in the discharge of all his duties. His master, a humane man, becomes embarrassed in his affairs, and sells him to a slave-dealer. After passing through various hands, and suffering intolerable cruelties, he dies.

Underground Railroad, The. A popular embodiment of the various ways in which fugitive slaves from the Southern States of the American Union were assisted in escaping to the North, or to Canada; often humorously abbreviated U. G. R. R.

Un'dine. In French fable a water-nymph, who was exchanged for the young child of a fisherman living near an enchanted forest. One day, Sir Huldbrand took shelter in the fisherman's hut, fell in love with Undine, and married her. By marrying a mortal she obtained a soul, and with it all the pains and penalties of the human race.

Urgan. *Lady of the Lake*, Scott. A human child stolen by the king of the faeries, and brought up in elf-land. He said to Alice Brand (the wife of Lord Richard), "if any woman will sign my brow thrice with a cross, I shall resume my proper form." Alice signed him thrice, and Urgan became at once "the fairest knight in all Scotland," and Alice recognized in him her own brother Ethert.

Urgan'da. In the romance of "Amadis de Gaul," a powerful fairy sometimes appearing in all the terrors of an evil enchantress.

Uther. Son of Constans, one of the fabulous or legendary kings of Britain, and the father of Arthur.

Uto'pia. The name of an imaginary island described in the celebrated work of Sir Thomas More, in which was found the utmost perfection in laws, politics, and social arrangements. More's romance obtained a wide popularity, and the epithet "Utopian" has since been applied to all schemes for the improvement of society which are deemed not practicable.

Val'en-tine. (1) One of the heroes in the old romance of "Valentine and Orson," which is of uncertain age and authorship. (2) One of the "Two Gentlemen of Verona," in Shakspeare's play of that name. (3) A gentleman attending on the Duke in Shakspeare's "Twelfth Night." (4) One of the characters in Goethe's "Faust." He is a brother of Margaret.

Valer'ian or Vall'rian. *Canterbury Tales*, Chaucer. The husband of St. Cecilia. Cecilia told him she was beloved by an angel, who constantly visited her; and Valerian requested to see this visitant. Cecilia replied that he should do so, if he went to Pope Urban to be baptized. This he did, and on returning home the angel gave him a crown of lilies, and to Cecilia a crown of roses, both from the garden of paradise.

Valley of Humiliation. *Pilgrim's Progress*, Bunyan. The place where Christian encountered Apollyon, just before he came to the "Valley of the Shadow of Death."

Van'ity Fair. *Pilgrim's Progress*, Bunyan. (1) A fair established by Beelzebub, Apollyon, and Legion, for the sale of all sorts of vanities. It was held in the town of Vanity, and lasted all the year round. Here were sold houses, lands, trades, honors, titles, kingdoms, and all sorts of pleasures and delights. Christian and Faithful had to pass through the fair, which they denounced. (2) Thackeray gave the name, "Vanity Fair," to the first of his famous works. It has been called "A novel without a hero." (See Sedley.)

Veck, Toby. *The Chimes*, Dickens. A ticket-porter who went on errands and bore the nickname Trotty. One New Year's Eve he had a nightmare and fancied he had mounted to the steeple of a neighboring church, and that goblins issued out of the bells. He was roused from his sleep by the sound of the bells ringing in the new year.

Veda. The technical name of those ancient Sanscrit works on which the first period of the religious belief of the Hindus is based.

Veiled Prophet. **Lalla Rookh, Moore.** He assumed to be a god, and maintained that he had been Adam, Noah, and other representative men. Having lost an eye, and being otherwise disfigured in battle, he wore a veil to conceal his face, but his followers said it was done to screen his dazzling brightness.

Ve'ni Crea'tor Spi'ritus. An ancient and very celebrated hymn of the Roman Breviary, which occurs in the offices of the Feast of Pentecost, and which is used in many of the most solemn services of the Roman Catholic Church. Its author is not known with certainty.

Vernon, Die or Diana. **Rob Roy, Scott.** The heroine of the story, a high-born girl of great beauty and talents. She is an enthusiastic adherent to a persecuted religion and an exiled king. She is excluded from the ordinary wishes and schemes of other girls by being predestined to a hateful husband or a cloister, and by receiving a masculine education, under the superintendence of two men of talent and learning.

Version of the Scriptures. The common English version of the Scriptures, the most remarkable of Bible translations, was made by a company of forty-seven scholars who did their work at the request of King James I. The version was published in 1611. "Tyndale's translation of the New Testament is the most important philological monument of the first half of the Sixteenth Century, both as an historical relic, and as having more than anything else contributed to shape and fix the sacred dialect, and establish the form which the Bible must permanently assume in an English dress."

Vicar of Wakefield. The hero of Goldsmith's novel of the same name. Dr. Primrose, a simple-minded, pious clergyman, with six children. He begins life with a good fortune, a handsome house, and wealthy friends, but is reduced to poverty without any fault of his own, and, being reduced like Job, like Job he is restored. (See Primrose.)

Vin-čen'ti-o. The Duke of Vienna in Shakespere's "Measure for Measure." He commits his scepter to Angelo, under the pretext of being called to take an urgent and distant journey, and by exchanging the royal purple for a monk's hood, observes incognito the condition of his people.

Vi'ola, Twelfth Night, Shakespere. A sister of Sebastian. They were twins, and so much alike that they could be distinguished only by their dress. When they were shipwrecked Viola was brought to shore by the captain, but her brother was left to shift for himself. Being in a strange land, Viola dressed as a page, and, under the name of Cesario, entered the service of Orsino, Duke of Illyria. The duke greatly liked his beautiful page, and, when he discovered her true sex, married her.

Violen'ta, All's Well that Ends Well, Shakespere. A character in the play who enters upon the scene only once and then she neither speaks nor is spoken to. The name has been used to designate any young lady nonentity; one who contributes nothing to the amusement or conversation of a party.

Vin'land. A name given, according to Snorro Sturleson, by Scandinavian voyagers, to a portion of the coast of North America discovered by them toward the close of the Tenth Century, well wooded, and producing agreeable fruits, particularly grapes. It is thought to have been some part of the coast of Massachusetts or Rhode Island.

Viv'len or Viv'ian, Idylls of the King, Tennyson. She is also known as the Lady of the Lake, and according to early legends was of a high family. These legends tell that Merlin in his dotage, fell in love with her, and she imprisoned him in the forest of Brittany. She then persuaded Merlin to show her how a person could be imprisoned by enchantment without walls, towers, or chains, and after he had done so, she put him to sleep. While he slept, she performed the needful ceremonies, whereupon he found himself enclosed in a prison stronger than the strongest tower, and from that imprisonment was never again released.

Volapuk. This so-called universal language was invented in 1879, by Johann Martin Schleyer, a Swabian pastor and later a teacher in Constance. Of the vocabulary, about one-third is of English origin, while the Latin and Romance languages furnish a fourth. The grammar is simplified to the utmost.

Vulgate. Name given to a version of the Scriptures made in Latin, probably by St. Jerome, about the year 380. This version was authorized by the Council of Trent in the year 1546.

Walden. A record of the experiences of the author, Thoreau, while living near Walden Pond, on nine cents a day. He read Homer, watched the birds, bees, ants, and the animals that came within his range, describing

the results of his acute powers of observation in a characteristic, quaint form.

Wa'verley. Name of hero and title of novel by Scott. Waverley was captain of "Waverley Honour" and after an injury he resigned his commission, and proposed to Flora M'Ivor, but was not accepted. Flora's brother, Fergus M'Ivor, introduced him to Prince Charles Edward. He entered the service of the Young Chevalier, and in the battle of Preston Pans saved the life of Colonel Talbot. The colonel, out of gratitude, obtained the pardon of young Waverley, who then married Rose Bradwardine, and settled down quietly in Waverley Honour. The novel, Waverley, was the first of Scott's historical novels, published in 1814. The materials are Highland feudalism, military bravery, and description of natural scenery. The chief characters are Charles Edward the Chevalier, the noble old baron of Bradwardine, the simple faithful clansman Evan Dhu, and the poor fool David Gellatley.

Waverley Novels. General name given to Scott's historical novels. Those founded on English history are "Ivanhoe," "Kenilworth," "Peveril of the Peak," "Betrothed," "Talisman," and "Woodstock." Founded on Scotch history are "Waverley," "Old Mortality," "Monastery," "The Abbott," "Legend of Montrose," "Fair Maid of Perth," and "Castle Dangerous." Treating of continental history are "Quentin Durward," "Anne of Geirstein," and "Count Robert of Paris." Twelve others in the series, including "Rob Roy," "Heart of Midlothian," "Bride of Lammermoor," are connected with historical events, but are more personal and deal mainly with Scottish character.

Weird Sisters, The. Three witches, in Shakespere's tragedy of "Macbeth."

Weller, Samuel. In Dickens's celebrated "Pickwick Papers." A servant to Mr. Pickwick, to whom he becomes devotedly attached. Rather than leave his master, when he is sent to the Fleet, Sam Weller gets his father to arrest him for debt. He is an inimitable compound of wit, simplicity, quaint humor, and fidelity. "Tony Weller," father of Sam; a coachman of the old school, who drives between London and Dorking. On the coachbox he is a king, elsewhere a mere London "cabby." He marries a widow and his constant advice to his son is, "Sam, beware of the vidders." Everybody was merry over Mr. Pickwick and Sam Weller, and everybody was eager to read this entertaining author.

Westover Manuscripts. In the year 1728 Colonel Byrd set out with a party of commissioners to meet another party of commissioners from North Carolina, to survey and settle the boundary between North Carolina and Virginia. The other Virginia commissioners were Dandridge and Fitz-William. With them were two surveyors, a chaplain, and seventeen woodsmen and hunters. Colonel Byrd took notes of the journey. These important documents remained in manuscript until 1841, when they were printed under the title of "The Westover Manuscripts," being so called from the estate of Westover, on the north branch of the James River, where the author lived. These journals of Colonel Byrd are remarkable for the freshness and vividness of their descriptions, and for a continued undercurrent of good-natured humor. He is particularly fond of indulging in a bit of fun at the expense of the North Carolinians. The journals abound in stories illustrative of Natural History.

Whit'ing-ton, Dick. The hero of a famous old legend, in which he is represented as a poor orphan boy from the country, who went to London, where, after undergoing many hardships he obtained a penny and bought a cat. Shortly after, he sent his cat on a venture in his master's ship; and the King of Barbary, whose court was overrun with mice, gladly bought the cat at a high price. With this money Whittington commenced business, and succeeded so well that he finally married his former master's daughter, was knighted, and became lord mayor of London.

Wilfer. Name of a family prominent in "Our Mutual Friend," by Dickens. Reginald Wilfer, called by his wife R. W., and by his fellow-clerks Runtz. He was clerk in the drug-house of Chicksey, Stobbles, and Veneering. Mrs. Wilfer, wife of Mr. Reginald, a most majestic woman, with an exalted idea of her own importance. Bella Wilfer, daughter of Mr. and Mrs. Wilfer, a wayward, playful, affectionate, spoiled beauty, so pretty, so womanly, and yet so childish that she was always captivating. She spoke of herself as "the lovely woman." Bella married John Harmon. Lavinia Wilfer, youngest sister of Bella, and called "The Irrepressible."

Winter's Tale, The. **Shakespere (1604).** Leontes, King of Sicily, invites his friend Polixenes to visit him, becomes jealous, and commands Camillo to poison him.

Camillo warns Polixenés, and flees with him to Bohemia. Leontés casts his queen, Hermioné, into prison, where she gives birth to a daughter. Hermioné is reported dead and the child is brought up by a shepherd, who calls it Perdita. Florizel sees Perdita and falls in love with her; but Polixenés, his father, tells her that she and the shepherd shall be put to death if she encourages the suit. Florizel and Perdita flee to Sicily, and being introduced to Leontés, it is soon discovered that Perdita is his lost daughter. Polixenés tracks his son to Sicily, and consents to the union. The party are invited to inspect a statue of Hermioné, and the statue turns out to be the living queen.

Worldly-Wiseman, Mr. One of the characters in Bunyan's "Pilgrim's Progress," who converses with Christian by the way, and endeavors to deter him from proceeding on his journey.

Wrayburn, Eugene. Our Mutual Friend, Dickens. Barrister-at-law; an indolent, moody, whimsical young man, who loves Lizzie Hexam. After he is nearly killed by Bradley Headstone, he reforms, and marries Lizzie, who saved his life.

Ya' hoo. A name given by Swift, in his satirical romance of "Gulliver's Travels," to one of a race of brutes having the form and all the vices of man. The Yahoos are represented as being subject to the Houyhnhnms, or horses endowed with reason.

Yamoyden. A romantic poem having for its hero Philip, the celebrated Sachem of the Pequod Indians. The author, Sands, published the poem between the years 1817 and 1819.

Yarpe. The Gray Horse Troop, Hamlin Garland. The resolute leader of the cowboy gang that undertook to drive the Tetongs from their reservation lands in the far West. The real hero of the story, Captain Curtis, is in charge, and his rational management of the Indians, his fight against the political ring that would defraud his wards, and his courageous handling of a serious crisis show him to be a different power from that these cowboys generally met, when they shot up towns and raced the Tetongs across the hills, making of themselves a lynching party on federal territory. United States soldiers appear on the scene and Yarpe and his men depart.

Yeast. A romance by Charles Kingsley, was the outcome of his interest in the Chartist Riots of that year, and gives some of the most powerful delineations of the sufferings of the poor which are to be found in English literature.

Yemassee. An historical tale founded on personal knowledge of the American Indian character. Written in the first half of the Nineteenth Century by Simms, of whom it has been said, "He has done for the historical traditions of the Carolinas what Cooper did for those of the North and West.

Ye'o. Westward Ho! Chas. Kingsley. A character in the novel prominent as a bold mariner, a true friend, a terrible foe. He was all his life a sailor, and made voyages to New Guinea for negro slaves which were sold in the West Indies. He joined in the search for fabulous wealth in New Spain, crossed the Isthmus of Panama, was pursued and wandered in the woods of the isthmus for some months. "Westward Ho!" is an historical novel, relating to Elizabethan English history.

Yorlek. (1) The King of Denmark's jester, mentioned in Shakespeare's "Hamlet." Hamlet picks up his skull in the churchyard and apostrophizes it. (2) A humorous and careless parson in Sterne's "Tristram Shandy."

Yule Clog. The Yule clog is a great log of wood, sometimes the root of a tree, brought into the house with great ceremony on Christmas Eve, laid in the fireplace, and lighted with the brand of last year's clog. While it lasted, there was great drinking, singing, and telling of tales. Sometimes it was accompanied by Christmas candles, but in the cottages the only light was from the ruddy blaze of the great wood fire. The Yule clog was to burn all night; if it went out, it was considered a sign of ill luck.

Zano'ni. Hero of a novel so called by Lord Lytton. Zano'ni is supposed to possess the power of communicating with spirits, prolonging life, and producing gold, silver, and precious stones.

Zeno'bia. Blithedale Romance, Hawthorne. A strong-minded woman, beautiful and intelligent, who was interested in playing out the pastoral of the life at Brook Farm. She is represented as disappointed in love and at last she drowned herself.

Ze'phon. A "strong and subtle spirit" in Milton's "Paradise Lost," whom Gabriel dispatched with Ithuriel to find Satan.

Ze'phi-el. In Milton's "Paradise Lost," an angelic scout.

FAMOUS POEMS, AUTHOR, AND FIRST LINE

- About Ben Adhen. Leigh Hunt.
"About Ben Adhen, may his tribe increase."
Address to Light. John Milton.
"Hail, holy light, offspring of Heaven, first-born."
Address to a Mummy. Horace Smöh.
"And thou hast walked about (how strange a story)."
Adonais. Percy Bysshe Shelley.
"I weep for Adonais—he is dead!"
Advice of Polonius to Laertes. William Shakespere.
"Give thy thoughts no tongue."
After the Curfew. Oliver Wendell Holmes.
"The play is over. While the light."
Afton Water. Robert Burns.
"Flow gently, sweet Afton, among the green braes."
Alexander's Feast. John Dryden.
"Twas at the royal feast for Persia won."
Alexander Selkirk. Wm. Cowper.
"I'm monarch of all I survey."
Alfred Harper. John Sterling.
"Dark was the night, the watch was set."
Answer to Passionate Shepherd. Sir Walter Raleigh.
"If all the world and love were young."
Angelus. Bret Harte.
"Bells of the past, whose long-forgotten music."
American Flag. Joseph Rodman Drake.
"When Freedom from her mountain height."
Annabel Lee. Edgar Allen Poe.
"It was many and many a year ago."
Apostrophe to the Ocean. Lord Byron.
"There is a pleasure in the pathless wood."
Ariel's Song. William Shakespere.
"Come unto these yellow sands."
At Forty-five. Robert J. Burdette.
"Halt! cry the bugles down the columns' length."
A Thing of Beauty. John Keats.
"A thing of beauty is a joy forever."
Auf Wiedersehen. James Russell Lowell.
"The little gate was reached at last."
Auld Lang Syne. Robert Burns.
"Should auld acquaintance be forgot."
Baby, The. George Macdonald.
"Where did you come from, baby dear?"
Baby Bye. Theodore Tilton.
"Baby Bye, here's a fly."
Ballad of Baby Bell. T. B. Aldrich.
"Have you heard the poets tell."
Ballad of the Tempest. James T. Field.
"We were crowded in the cabin."
Bannoekburn. Robert Burns.
"Scots, wha hae wi' Wallace bled."
Barbara Fritchie. John G. Whittier.
"Up from the meadows rich with corn."
Barefoot Boy. John G. Whittier.
"Blessings on thee, little man."
Battle Hymn of the Republic. Julia Ward Howe.
"Mine eyes have seen the glory of the coming of the Lord."
Battle of Blenheim. Robt. Southey.
"It was a summer's evening, old Casper's work was done."
Auld Robin Gray. Lady Anne Lindsay.
"When the sheep are in the fauld, and the kye come hame."
Battle of Agincourt. Michael Drayton.
"Fair stood the wind for France."
Beggar, The. James Russell Lowell.
"A beggar through the world am I."
Bells, The. Edgar Allen Poe.
"Hear the sledges with the bells."
Belshazzar. Barry Cornwall.
"Belshazzar is king, Belshazzar is lord."
Ben Bolt. Thos. Dunn English.
"O, don't you remember sweet Alice, Ben Bolt?"
Bingen on the Rhine. Caroline Norton.
"A soldier of the legion lay dying in Algiers."

- Bill and Joe, *Oliver Wendell Holmes.*
 "Come, dear old comrade, you and I."
- Blessed Damozel, The, *Dante Gabriel Rossetti.*
 "The blessed damozel leaned out."
- Blindness, Ode on, *John Milton.*
 "When I consider how my light is spent."
- Blue and the Gray, The, *Francis Finch.*
 "By the flow of the inland river."
- Bonnie Doon, *Robert Burns.*
 "Ye banks and braes o' bonnie Doon."
- Boys, The, *Oliver Wendell Holmes.*
 "Has there any old fellow got mixed with the boys?"
- Bridge of Sighs, The, *Thomas Hood.*
 "One more unfortunate."
- Bridge, The, *Henry W. Longfellow.*
 "I stood on the bridge at midnight."
- Brook, The, *Alfred Tennyson.*
 "I come from haunt of coot and hern."
- Bugle Song, *Alfred Tennyson.*
 "The splendor falls on castle walls."
- Burial of Moses, *Francis Alexander.*
 "By Nebo's lonely mountain."
- Burial of Sir John Moore, *Charles Wolfe.*
 "Not a drum was heard, not a funeral note."
- Carmen Bellicosum, *G. H. McMaster.*
 "In their ragged regimentals."
- Casabianca, *Felicia Hemans.*
 "The boy stood on the burning deck."
- Cataract of Lodore, *Robert Southey.*
 "How does the water come down at Lodore?"
- Cato's Soliloquy, *Joseph Addison.*
 "It must be so — Plato, thou reason'st well."
- Celestial Music, *William Shakespere.*
 "How sweet the moonlight sleeps upon this bank!"
- Chambered Nautilus, *Oliver Wendell Holmes.*
 "This is the ship of pearl which poets feign."
- Charge of the Light Brigade, *Alfred Tennyson.*
 "Half a league, half a league."
- Charles XII., *Samuel Johnson.*
 "On what foundation stands the warrior's pride?"
- Child Musician, The, *Austin Dobson.*
 "He had played for his lordship's levee."
- Children, The, *Charles M. Dickinson.*
 "When the lessons and tasks are all ended."
- Children's Hour, *H. W. Longfellow.*
 "Between the dark and the daylight."
- Choir Invisible, The, *George Eliot.*
 "O, may I join the choir invisible."
- Christmas Hymn, *Alfred Domet.*
 "It was the calm and silent night."
- Christmas Hymn, *Charles Wesley.*
 "Hark, the herald angels sing."
- Christmas Bells, *H. W. Longfellow.*
 "I heard the bells on Christmas Day."
- Clear the Way, *Charles Mackay.*
 "Men of thought, be up and stirring."
- Closing Scene, The, *Buchanan Read.*
 "Within the sober realm of leafless trees."
- Closing Year, *George D. Prentiss.*
 "'Tis midnight's holy hour,— and silence now."
- Cloud, The, *Percy Bysshe Shelley.*
 "I bring fresh showers for the thirsting flowers."
- Comin' Through the Rye, *Robert Burns.*
 "Gin a body meet a body."
- Concord Bridge, *Ralph Waldo Emerson.*
 "By the rude bridge that arched the flood."
- Contentment, *Edward Dyer.*
 "My mind to me a kingdom is."
- Cover Them Over, *Will Carleton.*
 "Cover them over with beautiful flowers."
- Cowper's Grave, *Elizabeth Barrett Browning.*
 "It is a place where poets crowned may feel the heart's decaying."
- Cradle Song, *Alfred Tennyson.*
 "Sweet and low, sweet and low."
- Crossing the Bar, *Alfred Tennyson.*
 "Sunset and evening star and one clear call for me."
- Cry of the Children, *Elizabeth Barrett Browning.*
 "Do you hear the children weeping, O, my brothers?"
- Curfew must not Ring Tonight, *Rose H. Thorpe.*
 "England's sun was slowly setting."
- Culprit Fay, *Joseph Rodman Drake.*
 "'Tis the middle watch of a summer's night."
- Cupid Grown Careful, *George Croly.*
 "There was once a gentle time."
- Cry of the Dreamer, *John Boyle O'Reilly.*
 "I'm tired of planning and toiling."
- Daffodils, *William Wordsworth.*
 "I wandered lonely as a cloud."
- Death of the Flower, *William Cullen Bryant.*
 "The melancholy days have come."
- Death of the Brave, *William Collins.*
 "How sleep the brave, who sink to rest."
- Deserted Village, The, *Oliver Goldsmith.*
 "Sweet Auburn! loveliest village of the plain."
- Destruction of Sennacherub, *Lord Byron.*
 "The Assyrian came down like a wolf on the fold."
- Dirge, *Sir Walter Scott.*
 "Soldier rest, thy warfare o'er."
- Domestic Peace, *Samuel Taylor Coleridge.*
 "Tell me, on what holy ground."
- Dorothy Q., *Oliver Wendell Holmes.*
 "Grandmother's mother, her age, I guess."
- Drifting, *Thomas B. Read.*
 "My soul to-day is far away."
- Driving Home the Cows, *Kate Osgood.*
 "Out of the clover and blue-eyed grass."
- Dream Ship, The, *Eugene Field.*
 "When the world is fast asleep."
- Dying Christian to His Soul, *Alexander Pope.*
 "Vital spark of heavenly flame."
- Each and All, *Oliver Wendell Holmes.*
 "Little thinks in the field yon red-cloaked clown."
- Easter Flowers, *Phillips Brooks.*
 "O garden by the city gate."
- Elegy in a Country Churchyard, *Thomas Gray.*
 "The curfew tolls the knell of parting day."
- End of Life, The, *Philip James Bailey.*
 "We live in deeds, not years; in thoughts, not breaths."
- End of the Play, *William Makepeace Thackeray.*
 "The play is done — the curtain drops."
- Erl King, *Goethe.*
 "Who rideth so late through the night wind wild."
- Evening Cloud, *John Wilson.*
 "A cloud lay cradled near the setting sun."
- Eve of St. Agnes, *John Keats.*
 "St. Agnes' Eve,— Ah, bitter chill it was."
- Evening in Paradise, *John Milton.*
 "Now came still Evening on, and Twilight gray."
- Evening, Ode to, *Joseph Addison.*
 "The spacious firmament on high."
- Evelyn Hope, *Robert Browning.*
 "Beautiful Evelyn Hope is dead."
- Evening Prayer, *James Edmonston.*
 "Saviour breathe an evening blessing."
- Fairies, The, *William Allingham.*
 "Up the airy mountain."
- Family Meeting, *Charles Sprague.*
 "We are all here! father, mother, sister, brother."
- Farewell, *Charles Kingsley.*
 "My fairest child, I have no song to give you."
- Fare Thee Well, *Lord Byron.*
 "Fare thee well, and if forever."
- Fire of Driftwood, *Henry W. Longfellow.*
 "We sat within the farmhouse old."
- First Snow Fall, *James Russell Lowell.*
 "The snow had begun in the gloaming."
- Five, *Julia C. R. Dorr.*
 "But a week is so long," he said."
- Flight of Youth, *Richard Henry Stoddard.*
 "There are gains for all our losses."
- For a That, *Robert Burns.*
 "Is there for honest poverty."

- Friends Together, *Caroline Norton.*
 "We have been friends together."
- Good-bye, My Lover, Good-bye, *T. H. Allen.*
 "My ship goes sailing down the bay."
- Good Times Coming, *Chas. MacKay.*
 "There's a good time coming, boys."
- Good Night and Good Morning, *Lord Houghton.*
 "A fair little girl sat under a tree."
- Graves of a Household, The, *Felicia Hemans.*
 "They grew in beauty side by side."
- Grecian Urn, Ode on a, *John Keats.*
 "Thou still unravished bride of quietness."
- Hamlet's Address to His Father's Ghost, *William Shakespeare.*
 "Angels and ministers of grace defend us."
- Hamlet's Soliloquy, *William Shakespeare.*
 "To be or not to be, that is the question."
- Hannah Binding Shoes, *Lucy Larcom.*
 "Poor lone Hannah, at the window, binding shoes."
- Here and There, *Susan Coolidge.*
 "We sit beside the lower feast."
- Highland Mary, *Robt. Burns.*
 "Ye banks and braes and streams around."
- High Tide on the Coast of Lincolnshire, *Jean Ingelow.*
 "The old mayor climbed the belfry tower."
- Hohenlinden, *Thomas Campbell.*
 "Oh Linden, when the sun was low."
- Home, Sweet Home, *John Howard Payne.*
 "Mid pleasures and palaces, though I may roam."
- Horatius, *Lord Macaulay.*
 "Lars Porsena of Clusium."
- Hour of Death, *Felicia Hemans.*
 "Leaves have their time to fall."
- House Where I Was Born, *Thomas Hood.*
 "I remember, I remember."
- How They Brought the Good News, *Robert Browning.*
 "I sprang to the stirrup and Joris and he."
- Hymn Before Sunrise, *Samuel Taylor Coleridge.*
 "Hast thou a charm to stay the morning star?"
- Hymn on the Morning of the Nativity, *John Milton.*
 "It was the winter wild."
- Il Penseroso, *John Milton.*
 "Hence vain deluding joys."
- I'm Growing Old, *John G. Saxe.*
 "My days pass pleasantly away."
- I Love My Love, *Charles Mackay.*
 "That is the meaning of the song."
- Inchcape Rock, *Robert Southey.*
 "No stir in the air, no stir in the sea."
- Ingratitude, *William Shakespeare.*
 "Blow, blow, thou winter wind."
- Ivy Green, *Charles Dickens.*
 "Oh, a dainty plant is the ivy green."
- Jerusalem, the Golden, *Gerald Massey.*
 "Jerusalem, the golden, I weary for one gleam."
- John Anderson, *Robert Burns.*
 "John Anderson, my jo, John."
- John Gilpin, *William Cowper.*
 "John Gilpin was a citizen."
- King's Guest, The, *Harriet Prescott Spofford.*
 "Thou shalt die," said the priest to the king."
- Knee-deep in June, *James Whitcomb Riley.*
 "Tell you what I like the best."
- Ladder of St. Augustine, *Henry W. Longfellow.*
 "St. Augustine, well hast thou said."
- L'Allegro, *John Milton.*
 "Hence, loathed melancholy."
- Landing of the Pilgrims, *Felicia Hemans.*
 "The breaking waves dashed high."
- Land o' the Leal, *Caroline Oliphant.*
 "I'm wearin' awa', John."
- Last Leaf, *Oliver Wendell Holmes.*
 "If I should live to be."
- Light Out of Darkness, *William Cowper.*
 "God moves in a mysterious way."
- Little Boy Blue, *Abby Sage Richardson.*
 "Under the haystack, Little Boy Blue."
- Little Boy Blue, *Eugene Field.*
 "The little toy dog is covered with dust."
- Little While, A, *A. H. Bonar.*
 "Beyond the smiling and the weeping."
- Lochinvar, *Sir Walter Scott.*
 "The young Lochinvar is come out of the West."
- Lost Chord, *Adelaide Proctor.*
 "Seated one day at the organ."
- Lord Ullin's Daughter, *Thomas Campbell.*
 "A chieftain to the highlands bound."
- Lost Leader, The, *Robert Browning.*
 "Just for a handful of silver he left us."
- Lotus Eaters, The, *Alfred Tennyson.*
 "Courage!" he said, and pointed toward the land."
- Love of Country, *Sir Walter Scott.*
 "Breathes there the man with soul so dead."
- Love's Immortality, *Robert Southey.*
 "They sin who tell us love can die."
- Lucy Gray, *William Wordsworth.*
 "Oft I had heard of Lucy Gray."
- Lux Benigna, *Cardinal Newman.*
 "Lead kindly light, amid the encircling gloom."
- Lycidas, *John Milton.*
 "Yet once more, O ye laurels, and once more."
- Man With the Hoe, *Edwin Markham.*
 "Bowed with the weight of centuries, he leans."
- Maid of Athens, *Lord Byron.*
 "Maid of Athens, ere we part."
- Marco Bozarris, *Fitz-Greene Halleck.*
 "At midnight in his guarded tent."
- Maud Muller, *John G. Whittier.*
 "Maud Muller on a summer's day."
- Meeting of the Waters, *Thomas Moore.*
 "There is not in the wide world a valley so sweet."
- Melrose Abbey, *Sir Walter Scott.*
 "If thou wouldst view fair Melrose aright."
- Mercy, *William Shakespeare.*
 "The quality of mercy is not strained."
- Mighty Fortress, A, *Martin Luther.*
 "A mighty fortress is our God."
- Miller's Daughter, *Alfred Tennyson.*
 "It is the miller's daughter."
- Milton, *John Dryden.*
 "Three facts in three distant ages born."
- Mind Alone Valuable, *William Shakespeare.*
 "For 'tis the mind that makes the body rich."
- Morte d'Arthur, *Alfred Tennyson.*
 "So all day long the noise of battle roll'd."
- Mother and Poet, *Elizabeth Barrett Browning.*
 "Dead! one of them shot by the sea in the east."
- Music, *William Collins.*
 "When music, heavenly maid, was young."
- Musical Instrument, A, *Elizabeth Barrett Browning.*
 "What was he doing, the great God Pan?"
- Nathan Hale, *Francis Finch.*
 "To drum beat and heart beat."
- Not as I Will, *Helen Hunt Jackson.*
 "Blindfolded and alone I stand."
- My Ain Countree, *Mary Demarest.*
 "I'm far frae my hame."
- My Mind, a Kingdom, *Sir Edward Dyer.*
 "My mind to me a kingdom is."
- My Native Land — Good-Night, *Lord Byron.*
 "Adieu, adieu! my native shore."
- Ocean, The, *Lord Byron.*
 "Roll on, thou deep and dark blue ocean — roll!"
- Ode on Immortality, *William Wordsworth.*
 "There was a time when meadow, grove, and stream."
- Old Arm Chair, The, *Eliza Cook.*
 "I love it — I love it, and who shall dare."
- Old Aunt Mary's, *James Whitcomb Riley.*
 "Wasn't it pleasant, O brother mine?"
- Old Ironsides, *Oliver Wendell Holmes.*
 "Aye, tear her tattered ensign down."
- Old Oakon Bucket, *Samuel Woodworth.*
 "How dear to my heart are the scenes of my childhood."

- Old Minstrel, The, *Sir Walter Scott.*
 "The way was long, the wind was cold."
- Old, Old Song, The, *Charles Kingsley.*
 "When all the world is young, lad."
- Old Song, An, *Joanna Baillie.*
 "The bride she is winsome and bonny."
- One Hoss Shay, *Oliver Wendell Holmes.*
 "Have you heard of the wonderful one hoss shay?"
- Oh, Sleep, *Samuel Taylor Coleridge.*
 "Oh, Sleep! it is a gentle thing."
- On the Loss of the Royal George, *William Cowper.*
 "Toll for the brave!"
- On Virtue, *Alexander Pope.*
 "Know then this truth, enough for man to know."
- Opportunity, *John J. Ingalls.*
 "Maker of human destinies am I."
- Order for a Picture, *Alice Cary.*
 "O good painter, tell me true."
- Other World, The, *Harriet Beecher Stowe.*
 "It lies around us like a cloud."
- Paradise and the Peri, *Thomas Moore.*
 "One morn a Peri at the gate."
- Passionate Shepherd to His Love, *Christopher Marlowe.*
 "Come live with me and be my love."
- Picket Guard, *Ethel L. Beers.*
 "All quiet along the Potomac, they say."
- Pied Piper of Hamelin, *Robert Browning.*
 "Hamelin's town 's in Brunswick."
- Pictures of Memory, *Alice Cary.*
 "Among the beautiful pictures."
- Planting the Apple Tree, *Henry W. Longfellow.*
 "Come let us plant the apple tree."
- Proud Miss MacBride, *John G. Saxe.*
 "O terribly proud was Miss MacBride."
- Power of Poetry to Confer Fame, *Edmund Spenser.*
 "The day I wrote her name upon the strand."
- Prayer, *James Montgomery.*
 "Prayer is the soul's sincere desire."
- Prisoner of Chillon, *Lord Byron.*
 "My hair is gray but not with years."
- Rabbi Ben Ezra, *Robert Browning.*
 "Grow old along with me."
- Raven, The, *Edgar Allen Poe.*
 "Once upon a midnight dreary."
- Recessional, *Rudyard Kipling.*
 "Lord of our fathers, known of old."
- Red Cross Knight, *Edmund Spenser.*
 "A gentle knight was pricking on the plain."
- Rhodora, *Ralph Waldo Emerson.*
 "In May when sea-winds pierce our solitude."
- Ring Out, Wild Bells, *Alfred Tennyson.*
 "Ring out, wild bells, to the wild sky."
- Rime of the Ancient Mariner, *S. T. Coleridge.*
 "It is an ancient mariner."
- Rock Me to Sleep, *Elizabeth A. Allen.*
 "Backward, turn backward, O time in thy flight."
- Robert of Lincoln, *Robert Browning.*
 "Merrily swinging on brier and weed."
- Rosary of Years, *Father Ryan.*
 "Some reckon their age by years."
- Rule Britannia, *Thompson.*
 "When Britain first at heaven's command."
- Sands of Dee, *Charles Kingsley.*
 "O Mary, go and call the cattle home."
- Sandpiper, The, *Celia Thaxter.*
 "Across the narrow beach we flit."
- Seven Ages of Man, *William Shakespeare.*
 "All the world's a stage."
- Sheridan's Ride, *T. B. Read.*
 "Up from the south at break of day."
- Sir Galahad, *Alfred Tennyson.*
 "My good blade carves the casques of men."
- Skipper Ireson's Ride, *John G. Whittier.*
 "If all the rides since the birth of time."
- Skylark, To a, *William Wordsworth.*
 "Up with me, up with me, into the clouds."
- Skylark, The, *James Hogg.*
 "Bird of the wilderness."
- Skylark, To a, *Percy Bysshe Shelley.*
 "Hail to thee, blithe spirit."
- Sleep, *Edward Young.*
 "Tired Nature's sweet restorer, balmy sleep."
- Sleep, *Elizabeth Barrett Browning.*
 "Of all the thoughts of God that are."
- Soldier's Dirge, *William Collins.*
 "How sleep the brave who sink to rest."
- Song from Cymbeline, *William Shakespeare.*
 "Hark! hark! the lark at heaven's gate sings."
- Song of Doubt, A, *Josiah Gilbert Holland.*
 "The day is quenched and the sun is fled."
- Song of Faith, A, *Josiah Gilbert Holland.*
 "Day will return with a fresher boon."
- Song of Pippa, *Robert Browning.*
 "The year's at the spring."
- Song of the Camp, *Bayard Taylor.*
 "Give us a song, the soldier cried."
- Song of the Chattahoochee, *Sidney Lanier.*
 "Out of the hills of Habersham."
- Song of the Fairy, *William Shakespeare.*
 "Over hill, over dale."
- Song of the Shirt, *Thomas Hood.*
 "With fingers weary and worn."
- Song of Seven, *Jean Ingelow.*
 "There's no dew left on the daisies and clover."
- Songs of Innocence, *William Blake.*
 "Piping down the valleys wild."
- Sonnet to Milton, *William Wordsworth.*
 "Milton! thou should'st be living at this hour."
- Soul and Body, *William Shakespeare.*
 "Poor soul, the center of my sinful earth."
- Soul's Errand, *Sir Walter Raleigh.*
 "Go, soul, the body's guest."
- Spare the Tree, *George P. Morris.*
 "Woodman, spare that tree."
- Stanzas for Music, *Lord Byron.*
 "There's not a joy the world can give like that it takes away."
- Stars, The, *Lord Byron.*
 "Ye stars! which are the poetry of heaven."
- Stirrup Cup, The, *John Hay.*
 "My short and happy day is done."
- Sweet Content, *Thomas Decker.*
 "Art thou poor, yet hast thou golden slumbers?"
- Tenting on the Old Camp Ground, *Kittredge.*
 "We are tenting to-night on the old camp ground."
- Thanatopsis, *William Cullen Bryant.*
 "To him who in the love of nature holds."
- To a Mountain Daisy, *Robert Burns.*
 "Wee, modest, crimson-tipped flower."
- To a Mouse, *Robert Burns.*
 "Wee, sleekit, cow'rin', tim'rous beastie."
- To a Waterfowl, *William Cullen Bryant.*
 "Whither midst falling dew."
- To Celia, *Ben Jonson.*
 "Drink to me only with thine eyes."
- To Night, *Percy Bysshe Shelley.*
 "Swiftly walk o'er the western wave."
- To Mary in Heaven, *Robert Burns.*
 "Thou ling'ring star, with less'ning ray."
- True Woman, *William Wordsworth.*
 "She was a phantom of delight."
- Two Angels, *H. W. Longfellow.*
 "Two angels, one of life and one of death."
- Vagabonds, The, *J. T. Trowbridge.*
 "We are two vagabonds, Roger and I."
- Valley of Silence, The, *Father Ryan.*
 "In the hush of the valley of silence."
- Village Preacher, The, *Oliver Goldsmith.*
 "Near yonder copse where once the garden smiled."
- Waiting, *John Burroughs.*
 "Serene I fold my hands and wait."
- When Malindy Sings, *Paul Lawrence Dunbar.*
 "G'way an' quit dat noise, Miss Lucy."
- We are Seven, *William Wordsworth.*
 "A simple child that lightly draws its breath."
- Yankee Girl, *John G. Whittier.*
 "She sings by her wheel at the low cottage door."

FOURTH BOOK

BIOGRAPHY

WILLIAM EWART GLADSTONE

BIOGRAPHY

Aaron, son of Amram and Jochebed, of the tribe of Levi, and the elder brother of Moses and Miriam. He appeared with Moses before Pharaoh, and was the first high priest of Israel, his sons being also consecrated to the priesthood. He shared the sin of Moses at Meribah, as well as its punishment, his death taking place shortly afterwards on Mount Hior.

Abbey, Edwin Austin, R. A., studied at Philadelphia Academy of Fine Arts. Mr. Abbey stands in the foremost rank of Anglo-Saxon painters of historical and subject pictures. All his works show his fine decorative instinct, and are painted with a rich glowing palette. They are remarkable for the correctness of all archaeological detail. He has acquired great fame as an illustrator of Shakespeare, whose plays have also supplied him with the subjects for some of his most successful pictures. Principal works: Richard III. and Lady Anne, King Lear's Daughters, Hamlet, the decorative panels illustrating the Quest of the Holy Grail, in the Boston Public Library, Coronation of King Edward VII., Columbus in the New World.

Abbot, Ezra, LL.D., D.D., born in 1819. American critic, very precocious as a child, graduated at Bowdoin College, and settled at Cambridge, gaining considerable reputation as a biblical critic. He contributed to periodicals, and also wrote several critical works, and in support of Unitarianism; the best known is that on "The Authority of the Fourth Gospel." Died, 1884.

Abbott, Lyman, clergyman, author, editor "The Outlook"; born in Roxbury, Mass., December 18, 1835; graduated University of New York, 1853; practiced law; ordained Congregational minister, 1860; pastor Terre Haute, Ind., 1860-65; New England Church, New York, 1865-69; resigned pastorate, 1869, to devote himself to literature. Edited "Literary Record" of Harper's Magazine; associate editor "The Christian Union" with Henry Ward Beecher, whom he succeeded as pastor of Plymouth Church, Brooklyn, May, 1888; resigned, November, 1898. Author: Jesus of Nazareth; Old Testament Shadows of New Testament Truth; A Layman's Story; How to Study the Bible; Illustrated Commentary on the New Testament; Dictionary of Religious Knowledge (with late T. J. Conant); A Study in Human Nature; In Aid of Faith; Life of Christ; Evolution of Christianity; The Theology of An Evolutionist; Christianity and Social Problems; Life and Letters of Paul; The Life that Really Is; Problems of Life; Life and Literature of the Ancient Hebrews; The Rights of Man; Henry Ward Beecher; The Other Room; The Great Companion; Christian Ministry; Personality of God; and Industrial Problems.

Abd-ul-Hamid II., Sultan of Turkey, was born September 22, 1842, and was the second son of Sultan Abd-ul-Medjid. He was proclaimed Sultan in succession to his brother Murad V., who was deposed in consequence of his mental incapacity (August 31, 1876), and died on August 29, 1904. The succession to the throne, according to Turkish custom, vests in the senior male descendant of the house of Othman, sprung from the Imperial Harem. The Sultan does not marry, but from the inmates of the Harem selects a certain number who are known as ladies of the palace, the others occupying positions subordinate to them. All children born in the Harem are held to be of legitimate and equal birth. The eldest son of the Sultan only succeeds when there are no uncles or cousins of greater age than himself. The Sultan has several children, the eldest being Mehmed-Selin Effendi, born January 11, 1870.

Abelard, or Abailard (ab-a-lard), Pierre, a French philosopher and ecclesiastic, was born in the year 1079, at Palais, near Nantes, in Brittany. He was celebrated for his learning and genius, and opened a school in Paris in 1103, where he taught philosophy with great success. His romantic love for Héloïse, and the misfortunes which followed in consequence of his unhappy passion, have added greatly to his celebrity. He died at the priory of St. Marcel, near Châlons, in 1142. He was at first interred by the monks of Cluni in their monastery, but his remains were afterwards removed to the Paraclete (a monastery in Champagne, which Abelard had himself founded, and which was then a convent presided over by

Héloïse); and finally they were deposited, together with those of Héloïse, in the cemetery of Pere la Chaise.

Abraham (d'bra-ham), the progenitor of the Hebrew nation, descendant of Shem, born 1996 B. C., in Mesopotamia, died at the age of 175 years, and was buried in the Cave of Machpelah. Isaac and Ishmael were his sons by Sarah and Hagar, the latter being a slave.

Abruzzi, Duke of the, prince of Royal House of Italy, was born in 1873; scientist, explorer, aeronaut, sportsman, littérateur; traveled round world as a youth; ascended Mount St. Elias, Alaska, 1896; his Arctic expedition in 1899 penetrated nearest to North Pole; in 1906 he ascended the topmost height in the Ruwenzori Range, and in January, 1907, at Royal Geographical Society, was eulogized by King Edward.

Abu Bekr (d'bu bā'ker), father-in-law and successor of Mohammed, born in 571, was elected Caliph over Ali, son-in-law of Mohammed, and the contest caused a schism in the Church, which still exists. Died, 634.

Adams, Charles Francis, born in 1807; son of J. Q. Adams; spent his childhood in Europe, and, returning to America, graduated at Harvard College, 1825. He was educated for the law, but adopting politics, eventually joined the coalition now known as the Republican party, and was appointed minister to England, 1861-68. He was arbitrator for America for the settlement of claims under the Treaty of Washington, 1871, and continued to take an active interest in political life. He wrote biographies of his father and grandfather. Died, 1886.

Adams, Charles Francis, history writer; born in Boston, May 27, 1835; graduated at Harvard, 1856 (LL. D., 1895); admitted to bar, 1858; served in Union Army through Civil War; brevetted brigadier-general, United States Army, May, 1865. Became identified with railway interests; appointed member board of railway commissioners of Massachusetts, 1869; president Union Pacific Railway, 1884; president Massachusetts Historical Society, 1895. Author: Chapters on Erie and Other Essays; Railroads, their Origin and Problems; Notes on Railway Accidents; Massachusetts, Its Historians and Its History; Three Episodes of Massachusetts History; Life of Charles Francis Adams; Richard Henry Dana, a Biography; A College Fetich; Lee at Appomattox, and other papers.

Adams, Henry, author; born in Boston, February 16, 1838; graduate Harvard, 1858; private secretary to his father, who was American Minister at London, 1861-68; assistant professor history Harvard, 1870-77; editor North American Review, 1870-76. Author: Essays in Anglo-Saxon Law; Historical Essays; Life of Albert Gallatin; John Randolph; Documents Relating to New England Federalism; History of United States (9 vols.); etc.

Adams, Henry Carter, professor political economy and finance University of Michigan, since 1887; born in Davenport, Ia., 1851; graduate Iowa College, 1874; lecturer in Cornell and University of Michigan, 1880-87, also in Johns Hopkins, 1880-82; director division transportation, 11th census; statistician, Interstate Commerce Commission since 1887; president American Economy Association, 1895-97. Author: Outline of Lectures on Political Economy; State in Relation to Industrial Action; Taxation in the United States; Public Debts; The Science of Finance; Statistics of Railways; and Economics and Jurisprudence.

Adams, John, born in 1735; second President of the United States; graduated at Harvard, and was called to the bar in 1761. He was one of the delegates at the Congress at Philadelphia, 1774, and throughout encouraged the movement for independence, in which, as chairman of the board of war, he took an active part. He was commissioner to the Court of France, 1788, and was sent on an embassy to England, 1779. He was elected Vice-President of the Union in 1789, and succeeded Washington as president in 1797, but in 1801 failed to gain reelection, and then retired from public affairs. Died, 1826.

Adams, John Quincy, born in 1767; son of President John Adams, and sixth President of the United States, studied at Leyden and Harvard, and was admitted to the bar in 1791. He entered the diplomatic

service, and was successively American minister in Holland, England, and Prussia, and as a senator (1803-1808) he supported Jefferson's Embargo Act. From 1806-1809 he occupied the chair of rhetoric at Harvard College. After holding various offices, in 1825 he was elected President of the United States, and being returned to Congress in 1830, became a vigorous supporter of the Abolitionists. He was author of "Letters on Silesia," "Lectures on Rhetoric," and a poem "Dermot MacMorrogh." Died, 1848.

Adams, Maude, actress; born (Kiskadden) in Salt Lake City, November 11, 1872; her mother (stage name "Adams") was leading woman of stock company there. Appeared on stage in child's parts; went to school; joined E. H. Sothern Company, New York, at 16; ingenue role in the "Midnight Bell;" afterward in Charles Frohman's Stock Company; later supported John Drew; pronounced success in "Little Minister," 1897-98; started in that play, 1898-99; also in "L'Aiglon, 1900-01 and subsequently in Shakespearean roles.

Adams, Oscar Fay, author, lecturer upon literature and architecture; born in Worcester Mass.; graduated at New Jersey State Normal School. Author: Handbook of English Authors; Handbook of American Authors; Through the Year with the Poets (12 vols. edited); Post-Laureate Idylls; Chapters from Jane Austen (edited); Morris's "Atalanta's Race," with Notes (edited); Dear Old Story Tellers; The Poets' Year (edited); The Story of Jane Austen's Life; The Presumption of Sex; Dictionary of American Authors (5th edition enlarged); The Archbishop's Unguarded Moment, and Other Stories; Some Famous American Schools. American editor of The Henry Irving Shakespeare.

Adams, Samuel, one of the leading men of the American Revolution; born in Boston, Mass., 1722. He displayed on all occasions an unflinching zeal for popular rights, and was, by the patriotic party, placed in the legislature in 1766. Adams was a member of the first Congress, and signed the Declaration of Independence in 1776; took an active part in framing the Constitution of Massachusetts, and was for several years president of the senate of that State. He held the office of lieutenant-governor from 1789 to 1794, and of governor from that time till 1797. Died, 1803.

Addams, Jane (Miss), head resident of Hull House; born in Cedarville, Ill., September 6, 1860; graduated at Rockford College, 1881; spent two years in Europe, 1883-85; studied in Philadelphia, 1888; in 1889 opened with Miss Ellen Gates Starr, Social Settlement of Hull House; has been inspector of streets and alleys in neighborhood of Hull House; writer and lecturer on social and political reform. Author: Democracy and Social Ethics.

Addison, Joseph, born in 1672, passed from Charterhouse school to Queen's College, Oxford, and graduated at Magdalen College in 1693. He spent four years traveling on the Continent, returning in 1703, and in 1704, "The Campaign," a poem celebrating the victory of Blenheim, brought him into favor. In 1708 he was sent to Ireland as secretary to the Lord Lieutenant. He contributed largely to the "Tatler" and "Spectator" from their commencement, and wrote 274 numbers for the latter. In 1713 he brought his tragedy of "Cato" before the public, and at Drury Lane it proved an unprecedented success. In 1716 he married the Countess Dowager of Warwick, and the following year was appointed secretary of state. Died at Holland House in 1719.

Adler, Felix, educator, lecturer; born in Alzey, Germany, August 13, 1851; studied of Hebrew rabbi; graduated at Columbia, 1870; studied at Berlin (Ph. D.); professor of Hebrew and Oriental literature at Cornell, 1874-76; established, 1876, New York Society for Ethical Culture, to which he gives regular Sunday discourses. Professor of political and social ethics; Columbia University member of editorial board of International Journal of Ethics. Author: Creed and Deed; The Moral Instruction of Children; Life and Destiny; Marriage and Divorce; Religion of Duty.

Æschines, born 389 B. C., celebrated Athenian orator. Failing in an attack on Demosthenes, was twice sent on an embassy to Philip of Macedonia, and retired to Rhodes where he founded a school. Died, 314 B. C.

Æschylus, (*æ'-ke-lus*), an eminent Greek tragedian, born at Athens. Of ninety tragedies which he wrote, fifty were crowned. Seven of them only remain; viz., "The Prometheus Bound," "The Seven Chiefs before Thebes," "The Persians," "Agamemnon," "The Choephore," "The Eumenides," and "The Suppliants." In his old age, Æschylus retired to the court of Hiero, King of Sicily. The oracle having predicted that the fall of a house should prove fatal to him, he went to reside in the fields, and was killed, it is said, by a tortoise which an eagle dropped upon his head. Died, 456, B. C.

Æsop (*æ'-sop*). A celebrated fabulist, said to have been born at Phrygia, 600 B. C. He was as deformed in body as accomplished in mind, and was originally a slave at Athens and at Samos. Having gained freedom by his wit, he traveled through Asia Minor and Egypt, and attached himself to the court of Croesus, King of Lydia. Sent by that monarch upon an embassy to Delphos, he so offended the inhabitants by the keenness of his sarcasms, that they hurled him from a rock into the sea. He was killed 560 B. C. His history appears to be altogether legendary.

Agassiz, Alexander, naturalist; born in Neuchâtel, Switzerland, December 17, 1815; graduated at Harvard, 1835; Lawrence Scientific School, B. S., 1837; on coast survey of California, 1859; assistant in zoology, Harvard, 1860-65; developed and was superintendent, 1865-69, Calumet & Hecla copper mines, Lake Superior; curator Museum Comparative Zoological, Cambridge, 1874-85; since engaged in zoological investigation. Appointed director Museum Comparative Zoology, Cambridge, 1902; appointed by Emperor William III. of Germany member Order of Merit, 1902; member of Academy of Science, Paris; president of National Academy of Science. Author, "Explorations of Lake Titicaca," "List of the Echinoderms," "Three Cruises of the Blake," "Revision of the Echine," "Pacific Coral Reefs," "Coral Reefs of the Maldins," "Panamic Deep Sea Echini," etc.

Agassiz, Louis Johann Rudolph, born 1807; eminent naturalist, was the son of a Swiss Protestant clergyman. He studied medicine and graduated at Munich, but devoted himself principally to ichthyology, and was employed to classify and arrange the collection brought from Brazil by Martius and Spix. In 1846, he went to America, where he was well received, and accepted the chair of zoology and geology at the University of Cambridge (Harvard College). In 1865, he visited Brazil, and on his return placed the large collection he had made in the museum of Cambridge. He wrote numerous very valuable works, and was to the last a disbeliever in the Darwinian theory of evolution. Died, 1878.

Agricola (*a-grick'-o-la*), (Cneius Julius), a Roman governor of Britain under Vespasian, born A. D. 40. He subjected Scotland and Ireland; reduced the Britons; and, by his able government, preserved these territories to the Romans. Domitian, jealous of his success, recalled him; and Agricola withdrew to his estate, where he died in 94. His life, written by his son-in-law, Tacitus, is extant, and is considered a model of biographical writing.

Aguinado, Emilio, v Famy, General. Born in Imus, a village near Cavite, Luzon, May, 1868; educated at St. Thomas by the Dominicans. He is short of stature, with a Japanese cast of countenance. During the rebellion of the Filipinos against Spain he was in constant fear of assassination, as the Spanish Government offered a reward of \$25,000 for his head. He was the chief of the insurgents and a capable man; acting as a dictator he assumed sovereign power. In March, 1901, was captured by General Fred. Funston, a Kansas volunteer, after being in constant flight.

Aguesseau, Henri François d', born in 1668; orator and advocate, took part in the contest between the Pope and the Gallican Church, 1699; was made procureur-general in 1700, and defended the Gallican Church against the Ultramontane Party. After the death of Louis XIV. was appointed chancellor in 1717, but was twice deprived of the seals, retiring from Paris 1722, but was finally restored in 1727. He was a great scholar and jurist. Died, 1751.

Ahaz, the tenth king of Judah, and son of Jotham, became tributary to Tiglath-Pileser, King of Assyria, whom he had summoned to assist him in repelling the kings of Israel and Damascus. He adopted the heathen practices of the Syrians, and died after a reign of sixteen years.

Alaric (*al'-ar-ick*). Two kings of the Visigoths have borne this appellation. Alaric I., after having despoiled several provinces of the Roman Empire, in the reign of Honorius, twice besieged Rome itself. At first he contented himself with levying heavy contributions; when he again invaded it, he plundered the city, and destroyed its noblest monuments. In 406, he extorted from Honorius the province of Spain, and a part of Gaul, and established the kingdoms of the Visigoths. He died in 411, whilst making preparations for the conquest of Africa and Sicily. Alaric II., eighth King of the Visigoths, came to the throne in 484. Besides Spain, he possessed Languedoc Provence, and various other tracks of country. Alaric held his court at Toulouse. Clovis I., King of the Franks, jealous of his power, carried war into the south of Gaul. A great battle was fought near Poitiers, in which Alaric fell by the hand of Clovis.

Albertus Magnus, born 1193, a man of great sanctity and learning, was appointed Bishop of Ratisbon, and assisted at the General Council of Lyons in 1274. He left numerous works, and amongst his scholars was the famous Thomas Aquinas. Died, 1280.

Albuquerque, Alfonso d' (ál-boó-kair'-ka), a Portuguese Viceroy of the Indies, born in 1452, made his first expedition to the East in 1503, and in 1508 became governor of the Indies. After a just and humane rule, he died at Goa, 1515.

Alcibiades (ál-se-bí'-a-deez), a famous Athenian general, born at Athens about 450 B. C., and educated in the house of his uncle Pericles. He held joint command with Nicias over the expedition against Sicily; but, during his absence, being accused of impiety, he fled to Sparta, and then to Persia. Recalled to Athens, he forced the Lacedæmonians to sue for peace, and made several conquests, but again losing his popularity, he withdrew to the court of Pharnabazus, the Persian satrap, in Phrygia. His treacherous host, instigated by Lysander, King of Sparta, set fire to the place where Alcibiades lived, and in seeking to escape, he was assassinated, B. C. 404.

Alcott, Louisa May, born in 1833, an American authoress. She began early to write, but met with no marked success till the publication of "Little Women" in 1867. She wrote many other books, the material for her first volume, "Hospital Sketches," being gathered during her experience as nurse in the military hospital at Washington, where she went in 1862. Died, 1888.

Alcuin, English theologian, especially noted as the coadjutor of Charlemagne in his educational reforms. At the invitation of that emperor he left England, and settled in France, where he founded several schools; but on being made Abbot of Tours he abandoned the court and devoted himself to theology.

Aldrich, Nelson Wilmarth, United States Senator from Rhode Island, December 5, 1881-1905; born in Foster, R. I., November 6, 1841; academic education; is engaged in mercantile pursuits. President of Providence Common Council, 1871-73; member Rhode Island Legislature 1875-76, and its speaker, 1876; member of Congress, elected for terms 1879-83, but resigned to take seat in senate; Republican. Chairman of Committee on Finance, and Republican leader in senate.

Aldrich, Thomas Bailey, American poet and editor; born in 1836. While engaged in the office of a New York merchant he began to write verses, the success of which soon induced him to enter on a literary career. His first volume, miscellaneous poems, was published in 1855, and was called "The Bells"; since then he has published "Babie Bell," several other volumes of poems, and "The Story of a Bad Boy." Mr. Aldrich has been an industrious contributor to our best periodicals, and was on the editorial staff of the "Home Journal" 1856-59 and "Every Saturday." In 1881 he became editor of the "Atlantic Monthly," but resigned in 1890. Died, 1907.

Alernbert (ál-lon-bare'), Jean le Rond d', a celebrated man of letters and a mathematician, the natural son of Madame de Tencin and the poet Destouches; was born in 1717. He was the friend of Voltaire, and acquired high esteem by his works, which fill eighteen volumes. His treatises on dynamics and fluids at once established for him a reputation in science. Died, 1783.

Alexander I., Paulovich, born in 1777; Emperor of Russia and King of Poland. He succeeded to the throne in 1801, and showed himself a brave and judicious monarch. He entered into a treaty with England, Austria, and Sweden to resist the encroachments of France, but was defeated at the battles of Austerlitz, Eylau, and Friedland, and compelled to make peace with Napoleon at Tilsit. In 1812 war again broke out, and on the conclusion of peace in 1814 Alexander visited England and Poland. He was succeeded on the throne by his brother Nicholas. Died, 1825.

Alexander II., Nicholavich, Emperor of Russia, born in 1818; succeeded his father as czar in 1855. He married in 1841 Maria, daughter of the Grand Duke Louis II., of Hesse Darmstadt. He terminated the Crimean War soon after his accession by the Treaty of Paris. Though trained by his father to a military life, he devoted himself to the internal affairs of his country, improved the popular education, and emancipated the Russian serfs. He waged war successfully on Turkey in 1877-78. He was assassinated in the streets of St. Petersburg. Died, 1881.

Alexander III., of Macedon, surnamed "The Great," born in 336 B. C., son of Philip. He was educated partly by Aristotle, and early gave proofs of skill and courage.

A revolt of Thebes at the commencement of his reign was promptly quelled with great severity; then crossing the Hellespont, he marched against the Persians, whom he repeatedly defeated, conquering Phenicia and Egypt. After the final defeat of Darius at Gaugamela, and the capture of Babylon, Susa, and Persepolis, Alexander commenced the conquest of India, but after crossing the Indus and penetrating as far as the Ganges, he was compelled to return to Babylon, but paused at Susa to celebrate his marriage with the daughter of Darius. He died at Babylon after a reign of about thirteen years; his body was embalmed and taken to Alexandria, which city had been founded by him and named in his honor. Died, 323 B. C.

Alexander VIII. (Pope), Pietro Ottoboni, born in 1610, Bishop of Brescia, and afterwards of Frascati; he became pope in 1689, and succeeded in reforming many abuses and re-establishing friendly relations with France. He placed in the Vatican the fine collections of books and manuscripts left him by the Queen of Sweden. Died, 1691.

Alexander, Nevskoi, Saint, born in 1219, Prince of Novogorod. A brave soldier, his surname of "Nevsky" was given him after a signal victory over the Swedes on the banks of the Neva. He submitted to Batu Khan, the Tartar Chief, who confirmed him in his dominions, and also bestowed upon him the sovereignty of Southern Russia. Died, 1263.

Alexis (a-lex'-ie), Michaelowitz, a Russian emperor, born in 1630, came to the throne in 1646, and died in 1677. He was the progenitor of Peter the Great. In his reign the laws of the kingdom were first printed, various manufactories established, Moscow beautified, and many new cities built.

Alfieri (ál-fe-á'-re), Victor, a Piedmontese count, born in 1749. This distinguished poet is the author of several esteemed tragedies, sonnets, and other works of fancy. He is equally celebrated for his "liaison" with the Countess of Albany. Died, 1803.

Alfonso I., of Asturias and Leon, born in 693; a wise and brave king, who, elected in 739, succeeded in expelling the Moors from Galicia, Leon, and Castile. He also established towns, built churches, and generally improved the internal condition of his country. Died, 756.

Alfonso X., of Leon and Castile, born in 1226, succeeded to the throne in 1252; aspired to be Emperor of Germany, and in 1257 divided the election with Richard of Cornwall. In 1272 he again unsuccessfully attempted to gain the imperial crown. He was driven from the throne by his son Sancho. He was the most learned ruler of his time. Died, 1284.

Alfonso XIII., King of Spain, born in 1886, son of Alfonso XII. As direct heir to the throne in the male line his birth gave great satisfaction, and Queen Christina was appointed regent during his minority.

Alfred the Great, born in Wantage, Berks, 849, the youngest son of Ethelwulf, King of the West Saxons, succeeded on the death of his brother Ethelred to a throne threatened by invasion from without and dissension within. His first care was to drive off the Danes, whom he is said to have encountered in fifty-six battles by land and sea. The great victory of Edington (878) led to the peace of Wedmore, and Alfred was thus for a time free to devote himself to the peaceful reforms for which his name is renowned. Prominent amongst these are the establishment of social order, the encouragement of learning, and the founding of a national fleet. Alfred died in 901, esteemed as a religious and industrious man, and a wise and learned king.

Alger, Russell Alexander, senator, capitalist; born in Lafayette township, Medina County, O., February 27, 1836; orphaned at 12 years of age and for seven years worked on farm, earning money to defray expenses at Richfield (O.) Academy during winters. Taught school two winters; admitted to bar, 1859; began practice in Cleveland; removed to Michigan, January 1, 1860; began lumbering in a small way; enlisted, September 2, 1861, and served as captain and major Second Michigan, lieutenant-colonel Sixth Michigan, colonel Fifth Michigan, cavalry; brevetted brigadier-general and major-general volunteers. In lumber business after war; head of Alger, Smith & Co., and Manistiquet Lumbering Company, which owns and operates extensive timber tracts and mills in Michigan and Minnesota. Was Governor of Michigan, 1885 and 1886; a leading candidate for president in Republican National Convention, 1888; one term Commander-in-Chief of G. A. R.; Secretary of War of United States, 1897-99, resigned; appointed United States senator, September 27, 1902, to succeed James McMillan deceased, and elected February, 1903, for term expiring 1907. Author: "The Spanish-American War," 1901. Died, 1907.

Allison, Sir Archibald, born in 1826, son of a clergyman. He was educated at the University of Edinburgh, and called to the Scottish bar, becoming deputy advocate in 1822. But he is best known as an historian, his great work being "The History of Europe from the French Revolution to the Restoration of the Bourbons," in recognition of which he was made a baronet in 1852.

Allen, James Lane, author; born in Kentucky, 1849; graduate of Transylvania University; taught in Kentucky University; later professor of Latin and higher English, Bethany, West Virginia College; since 1886, given entire attention to literature. Author: "Flute and Violin," "The Blue Grass Region and Other Sketches of Kentucky," "John Gray," a novel; "The Kentucky Cardinal," "Aftermath," "A Summer in Arcady," "The Choir Invisible," "The Reign of Law," "The Mettle of the Pasture."

Allison, William B., a distinguished American legislator, born in Ohio, 1829; educated at Western Reserve College and practiced law till 1857; emigrated to Iowa; served in the Civil War; was sent to Congress while that struggle was going on, and has been in Congress as representative and senator from that time to the present, save in 1872-73. His influence has been marked and salutary on the legislation of his day.

Allen, Ethan, an officer of the American Revolution, born in 1744. He planned and captured Forts Ticonderoga and Crown Point at the opening of the war. His troops were mostly from Vermont, and were called "Green Mountain Boys." Died, 1789.

Allen, Viola, actress; born in the South; d. Leslie A., character actor, of old Boston family, and Sarah (Lyon) A., English-woman of good descent; went to Boston when three years old; educated in Boston and at Wyckham Hall, Toronto, and boarding school in New York. Made debut, Madison Square Theater, New York, in Esmeralda, at age of 15; after few months joined John McCullough Company, playing Virginia, Desdemona, Cordelia, etc. Subsequently played leading classical, Shakesperean, and comedy roles with Lawrence Barrett, Tommaso Salvini, Joseph Jefferson, and William J. Florence. Leading lady at Boston Museum for a season; also at Empire Theater in 1893, and four years following, creating and playing roles in "Liberty Hall," "Sowing the Wind," "The Masqueraders," "Under the Red Robe," etc. Starred, 1898, as Gloria Quayle in "The Christian," by Hall Caine, and in 1900, produced "In the Palace of the King," by F. Marion Crawford and Lorimer Stoddard; and, in 1902, as Roma in Hall Caine's "The Eternal City." In 1903, under management of her brother, began series of Shakesperean revivals, producing first "Twelfth Night," in which she played "Viola" with success; in subsequent seasons, she appeared as Hermione and Perdita in "A Winter's Tale."

Almanzor (al-man'-zor) (surnamed the Victorious). The second caliph of the Abassidian Dynasty, succeeded his brother, Aboul Abbas, in 753. He exterminated the race of the Ummayyads, and in 762 founded the city of Bagdad, which became the capital of his empire. Several other Mohammedan princes, famed for their martial achievements, also bore this name. He died in 774.

Alma-Tadema, Laurence, R. A., born in Friesland in 1836; painter, studied at the Royal Academy of Antwerp, and was afterwards pupil and assistant of Baron Henry Leys. He settled in England, where his pictures found a ready welcome. He was elected A.R.A. in 1876, and R. A. in 1879. Among his numerous works are "Phidias and the Elgin Marbles" (1868), "A Roman Emperor" (1871), "The Sculpture Gallery" (1875), "Sappho" (1881), and "The Roses of Heliogabalus" (1888).

Alstroemer (al-stro'-mer) Jonas, a Swede, remarkable for the great commercial improvements which he introduced into his native country. Of very humble origin, he was for a time unable to surmount the obstacles by which poverty depressed him. He visited England; and having minutely noticed the sources of its manufacturing prosperity, returned to Sweden, and obtained permission to establish a manufactory at Alingas, in West Gothland, his birthplace. So extensive and successful were the manufacturing and agricultural resources which he introduced into Sweden, that the state, in acknowledgment of his merit, conferred on him a patent of nobility, made him chancellor of commerce, and erected a statue to his honor on the Stockholm Exchange. Died, 1761.

Alva, Ferdinand Alvarez de Toledo, Duke of, born in 1508, Spanish governor of the Netherlands under Philip II. of Spain, and notorious for the merciless manner in which he exercised his dictatorial power. Under his rule more than 18,000 persons were sent to

the scaffold, and a revolt, headed by the Prince of Orange, broke out, which, after nearly forty years of war, resulted in the independence of the provinces. Alva was recalled in 1573, but he was soon given the command of Portugal, which he quickly conquered. Though his pride and cruelty were excessive, he was undoubtedly the greatest general of his age. Died, 1582.

Alvarado, Alonso, one of the Spanish conquerors of Mexico and Peru under Pizarro; he was defeated and made prisoner by Almagro. He afterwards joined De Castro (1542), and was lieutenant-general of the army which suppressed the rebellion of Gonzalo Pizarro in 1548. Died, 1554.

Alvarado, Pedro d', one of the Spanish conquerors of Mexico; he took part in the expedition and victories of Cortez, and was entrusted with the command of the city of Mexico, and afterwards made governor of Guatemala and Honduras. He explored California, and was killed soon after his return in an expedition against Xalisco. Died, 1541.

Amaral, Antonio Castano do, born in 1747; a learned Portuguese historian and author of the valuable "Memoirs on the Forms of Government and Customs of the Nations that Inhabited Portugal." Died, 1819.

Amasis, or Amosis (a-ma'-sis, a-mo'-sis), an Egyptian who, from a common soldier, rose to be a king of Egypt. He made war against Arabia, and died before the invasion of his country by Cambyses, King of Persia. Cambyses caused his body to be dug up, insulted, and burnt.

Amaziah (am-a-zî'-â), the son of Joash, whom he succeeded as eighth king of Judah, 3165 A. M. He adhered to the worship of the true God, but permitted some idolatrous observances. Having arrogantly challenged Jehoash, King of Israel, to battle, the armies met at Beth-she-mesh, where Amaziah was defeated, himself taken prisoner, and subsequently his city and palace were plundered. Fifteen or sixteen years afterwards, he fled from conspirators, by whom he was overthrown and assassinated, 3194 A. M.

Amboise, George d', born in 1460, a French cardinal and minister of state. He was successively Bishop of Montauban, Archbishop of Narbonne and of Rouen, and after acquiring considerable popularity as prime minister under Louis XII., was made cardinal and appointed legate in France, where he effected great reforms among the religious orders. Died, 1510.

Ambrose, St. (âm'brôz), a doctor in the Latin Church of the Fourth Century, was born at Treves, 340. Consecrated archbishop of Milan, 374. Ambrose was repeatedly, in the discharge of his duty to the Church, brought into direct conflict with the highest secular authority. He rebuked Valentinian, defied Maximus, and after the massacre of Thessalonica, compelled the great Theodosius to a humiliating penance before admitting him to Christian communion. To him we owe the noble hymn, "Te Deum Laudamus." No father of the Church has a fame more wide, more beautiful, or more deserved. Died, 397.

Ames, Fisher, born in 1758; American lawyer and politician, who sat in the Massachusetts Convention, and was afterwards a member of Congress, and famed for his eloquence. He retired from public life with Washington, and devoting himself to literary pursuits, was elected president of Harvard College in 1804. Died, 1808.

Ames, James Barr, dean Harvard Law School since 1895; born in Boston, June 22, 1846; graduate of Harvard, 1868 (1871 A. M.); Harvard Law School, 1872 (LL. D.); University City of New York, University of Wisconsin, 1898; University of Pennsylvania, 1899; Northwestern, 1903; Williams, Harvard, 1904. Taught in private school, Boston, 1868-69; tutor in French and German, Harvard, 1871-72; instructor in history, 1872-73; associate professor of law, 1873-77, professor of law since 1877, Harvard. Compiled collections of cases on torts, pleading, bills and notes, partnership, trusts, suretyship, admiralty and equity jurisdiction; author of numerous articles in Harvard Law Review and other law reviews.

Amerigo Vespucci, born in Florence, 1451, was an Italian navigator who visited Brazil in 1503. He had previously made several voyages of exploration, and claimed priority over Cabot and Columbus in reaching the mainland, named in his honor America, but the best authorities consider this claim to be unfounded. Died in Seville, 1512.

Amherst, Jeffrey, Lord, born in 1717; British general, served on the Continent and in America, where he succeeded Abercrombie as commander-in-chief. Here he was remarkably successful, and after many victories, Montreal surrendered and Newfoundland was recovered

from the French. He was raised to the peerage in 1776, and was appointed field marshal in 1796. Died, 1797.

Ampere, Andre Marie, born in 1775; a distinguished electrician, who may be considered the father of electromagnetics. He first attracted attention by a treatise on the "Theory of Probability," published in 1802, and obtained a post as teacher, and ultimately as professor, at the polytechnic school in Paris. In 1820, Orsted's discovery of the effect of voltaic currents upon magnetic needles was brought to his notice, and Ampere verified and completed this, and showed also the mutual effect of currents upon each other, from which he deduced a new theory of magnetism. The Royal Academy of Sciences recognized his services, and gave his name to one of the electro-magnetic units. Ampere's last great work was the classification of the sciences, but this he did not live to finish. Died, 1836.

Amphictyon (*am-fik'-te-on*). One of the heroes of ancient Greece, son of Deucalion and Pyrrha. On the dominions of his father being divided between him and his brother Helenus, Amphictyon reigned over Thermopylae, in the Fourteenth or Fifteenth Century before Christ. In 1497 B. C., he invaded Athens, which he consecrated to Minerva, and governed it as sovereign during ten years.

Amyntas (*a-min-tas*), several Macedonian monarchs bore this name, of whom the principal was Amyntas III. (son of Menelaus), who came to the throne 397 B. C., after having assassinated the king, Pausanias. When expelled by the Illyrians, he was enabled by the Spartans and Thessalonians to regain his dominions. His wife, Eurydice, conspired against his life, but her plot was frustrated. He was the father of Philip, and the grandfather of Alexander the Great. Amyntas, grandson of Amyntas III., was yet in his early infancy when Perdiccas, his father, and Alexander, were murdered, at the instigation of Eurydice, their mother. He was heir to the throne; but his uncle, Philip, who was his tutor, having been raised to it, Amyntas was compelled to give up his own right. He served in the armies of Philip and Alexander the Great; but, plotting against the latter, he was put to death.

Anacreon (*an-ack'-re-on*). A celebrated Greek lyric poet, born at Teos in Ionia, towards the close of 500 B. C. He was patronized by Polycrates, the tyrant of Samos, and Ipparchus, the tyrant of Athens. He died at Abdera, suffocated by a grape-stone while in the act of drinking. His poems are chiefly devoted to the praises of love, pleasure, and wine.

Anacreon, born about 560; a Greek lyric poet who lived at Samos under the patronage of the tyrant Polycrates, and afterwards at Athens. His poems were admirably translated by Moore.

Anaxagoras (*an-az-ag'-o-ras*), a Greek philosopher of the Ionian school, born at Clazomenae, 500 B. C. He studied under Anaximenes, and, after traveling through all the known parts of the globe, in search of knowledge, established himself at Athens, where he opened the first school of philosophy. Pericles, Socrates, and Euripides were among his pupils. He was condemned to die for alleged impiety, a sentence which was changed to exile, when he retired to Lampsacus, and there continued to teach philosophy till his death, 428 B. C.

Anaximander (*an-az-e-man'-der*), a philosopher and famous mathematician of the Ionian school, born in 610 B. C. He was the first who noticed the obliquity of the ecliptic, and taught that the moon is indebted for her light to the sun, and that the earth is round. He constructed a sphere to represent the heavenly divisions, and is said to have invented geographical charts and the gnomon. He also believed in a multitude of worlds. He died 546 B. C.

Andersen, Hans Christian, born in 1805. The son of poor parents, was born at Odensee in Funen; he early showed a strong inclination for the stage, and at fourteen went to Copenhagen, where he obtained an engagement at the theater royal. His voice soon broke down, but through the kindness of Conference Councillor Collin he was admitted to the grammar school at Slagelse. His first prose work, a book of travels, was published in 1828, and was followed by others, as well as novels and poems. He is best known for his fairy tales, which are full of charm. Died, 1875.

Anderson, Mary, born in 1859, at Sacramento, California; well known as an actress of great beauty and considerable dramatic taste; at 16 years of age made her debut at Louisville as Juliet. She met with great success both in the United States and in London.

Anderson, Rasmus Bjorn, author; born at Albion, Dane County, Wisconsin, of Norwegian parentage, January 12, 1846; graduate of Luther College, Decorah,

Iowa, 1866; University of Wisconsin, 1869 (LL. D., 1888); professor of Greek and modern languages, Albion (Wis.) Academy, 1866; instructor of languages, 1869-75; professor of Scandinavian languages and literature, 1875-83; United States minister to Denmark, 1885-89; married July 21, 1868, to Bertha Karina Olson. Editor and publisher of "Amerika" since October, 1898. Author: "Norse Mythology," "Viking Tales of the North," "America Not Discovered by Columbus," "The Younger Edda," "First Chapter of Norwegian Immigration, 1821-1840"; also many translations of Norse books, and author of several works in Norwegian.

Anderson, Robert, born in 1806; an American general, who served under Lincoln in the Black Hawk War, and distinguished himself in the Mexican War (1846-47), in the battle of El Molino del Rey. On the outbreak of the Civil War he was appointed to the defense of Charleston Harbor, and held Fort Sumter for two days against the Confederates; failing health prevented his taking further part in the war. Died, 1871.

Andre, John, born in 1751; a British soldier who served in the war with America, and rose to the rank of major. He conducted the negotiations with Benedict Arnold for the betrayal of West Point, but being discovered in disguise, was arrested and put to death as a spy. His remains lie in Westminster Abbey, where a cenotaph was erected to his memory. Died, 1780.

Andrea, Pisano, born in 1270; an Italian architect and sculptor, who produced many fine works in Florence, his greatest being the bronze figures in relief for the baptistry of St. John's. Died in 1345.

Andrea (*an'-dre-a*), a distinguished engraver, who flourished in the Seventeenth Century. He obtained engravings worked by other hands, which he disposed of as his own. He engraved on wood in a peculiar style, known as "chiaro-oscuro," of which, however, he was not the inventor. One of his productions, "The Triumph of Julius Caesar," from Andrea Mantegna, the original of which is at Hampton-Court, is cut on ten blocks of wood, and dated 1598. Andrea died at an advanced age, in 1623.

Andrew, Saint, one of the twelve apostles, who before his call was a disciple of John the Baptist. He was the means of bringing his brother, Simon Peter, to Christ, and is said to have preached the Gospel in various countries, and to have been at last crucified at Patrae in Achaia.

Andrews, Elisha Benjamin, chancellor University of Nebraska since July, 1900; born in Hinsdale, N. H., January 10, 1844; served private to second lieutenant of Union Army in Civil War; wounded at Petersburg, August 24, 1864, losing an eye; graduate of Brown University, 1870; Newton Theological Institution, 1874; Principal Connecticut Literary Institution, Suffield, Conn., 1870-72; pastor First Baptist Church, Beverly, Mass., 1874-75; president Denison University, Granville, O., 1875-79; professor homiletics, Newton Theological Institution, 1879-82; professor history and political economy, Brown University, 1882-88; professor political economy and finance, Cornell, 1888-89; president Brown University, 1889-98; superintendent schools, Chicago, 1898-1900; member of international monetary conference, Brussels, 1892, Loyal Legion. Author: "Institutes of Constitutional History, English and American," "Institutes of General History," "Institutes of Economics," "An Honest Dollar," "Wealth and Moral Law," "History of the United States," "History of the Last Quarter Century in the United States," "History of United States in Our Own Times."

Andros, Sir Edmund, born in 1637; an English officer who served in the wars with the Dutch, and afterwards went as governor to various provinces of North America. He was recalled in 1698 from Virginia, but was afterwards appointed lieutenant-governor of Guernsey. Died, 1713.

Angell, James Burrill, educator, diplomat; born in Scituate, R. I., January 7, 1829; graduate of Brown University, 1849; professor modern languages and literature, Brown, 1853-60; editor Providence Journal, 1860-66; president of University of Vermont, 1866-71; president University of Michigan, since 1871; United States Minister to China, 1880-81, acting as commissioner in negotiating important treaties; member Anglo-American International Commission on Canadian Fisheries, 1887; chairman Canadian-American Commission on Deep Waterways from Lakes to Sea, 1896; appointed minister to Turkey, 1897, but resigned May, 1898. Author numerous addresses and articles in leading reviews.

Angelo, Michael de Buonarroti, a distinguished painter, sculptor, architect, and poet of Italy. He was born in 1474, in the territory of Arezzo, in Tuscany. At an early age he became the pupil of Domenico Ghir-

landaio, a celebrated artist of his day. He soon displayed such uncommon merit, that Lorenzo de Medici took him into his service. His mastery over the grand and terrible has never been equaled; and his correct design and knowledge of anatomy has not been attained by other artists. Several editions of his poetry have been published. Michael Angelo discontinued painting in his 75th year, and terminated his brilliant career at Rome, at the advanced age of 90, in 1564. He was splendidly interred in that city by Cosmo, Duke of Tuscany, but his remains were subsequently, by command of that prince, removed to Florence, and deposited beneath a magnificent monument, embellished with three statues, representing painting, sculpture, and architecture.

Anjou, Counts and Dukes of (*an-joo'*), a powerful French family, connected with the royal house of Valois which maintained a considerable share of independence until the reign of Louis XI. One of its members, Fulke, became King of Jerusalem, 1131; and his son, Geoffrey, founded the royal house of Plantagenet. The second house of Anjou was a branch of the royal family of France. The title of Duke d'Anjou was also borne by several sons of kings of France, and lastly by a grandson of Louis XIV., who became Philip V. of Spain.

Anna Comnena (*kom-nē-na*), the daughter of Alexius Comnenus I., by his wife Irene, was born at Constantinople, in 1083. She devoted herself to the study of literature and philosophy, and was esteemed the most learned female of her age. After the death of her father, she conspired to depose her brother, and to place the crown upon the head of her husband, Nicephorus Bryennius. Her plot being discovered, she lost all her influence at court, and employed the last ten years of her life in composing a history of her father's reign, called the "Alexiad." Died, 1148.

Anne of Austria, the eldest daughter of Philip III. of Spain, was born in 1604, and married Louis XIII., King of France, in 1615. Upon the death of her consort, in 1643, she was declared queen-regent, during the minority of her son. She placed unbounded confidence in Cardinal Mazarin, whose rule was so unpopular that a civil war ensued, which compelled the queen and her son to fly from Paris, and to solicit the aid of the great Condé. In 1661, the young king assumed the reins of government, and Anne retired, to pass the remainder of her life in religious exercises. She died from the effects of a cancer in her breast, in 1666.

Anne of Beaujeu, daughter of Louis XI., married Peter Beaujeu, Duke of Bourbon, and constable of France. She acted as regent of the kingdom during the minority of her brother, Charles VIII., from 1461 to 1465. She died in 1522.

Anne Boleyn, the second queen of Henry VIII., was born in 1507. She was the daughter of Sir Thomas Boleyn, and a maid of honor to Queen Katherine, whom Henry divorced, that he might raise Anne to the throne, who became the mother of Queen Elizabeth. The fickle king caused her to be decapitated in May, 1536.

Anne of Brittany, the daughter and heiress of Duke Francis II., was born in 1476. In 1491 she was united to Charles VIII., King of France, and governed the kingdom during the expedition of that prince to Italy. After his death, she married Louis XII. in 1499, over whom she exercised great influence. She died in 1514.

Anne of Cleves, the fourth wife of Henry VIII., to whom she was married in 1538. She was the daughter of John, third Duke of Cleves. The match was projected by Cromwell, and was partly the cause of that minister's ruin. Henry put her aside, settled on her a liberal annuity, with which she was well satisfied, and she spent the remainder of her days in England, where she died in 1557.

Anne, Queen of England, was the second daughter of King James II., by his first wife, Ann Hyde, and was born in 1664. In 1683, she married Prince George, brother to the King of Denmark, by whom she had a numerous family of children, all of whom died young. Anne ascended the throne on the 8th of March, 1702. She established a fund, known as "Queen Anne's Bounty," for the augmentation of the livings of the poor clergy. During her reign (which was made illustrious by the military triumphs of the Duke of Marlborough), Sir George Rooke and Sir Cloudesley Shovel conquered the fortress of Gibraltar, a possession which Spain has never been able to regain; and the legislative union of Scotland with England was effected. The glorious galaxy of writers, in almost every branch of learning, who flourished in her time, has caused it to be considered the Augustan age of British literature. She died on the 1st of August, 1714.

Annunzio, Gabriele d', the pseudonym of the Italian

poet Gaetano Rapagnetto; was born in 1864, on a boat in the Adriatic; educated in a college at Prato, near Florence, and studied in Rome. He was elected, in 1898, a deputy in the Italian Parliament. His first volume of verse, "Primavera," appeared in 1879, and was followed by "In Memoriam," 1880; "Canto Novo," 1882; "Intermezzo di Reine," 1883. His "Odi Novelli" reached their ninth edition in 1899. Of his numerous novels, the first, "Terra Vergine," appeared in 1882; "Il Piacere" obtained ten editions between 1889 and 1898. He then turned to the drama, with "Un Sogno d'un Mattino di Primavera," "Giaconda," "Francesca da Rimini," produced by Signora Duse at the Adelphi in 1903, and "Più che l'Amore" produced at Rome, November, 1906.

Anselm, Saint, born in 1034; Archbishop of Canterbury during the reigns of William Rufus and Henry I., to which post he was summoned from his position as Abbot of Bec in Normandy. He was a man of great piety and intellectual power, and firmly resisted the efforts of the king to despoil the Church of her dignity or revenues. He died at Canterbury in 1109 and was canonized in the reign of Henry VII.

Anthony the Great, St. (*an'to-ne*), the founder of monastic institutions, was born A. D. 251 near Heraclea, in Upper Egypt. In 205, having sold all his property and given the proceeds to the poor, he withdrew into the desert whither a number of disciples were attracted by his reputation for sanctity; and thus was formed the first community of monks. He afterwards went to Alexandria to seek the honor of martyrdom amid the persecutions there raging against the Christians; but as his life was spared, he again returned to the desert, and died at the great age of 105.

Anthony, Susan Brownell, reformer; born in Adams, Mass., February 15, 1820; educated in school maintained by father for his own and neighboring children, Battenville, N. Y., and 1837-38 at Friends' Boarding School, West Philadelphia. Taught school from age of 15 to 30; aided, 1852, in organizing the first State woman's temperance society; active in anti-slavery and woman's rights work; organizer and secretary of Women's National Loyal League during Civil War. Since war was entirely devoted to the woman suffrage movement; founded, 1868, "The Revolution," exclusively woman's rights paper; managed it several years; in 1869 organized, with Mrs. Stanton, National Woman Suffrage Association; joint author with Mrs. Elizabeth Cady Stanton and Mrs. Matilda Joselyn Gage of "The History of Woman Suffrage" (3 volumes), and of Volume IV. with Mrs. Ida Husted Harper; has contributed to leading magazines and has lectured in England and throughout the United States.

Antigonus, Cyclops or "one-eyed," a distinguished general of Alexander the Great, on whose death he became Governor of Phrygia, Lycia, and Pamphylia, and after defeating and slaying Eumenes, and waging other successful wars, assumed the title of king. His ambitious schemes united his rivals, and he was slain in battle at Ipsus. Died, 301 B. C.

Antiochus (*an-ti'o-kūs*), a favorite royal name in ancient Syria, no less than eleven of her kings bearing it. The most noted was Antiochus III., the Great, contemporary with Hannibal, 223 B. C., and Antiochus IV., his son.

Antipater, born in 390 B. C.; the Macedonian, the friend and minister of Philip and Alexander the Great, during the absence of the latter was appointed regent of Macedonia and Greece, and in that capacity defeated the Greeks. On the death of Alexander Antipater received the government of Macedonia. Died, 319 B. C.

Antipater of Idumea, father of Herod the Great; took part in the disputes between Hyrcanus II. and Aristobolus II. He assisted in placing Hyrcanus on the throne of Judaea 63 B. C., and contrived to get the power in his own hands. He was afterwards appointed Procurator of all Judaea. Died, 43 B. C.

Antoinette (*ong-twā-net'*), Marie, Archduchess of Austria, was born at Vienna, November 2, 1755. She was the daughter of the Emperor Francis I. and Maria Theresa, and was given in marriage to the Dauphin, son of Louis XV., in 1770, being then 15 years of age. Her beauty and amiable conduct gained universal admiration. Her consort having ascended the throne as Louis XVI., during the troubles which occurred in the latter years of his reign she became the object of popular hatred. She was confined in the same prison with her husband for some time, but afterwards separated from him and detained in the Conciergerie, whence, after much suffering, she was carried before a Revolutionary tribunal in October, 1793, by judgment of which she suffered by the guillotine on the same day.

Antomarchi (*an-to-mar'-ke*). **Doctor**, a celebrated anatomist, born in 1780 in Corsica. When Napoleon was a captive he was selected to attend the deposed emperor. He remained with him in his last moments, and refused to sign the document prepared on the examination of the corpse by the English surgeons. He died in 1838.

Antoninus Plus, Titus, adopted son and successor of Hadrian, Emperor of Rome, was born in 86. His reign of twenty-three years was powerful and prosperous. He died in 161.

Antony, Marc (Latin, Antonina Marcus), this celebrated triumvir was born in the year 86 B. C. He was the son of Antonius Cretensis by Julia, an eminent lady of the Cæsarian family. He attached himself to Cæsar, and commanded the left wing of his army at the battle of Pharsalia, and rose five years afterwards to be the colleague of his commander. After Cæsar's death he strove for the sovereignty. He repudiated Fulvia, his wife, to marry Octavia, the sister of Augustus; a violent passion for Cleopatra, the beautiful Queen of Egypt, caused him to desert Octavia. He lost the battle of Actium, and, deserted by his friends, put an end to his existence, in the year 30 B. C. Another Marcus Antonius, grandfather of the above, a brave and eloquent consul, is described by Cicero, as having made Roman eloquence rival that of Greece. He died 67 B. C.

Apelles (*a-pel'-leez*), a celebrated Greek painter, born in the island of Cos, according to Pliny, but by some writers said to have been a native of Ephesus. During the reign of Philip, father to Alexander the great, Apelles visited Macedonia. The monarch became his patron and friend, as did Alexander after him. The latter would not permit any one else to paint his portrait. His most famous works are "Venus asleep," and "Venus Anadyomene." He died in the island which is supposed to have been his native place.

Apollodorus of Damascus, a great architect of the Second Century, worked at Rome for the Emperor Trajan, and built the forum and column which bear that monarch's name, but his greatest work was a huge bridge over the Danube at its confluence with the Alt. He was banished and put to death by Hadrian.

Apollonius (*a-pol'-lo'-ne-us*), called the Rhodian (Apollonius Rhodius), was born in Alexandria, B. C. 230. He presided over an academy at Rhodes, was an eminent rhetorician, and wrote a poem, in four books, on the expedition of the Argonauts, and other poems. This name was also borne by a mathematician of Perga in Pamphylia, who lived in 240 B. C.; by a Roman senator, and Christian martyr, who suffered in 186; and by a sophist, a stoic, and a Pythagorean philosopher.

Apollo (*a-pol'-los*), a Jew born in Alexandria, and converted in the time of the Apostles to Christianity. In the year 54, being at Ephesus, and famed for eloquence and Scriptural knowledge, he preached the gospel in the absence of St. Paul. At Corinth he preached with great success, and was there promoted to the dignity of a bishop.

Aquinas (*a-kwi'-nas*), **St. Thomas d'**, popularly called the "Angelic Doctor," was a descendant from the counts of Aquino, in Calabria. He was born in 1224, and in 1323 Pope John XXII. enrolled his name in the calendar of saints. His writings, which are very highly esteemed among Catholics, gave rise to a sect called Thomists. Died, 1274.

Arago (*är-a'-go*), **Domique**, a celebrated French philosopher; was born February 26, 1786. In 1806, he was engaged, with Biot, in measuring an arc of meridian. His subsequent life was distinguished by an ardent and successful devotion to science; he was also eminent as a liberal politician. He died in October, 1853.

Arbaces (*ar-bä'-seez*), a general of the Medes, who served under Sardanapalus, King of Assyria. Disgusted with the effeminacy of that monarch, Arbaces took arms against him, and compelled him to fly to Nineveh, where he committed suicide, when Arbaces ascended his throne, which he filled for twenty-eight years.

Arce, Joan of, a celebrated heroine, otherwise called the Maid of Orleans, was born at Domremy, on the borders of Lorraine, about 1400. She was the daughter of humble peasants, and in her earlier years is said to have tended horses, and rendered other menial services as the servant at a small inn. In her eighteenth year, however, professing to have a divine mission to be the saviour of her country, she got herself introduced to the Dauphin Charles, headed his troops, and infusing courage into his dispirited adherents, restored his fallen fortunes in a most incredibly short period, and secured to him the crown of France. Eventually she fell into the hands of the English, and having been delivered over by them to the Burgundians and their French partisans, the

latter caused her to be condemned to the flames as a heretic and sorceress, in 1431.

Archelaus, a Cappadocian, the distinguished general of Mithridates VI., flourished in the First Century B. C. After defeating Nicomedes III. at Amnias, 88 B. C., he sailed to Greece, captured Delos and other towns, and induced Achaia, Lacedemon, and Boeotia to form an alliance with Mithridates against Rome. Sulla besieged him in the Piræus, and compelled him to withdraw his forces. Returning to the contest with a still larger army, Archelaus was again defeated and forced to retire, when, acting upon instructions received from Mithridates, he concluded peace with Sulla, but upon terms unsatisfactory to the king, and he finally deserted to the Romans, after which little is known of him.

Archimedes (*ar-ke-me'-deez*), a renowned mathematician, whose astonishing skill in mechanics was such, that some of the greatest real triumphs of antiquity may be ascribed to him. His inventions amazed his contemporaries: the lifting of weights by means of pulleys, and the endless screw, are among them. A Roman historian celebrates the warlike engines produced by the skill of Archimedes. His mind ever fruitful of extraordinary resources, when Syracuse was besieged by Marcellus, he constructed a burning-glass, on a scale of such magnitude, that by means of it the enemy's fleet was fired. Eventually the city being taken, he was found among the slain.

Argand, Alme', born in 1755, a chemist of Geneva, inventor of the Argand lamp, which he brought out in England in 1782. The patent was also claimed by a Frenchman, Ambroise Langé, and finally taken out in France in their joint names, the priority of invention being conceded to Argand. The French Revolution, however, deprived him of all profit from his patent. Died, 1803.

Ariosto (*ar-e-ös'-to*), **Ludovico**, a famous Italian poet. He was born at Reggio in 1474, and educated at Ferrara. His writings were numerous, but his "Orlando Furioso" is the work which established his fame. Died, 1533.

Aristotle (*ar'-is-tot'-l*), a distinguished philosopher, born at Stagyra in Thrace, 384 B. C. When seventeen years of age, he had the advantage of being placed under Plato, who pronounced his eulogy by describing him to be "the mind" of his academy. His growing fame caused Philip of Macedon to make him tutor to his son Alexander. That prince is said to have profited from his sage counsel to restore towns that he had ruined. Pursued by envy, Aristotle was accused of impiety, and retired to Chalcis, where he died 323 B. C.

Aristides (*ar-is-ti'-deez*), an Athenian patriot whose unbending integrity gained for him among his countrymen the name of The Just. He distinguished himself at Marathon, Salamis, and Platæa. After gaining great honor for virtuous conduct, he died poor, 467 B. C. There were also, an orator of Adriani in Mysia, a Christian philosopher in Athens, a painter of Thebes, a historian mentioned by Plutarch as of Miletus, and a Greek musician, who bore the same name.

Aristophanes (*a-ris-tof'-a-neez*). The most celebrated of the ancient Athenian writers of comedy, contemporary with Socrates and Plato. He wrote fifty-four comedies, of which eleven only remain. In one of them, "The Clouds," Socrates (or rather the philosophy of the age) is held up to ridicule. The date of his death is not known.

Arius (*a'-ri-us*), a presbyter in the Church of Alexandria, who lived in the Fourth Century. His doctrine was that the Father and Son were essentially distinct. That the latter was created out of nothing by the will of the former. For this he was excommunicated and banished, but having been recalled, was about again to enter the Church from which he had been exiled, when he suddenly expired. The sect called Arians are named after him, but they do not adopt all his opinions.

Arkwright, Sir Richard, born in 1732; a Lancashire barber, renowned as the inventor of the spinning-frame. Of humble birth, he exhibited considerable mechanical skill, joined with the greatest industry. In 1767 he attempted to solve the problem of perpetual motion, and soon after, with the help of a clock maker named Kay, his spinning inventions began to take shape. He then entered into partnership with a firm of stocking manufacturers, and his invention was patented in 1769, and though many difficulties arose, from infringements of the patent, the hostility of the work-people, and disputes to his claim as the inventor of his machines, Arkwright was enabled to rise from poverty, and was chosen to present a congratulatory address to George III. in 1780, on which occasion he was knighted. Died, 1792.

Armour, Jonathan Ogden, capitalist, packer; born in Milwaukee, Wis., November 11, 1863; entered Yale

but did not complete course, yielding to request of father that he should return to Chicago and relieve him of some of his business cares. Now president of Corporation of Armour & Co., packers, and director in other corporations.

Arnhelm or Arnim, George, Baron von, born in 1581, a distinguished general and politician, who took part in the Thirty Years' War, serving successively under Gustavus Adolphus, Wallenstein, and the Elector of Saxony. After gaining the decisive victory of Liegnitz (1634) he retired to his estates, but was seized and imprisoned by the King of Sweden; he escaped, however, but died soon after. Died, 1641.

Arnold, Benedict, born in 1740; American general, a brave but unprincipled man. At fifteen he enlisted in the English army, but soon deserted, and adopted a mercantile life. In the Anglo-American War Arnold took an extremely active part, his skill and gallantry being especially exhibited in the siege of Quebec and the victories of Ridgefield and Benis. Meanwhile a party hostile to him had been growing up; his due promotion was deferred, several serious charges were brought against him, the fortunes of the Americans grew worse and worse, and he became affected with the prevalent spirit of desertion. Accordingly he entered into negotiation with the British commander, and treacherously asked and obtained the command of West Point, with the intention of surrendering it to the enemy; the capture of André betrayed his duplicity, and the traitor fled in disgrace to the English army at New York. Here he was appointed brigadier-general, and after serving against his countrymen, retired to London. Died, 1801.

Arnold, Sir Edwin, K. C. I. E., born in 1832; journalist and poet, educated at King's College, London, and Oxford, where he won the Newdigate Prize in 1852. He was for several years principal of the Government Sanscrit College at Poonah, Bombay Presidency, but resigned his post in 1861, when he first became connected with the "Daily Telegraph," for which he has continued to write ever since, being appointed editor. His "Light of Asia" (1879) achieved extraordinary popularity, and obtained him a high place amongst the poets of the day.

Arnold, Matthew, born in 1822, eldest son of Dr. Arnold of Rugby, was educated at Winchester, Rugby, and Balliol College, Oxford, and was a distinguished critic, poet, scholar, and theologian. He was elected Fellow of Oriel College in 1845, and in 1851, after having been for some time private secretary to Lord Lansdowne, he was appointed Lay Inspector of Schools under the Committee of Council on Education, in which capacity he twice visited the Continent for the purpose of collecting information, and which appointment he resigned in 1886. His poetic activity was manifested in early life; for ten years (1857-1867) he held the chair of poetry at Oxford, and amongst his productions may be noted his Newdigate prize poem "Cromwell" (1843), "The Strayed Reveller," and a volume of "New Poems" published in 1869. As a critic he holds a very high place. His later works were chiefly theological, being attempts to grapple with the supernatural aspects of Christianity from a rationalistic standpoint. "St. Paul and Protestantism" (1871), "Literature and Dogma" (1873), and "God and the Bible" (1875), are among his writings. Died, 1888.

Arnold, Thomas, D. D., born in 1795, was educated at Winchester, and Corpus Christi College, Oxford. In 1815 he became Fellow of Oriel, obtaining in that year the Chancellor's Prize for the Latin and in 1817 for the English essay. After taking holy orders, he passed nine years at Laleham, near Staines, in literary occupations, and in preparing young men for the universities. Appointed head master of Rugby School in 1828, he raised that institution beyond all precedent, both by the remarkable success of his pupils and by the introduction of new branches of study into the Rugby course. He was of the Broad Church school of thought, and a vigorous opposer of the then new Tractarian movement. In 1841 he was appointed professor of modern history at Oxford. The best known of Dr. Arnold's works are his edition of "Thucydides," his "History of Rome" (unfinished), and his sermons delivered in the chapel of Rugby School. Died, 1842.

Artemisia, Queen of Halicarnassus, wife and successor of Mausolus, to whose memory she erected a splendid monument, which has given to similar erections the name of "mausoleum."

Arteveld, Jacob van, popular Flemish leader in the Fourteenth Century, assisted Edward III. in his French wars, and for nine years was practically ruler of Flanders. He determined to convert his country into a kingdom, and offered the crown to the Prince of Wales, which led to a tumult in which he was slain. Died, 1345.

Arthur, Chester Alan, born in 1830; twenty-first President of the United States; took a leading part in the Civil War, and from 1871-78 was collector of the port of New York City. When Garfield was elected president, he was vice-president, and on the former's assassination succeeded to the presidency. Died, 1886.

Arthur, Julia, actress; born in Hamilton, Ont., May 3, 1869, of Irish and Welsh parentage; real name, Ida Lewis, stage name being taken from her mother's maiden name of Arthur. At 11, played in amateur dramatic club, taking part of Gamora in "The Honey-moon" and of Portia in "The Merchant of Venice"; three years later made professional debut as the Prince of Wales in "Daniel Bandmann's presentation of Richard III."; remained three seasons with that company; studied violin music and dramatic art in England; first New York success at Union Square Theater in "The Black Masque"; later in A. M. Palmer's company in several rôles, notably in "Mercedes," 1893; London debut, February 1, 1895, in Henry Irving's company, playing rôles next to Miss Terry; especially successful as Rosamond in "A Becket," with Irving and Terry in United States, 1896. Now, Mrs. B. P. Cheney.

Asbury, Francis, born in 1745; the "Pioneer Bishop," an English Methodist preacher who undertook an evangelistic mission to America in 1771, by the wish of John Wesley. In 1784 he was ordained Bishop of the Methodist Episcopal Church of America. Thenceforth his life was devoted with untiring energy to the organization and extension of that Church. Died, 1816.

Ashmole, Elias, born in 1617; astrologer and antiquary, held the appointment of Windsor Herald, and published the "History of the Order of the Garter." He left many works, and presented to the University of Oxford his valuable collection of coins, specimens, and manuscripts. Died, 1692.

Aspasia (as-pa'-se-a), a beautiful Athenian courtesan. Socrates is said to have been one of her admirers. In order to marry her, Pericles repudiated his wife. An affront offered to Aspasia is said to have caused the Peloponnesian War.

Astor, John Jacob, capitalist; born in Rhinebeck, N. Y., July 13, 1864; son of William, grandson of William B., and great-grandson of John Jacob Astor; B. S., Harvard, 1888; traveled abroad, 1888-91; since then has been manager of the family estates; built (1897) Astoria Hotel, New York, adjoining Waldorf Hotel, which was built by William Waldorf Astor, his cousin, the two now forming one building under the name of Waldorf-Astoria Hotel, one of the largest and probably most costly hotels in the world. Was colonel, staff of Governor Levi P. Morton, and on May, 1898, commissioned lieutenant-colonel of United States Volunteers; presented to the government a mountain battery for use in war against Spain, said to cost over \$100,000. After assisting Major-General Breckinridge, Inspector-General U. S. A., in inspection of camp and troops at Chickamauga Park, Ga., assigned to duty on staff of Major-General Shafter, and served in Cuba in operations ending in surrender of Santiago. Has invented a bicycle brake, a pneumatic road improver, and an improved turbine engine. Author: "A Journey in Other Worlds"; etc.

Astor, William Waldorf, capitalist, author; born in New York, March 31, 1848; son of John Jacob and Charlotte Augusta (Gibbes) A.; great-grandson of John Jacob, founder of the Astor fortune. Educated by private tutors, finishing in Europe; entered office of the Astor Estate, 1871; succeeded his father, 1890, as head of the Astor family, with personal fortune estimated at about \$100,000,000. Member of New York Legislature, 1878-81; United States minister to Italy, 1882-85; removed to England, 1890; became owner "Pall Mall Gazette" and "Pall Mall Magazine." Author: "Valentino, a Story of Rome"; "Sforza, an Historical Romance of the Sixteenth Century in Italy"; etc. Has for many years lived in England.

Atahualpa, the last of the Incas of Peru, succeeded his father, Huayna Capac, in 1525, on the throne of Quito, whilst his half-brother, Huascar, although the rightful heir, obtained only the kingdom of Peru. The two brothers engaged in a struggle for supremacy, in which Huascar was defeated. The Spaniards under Pizarro, taking advantage of these internal dissensions, invaded Peru, and by an act of deliberate perfidy obtained possession of the person of Atahualpa, and attempted to compel him to acknowledge the King of Spain as master, and to embrace the Christian religion. His refusal was made a pretext for a massacre, and the imprisonment of their king, whom the Spaniards induced to raise an enormous treasure in the hopes of regaining his throne. After a mock trial, however, he was condemned and strangled at the stake. Died, 1533

Athanasius (*a-tha-na'shus*) **Saint**, was born in Egypt about the year 296, entered the Church at an early age, and was chosen bishop of Alexandria in 326. He is esteemed one of the most eminent among the ancient fathers of the Church. He was a violent opponent of Arius; and his earnest advocacy of the Catholic faith, more particularly of the doctrine of the Trinity, subjected him to much persecution from the emperors Constantine and Julian, by both of whom he was several times exiled, but he finally closed his days in tranquility in 373, in the forty-eighth year of his prelacy. His works are numerous, but consist chiefly of invectives against his enemies, and controversial treatises against Arianism. The more important of his writings are his "Apologies," "Two Books on the Incarnation," "Conference with the Arians," "The Life of St. Anthony," "The Abridgement of the Holy Scriptures," "Letters to Those that Lead a Monastic Life," and "Letters to Serapion."

Athelstan (*ath'el-at'n*), or **Æthelstan**, one of the ablest of the Anglo-Saxon kings, born about 895, succeeded his father, Edward the Elder, 925. In 937 he gained a great victory at Brunenburg, over the Danes, Scots, etc., and reigned over all the island except Cumbria, Wales, Cornwall, and Scotland, which were tributary to him. Died without issue, 941.

Athenagoras (*ath-e-nag'-o-ras*), a Christian philosopher, born in Athens, who lived toward the close of the Second Century. His conversion to Christianity has been likened to that of St. Paul. Writing against the Christians, in order to render his attacks more formidable, he referred to the Scriptures, and by reading them was converted to the true faith. A "Discourse on the Resurrection of the Dead" and his "Apology for Christians" were much admired.

Attila (*at'te-la*), a king of the Huns, who lived in the Fifth Century. He styled himself "The Scourge of God," and devastated Lombardy. The city of Venice was founded by those who fled before him. On his death, in 453, his body was buried in three coffins, made of silver, gold, and iron. The captives who dug his grave were put to death.

Atwood, George, F. R. S., a distinguished mathematician, and author of many valuable scientific works, born in 1745, and died in 1807.

Atwood, Thomas, born in 1767, was the son of a coal merchant. He commenced his musical education in the choir of the Chapel Royal under Dr. Nares. The celebrated Mozart, under whom he studied, thought highly of his talents. In 1796 he was appointed organist of St. Paul's. He wrote coronation anthems for George IV. and William IV., and died in 1838.

Auber, Daniel François Esprit, born in 1782; French composer, was intended for a business career, and it was not until he met with Scribe, in 1823, that his long course of successful composition commenced. "La Muette de Portici," or "Masaniello," as it is called in England, was brought out in 1828. He produced many other works which enjoy a European reputation, his last being "Le Rève d'Amour" (1870), composed shortly before his death. Died, 1871.

Aubigne, Jean Henri Meris d', born in 1794; Swiss theologian and writer, studied at Leipsic and Berlin, and became professor of Church history at Geneva in 1830. He was author of "The History of the Reformation of the Sixteenth Century," and other works. Died, 1872.

Audubon, John James, born in 1780; a celebrated American naturalist of French descent; a pupil of the great painter David; from his childhood he was devoted to natural history, but it was not until 1830 that the first of the four volumes of his great work, "The Birds of America," appeared. This magnificent collection of plates, which was sold for \$1,000 a copy, was quickly followed by explanatory letterpress under the title of "American Ornithological Biography." Audubon also projected a similar work on the "Quadrupeds of America," but much of this work was done by his sons, John and Victor. Died, 1851.

Auerbach, Berthold, born in 1812; German novelist, was a native of the Black Forest; his reputation was established by the publication, in 1843, of his "Village Tales from the Black Forest," and this was followed by a number of other popular novels. Among his earlier works were a translation of Spinoza's writings, and an essay on modern Jewish literature. He died at Cannes in 1882, shortly after the publication of "Brigitte."

Augustine, Saint, one of the fathers of the Christian Church, was born at Tagaste in Africa, in 354. In his youth he was favorable to the Manichean doctrines. Subsequently he became Bishop of Hippo, and wrote with great force against all whom he deemed heretics. He died in 430. Another St. Augustine (or St. Austen),

called the "Apostle of the English," was sent with a party of forty monks by Pope Gregory I. to preach the Gospel in England in 597, where he was advanced to be first Archbishop of Canterbury. The exact date of his death is not known.

Augustulus, Romulus, the last of the Roman emperors in the West, was the son of Orestes, who, after deposing Julian Nepos, advanced him to the throne. Odoacer, a barbarian, raised a mutiny against him, and having put Orestes to death, compelled Augustulus to resign his imperial dignity. He was then dismissed with his family, and allowed 6,000 pieces of gold annually for his maintenance in the castle of Lucullus in Campania.

Augustus, Calus Julius Cæsar Octavianus, a Roman emperor, born 63 B. C., was the son of Caius Octavius and Accia, niece of Julius Cæsar, by whom he was adopted when but four years of age. He was in Epirus when Julius Cæsar was assassinated, but speedily returned to claim his inheritance. Connected with Antony and Lepidus, Octavianus shared the guilt which stains the name of the triumvirate. His colleagues put aside, at the age of 36, he became emperor, with the title of Augustus. His reign was fortunate, good laws were framed in it, and the arts flourished under his protection. He died, A. D. 14.

Aurelianus, Claudius or Lucius Domitius, Emperor of Rome, born in 212, the son of a peasant; entered the Roman army, his exploits in which attracted the notice of the emperors Valerian and Claudius, and on the death of the latter in 270, he was proclaimed emperor. His short reign was a series of brilliant victories: the Goths and Vandals were subdued, the Alemanni, who threatened Rome itself, were exterminated, Palmyra was sacked, and in the splendid triumph of Aurelian were led captive Tetricus, the ex-emperor of Gaul, Britain and Spain, and Zenobia, the renowned Queen of the East. A formidable rebellion at home was crushed with terrible sternness, and the emperor's severity made him feared even by his friends, who, as they deemed in pure self-defense, conspired against him and put him to death. Died, 275.

Aurelius, Antoninus Marcus, born in 121 A. D.; Emperor of Rome, was the adopted son of Antoninus Pius, to whose throne he succeeded in 161, and took as associate Lucius Verus. Most of his reign was disturbed by wars with the Germans. Aurelius was distinguished for his love of truth and his adhesion to the Stoic school of philosophy, and his "Meditations" still exist, and give a trustworthy record of his private opinions. Died, 180.

Aurungzebe (*aw-rung-se'-be*), Emperor of Hindostan, known as the Great Mogul, was born in 1618. The third son of Shah Jehan, he affected devotion in early life but subsequently, at the call of ambition, he deposed his father and put to death his two brothers and nephew. As emperor, his career was brilliant. He conquered Golconda, Visapour, and Bengal. His sons disturbed his latter days by attempting to depose him. He died in 1707.

Austen, Jane, novelist; born in 1775, at Steventon. Hants, of which parish her father was rector. Her principal productions are "Pride and Prejudice" (composed 1796, published 1813), "Sense and Sensibility" (1811), and "Emma" (1816). They are distinguished for originality, naturalness, and fidelity of delineation, qualities in which the literature of her time was most deficient. Her family moved successively to Bath and Chawton, and she died at Winchester in 1817, and was buried in the cathedral.

Austin, Alfred, born in 1835; critic, journalist, and satirical poet, was educated for the bar, but resigned that profession for literature. As a strong Conservative is one of the editors of the "National Review," and has acted as correspondent to the "Standard."

Averrhoes, born circa in 1120 (Ibn-Roshd), the great Arabian philosopher, of good birth, and a pupil of Avenpnce and Avenzoar. He devoted his life to the study of Aristotle. He was banished for awhile from Cordova, and his views were condemned by the University of Paris in 1240. Died, 1198 or 1206.

Avery, Elroy McKendree, author; born in Erie, Monroe County, Mich., July 14, 1844; graduate of University of Michigan, Ph. B., 1871; served in Civil War; mustered out at close as sergeant-major of 11th Michigan Volunteer Cavalry. Principal of high school, Battle Creek, Mich., and high and normal schools, Cleveland, O. Member of Cleveland City Council, 1891-92; of Ohio Senate, 1893-97; member of many historical and economic societies. Author: "Elementary Physics," "Elements of Natural Philosophy," "Physical Techniques," "Teachers' Hand Book of Natural Philosophy," "Elements of Chemistry," "Teachers' Hand Book of Chemistry," "Complete Chemistry," "First Principles

of Natural Philosophy," "Words Correctly Spoken," "Columbus and the Columbia Brigade," "School Physics," "Elementary Physics," "First Lessons in Physical Science," "School Chemistry," "The Town Meeting," "History of the United States and Its People," 15 vols. **Avicenna, Ibn Sina**, born in 980; the celebrated Arab physician, a native of Bokhara, was author of the world-famed "Book of the Canon of Medicine." Died, 1037.

Baba, Ali, was elected Dey of Algiers in 1710, after the revolution in which Ibrahim Dey was killed. At great sacrifice of life, Baba liberated Algiers from the dominion of Turkey, and its independence was maintained until the French invasion in 1830. Died, 1718.

Bach, Johann Sebastian (*bă'k*), an eminent German musical composer, born in 1685, became court organist at Weimar, and finally director of music at the school of St. Thomas, Leipzig. Bach was almost unrivaled as an organist. His works are thoroughly original, profoundly scientific, and most difficult of execution. Died, 1750.

Bacon, Augustus Octavius, United States senator from Georgia; born in Bryan County, Georgia, October 20, 1839; graduate of University of Georgia, 1859; law department of same, 1860; Served as regimental adjutant and staff captain in Confederate States Army; in law practice in Macon since 1866; member several State Democratic conventions (president, 1880); delegate National Democratic Convention, 1884; several times candidate for Democratic nomination for governor of Georgia; presidential elector, 1868; member, 1870-82, 1892, and 1893; speaker, 1873-74 and 1877-81, Georgia House of Representatives; Democrat. Elected to the United States Senate, 1895; reelected, 1901 and 1907.

Bacon, Francis (*bă'kn*), Lord Verulam, and Viscount St. Alban's, one of the greatest of modern philosophers, was born in London in 1561. Entering parliament in 1593, he was knighted in 1603, and in 1613 became attorney-general and privy-councillor. The office of Lord Keeper was given him in 1617, and he was soon afterwards made Lord Chancellor. But from this time dates the beginning of his miserable fall. Complaints were made of his venality as a judge, which on inquiry by a parliamentary committee were verified; Bacon then made full confession, was deprived of his offices, fined, and imprisoned during the royal pleasure. He was ultimately pardoned, but continued to live in retirement, devoting himself to his favorite studies. The great aim of this extraordinary man was to reform the methods of philosophy; he recalls men from blindly following authority to the observation and examination of nature. His "Essays" were published in 1597, but his greatest works are the "Novum Organum" (1603), and the "De Augmentis Scientiarum" (1620). Died, 1626.

Bacon, Roger, an English scientist and publicist of the Thirteenth Century, the most learned of his day, is reputed to have advocated the change since made in the calendar, to have invented gunpowder, and is known to have manufactured magnifying glasses. His great work, "Opus Majus," urges philosophical reform, and is a marvel of learning and prophecy.

Baer, George F., railway official lawyer; born in Somerset County, Pennsylvania, September 26, 1842; educated at Somerset Institute, Somerset Academy, and Franklin and Marshall College. At 13 entered office of "Somerset Democrat"; worked at printing trade over two years, and with his brother became owner of that paper in 1861. His brother went to the war and he continued the paper; also studied law, principally at night. Raised volunteer company August, 1862; elected captain, joined Army of Potomac at Second Bull Run and took part in all engagements up to and including Chancellorsville, when he was detailed as adjutant-general second brigade; resumed legal studies and was admitted to bar, 1864. Removed to Reading, 1868, gained large practice at Berks County bar; counsel for Philadelphia & Reading, 1870, and later a director, but resigned because unable to agree with President McLeod's policy. For years confidential legal adviser in Pennsylvania of J. Pierpont Morgan; took prominent part in reorganization of Philadelphia & Reading R. R., 1893; elected April, 1901, president of Philadelphia & Reading Railway Co., Philadelphia & Reading Coal & Iron Co., and Central R. R. Co., of New Jersey; took leading part for railway anthracite operators in negotiations and proceedings connected with the anthracite coal strike situation, 1902.

Bailey, Joseph Weldon, United States senator, 1901-13; born in Copiah County, Mississippi, October 6, 1863; admitted to bar, 1883; presidential elector, 1884; removed to Texas, 1885, and began practice of law at Gainesville; presidential elector at large, 1888; member

of Congress from 1891-1901; caucus nominee of his party for speaker and minority member; Committee on Rules of 55th Congress.

Bailey, Liberty Hyde, director of College of Agriculture at Cornell since 1903; born in South Haven, Mich., March 15, 1858; graduated at Michigan Agricultural College, 1882 (M. S.); assistant to Asa Gray, Harvard, 1882-83; professor of horticulture and landscape gardening at Michigan Agricultural College, 1883-88; professor of horticulture, Cornell, 1888-1903. Author: "Survival of the Unfit," "Evolution of our Native Fruits," "Lessons with Plants," "Botany, an Elementary Text for Schools," "Principles of Fruit Growing," "Principles of Vegetable Gardening," "Plant-Breeding," "Garden-Making," "Horticulturist's Rule-Book," "Principles of Agriculture," "Nursery-Book," "Forcing-Book," "Pruning-Book," "Practical Garden-Book," "Cyclopedia of American Horticulture," four volumes; "The Nature-Study Idea," "Outlook to Nature," four volumes; Editor: "Rural Science series," "Garden-Craft series," "Cyclopedia of Agriculture," contributor to technical journals and popular magazines.

Bajazet I., born in 1347; Emperor of the Turks, son of Murad I., whom he succeeded in 1389, began his reign with a series of conquests, crossing the Danube and finally defeating Sigismund of Hungary and his army of 100,000 men. Ill health alone prevented him crossing the Alps, and he next turned to the conquest of Constantinople. Bought off for the moment, he was diverted from the ultimate accomplishment of his design by war with Tamlarlaine the Great, by whom, in 1402, he was totally defeated and taken prisoner, dying shortly afterwards. Died, 1403.

Balboa (*bal-bo'á*), **Vasco Nunez de**, a Spaniard, and one of the first Europeans who visited the West Indies. He established a colony on the Isthmus of Panama, and discovered the Pacific Ocean. He was accused of treasonable designs, and in consequence put to death by the Spanish governor of Darien, Pedraria Davila, in 1517.

Baldwin I., younger brother of Godfrey of Bouillon, whom he succeeded as King of Jerusalem, 1100, reigned eighteen years. Died, 1118.

Baldwin I., son of Baldwin VIII., Count of Flanders, born 1170, succeeded his father, 1195; joined the Crusade he led the successful attack on Constantinople, and was crowned first Latin Emperor, 1204; defeated and captured by the Bulgarians, 1205. Died, 1206.

Baldwin, James Mark, psychologist; born in Columbia, S. C., January 12, 1861; graduate of Princeton, 1884, A. M., 1887; Ph. D., 1889; Sc. D., Oxford University, England, 1900; studied in Leipzig, Berlin and Tübingen; Instructor of French and German at Princeton, 1886; professor of Philosophy, Lake Forest University, Illinois, 1887-89; same, Toronto, Can., University, 1889-93; professor, psychology, Princeton, 1893-1903; professor philosophy and psychology, Johns Hopkins, since 1903. Author: "German Psychology of To-day," (translated), "Hand Book of Psychology," "Elements of Psychology," "Mental Development in the Child and the Race," "Social and Ethical Interpretations in Mental Development," "Story of the Mind," "Fragments in Philosophy and Science," "Development and Evolution," "Editor-in-chief, Dictionary of Philosophy and Psychology." His various books have been translated into French, German, Italian, and Spanish. Editor: "Psychological Review," "Princeton Contributions to Psychology," "Library of Historical Psychology," "Philosophy," "Johnston's Universal Cyclopedia."

Balfe, Michael William, born in 1808; musical composer, as a boy showed great musical talent, and at the age of 16, going to London, he was engaged in the Drury Lane orchestra. While there he attracted the attention of an Italian nobleman, Count Mazzara, who took him to Italy to study music. After singing at Paris in the Italian Opera under Rossini, Balfe returned to Italy and produced in 1830 several operas. In 1835, he went to England as a vocalist and composer of opera, and after five years of successful composition he produced two operas in Paris. In 1844, his most popular work, "The Bohemian Girl," appeared at Drury Lane, to be followed by several other operas before the fertility of Balfe's genius was checked by a fatal attack of bronchitis. Died, 1870.

Balfour, Right Hon. A. J., English statesman and author. Educated at Eton and Trinity College, Cambridge (M. A. '73, Hon. Fellow 1902); was private secretary to Lord Salisbury 1878-80, and went with him to Berlin in 1878; member of the so-called "Fourth Party"; president local government board 1885-86; secretary for Scotland, with a seat in the cabinet, and vice-president committee of council on education for Scotland, 1886-87; chief secretary for Ireland, 1887-91,

and carried the Crimes Act through Parliament; created the congested districts board for Ireland, 1890; first lord of the treasury and leader of the house on the death of Mr. W. H. Smith, 1891, and again in 1895-1905. On the retirement of Lord Salisbury in 1902, he became prime minister and lord privy seal, retaining the office of first lord of the treasury. He introduced the education act, 1902. When Mr. Chamberlain made his fiscal proposals, 1903, Mr. Balfour, holding that the country was not ripe for the taxation of food, committed himself and the government only to a policy of retaliation. At the end of 1906 he and his cabinet resigned. Author of "A Defense of Philosophic Doubt," "Essays and Addresses" and "The Foundations of Belief, being Notes Introductory to the Study of Theology."

Ballou, Hosea, born in 1771; an American preacher and founder of the "Universalists." He attained considerable celebrity in the United States. Died, 1852.

Balmes, James Lucian (*bâlmêh*), a Spanish theologian, born in 1810, is the author of a valuable work entitled "Protestantism and Catholicism Compared in their Effects on the Civilization of Europe," which has been translated into several languages, and is one of the most elaborate contributions to modern theological literature. Died, 1848.

Balzac, Honoré de, born in 1799; French novelist, was intended for the law, but left the legal profession for literature, and under various assumed names produced rapidly. In 1826 he entered into partnership with a printer, but their publications were not successful; and Balzac, depending solely upon his pen for a livelihood, endured the greatest privations. He obtained no public recognition till the appearance of his "Physiologie du Mariage," but afterwards he continued to write with increasing success. In 1848 he married a Russian lady, and after visiting Russia returned to Paris in broken health, and shortly afterwards died (1850). His collected works are included in forty-five volumes.

Bancroft, George, American historian and diplomatist, was born at Worcester, Mass., 1800. He graduated at Harvard College, 1813; proceeded to Göttingen University, where he took the degree of LL.D., 1820; returned home and opened a school at Northampton. In 1845, he became secretary of the navy in the cabinet of Mr. Polk. In 1846, he was sent to Great Britain as minister plenipotentiary, remaining in that country till 1849. In 1867, he received the appointment of minister at the Prussian court. His principal works are "History of the United States," and "History of the Revolution." Died, 1891.

Bancroft, Hubert Howe, historian; born in Granville, O., May 5, 1832. Entered bookstore of his brother-in-law, Geo. H. Derby, Buffalo, N. Y., 1848, and in 1852 went to establish a branch in San Francisco; collected as materials for Pacific coast history a library of 60,000 volumes, and with aid of a staff of collaborators, has written and published an historical series of 39 volumes, covering the western part of North America; also "The Book of the Fair," "The Book of Wealth," etc.

Baner (*bâ'-ner*), John, a Swedish commander of a distinguished family, born in 1601. He was so much addicted to literary studies that Gustavus Adolphus styled him his "learned general." He gained many victories; was revered for his humanity; and, having acquired a high reputation, died at Haldberstadt in 1641.

Barbarossa, Urusch and Khaleddin. The name given to two brothers of Roumelian extraction, whose naval exploits against the Christian powers in the Mediterranean were famous in the early Sixteenth Century. After gaining possession of Algiers, Urusch was slain in battle against the Spaniards, but his brother, entering the service of the Turkish Sultan, defeated the Spaniards, and afterwards the Genoese fleet, ravaged the coasts of Italy, took Tunis, and in 1538 decisively defeated the combined fleets of the Pope, Venice, and Spain. His triumphs were only terminated by his death, in 1546.

Barclay de Tolly, a Russian commander born about the middle of the Seventeenth Century. He was distinguished by his conduct in the German and Polish campaigns of 1806 and 1807. Having been made a field-marshal, he succeeded Kutusow as commander-in-chief. He commanded the Russians on the great day of Leipsic, and subsequently became minister of war, and was made a prince. Died, 1818.

Barham, Richard Harris (better known by his literary nom de plume of Thomas Ingoldsby), an English poet and humorist, born 1789, entered holy orders, and became celebrated by his popular lyrics, published under the title of the "Ingoldsby Legends." Died, 1845.

Barker, George Frederick, professor physics, University of Pennsylvania, 1872-1900, now emeritus professor; born in Charlestown, Mass., July 14, 1835;

graduate Sheffield Scientific School, Yale (Ph. B.), 1858; M. D., Albany, 1863; was assistant in chemistry and later professor physiology, chemistry, and toxicology, Yale; taught in other colleges; United States Commissioner Paris Electrical Exhibition, 1881; delegate to electoral congress and vice-president jury of awards; received decoration commander Legion of Honor of France; United States Commissioner Electrical Exhibition, Philadelphia, 1884; on jury of awards World's Columbian Exposition, 1893. Expert in poisons, criminal cases; expert in Edison, Berliner, and other patent suits. Member many American and foreign scientific societies. For several years associate editor "The American Journal of Science." Author: "Textbook of Elementary Chemistry," "Physics," etc.

Barnard, Edward Emerson, professor of astronomy, University of Chicago, and astronomer Yerkes Observatory; born in Nashville, Tenn., December 16, 1837; graduate of Vanderbilt University, 1887; astronomer Lick Observatory, California, 1887-95. His principal discoveries are the fifth satellite of Jupiter (1892), and sixteen comets; has also made many other discoveries and done much work in celestial photography, making photographs of the Milky Way, the comets, nebulae, etc. Received Lalande gold medal, French Academy of Sciences, 1892; Arago gold medal, same, 1893; gold medal Royal Astronomical Society of Great Britain, 1897; Janssen Gold medal, French Academy of Sciences, 1900; elected foreign associate Royal Astronomers Society, 1898; member many American and foreign societies; contributor to many astronomy journals.

Barnabas, Saint, a teacher of Christianity, contemporary with the apostles, was a Levite and a native of Cyprus. His original name is believed to have been Joseph; that of Barnabas, or, "Son of Consolation," being subsequently conferred on him by the disciples. He was one of those who, after the resurrection, sold their property, and laid the price of it at the apostles' feet. It was by him that St. Paul was presented to the other apostles, three years after his conversion. He is described by St. Luke to have been a good man, full of the Holy Ghost, and of faith. It is said that he was stoned to death by the Jews of Cyprus, where, it is added in the reign of the Emperor Zeno, about 488, his body was discovered with the gospel of St. Matthew, written in Greek, upon his breast.

Barnum, Phineas Taylor, born in 1810; an American showman and proprietor of "the greatest show on earth." He was engaged in several professions, made and lost several fortunes, and his show was twice destroyed by fire. He brought out Tom Thumb, and introduced Jenny Lind to the American public. He twice visited Europe, the last time in 1889. Died, 1891.

Barrett, John, diplomat; born in Grafton, Vt., November 28, 1866; graduate of Dartmouth College, 1889. Taught Hopkins Academy, Oakland, Cal.; assistant editor Statistician, San Francisco; on editorial staff newspapers San Francisco, Tacoma, Seattle; associate editor "Telegram," Portland, Ore., 1891-94; American minister to Siam, 1894-98, settling by arbitration claims involving \$3,000,000 and securing first exact interpretation foreign extra-territorial jurisdiction Asiatic countries; undertook special diplomatic and commercial investigations Japan, Siam, Korea, Siberia, and India; war correspondent in Philippines, 1898-99; elected honorary member American Asiatic Association for services in development American commercial and political interests in Asia; American plenipotentiary to International Conference American Republics, Mexico, 1901-02; commercial-general of foreign affairs for St. Louis Exposition, 1902-03; offered post American minister to Japan by President Roosevelt, but declined December 10, 1903; American minister to Argentina, 1903-04; American minister to Panama, 1904-05; American minister to Colombia, 1905-06; since 1906, director International Bureau of the American Republics. Contributor of articles for magazines and reviews on Asiatic and Latin American subjects. Author: "Admiral George Dewey," and several other books on foreign affairs.

Barrie, J. M., also known as "Gavin Ogilvy," was born at Kirriemuir, Forfarshire, in 1860. He was educated at Dumfries Academy, and graduated M. A. at Edinburgh University in 1882. After holding a journalistic position in Nottingham he went to London and wrote for the "British Weekly," "St. James's Gazette," "Speaker," and "National Observer." His first volume, "Better Dead," appeared in 1887; "Auld Licht Idylls" and "When a Man's Single" in 1888; "A Window in Thrums" and "An Edinburgh Eleven" in 1889; "My Lady Nicotine" in 1890; "The Little Minister" in 1891; "Sentimental Tommy" and "Margaret Ogilvy, a Memoir," in 1896; "Tommy and Grizel" in 1900, and in

1902 "The Little White Bird." Mr. Barrie's work for the stage includes "Walker, London," in 1892; "Jane Annie," written with Mr. Conan Doyle, and brought out at the Savoy in 1893; "The Professor's Love Story," "The Little Minister," 1897; "The Wedding Guest," 1900; "Quality Street," 1902; "The Admirable Crichton," and "Little Mary," 1903; "Alice Sit-by-the-Fire," 1905, and "Josephine," 1906.

Barrow, Isaac, born in 1630; scholar and divine, and the preceptor of Isaac Newton. He earned a great reputation at Cambridge, and afterwards chiefly studied natural science, divinity, and the classics. After some foreign travel he entered the Church, and in 1660 obtained the professorship of Greek at Cambridge and that of geometry at Gresham College. The latter appointment he resigned to Newton, and was appointed by Charles II. to the mastership of Trinity College, afterwards being chosen vice-chancellor of Cambridge University. He died a little later (1677), with the reputation of being one of the best wits and profoundest scholars of his day.

Barrows, Samuel June, ex-congressman, clergyman; born in New York, May 26, 1845; graduate of Harvard Divinity School (B. D.), 1875. Before graduation had been stenographer and journalist; pastor First Church (Unitarian), Dorchester, Boston, 1876-80; editor "Christian Register," 1881-97; member Congress, tenth district, Mass., 1897-99; represented United States on International Prison Commission, 1896; corresponding secretary Prison Association of New York, 1900. Author: "Shaybacks in Camp," "Isles and Shrines of Greece," "A Baptist Meeting House," "The Doom of the Majority of Mankind," "Crimes and Misdemeanors in the United States," etc.

Barrymore, Ethel, Miss, actress; born in Philadelphia, August 15, 1879; daughter of late Maurice and Georgiana (Drew) B.; niece of John Drew; educated at Convent of Notre Dame, Phila. Made debut in John Drew's Company, 1896; starring under management of Charles Frohman; at present star in "Sunday," a drama.

Bartholdi, Frederic Auguste, a famous French artist and sculptor; born in Alsace, 1834. In 1865, he received the Cross of the Legion of Honor. Chief among his works are the "Lion of Belfort," the statue of La Fayette in Union Square, New York, and the colossal figure in New York Harbor of "Liberty Enlightening the World."

Bartholdt, Richard, congressman; editor "St. Louis Tribune;" born in Germany, November 2, 1855; came to United States in boyhood; classical education; learned printing trade; since then in journalism. Was member board of public schools, St. Louis, and its president, 1891; member Congress, Tenth Missouri district since 1893. president Interparliamentary Union for Promotion of International Arbitration.

Bartholomew, Saint, one of the twelve apostles of Jesus. He preached the gospel in the Indies, in Ethiopia, and elsewhere. His labors are said to have been terminated by a cruel death, by his being brutally flayed alive in Armenia. The correctness of this statement, however, has been doubted. The Church of Benevento and that of Rome boast of possessing some of his bones among their treasured relics.

Barton, Clara, founder and organizer of National Red Cross in United States, president 1881-1904; born in Oxford, Mass., 1821; graduate of Clinton Liberal Institution, New York. Taught school ten years; organized system of public schools, Bordenstown, N. J. During Civil War did relief work on battlefields and organized search for missing men (for the carrying on of which work Congress voted \$15,000); laid out grounds national cemetery, Andersonville, 1865; associated with International Red Cross of Geneva and worked through entire Franco-Prussian War, 1870; distributed relief in Strassburg, Belfort, Montpelier, Paris, 1871; secured adoption of treaty of Geneva, 1882; first president American Red Cross (official); appointed to represent United States in all international conferences, Geneva, 1884; Karlsruhe, 1887; Rome, 1892; Vienna, 1897; St. Petersburg, 1903; inaugurated American amendment of Red Cross, to provide for greater calamities of peace; distributed relief Johnston flood, 1892; Russian famine, 1893; Armenian massacre, 1898; at request of President of United States, carried relief to Cuba, 1898; did personal field work, Spanish-American War; conducted Red Cross relief at Galveston, Tex., after great disaster, August, 1900; president National First Aid Association since 1905. Holds decorations or diplomas of honor from Germany, Baden, Austria, Servia, Turkey, Armenia, Switzerland, Spain, Russia. Author: "History of Red Cross," "America's Relief Expedition to Asia Minor," "History of the Red Cross in Peace and War," "Story of Red Cross."

Basil, St., commonly called the "Great"; was born in Cappadocia about A. D. 329. He studied at Antioch, Caesarea, Constantinople, and Athens. Having gained distinction as a professor of rhetoric, he visited the monasteries of Egypt and Libya, and in consequence embraced the monastic life. He was ordained priest by Eusebius, bishop of Caesarea, and on the death of Eusebius, was elected to his see. He was much engaged in theological controversy, and boldly defended his opinion against the Emperor Valens. He died about 380. A monastic order was named after this saint.

Bazaine, Francois Achille, a marshal of France; born at Versailles; distinguished himself in Algiers, the Crimea, and Mexico; did good service as commander of the army of the Rhine, in the Franco-German War, but after the surrender at Sedan was shut up in Metz, surrounded by the Germans, and obliged to surrender, with all his generals, officers, and men; was tried by court-martial, and condemned to death, but was imprisoned instead; made good his escape one evening to Madrid, where he lived to write a justification of his conduct, the sale of the book being prohibited in France (1811-1888).

Beauharnais, Eugene de (bo-här'nai), son of Josephine, wife of Napoleon I., adopted by the latter; born in 1781; served with distinction in the Napoleonic Wars, and was appointed Viceroy of Italy. After Napoleon's fall he retired to Munich, and married the daughter of the King of Bavaria. Died, 1824.

Beauharnais, Hortense Eugene de, daughter of Josephine; born in 1783; was married against her will to Louis, youngest brother of Napoleon Bonaparte, from whom she separated in 1810, after he was driven from the throne of Holland. Her son by him was the late Napoleon III. Died, 1837.

Beaumarchais (bō-mär'shay) Pierre Augustin Caron de, born in 1732; a man of many-sided genius, was the son of a watchmaker. His musical accomplishments procured him a place in the royal concerts, and he became rich by the fortunes of two widows whom he married, and by successful financial speculation. He made another fortune by supplying arms and provisions to the Americans during the war of Independence, and then turned to dramatic writing, producing several highly successful pieces. In 1793 he was accused of treason to the state, and fled to England. Returning to France, he was for some time imprisoned, and finally died (1799), in poverty.

Beauregard, Pierre Gustave Toussaint, born in 1818; a general of the Confederate Army. He took up the cause of the Southern States, on their secession, and captured Fort Sumter. He defeated Butler at Bull's Run, and afterwards commanded the army of the Mississippi. His obstinate defense of Charleston is one of the remarkable episodes of the Civil War. Died, 1894.

Beck, James M., lawyer; born in Philadelphia, July 9, 1861; graduate of Moravian College, Bethlehem, Pa., 1880, LL. D., 1902; Mühlenberg College, 1902; studied law in office of Albert A. Outerbridge; admitted to bar, 1884; United States attorney for Eastern District of Pennsylvania, 1896-1900; assistant attorney-general of United States, 1900-1903; resigned April 30, 1903; republican. Has argued many important cases in United States Supreme Court, including the Neely case, and the Lottery cases; argued the Northern Securities merger case before circuit judges. Has delivered public orations on many notable occasions. Spoke for the American bar at dinner given in the Temple, London, by the bench and bar of England. As master appointed by United States Court sold, April, 1902, the "Philadelphia Record" for \$3,000,000—highest price ever brought by an American newspaper at public sale. In 1902 negotiated purchase of "Philadelphia Ledger" and the merging of it with "Philadelphia Times"; part owner of "Ledger" company; entered law firm of Shearman & Sterling, New York, 1903, and removed to that city; also member law firm of Beck & Robinson, Philadelphia. Solicitor Fairmount Park Art Association; trustee Moravian College.

Becket, St. Thomas a (ah-bek't), Archbishop of Canterbury; born in 1119; was the son of a London merchant, his mother being a convert from Mohammedanism. After entering the Church, Henry II. made him chancellor of England, and in 1162 he was elected to the primacy. Dissensions, however, soon broke out between the king and Becket, the latter asserting the independence of the Church, and refusing to sign the "Constitutions of Clarendon." Becket, having been condemned and suspended from his office by parliament, escaped to France, and a war with the latter country followed. In 1170, an apparent reconciliation was entered into, and Becket returned to England. Shortly after his arrival he was assassinated by the supposed

order of the king, on the steps of his own altar, 1170. The king denying all share in the murder was absolved; but in 1174 did penance at his tomb. Becket was canonized by Alexander III. in 1173.

Beckford, William, born in 1760; an English millionaire and distinguished author. When only twenty he published a clever satire, "Biographical Memoirs of Extraordinary Painters." After some foreign travel he entered parliament, and published his great work, "The Romance of Vathek," in the French language, a book which excited the widest admiration. The chief episodes of the remainder of his life were the erection, at enormous cost, of two vast mansions in England and a "fairy palace" in Portugal. Died, 1844.

Beckham, John Crepps Wickliffe, governor of Kentucky; born in "Wickliff," Bardstown, Ky.; educated in common schools, Bardstown, Ky., and 1884-86, Central University, Richmond, Ky.; was page Kentucky House of Representatives, 1881-82; principal Bardstown High School, 1888-91. Began practice of law, 1893; elected to Kentucky legislature, 1893-96-97; elected speaker session 1898; nominated for lieutenant-governor, 1899, declared by legislature elected; became governor upon death of Goebel, February 3, 1900; nominated by Democratic Convention, July 20, 1900, and elected for term ending 1903, reelected, 1904, and served until 1907.

Bede, J. Adam, congressman, journalist; born on farm, Lorain County, O., 1856; educated in Ohio public schools; learned printer's trade; taught school; did work as reporter on newspapers West and South. Originally Republican, but supported Cleveland in 1888 and 1892; appointed United States Marshal for district of Minnesota but resigned within a year; returned to Republican party on financial issue, 1896; campaigned in several States, 1896, 1898, 1900. Member Congress, eighth Minnesota district since 1903.

Beecher, Henry Ward, Rev., son of Lyman Beecher, an eminent New England Congregational preacher and theologian; born in 1813; entered the Congregational ministry in 1834 and in 1847 became pastor of Plymouth Church, Brooklyn, which place he held till his death. Mr. Beecher was considered by many as the most eloquent divine of the Nineteenth Century, and was scarcely less distinguished as a writer and lecturer on popular subjects. Died, 1887.

Beethoven (bē-tō'-ven), **Ludwig Von**, a very eminent German composer, born at Bonn in 1770. He studied under Haydn. His numerous symphonies, of which the finest are the "Battle Symphony," and the "Pastoral Symphony"; his operas, of which "Fidelio" is the most admired, and his other works, abounding in originality and genius, have imparted to him an unfading celebrity. Died, 1827.

Belasco, David, dramatic author; born in San Francisco; educated at Lincoln College, Calif. Author: (plays), "Zaza," "The Heart of Maryland," "The Wife," "The Charity Ball," "Lord Chumley," "May Blossom," "Men and Women," "La Belle Russe," "The Girl I Left Behind Me," "Valerie," "Hearts of Oak," "The Darling of the Gods," "Du Barry," "Sweet Kitty Bellairs," "Adrea." Manager of Mrs. Leslie Carter, David Warfield, and Blanche Bates.

Bellarius (bē-lā'-ri-us), a Roman general, who served the Emperor Justinian with skill, valor, and success. In his old age he is said to have become blind, and to have suffered much from poverty; but there are reasons for doubting the truth of these representations. Died, 565.

Bellew, Harold, Kyrie-Money, actor; born in Calcutta, 1857; son of Rev. J. C. M. Bellew, chaplain cathedral at Calcutta; was cadet English Navy, serving seven years, then went to Australian gold fields; worked on Melbourne newspapers; returned to England; made stage debut at Theater Royal, Brighton; became leading man and star in London; came to United States as leading man in Wallack's Theater, New York, October, 1885; subsequently starred jointly with Mrs. James Brown Potter, taking leading roles with her in legitimate drama in all English-speaking countries. Headed exploration expedition in Northern Queensland, 1900-02, returning to stage at head of own company in United States, October, 1902. Author: "Yvonne," "Iolande," "Hero and Leander," "Charlotte Corday," and several adaptations.

Bellini, Giovanni, born in 1422; Venetian painter, son of Jacopo Bellini, himself a painter of note, and the teacher of Titian, who finished several of his works. He began by portrait painting; and he afterwards executed some great historical pieces for the hall of the Great Council of Venice, which were destroyed by fire in 1577. Died, 1512.

Bellini, Vincenzo, born in 1802; an Italian musical

composer, and a disciple of Rossini. The son of a Sicilian organist, he proceeded to the royal music school of Naples where he produced his first opera. He attracted attention with "Il Pirata," brought out at Milan and played successively in all the European capitals, and in 1831 the production of his greatest opera, "La Sonnambula," established his high reputation. This was followed by the tragic opera "Norma," and in 1835 by "I Puritani," the composer's last work. He died in 1835 and was buried in Père la Chaise at Paris.

Bellmann, Karl Michael, born in 1740; a Swedish lyrical poet of considerable popularity. The nature of his verse is indicated by the name given to him—the Swedish Anacreon. Died, 1795.

Belmont, August, banker; born in New York, February 18, 1853; son of prominent banker of same name, now deceased; graduate of Harvard, 1875, and at once entered the bank; now head of August Belmont & Company, American representatives of European banking firm of Rothschilds; is officer and director of many large railway, banking, manufacturing and other corporations; president Interborough Rapid Transit Company.

Bem, Joseph, born in 1795; a brave and skillful Polish general. He served as general of artillery in the Polish Revolution of 1830, and afterwards traveled in Europe. He joined Kossuth in 1848 in the revolt against Austria, and won several battles for the national cause. Later, he entered the service of the Turkish Sultan, adopting the Mohammedan religion. Died, 1850.

Bembo, Pietro, born in 1470; an eminent Italian cardinal, and a profound scholar. His early life he spent studying in one city and another, and he attained such a reputation for culture that when, in 1512, he went to Rome he was appointed one of the pontifical secretaries, and in 1539 he was created cardinal. He wrote prose and verse, both in Italian and Latin, and his compositions are most remarkable for their purity of style. Died, 1547.

Benedict, St., a monk who founded the first religious order in the West; was born at Nursia, in the Duchy of Spoleto, in 480. At an early age he retired to a cavern to devote himself to study; this austerity gained him fame. By him the monastery of Monte Cassino, near Naples, was established in 528. One leading principle which he laid down was, that the order should maintain themselves by the labor of their hands, which greatly conduced to their subsequent prosperity. He died in 543.

Benjamin, Judah Philip, born in 1811; an American politician, who later became a distinguished member of the English bar. He was born in the West Indies, and practiced as a barrister at New Orleans. He sat in the senate, and became attorney-general and secretary of state to the Confederate Government under Jefferson Davis. When the cause of the South was lost, he fled to England, and was, by influence, at once called to the English bar, obtaining a large practice and becoming a Q. C. Died, 1884.

Bennett, James Gordon, proprietor of "New York Herald"; born in New York, May 10, 1841; son of journalist of same name; educated by private tutors; inherited "The Herald" and a large fortune, 1872; for a time issued a London edition and still publishes a Paris edition of "The Herald"; inaugurated publication in England of storm warnings transmitted from the United States; sent Henry M. Stanley to Africa to find Livingstone, 1874-77; fitted out Jeannette polar expedition, 1879; established, 1883 (with John W. Mackay), the Commercial (Mackay-Bennett) Cable Company; is a prominent yachtsman; lives most of his time in Paris, but keeps active management of "The Herald" by cable.

Bentham, Jeremy (bēn'-ham), a distinguished English writer on political economy and jurisprudence; was born in 1748, and died in 1832.

Benton, Thomas H., an eminent American statesman, born in North Carolina in 1782; died in 1858, after holding a seat in Congress from Missouri for thirty years. He was a consistent Jackson Democrat in politics. His "Thirty Years' View" embraces a history of the government from 1820 to 1850, and is recognized as a standard authority.

Berkeley, George, born in 1684, an English divine, famous for the keenness of his intellect and the greatness of his nature. He was born in Ireland, and educated at Trinity College, Dublin. In 1709 he published his "Theory of Vision," and in 1710 his "Principles of Human Knowledge," proving the non-existence of matter, a view which he afterwards elaborated. Going to England he made the acquaintance of the great literary men of the day, and in 1724 was made Dean of Derry. In 1725 he published "A Scheme for Converting the Savage Americans to Christianity." This scheme involved the erection of a college at the Bermudas, and

the government granted a charter, and promised a grant in aid. Berkeley set out for the Bermudas, but the money not being forthcoming, the scheme had to be abandoned. In 1733, he was made Bishop of Cloyne, when he retired to Oxford. His last publication was a treatise on "The Virtues of Tar Water." Died, 1753.

Berlioz, Hector (*bair'-le-o*), a French composer, was born at La Côte St. André, 1803, and died in 1869. His best productions are the symphonies "Harold" and "Romeo and Juliet."

Bernadotte, Jean Baptiste Jules, a marshal of France, under Napoleon I., born in 1764, was elected King of Sweden and Norway on the death of Charles XIII., assumed the throne under the title of Charles John XIV., and in 1813 commanded the united armies of Germany against Napoleon. Died in 1844, after a wise and prosperous reign.

Bernard, St., born in 1091 of noble Burgundian birth; was educated at Paris University. He entered the Cistercian monastery at Cîteaux, and there acquired a high reputation as a preacher. At the head of a band of monks he was sent to found a new monastery, which he established at Clairvaux, and from which his fame and influence spread far and wide. Kings, popes, and nobles all appealed to him for advice on the weightiest matters, and accepted his decisions. He procured the condemnation of several heterodox writers, including Abelard and Arnold of Brescia. His great work was the preaching of a new crusade in France and Germany. He excited the greatest enthusiasm, and prophesied the triumph of the expedition. But it failed notably, and Bernard died soon afterwards (1153). He was canonized in 1174, and bears the title of "The Last of the Fathers."

Bernardin de St. Pierre (*der-sant-pe-are*) **Jacques Henri**, the admired author of "Paul and Virginia," "Studies of Nature," etc., was born at Havre in 1737. He became professor of morals at the normal school, and a member of the institute, and died in 1814.

Bernhardt (Bernard), Rosine Sarah, French tragic actress, was born in Paris, October 22, 1846, of Jewish parents, but, by the will of her father, educated in a convent at Versailles and at the Paris Conservatoire. Appeared at the Théâtre Français in 1862 as "Iphigénie," but without success. In 1867 at the Odéon, in the rôle of the queen, in Victor Hugo's "Ruy Blas," she gained her first striking success. The war of 1870-71 interrupted her career, and she became, for a while, a nurse. She then won a position in the Théâtre Français, the troupe of which she accompanied in 1879 to London, where her triumphs have been repeated in succeeding years, and where she married a M. d'Amala. She was left a widow in 1889. She broke her contract with the Français in 1880, and has since been touring, with great *éclat* in America, and in all the principal countries of Europe. She now directs a theater of her own in Paris. She is also a painter and sculptor. Her "Memoirs" were published by Heinemann in 1907.

Bernini (*ber-né-ne*), **Giovanni Lorenzo**, known as the Cavaliere Bernini, was born in Naples in 1598. He was eminent as a painter, an architect, and a sculptor; and his merit entitled him to the rewards which he had the good fortune to receive from Louis XIV. His Apollo and Daphne, produced from a single block, when he was but 18 years of age, was considered a masterpiece, but his finest works are found in the colonnade at Rome. He died in 1680.

Bernouilli (*ber'-noo-ye*), **James**, a celebrated mathematician, was born in Basil in 1654. He died in 1705. John Bernouilli, brother to James, and not less celebrated as a mathematician, was born in Basil in 1667. He died in 1748. Nicholas Bernouilli was born at Basil in 1687. He became a professor of mathematics at Berlin. He died in 1759. Daniel Bernouilli, son of John, was born in Groningen in 1700. He studied mathematics, and became a professor of anatomy and botany. He died in 1782. John Bernouilli, brother of the last-named, born in Basil in 1710, was a professor of eloquence and mathematics. He died in 1790. James Bernouilli, his son, a licentiate at law, was born in Basil in 1759. Though a lawyer by profession, he studied mathematics with success. He died in 1789.

Berosus (*be-ro'-sus*), an eminent historian, born in Babylon, was a priest in the temple of Belus, and flourished in the time of Alexander the Great, and in that of several of his successors. His writings are said to have strongly corroborated various parts of Scripture.

Berthier (*bar'-le-a*), **Alexander**, Prince of Neufchâtel and Wagram, a distinguished French general. He received his titles from Buonaparte in acknowledgment of his great services, for though he won no battle himself, he largely contributed towards the gaining of

many. On the return of Louis XVIII., Berthier sent in his adhesion, and was made captain of the guards of the restored monarch. When Napoleon reappeared, having escaped from Elba, Berthier withdrew to Bamberg with his family, where he terminated his existence by throwing himself from a window, it was supposed, in a fit of apoplexy, in June, 1815.

Berzelius, Johann Jakob, born in 1779, Swedish chemist, was professor for many years at Stockholm University, and acquired a great reputation by his memoirs and his invaluable work in chemical analysis and mineralogy. Died, 1848.

Bessemer, Sir Henry, civil engineer and inventor, born at Charlton, Herts., in 1813; of his many inventions the chief is the process, named after him, of converting pig-iron into steel at once by blowing a blast of air through the iron while in fusion till everything extraneous is expelled, and only a definite quantity of carbon is left in combination, a process which has revolutionized the iron and steel trade all over the world, leading, as has been calculated, to the production of thirty times as much steel as before and at one-fifth of the cost per ton. Died, 1898.

Bessey, Charles Edwin, professor of botany in University of Nebraska since 1884; born on a farm, in Milton, Wayne County, O., May 21, 1845; graduate (B. Sc.) of Michigan Agricultural College, 1869; studied with Dr. Asa Gray at Harvard, 1872-73 and 1875-76; married, on December 25, 1873, Lucy Athearn, West Tisbury, Martha's Vineyard, Mass. Professor of botany in Iowa Agricultural College, 1870-84 (acting president, 1882); acting chancellor of University of Nebraska, 1888-91 and 1899-1900. Botanical editor of "American Naturalist" (Philadelphia), 1880-97; of "Science" (New York), since 1897; of Johnson's Cyclopaedia since 1893. Author: "Geography of Iowa," "Botany for High Schools and Colleges," "The Essentials of Botany," "Elementary Botanical Exercises," "Elementary Botany," "Plant Migration Studies," also many scientific papers and reviews. Edited McNab's "Morphology, Physiology, and Classification of Plants."

Beveridge, Albert Jeremiah, was born on a farm in Highland county, Ohio, October 6, 1862; his father and brothers were soldiers in the Union Army; was graduated at De Pauw University, Greencastle, Ind., in 1885; was admitted to the bar in 1886, and has since then devoted himself to his profession; was married, first, to Miss Katherine M. Langsdale, in 1887, who died in 1900; second, in 1907, to Katherine Eddy, of Chicago; was elected to the Senate of the United States in 1899, for the term beginning March 4 following; was reelected in 1905. He is the author of "The Russian Advance," "The Young Man and the World," and has been a frequent magazine contributor.

Bewick, Thomas, born in 1753; English engraver, entered into partnership with a Newcastle wood engraver, Ralph Beilby, with whom he published his "History of Quadrupeds," which proved an immense success. After some more fine work, he produced "The History of British Birds," and later, "Æsop's Fables," the two best examples of his art. Died, 1828.

Bichat (*bê'-shâ*), **Marie Francois Xavier**, born in 1771; physiologist and anatomist, was adopted by Dessault, whose works he edited, and after his death devoted himself to research in anatomy and surgery with such incessant industry as to undermine his constitution. He left numerous works of the highest value. Died, 1802.

Biddle, John, born in 1615; religious controversialist, known as "the father of the English Unitarians"; was sent to prison for heresy, and his book was ordered by the House of Commons to be burnt. In 1648, for the publication of his "Confession of Faith," he was condemned to death, but the sentence was commuted; and he was released in 1651, only to be again imprisoned by order of the House of Commons. Cromwell subsequently banished him to the Scilly Isles, but in 1662 he returned to London, and was again sent to prison, where he died (1662).

Bierce, Ambrose, author, journalist; born in Ohio, 1842; served as line officer during Civil War; brevetted major for distinguished services; went to California, 1866; went to London, 1872, contributing to "Fun" fables purporting to be translations from Zambri, the Parsee (published in volume, "Cobwebs from an Empty Skull," 1874); returned to California and contributed to "Overland Monthly," edited "Argonaut" and "Wasp," for many years contributed "Prattle" columns in San Francisco "Examiner." Author: "Cobwebs from an Empty Skull," "The Monk and the Hangman's Daughter" (with Dr. A. Danziger), "Black Beetles in Amber," "Can Such Things Be?" "In the Midst of Life" (former

title, "Tales of Soldiers and Civilians"), "Fantastic Fables," "Shapes of Clay."

Blot, Jean Baptiste (*bē'o*), an eminent French astronomer, optician, and natural philosopher, born in Paris, 1774. He is especially celebrated as the discoverer of the circular polarization of light. Died, 1862.

Bishop, Sir Henry Rowley, born in 1786; English composer, early devoted himself to the composition of dramatic music; and in 1809 produced his "Circassian Bride," which was a great success. In 1810 he became connected with Covent Garden Theater, and produced many operas during this time, including "The Lady of the Lake," "Guy Mannering," and "The Slave." In 1825, Bishop broke his connection with Covent Garden to go to Drury Lane, and he was succeeded at the former theater by Weber. It was in rivalry with Weber's "Oberon" that Bishop produced the unsuccessful "Aladdin." In 1840, his last dramatic piece, "The Fortunate Isles," was produced at Covent Garden in honor of the queen's wedding; in 1842, he was knighted; and in 1848 he became professor of music at Oxford. Died, 1855.

Bismarck-Schonhausen, Karl Otto, Prince Von (*biz-märk-shoon-hou'-zēn*), one of the greatest statesmen of the Nineteenth Century, was born in Brandenburg, 1815. After studying law at the universities of Göttingen and Berlin, Bismarck-Schonhausen filled important diplomatic positions, and was nominated prime minister of Prussia in 1862. His reactionary policy gave great offense to, and provoked many collisions with, the Liberal party; and, ere long, he dissolved the Representative Chamber, and declared that the ministry would act independent of popular suffrage. Bismarck-Schonhausen instigated the war against Denmark in 1864, which resulted in the acquisition of the Schleswig-Holstein duchies by Prussia. The rivalry which had long existed between Austria and Prussia, as the leading German powers, was terminated by the latter kingdom seceding from the Bund in 1866, and forming an alliance with Italy against Austria. War was declared in June, and the result of a six weeks' campaign was the exclusion of Austria from German councils and interests. Bismarck-Schonhausen next set about annexing the smaller states of Hanover, Hesse, etc., and succeeded in negotiating a secret treaty, in August, 1866, with the South German powers, by virtue of which their armies were placed under control of the King of Prussia. In 1867, Bismarck-Schonhausen was made chancellor of the German Confederation, and, in 1870, brought about a coalition of the German powers against France, in consequence of a declaration of war having been declared by Napoleon III. against Prussia, on account of her interference in the succession to the Spanish Crown. The German armies crossed the Rhine in August, and, after defeating the French in several obstinately-fought battles, compelled the capitulation of the French Emperor with his army at Sedan, and ultimately besieged Paris, which city capitulated in the early part of 1871. For his services in the successful carrying out of this war, which resulted in the elevation of his master, William I., to the imperial Crown of Germany, Bismarck-Schonhausen was created a prince of the empire in May, 1871. Died, 1898.

Bispham, George Tucker, lawyer, author; born in Philadelphia, May 24, 1838; graduate of University of Pennsylvania, 1858; law department, same, 1862; admitted to bar, 1861; has practiced in Philadelphia ever since; later admitted to bar of United States Supreme Court. One of solicitors of Pennsylvania Railroad Company; solicitor of Philadelphia Saving Fund Society, Girard Trust Company, and other corporations; professor of equity jurisprudence, law department, University of Pennsylvania. Author: "Principles of Equity," and other books on law.

Bjoernstjerna (*byern'-stee-nä*), Magnus, born in 1779; Swedish general and diplomatist, served in the Finnish War; in 1809 was sent on a mission to France, and in 1812 arranged for the sale of Guadeloupe. He fought in the Danish War, and assisted at the negotiations which brought about peace with the transference of Norway to Sweden. In 1826 he was appointed minister in London. He left several works on political and fiscal matters. Died, 1847.

Bjornson (*byern'-son*), Bjornstjerne, born in 1832, the national poet of Norway. In early life an historical drama of his, called "Valborg," was accepted by the Royal Theater, but its author withdrew the piece. In 1856 the International Students' Reunion at Upsala stimulated him again to an effort to produce a national poetry, free from foreign influences. He began with "Synnöve Solbakken," a story of peasant life, which was followed by "Arne" and many other pieces. In 1858, he became director of the theater at Bergen, and

produced quickly two dramas, "Mellem Slagene" and "Halte Hulda," both treating of national subjects. "Marie Stuart" and "Sigurd Slenbe" are both well-known plays, and he has written, besides his dramas, a series of folk plays, an epic, and much beautiful lyric poetry. He receives a government pension, but lives abroad.

Black, Frank Swett, ex-governor of New York; born in Limington, Me., March 8, 1853; graduated at Dartmouth, 1875; was editor Johnstown, N. Y., "Journal"; later reporter Troy, N. Y., "Whig"; clerk in registry department, Troy post-office; admitted to bar, 1879; member of Congress, 1895-97; governor of New York, 1897-99; since when he has been a practicing lawyer.

Black, William, born in 1841; English novelist; spent some years in the study of art, but, regarding himself as a failure in the artistic profession, he turned to literature. His first novel, "Love or Marriage," was published in 1867, being followed in 1868 by "In Silk Attire," and in 1871 by "A Daughter of Heth," which was a pronounced success. "The Strange Adventures of a Phaeton" and "A Princess of Thule" were published soon after, and his reputation as one of the best novelists of the day was established. For four years he acted as assistant-editor of the "Daily News," but has long abandoned journalism.

Blackburn, Joseph Clay Styles, lawyer, legislator; born in Woodford County, Ky., October 1, 1838; graduate of Centre College, Danville, Ky., 1857; admitted to bar, 1859; practiced in Chicago until Civil War broke out; served in Confederate States Army; after war, practiced law in Kentucky; member Kentucky legislature, 1871-75; member of Congress, 1875-85; United States senator, 1885-97; again elected January, 1901, for term 1901-07; member of the Isthmian Canal Commission, 1907; a leader in the free-coinage movement.

Blackmore, Richard Doddridge, born in 1825, one of the most of modern novelists; in 1852, was called to the bar, and practiced for a short time. In 1860, he published for the first time, the work being a poem entitled "The Fate of Franklin." This was followed by translations of the first two of the "Georgics," and in 1864 by his first novel, "Clara Vaughan."

Blackstone (*black'-ston*), Sir William. A celebrated jurist, born in London in 1723. He was a judge, a member of parliament, and author of "Commentaries on the Laws of England." At the bar, after seven years' practice, his prospects were so indifferent, that he retired to Oxford on his fellowship, and there gave public lectures on English law. Their success is supposed to have suggested to Mr. Viner the propriety of establishing a professorship of law in the university, to which office Blackstone was elected, being the first Vinerian lecturer, in 1758. Subsequently, having married, he vacated, his fellowship, and was appointed principal of New-Inn Hall. That office, with his Vinerian professorship, he resigned in 1766. In 1770, he became one of the judges of the Common Pleas. Died, 1780.

Blackwell, Elizabeth, M. D.; born in Bristol, England, February 3, 1821; emigrated to the United States in 1832; educated in private schools in Bristol and New York; taught school in Kentucky and the Carolinas; sought admission to several medical colleges, but was refused until she entered the medical school at Geneva, N. Y., 1847; later studied in La Maternité and Hotel Dieu, Paris, and St. Bartholomew's, London. Established practice in New York, 1851; founded a hospital and, in 1867, in conjunction with her sister, Dr. Emily Blackwell, organized Woman's Medical College of New York Infirmary; lectured in England, 1858-59; registered as a physician in England, 1859, and since 1869 has practiced in London and Hastings. Author: "Physical Education of Girls," "Religion of Health," "Counsel to Parents on Moral Education," "Pioneer Work in Opening the Medical Profession to Women," "The Human Element in Sex," "Decay of Municipal Representative Institutions."

Blaine, James Gillespie, "the Plumed Knight," was born in Pennsylvania, 1830; removed to Maine, where he edited the "Portland Advertiser"; served four terms in the legislature; in Congress from 1862 to 1876, and speaker for three years; prominent candidate for the Republican nomination for the presidency in 1876, 1880, and 1892; chosen United States senator in 1877, but resigned to accept the secretaryship of state under Garfield; secretary of state under Harrison, but resigned just before the Republican Convention of 1892. Died, 1893.

Blanc, Jean Joseph Louis (*blāng*), a French historian and socialist writer, born in Madrid, 1813, started as a journalist; founded the "Revue du Progrès," and pub-

lished separately in 1840, "Organization of Labor," which had already appeared in the "Revue," a work which gained the favor of the working classes; was member of the Provisional Government of 1848, and eventually of the National Assembly; threatened with impeachment, fled to England; returned to France on the fall of the empire, and was elected to the Chamber of Deputies in 1871. Blanc wrote an elaborate and well-written "History of the French Revolution." Died at Cannes, 1882.

Blanche of Castile (*blānsh*), Queen of Louis VIII. of France, and daughter of Alphonso IX., King of Castile, was born about 1186. On the death of her husband, in 1226, she was declared Regent of France, in which capacity she displayed great energy and address. After carrying on the government during the absence of her son Louis IX. in the Holy Land, she died in 1252.

Blashfield, Edwin Howland, artist; born in New York, December 15, 1848; educated at Boston Latin School; studied at Paris, 1867, under Leon Bonnat, also, receiving advice from Gérôme and Chappu; exhibited at Paris Salon, yearly, 1874-79, 1881, 1891, 1892; also several years at Royal Academy, London; returned to United States in 1881; has exhibited genre pictures, portraits, and decorations. Among his paintings are "Christmas Bells" and "Angel with the Flaming Sword." Decorated one of domes of Manufacturers Building, World's Columbian Exposition; Collis P. Huntington's drawing room, and great central dome Library of Congress. Has lectured on art at Columbia, Harvard, Yale, etc. Author: (with Mrs. Blashfield) "Italian Cities," co-editor (with Mrs. Blashfield and A. A. Hopkins): "Vasari's Lives of the Painters."

Blavatsky, Mme., a theosophist, born in Russia, 1813, was a great authority on theosophy, the doctrines of which she professed she derived from the fountainhead in Thibet. Died, 1891.

Blind, Karl, born in 1826, German revolutionist, began his agitation when still a student, and in 1847 was imprisoned for a short time. He took part in the rising of 1848, and then fled to Alsace, from whence the French Government sent him to Switzerland. He joined Struve in the second Black Forest insurrection, and was condemned to a long term of imprisonment, but was liberated by the people. Being banished from France, and a fugitive from Germany, he went to Belgium, and afterwards to England, where he has written industriously in support of his political ideas. It was Blind's son-in-law who attempted Bismarck's life in 1866.

Bloomfield, Robert (*bloom'fild*), an English poet; was born in 1766. Reared in humble life, his genius found development in the poem entitled the "Farmer's Boy," which attained very great popularity. Died, 1823.

Blucher, Gerhard Leberecht von, born in 1742. Prussian field marshal and Prince of Wahlstadt, first entered the Swedish, but soon passed to the Prussian army, in which he served during the Seven Years' War. He went through the Polish campaign of 1772, and gained rapid promotion during the struggle with the French invaders begun in 1792. In the campaign of 1814, Blücher held high command, and though defeated by Napoleon, he beat Marshal Marmont, and entered Paris with the Allies. In the Waterloo campaign he commanded the Prussian army in Belgium, and was severely defeated by Napoleon at Ligny. However, by out-maneuvring Grouchy, he was able to arrive at Waterloo in time to decide the victory for the Allies and pursue the routed French army. He then retired from active service and died four years later. Died, 1819.

Boccaccio (*bok-kā-she-o*), **Giovanni**, a much-admired Italian novelist, born at Paris in 1313. His works are prized for their tenderness, but they often offend decorum. His most celebrated work is the Decameron, a collection of one hundred stories, supposed to have been recited in ten days by a company of ladies and gentlemen, who had withdrawn to the country to escape the plague which raged at Florence in 1348. He died in 1375.

Bodley, Sir Thomas, a diplomatist in the time of Queen Elizabeth, was born in Paris in 1544. The university library of Oxford was rebuilt by him, and he bequeathed his fortune to support it. It has ever since been called the Bodleian Library. He died in 1612.

Boerhaave (*bo'er-hāve*), a celebrated physician, born in 1668, in Voorbuit near Leyden. He studied much, successfully labored in his profession, and was universally esteemed by his contemporaries. His writings, which are numerous, were much admired. He died in 1738.

Bogardus, James, born in 1800; American inventor of great fecundity, who worked for some time as a watchmaker and engraver in New York. Among his inventions were the king-flyer for cotton spinning (1828);

the eccentric mill (1829); the dry-gas meter (1832); a dynamo-meter, and a pyrometer (1848). In 1847 he built the first structure of cast iron in the United States. Died, 1875.

Bolleau-Despreaux (*boy-lo-da-pro'*), **Nicolas**, a critic, poet, and satirist, who lived in the time of Louis XIV., was born in 1636. His "Art of Poetry," his epistles, and his satires, gained him the title of "Master of Parnassus." He was the friend of Molière, La Fontaine, and Racine. With the last he was appointed historiographer of France, and received a pension of 2,000 livres. He died in 1711. His brothers Giles and James were also much esteemed writers. The former died in 1669; the latter in 1716.

Bok, Edward William, editor of "The Ladies' Home Journal" since 1888; vice-president "The Curtis Publishing Co.," born in Helder, Holland, October 9, 1863; came to the United States at the age of 6; educated at Brooklyn public schools; stenographer with Western Union Telegraph Co.; Henry Holt & Co., 1884-85; Scribner's 1885-88; Author: "The Young Man in Business"; "Successward."

Boker, George Henry, born in 1824, American poet; his first published poem was "The Lesson of Life" (1847), and this was followed by two tragedies, which were produced on the stage. For ten years he was secretary of the Union League, Philadelphia, and his "Poems of the War" proved very popular. In 1869 he went as United States Minister to Constantinople. He published in 1882 an elegy, "The Book of the Dead."

Bollingbroke (*bol'-ing-brook*), **Henry St. John Viscount**, an English statesman, born in Battersea in 1672. Having studied at Oxford he entered parliament in 1700, and in 1704 became secretary of war. He afterwards became secretary of state for foreign affairs, and negotiated the Treaty of Utrecht. In 1712, he was raised to the peerage. On the accession of George I. he was impeached of high treason, when he fled the country, and became secretary of state to the first pretender. He was attainted, and his estate seized; but in 1723 he was permitted to return. His estates were restored, but he was not allowed to sit in parliament. He wrote against the ministry, and his productions were admired for their eloquence and vigor. He again withdrew to France in 1735, but returned to England on the death of his father, and died in 1751.

Bolívar, Simon, the founder and first president of the Republic of Colombia, known as "The Liberator of South America." Born in Venezuela, 1783, he was educated in Madrid, and traveled in Europe and the United States. When the revolt against the Spanish yoke broke out in Venezuela, he joined it, but had to fly. In 1813 he returned, and gathering a force together, defeated General Monteverde at Caracac. The tide then turned, and Bolívar fled to Jamaica, but he shortly returned, and after varying fortune in 1819 won the battle of Bojaca, resulting in the inauguration of the Republic of Venezuela in the same year, to which was afterwards united New Granada. In 1822 Bolívar went to help the Peruvians in their struggle for liberty, and was given the chief command. After a long campaign he won the great battle of Ayacucho. Upper Peru was constituted a separate republic with the title of Bolivia. As President of Colombia he had to endure much factious hostility; but though he tendered his resignation more than once it was never accepted, the supreme power being confirmed in him in 1828. Died, 1830.

Bonaparte, Charles Joseph, lawyer, secretary of the navy, United States, since July 1, 1905; born in Baltimore, June 9, 1851; grandson of Jerome Bonaparte, King of Westphalia; graduate of Harvard in 1871; Harvard Law School in 1874; since then in law practice in Baltimore; prominent in reform movements; member of board of Indian commissioners, 1902-04; Republican presidential elector from Maryland, 1904; chairman council of National Civil Service Reform League; president of National Municipal League; member of Executive Committee National Civic Federation; overseer at Harvard, 1891-1903; trustee Catholic University of America since 1904; awarded Laetare medal by University of Notre Dame, 1903.

Bonapartes, The. The family to which the Emperor Napoleon I. belonged came from Corsica. The father, Carlo Maria Bonaparte, born in 1746, was a lawyer and an adherent of Paoli, the insurgent. Died, 1785. The mother, Letizia Ramolini, born in 1750, was celebrated for her beauty; and with the title, "Madame Mère," lived in Paris during the rule of Napoleon. Died, 1836. (1) Joseph, born in 1768, the eldest son, practiced as an advocate, and married a merchant's daughter at Marseilles. He was commissary-general to the army in Italy under Napoleon, and in 1797 was sent as ambassador to the pope. An able diplomatist, he negotiated

the treaties of peace at Lunéville (1801), and at Amiens (1802). When his brother was proclaimed Emperor, he was placed upon the throne of Naples, but being a merely nominal ruler, his good judgment and better instincts had no play. In 1808, he was transferred to the throne of Spain, where his position was still more unfortunate. He was twice compelled to fly from Madrid, and finally abandoned the throne after the battle of Vittoria. He was lieutenant-general of the empire during the 1814 campaigns and the Hundred Days; and after Waterloo he lived for some years in the United States as the Comte de Survilliers. He died in Florence in 1844, and left his highly interesting "Memoirs and Correspondence." (2) Napoleon, the second son. (Napoleon I.) (3) Lucien, born in 1775, in 1795 became commissary to the army of the North. In 1798, he was elected to the council of the Five Hundred, and played an important part in the revolution which destroyed the Directory and made Napoleon First Consul. After becoming minister of the interior, he went as ambassador to Madrid; but his marriage with Mme. Joubuthon brought about an estrangement between him and the emperor, and in 1804 he retired to his estates in Italy, as Prince of Canino, where he cultivated his tastes for literature and the fine arts. After the peace of Tilsit he was offered the crown of Italy, but he refused it; and in 1810 set out for the United States. Captured by a British cruiser, he was kept a prisoner in England till 1814. After Waterloo he induced Napoleon to abdicate in favor of his son; and he himself retired to Italy. He wrote an epic, "Charlemagne." Died, 1840. (4) Marie Anne Elisa, born in 1777, married Felix Pascal Baciocchi, and was created Princess of Piombino and Lucca, and Grand Duchess of Tuscany. She retired from France in 1815, and died in Trieste in 1820. (5) Louis, born in 1778, the father of Napoleon III. He served in the Italian and Egyptian campaigns; and in 1802 he was compelled to marry Hortense Beauharnais, from whom he was afterwards separated. Under the empire he was created a prince and constable of France, and after occupying Holland he was proclaimed king of the country. He became extremely popular with the people, but offended the emperor and in 1810 he abdicated, but the country being absorbed in France. He spent most of his life after Napoleon's banishment in Italy, and wrote several books, of which the "Documents Historiques" is the most important. Died, 1846. (6) Marie Pauline. (Pauline Borghese.) (7) Caroline Marie Anniciade, born in 1782, married Marshal Murat in 1800. Died, 1839. (8) Jérôme, born in 1784. He was given a command in the navy, and while on the American station married a Miss Paterson, a marriage which he was forced to renounce by the emperor. In 1806 he was made King of Westphalia, and married a daughter of the King of Württemberg, who became the mother of Prince Napoleon. In 1812 he proved so incapable a general during the Russian campaign that he was removed from command; but he commanded a division at Waterloo. After Napoleon's abdication he lived in exile, until 1847, when Napoleon III. made him a marshal of France and president of the senate. Died, 1860. Of the second generation: (1) Napoleon, son of Louis. (Napoleon III.) (2) Napoleon, Joseph, born in 1822, commonly known as Prince Napoleon, and son of Jérôme Bonaparte. His early life was spent in travel, but after the 1848 revolution he was elected to the assembly. In 1849, he held for a year the post of ambassador at Madrid; and in 1854 he commanded a division of the army in the Crimea. He threw up his command suddenly, and in 1858 became president of the ministry for Algiers. In 1859, he held a command in Italy, and married the Princess Clotilde, a daughter of Victor Emmanuel. In 1861, he created a sensation in the senate by a fine oration in support of Democratic principles, provoking a challenge from the Duc d'Aumale. His loudly-expressed approval of the Polish revolution brought him into disgrace with the emperor more than once, and compelled his resignation of the presidency of the Commissioners for the Universal Exhibition. After the fall of Napoleon III., and the death of Prince Louis Napoleon, he was recognized as head of the Napoleon family. In 1883, he was imprisoned for a pronouncement, and in 1886 he was banished from France, and died in exile in 1891. (3) Charles Lucien Jules, Prince de Canino, born in 1803, the son of Lucien Bonaparte, a distinguished naturalist; in 1822, married his cousin, Zenaïde, the daughter of Jérôme Bonaparte, and soon after went to America, where he devoted himself to the study of science, and published his valuable "American Ornithology." In 1828, he returned to Italy; in 1833 he published his "Italian Fauna," and in 1847 he succeeded to the title of prince. He was for a short time active in Italian politics, but finally settled at Paris, where he died in 1857.

His son, Lucien, born in 1828, is a cardinal. (4) Louis Lucien, born in 1813, the second son of Lucien Bonaparte. He passed his youth in scientific and linguistic study. In 1848, he was elected to the constituent assembly as deputy for Corsica, but the election was annulled. In 1852, he was made a senator, and in 1860 grand officer of the Legion of Honor. He has written a great deal, much of his work being translations. Died, 1891. (3) Pierre Napoleon, prince, born in 1815, third son of Lucien. After getting into disfavor in Italy and America, he went to Paris in 1848, and sat in the assembly. In 1849 he served in Algeria, and finally settled in England. Died, 1851. Of the third generation: Prince Louis, better known as the Prince Imperial, born in 1856, the only child of Napoleon III. and the Empress Eugénie. He accompanied his father at the opening of the Franco-German War, but after Sedan he went to England. He entered the Woolwich Military Academy, and in 1879 went with the expedition to Zululand. He was killed in this war, a small body of soldiers with whom he had gone out having been surprised by the Zulus. A monument was erected to his memory at Chislehurst. Died, 1879.

Bonheur, Rosa (*bôn-ner'*), a French painter, born at Bordeaux, 1822; is unrivaled among her own sex for the minute and spirited delineation of the various forms of animal life. Her most celebrated pieces are "The Nivernais Ploughing," "The Horse-Fair," "The Three Musketeers," and "Cows and Sheep in a Hollow Road." Through the Empress Eugénie, she received the Cross of the Legion of Honor. During the siege of Paris, her studio was spared by order of the Crown Prince. Died, 1899.

Boniface, Saint, born in 680, an English monk, known as the "Apostle of Germany," abandoned certain and distinguished preferment to go in 716 as a missionary to Germany. Having obtained authority from Pope Gregory II., he lived among the barbarous tribes for many years, and finally met a martyr's death near Utrecht. Died, 755.

Boone, Daniel (*boon*), the pioneer of Kentucky, born in Bucks County, Pennsylvania, 1735, was one of the most successful of the enterprising American pioneers of the Eighteenth Century.

Booth-Tucker, Frederick St. George de Laufour, commander of Salvation Army in the United States; born in Monghyr, Bengal, India, March 21, 1853; educated at Cheltenham College, England; passed Indian civil service examinations, 1874; studied in London until 1876; appointed to Punjab and held positions of assistant commander magistrate and treasury officers; resigned to join Salvation Army, 1881; inaugurated Salvation Army work in India, 1882; had charge there until 1891; secretary for international work, Salvation Army, London, 1891-96; since March, 1896, in charge of United States; married in 1888, Emma Moss, daughter of General Wm. Booth, of Salvation Army (she died in railway accident October 28, 1903); adopted name of Booth Tucker. Author: "The Life of Catherine Booth," "Life of General William Booth," "In Darkest India and the Way Out," "Favorite Songs of the Salvation Army," "Monograph for the Paris Exposition on the Work of the Salvation Army in the United States," etc.

Bopp, Franz, a celebrated German philologist and Sanskrit scholar, born at Mayence; was professor of Oriental Literature and General Philology at Berlin; his greatest work, "A Comparative Grammar of Sanskrit, Zend, Greek, Latin, Lithuanian, Old Slavic, Gothic, and German"; translated portions of the "Mahābhārata," q. v. (1791-1867).

Borghese (*bôr-gô-râ*). The name of a family of high position and great wealth in Rome. Camillo, having become pope, in 1605, under the title of Paul V.; and Prince Borghese having married Pauline Bonaparte, sister of Napoleon, who separated himself from her on the fall of her brother. He was born in 1775; died, 1832. The palace of the family is one of the finest in Rome, and has a rich collection of paintings.

Borgia, Cesare, born in 1476, Italian master of statecraft of great but evil fame, was the fourth son of Pope Alexander VI., by Rosa Vanozza, and was created a cardinal, though he divested himself of the office in later years to suit his purposes. He compassed the death of his brother Giovanni, who was Duke of Candia in order to gain complete ascendancy in the papal government; and in 1498, having been sent as nuncio to Louis XII. of France, he was created Duke of Valentinois and married the daughter of Jean d'Albret, King of Navarre. After accompanying Louis XII. a Italian campaign, he conceived the idea of a kingdom in Central Italy, and by force, treachery, and murder he had nearly succeeded in obtaining ascendancy throughout the Roman states, when the death of his father deprived him

of his great source of power. He was sent in 1504 a prisoner to Spain by Pope Julius II., but escaped, and joined the King of Navarre's army against Castile. In this campaign he was killed in 1507.

Borgia, Lucrezia, born in 1480, sister of the preceding, and like him the possessor of an infamous reputation. Her father compelled her twice to marriage and divorce before she became the wife of the Duke of Bisceglia. After her third husband had been murdered by Cesare Borgia, she married Alfonso of Este, and passed her life in the court of Ferrara, cultivating literature and art. Died, 1523.

Borgiano (*bor-je-d'-no*), **Horazio**, an artist of eminence, a painter of historical subjects, of portraits, and also an engraver, was born in Rome in 1630. His style was considered masterly, and his "Dead Christ," a composition wholly his own, was especially admired. He died in 1681.

Borglum, John Gutzon de la Mothe ("Gutzon Borglum"), sculptor, painter, born in Idaho, March 25, 1867; educated at public schools, Fremont and Omaha, Neb., and St. Mary's College, Kansas; studied art in San Francisco; went to Paris, 1890, worked and studied in Académie Julian and Ecole des Beaux Arts. Exhibited as painter and sculptor in Paris Salon; in Spain, 1892; in California, 1893-94; returned East, and in 1896 went to London, remaining until 1901; settled in New York since 1902. Exhibited in London and Paris, 1896-1901; held successful "one-man" exhibition in London; received gold medal sculpture at Louisiana Purchase Exposition; sculptor for work on Cathedral of St. John the Divine, New York. Work includes, in painting, figures and animals, portraits and mural painting; in sculpture figures and horses and groups in bronze; executed the gargoyles on the Princeton Dormitory, class of 1879 (about sixty devices).

Borromeo, St. Carlo (*bör-rö-mä-ö*), cardinal and archbishop of Milan, a prominent member of the Council of Trent, contributed to the Tridentine Catechism, and was conspicuous by his self-sacrificing offices during a plague in the city of which he was the archbishop. Born in 1538, died in 1584.

Bossuet (*bo-suä*), **Jacques Benigne**, born in Dijon, September 27, 1627; a distinguished orator and prelate of the Roman Catholic Church, bishop successively of Cordan and of Meaux, and tutor to the Dauphin, the son of Louis XIV. Bossuet was the author of several controversial works, all in defense of the Roman Catholic doctrine; but his fame rests chiefly on his "Sermons," which, of their kind, are of unrivaled eloquence, though they are too dramatic for the majority of English readers. Several of his compositions, written in the first instance for the use of the Dauphin, and especially his "Discourse on Universal History," printed in 1681, long retained a high reputation.

Boswell, James, the biographer of Johnson, born in Edinburgh, showed early a penchant for writing and an admiration for literary men. He fell in with Johnson on a visit to London in 1763, and conceived for him the most devoted regard; made a tour with him to the Hebrides in 1773, the "Journal" of which he afterwards published; settled in London, and was called to the English bar; succeeded, in 1782, to his father's estate, Auchinleck, in Ayrshire, with an income of £1,600 a year. Johnson dying in 1784, Boswell's "Life" of him appeared five years after, a work unique in biography, and such as no man could have written who was not a hero-worshiper to the backbone. He succumbed in the end to intemperate habits, aggravated by the death of his wife. Born in 1740, died in 1795.

Bothwell (*both-wel*), **James Hepburn, Earl**. The head of a powerful family in East Lothian. He became the second husband of Mary, Queen of Scots, having compassed the death, as was generally believed, of Darnley, her first husband. By Mary he was created Duke of Orkney, but a confederacy of nobles having compelled him to leave Scotland, he engaged in piratical enterprises, was taken by the Danes, and died in confinement in 1577.

Botta, Carlo Giuseppe Guglielmo, born in 1766, Italian historian, studied medicine, and was imprisoned in 1792 as a revolutionary. He took an active part in the government of Piedmont, set up by Napoleon, but before the emperor's overthrow he devoted himself entirely to literature. He wrote "The History of Italy between 1789 and 1814," and a "History of the American War of Independence." Died, 1837.

Botticelli (*bot-tè-chel-lè*), **Alessandro**, born in 1447. Italian painter, in response to the invitation of Pope Sixtus IV. went to Rome and executed some fine paintings for the chapel of the Vatican. On returning to Florence he became a devoted follower of Savonarola. Died, 1515.

Boughton, George Henry, born in 1833, artist, a member of the National Academy of New York, and an associate of the Royal Academy since 1879. Among his paintings are "The Return of the Mayflower," "Evangeline," and "Milton visited by Andrew Marvell."

Bouguereau (*bög-ro'*) **Adolphe Guillaume**, born in 1825; French painter. In 1855 his "Triomphe du Martyre" was bought by the state, and previously he divided the honors of the Grand Prix du Rome with Baudry. Two of his later pictures which are well-known are "The Youth of Bacchus" and the "Adoration of the Magi and the Shepherds."

Boulanger (*bu-lon-zhã*), **George Ernest Jean Marie**, born in 1837. French general and politician, was made colonel during the siege of Paris, general of brigade in 1880, and minister of war in 1886. He achieved great popularity and was elected in 1889 by the Nord, Somme, Charente Inférieure, and a division of Paris. A threat of prosecution drove him into exile, and he committed suicide at Brussels. Died, 1891.

Bowles, Samuel, a distinguished American journalist; was born at Springfield, Mass., U. S., February 9, 1826, and since 1844 has been sole editor of the "Springfield Republican," founded by his father. Under his management the paper has become one of the foremost journals in the country, and is noted for its extensive news, its literary taste, and its intelligent views of public affairs. In recent years it has labored to free the press from the bias of political party. Bowles is author of "Across the Continent," "Our New West," and "The Switzerland of America."

Braddock, Edward, born in 1695, British general; served in the Peninsula and Germany, and in 1754 was appointed to the command of the forces in Virginia. In 1755 he led an expedition against Fort Du Quesne, where his troops fell into an ambush and were routed, and himself killed. Died, 1755.

Braddon, Mary Elizabeth, born in 1837, popular novelist, after contributing to the provincial press, succeeded in getting a comedy, "Loves of Arcadia," accepted at the Strand Theater. In 1861 she produced a volume of poems, "Garibaldi," and then turning to fiction, published rapidly "Lady Lisle," "Lady Audley's Secret," "Aurora Floyd," and "Henry Dunbar." These books established her as one of the most popular novelists of the day, and later works, which she has published in large number, have not diminished her reputation.

Bradlaugh, Charles, born in 1833, politician, after working in several humble capacities, enlisted in the army. In 1853 he entered a solicitor's office; and then he achieved a great influence with working men as a Radical, and an antagonist of the Christian religion. His lectures in the Hall of Science, London, on social, political, and religious questions, were very popular; and in 1860 he started the "National Reformer," against which a futile government prosecution was instituted. In 1870, he secured a judicial decision in favor of affirmation in courts of law, but the expenses of the trial made him bankrupt. In 1872, he published his "Impeachment of the House of Brunswick," and the question of perpetual pensions always formed one of his favorite subjects. In 1880, he was returned for Northampton to Parliament, but refusing to take the oath, he was not allowed to take his seat until after the general election of 1885, although he was repeatedly returned by the constituency. Afterwards he earned a high reputation in the House of Commons, and though a thorough Radical, opposed the advocates of socialism. In 1889, he visited India, his interest in Indian affairs having always been pronounced. Died, 1891.

Brady, Cyrus Townsend, Protestant Episcopal clergyman, author; born in Allegheny, Pa., December 20, 1861; graduate of United States Naval Academy, 1883. Railroad service with the Missouri Pacific and Union Pacific roads for several years; studied theology under Bishop Worthington, Nebraska; ordained deacon, 1889; priest, 1890. Was rector of Protestant Episcopal churches in Missouri and Colorado and archdeacon of Kansas until 1895, and archdeacon of Pennsylvania till 1899; rector of St. Paul's Church, Overbrook, Philadelphia, 1899-1902, resigning to engage in literary work; chaplain of 1st Pennsylvania Volunteer Infantry in Spanish-American War. Member of American Academy of Political and Social Science. Author: "For Love of Country," "For the Freedom of the Sea," "The Grip of Honor," "Stephen Decatur," "Recollections of a Missionary in the Great West," "American Fights and Fighters," "Commodore Paul Jones," "Reuben James," "When Blades are Out and Love's Afield," "Under Tops'ls and Tents," "Colonial Fights and Fighters," "Hohenzollern," "Woven With the Ship," "In the Wasp's Nest," "Border Fights and Fighters," "The Southerners," "The Bishop," "Sir Henry Morgan, Buc-

cancer." "The Doctor of Philosophy." "In the War with Mexico." "The Corner in Coffee." "The Records." "A Little Traitor to the South." "A Midshipman in the Pacific." "Indian Fights and Fighters." "The Conquest of the Southwest." "The Two Captains."

Bræbe, Tycho (*bråh*), the most distinguished astronomer of the Sixteenth Century, was born in 1545, and died in 1601. A native of Denmark, his active life was passed in Germany.

Brahms, Johannes, born in 1833; German musical composer. Schumann early expressed the highest opinion of Brahms' genius, but for many years he was not appreciated in Germany. In 1861 he went to Vienna, where he acquired a high reputation, and held several important musical posts. In 1868 he composed the "Deutsches Requiem," which, after the Franco-German War, was performed all over Germany, and since then his compositions have been very highly valued.

Brant, Joseph (*brånt*). An Indian chief of the Mohawk nation, born in Ohio, about 1742, held a commission in the British service, and fought against the American colonists in the Revolution. He went, afterwards, to England, where he published the Gospel of St. Mark in Mohawk. Died, 1809.

Breckenridge, John Cabell, born in 1821; American politician; in 1851 entered Congress, and in 1856 was elected vice-president under Buchanan. In 1860 he was a candidate for the presidency in the Southern interest, but was defeated by Lincoln; and having denounced Lincoln's address as a declaration of war, he was expelled from the House of Representatives. He was given a command in the Confederate army. Died, 1875.

Brewer, David Josiah, associate justice in United States Supreme Court since December 18, 1889; born in Smyrna, Asia Minor, June 20, 1837; graduate of Yale, 1856; Albany Law School, 1858. Began practice, Leavenworth, Kan., 1859; United States commissioner, 1861-62; judge in probate and criminal courts, Leavenworth County, 1863-64; judge in district court, 1865-69; county attorney, 1869-70; justice supreme court, Kansas, 1870-84; judge circuit court of United States, 1884-89. Appointed by President Cleveland, 1896. member Venezuelan Boundary Commission; member of British-Venezuela Arbitration Tribunal, 1899. President of Universal Congress of Lawyers and Jurists, Louisiana Purchase Exposition, St. Louis, 1904. Author: "The Pew to the Pulpit," "The Twentieth Century from Another View Point," "American Citizenship."

Brewster (*broo'stur*), **Sir David**, an English philosopher and author, born in 1781, and educated at Edinburgh. From 1808 to 1829, he was editor of the "Edinburgh Encyclopedia." In 1815, he was elected F. R. S., and the next year invented the kaleidoscope. Among his chief works are a "Treatise on Optics" and "Memoirs of the Life, Writings, and Discoveries of Newton." His researches on double refraction, and discovery of the law of the polarization of light are his chief titles to eminence. Died, 1868.

Brian Boru, Boroimhe (*brí'an-bo-roo'*), a celebrated Irish chief, King of Munster, afterwards sovereign of all Ireland, was born in 937, and died in 1014. He defeated the Danes in forty battles, his last victory being at Clontarf, where he was killed. He was equally distinguished for his patronage of learning and piety.

Bridget, St. (*bríd'jet*), or **St. Bride**, the patroness of Ireland, born at Fochard, County of Armagh, who flourished in the beginning of the Sixth Century, was renowned for her beauty, and founded the monastery of Kildare, where she devoted herself to the education of young girls.

Briggs, Charles Augustus, clergyman, theologian; born in New York, January 15, 1841; studied in University of Virginia, 1857-60; Union Theological Seminary, 1861-63; University of Berlin, 1866-69. Pastor of Presbyterian Church, Roselle, N. J., 1870-74; professor of Hebrew, 1874-91, Biblical theology, 1891-1904, Theological Encyclopedia and Symbolics, since 1904, Union Theological Seminary. Editor "Presbyterian Review," 1880-90; was tried for heresy and acquitted by Presbytery of New York, 1892, but suspended by General Assembly, 1893; ordained priest by Protestant Episcopal bishop of New York, 1899. Author: "Biblical Study," "American Presbyterianism," "Messianic Prophecy," "Whither? A Theological Question for the Times," "The Authority of Holy Scripture," "The Higher Criticism of the Hexateuch," "The Bible, the Church, and the Reason," "The Messiah of the Apostles," "The Messiah of the Gospels," "The Case of Dr. Briggs," three parts; "General Introduction to the Study of Holy Scripture," "The Incarnation of the Lord," "New Light on the Life of Jesus," "Ethical Teachings of Jesus." Also (with F. Brown and S. R. Driver) New Hebrew

Lexicon. Editor: "International Theological Library," "International Critical Commentary."

Bright, John, born November 16, 1811; an eminent orator and Radical statesman. Of Quaker parentage, he entered his father's business at the age of 16. Though he had taken part in the Reform movement, he first became prominent along with his friend Cobden in the anti-corn law agitation; entered parliament for Durham, being afterwards returned for Manchester, and losing that seat through his opposition to the Crimean War. In 1857, he was returned for Birmingham, holding that seat till his death. He joined Mr. Gladstone's government which disestablished the Irish Church, but opposed his Home Rule policy in 1886, dying in the unshaken conviction that it was a fatal error. As a master of really pure Saxon English, in all its power and pathos, Mr. Bright was never surpassed, and his speeches are worthy attention study on that account alone. Died, March 27, 1889.

Broek, Sir Isaac, a gallant British officer. In 1812, when an American army, under General Hull, invaded Canada, the measures adopted by Broek were so effectual that the Americans surrendered without striking a blow. He did not long enjoy the fame he had won. An affair occurred at Queenstown, in October the same year, in which he lost his life.

Brontë, Charlotte, born in 1816; English authoress, the eldest of the three Brontë sisters. After some experience as a governess she became engaged with her sisters in the writing of novels, and in 1846 published with them a small volume of poems under the names of Currer, Ellis, and Acton Bell. In 1847 she published the well-known story, "Jane Eyre." Its success was instantaneous and complete. Although adversely and severely criticised, it was and is admitted to be one of the most remarkable of English novels. Her second story, "Shirley," was published in 1849, and her third and last, "Villette," in 1853. Another story, "The Professor," which had been refused by the publisher before "Jane Eyre" had made its authoress famous, was published after her death. In June, 1854, she married the Rev. Mr. Nicholls, who had been for a time her father's curate. But soon after her marriage, consumption, which had carried off her sisters and brothers, settled on her, and she died in her fortieth year (1855).

Brooke, Rev. Stopford A., M. A., was born in 1832. Educated at Trinity College, Dublin, where he graduated (1856), winning the Downe prize and Vice-Chancellor's medal for English verse. He was formerly chaplain to Queen Victoria and to the Empress Frederick of Germany. In 1880, Mr. Brooke seceded from the Church of England because he could not accept the orthodox views on miracles, and became minister of Bedford Chapel, Bloomsbury. In 1895, however, after a lengthy illness, he found himself compelled to retire from the post. He is the author of several works, among which are "Life and Letters of the Late F. W. Robertson," a "Primer of English Literature," "The Early Life of Jesus," several volumes of sermons, a volume of poems, "History of English Poetry," a work on "Early English Literature," "The Old Testament and Modern Life," and a book on Browning.

Brougham, Henry, Lord Brougham and Vaux (*bröö'am*), born in Edinburgh in 1778, and educated at the high school and university of that city, was admitted to the Scotch bar in 1800. Excluded from promotion in Scotland by his liberal principles, he joined the English bar in 1808, speedily acquired a reputation as a lawyer for the defense in Crown libel actions, and, by his eloquence in the cause of Queen Caroline, 1820. Died, 1868.

Brown, Henry Billings, associate justice of United States Supreme Court, 1891-1906; born in South Lee, Mass., March 2, 1836; graduate of Yale, 1856; studied law in private office; attended lectures at Yale and Harvard law schools. Deputy United States marshal, 1861-63; assistant United States attorney for eastern district of Michigan, 1863-68; then for a few months, to fill a vacancy, judge State Circuit Court of Wayne County; practiced law in Detroit until 1875; United States judge for eastern district of Michigan, 1875-90. Compiler of Brown's Admiralty Reports.

Brown, John, an American slavery abolitionist, born in 1800, settled in Kansas, and resolutely opposed the project of making it a slave State. In the interest of emancipation, with six others, he seized on the State armory at Harper's Ferry in hope of a rising, entrenched himself armed in it, was surrounded, seized, tried, and hanged in 1859.

Brown-Sequard, Edward, born in 1818; American physician and physiologist, was appointed successively professor of pathology at Harvard, professor to the Faculty of Medicine at Paris, and succeeded Claude

Bernard in the chair of experimental medicine at the College of France. He published two important series of lectures on the "Paralysis of the Lower Extremities" and on "Functional Agitations." Died, 1894.

Browne, Charles Farrar, a humorist and satirist, known by the pseudonym of "Artemus Ward," was born in Maine, United States, in 1834. His first literary effort was as "showman" to an imaginary traveling menagerie. He traveled over America lecturing, carrying with him a whimsical panorama as affording texts for his numerous jokes, which he took with him to London, and exhibited with the same accompaniment with unbounded success. Browne spent some time among the Mormons, and defined their religion as singular, but their wives plural. Died, 1867.

Browne, Sir Thomas, a physician and religious thinker, born in London in 1605, resided at Norwich for nearly half a century, and died there in 1682. He was knighted by Charles II.; "was," Professor Saintsbury says, "the greatest prose writer perhaps, when all things are taken together, in the whole range of English." His principal works are "Religio Medici," "Inquiries into Vulgar Errors," and "Hydriotaphia, or Urn-Burial, a Discourse of the Sepulchral Urns Found in Norfolk," all of the very first importance in English literature.

Browning, Elizabeth Barrett (*broun'ing*), one of the greatest of English poetesses, born in 1809; she married the poet Robert Browning, with whom she took up her residence in Italy. Her principal works are "Aurora Leigh," "Lady Geraldine's Courtship," "Casa Guidi Windows," and "Poems Before Congress." Died, 1861.

Browning, Robert, an English poet, born in 1812; married Elizabeth Barrett in 1846, and afterward resided in Paris and Italy. His poems are numerous and of much power, but notable for their obscurity. Died, 1890.

Bruce, David, born in 1323; King of Scotland, and son and successor of Robert Bruce. The invasion of Scotland by Edward III. forced him to fly to France; but he returned during the war between France and England. He invaded England, but was defeated and taken prisoner. He was ransomed for £100,000. Died, 1370.

Bruce, Edward, brother of Robert Bruce, fought with great bravery in the war against the English, and in 1315, being offered the crown of Ireland, he went to that country, maintaining his position with great success. He was killed in a battle against the English in 1318.

Brumm'el, Beau, born in London, in 1778; in his day the prince of dandies, was patronized by the Prince of Wales, afterwards George IV.; quarreled with the prince; fled from his creditors to Calais, where, reduced to destitution, he lived some years in the same reckless fashion. He settled at length in Caen, where he died insane in 1805.

Brutus, Decimus Junius Albinus, one of the assassins of Julius Cæsar. After the murder of the consul, he was besieged in Mutina by Mark Antony, but drove off the enemy. Crossing into Macedonia, he was betrayed into the hands of Antony and put to death (43 B. C.).

Brutus, Lucius Junius, a Roman consul. Tarranquius Superbus, having put the father and brother of Brutus to death, Brutus feigned madness, until the rape of Lucretia, when he excited the populace to insurrection, and drove Tarranquius from the city. He and Collatinus were appointed consuls together, and in this capacity Brutus ordered the execution of his own sons for complicity in a conspiracy. He was killed by Tarranquius's son.

Brutus, Marcus Junius, born in 85 B. C.; the nephew of Cato of Utica, sided with Pompey against Cæsar, and after the battle of Pharsalia retired to literary pursuits. Cæsar made him governor of Cisalpine Gaul, but he joined the conspirators who murdered the consul. After the assassination he collected troops in Macedonia, and assuming the title of imperator, ravaged Rhodes and Lydia. In 42 B. C., he and Cassius were defeated by Octavius Cæsar and Mark Antony, when Brutus committed suicide.

Bruyere (*bru-yare'*), John de la, a distinguished French writer, born in 1644. He wrote dialogues on quietism, and translated the characters of Theophrastus from the Greek. He died in 1696.

Bryan, William Jennings, editor; born in Salem, Ill., March 19, 1860; early education in public schools and Whipple Academy; graduate of Illinois College, Jacksonville, 1881; Union College of Law, Chicago, 1883. Practiced at Jacksonville, Ill., 1883-87; since then at Lincoln, Neb.; member of Congress, 1891-95;

received Democratic vote for United States senator in Nebraska Legislature, 1893; nominated in Democratic convention for United States senator, 1894, but was defeated in legislature by John M. Thurston; editor of Omaha "World-Herald," 1894-96; delegate to National Democratic Convention, 1896; wrote the "silver plank" in its platform, made a notable speech, and was nominated for president of United States; traveled over 18,000 miles during campaign, speaking at almost every stopping place; received 176 electoral votes against 271 for William McKinley. In 1897-98 he lectured on bimetallism; raised in May, 1898, the 3d Regiment of Nebraska Volunteer Infantry for war against Spain, becoming its colonel. Again nominated for president in 1900 by Democratic, Populist, and Silver Republican conventions; "Imperialism" was declared by the platform to be the paramount issue; he made an active canvass, but was again defeated, receiving in electoral college 155 votes against 292 for William McKinley. After the election he established a weekly political magazine, "The Commoner." Author: "The First Battle," "Under Other Flags," also many articles in magazines and newspapers.

Bryant, William Cullen, born in 1794; American poet and historian, when only nineteen published his poem, "Thanatopsis," which attracted much attention; and in 1825 he became editor of several periodicals in New York. Having twice visited Europe, he wrote his "Letters of a Traveler in Europe and America"; for more than thirty years he acted as editor of the "New York Evening Post," and wrote much poetry, as well as many other prose works. Died, 1878.

Bryce, Rt. Hon. James, was born in 1838; educated at Glasgow University and Trinity College, Oxford (Craven and Vinerian Scholar); Fellow of Oriel, 1862; Honorable Fellow of Trinity College; D. C. L., J. L. D., F. R. S.; D. L. City of Aberdeen; member of Institute of France and of the Royal Academies of Turin, Stockholm, Naples, and Brussels, and of the Royal Accademia of the Lincei at Rome; P. C.; called to the bar, Lincoln's Inn, 1867; regius professor of civil law at Oxford University, 1870-93; M. P. for Tower Hamlets, 1880-85, and for South Aberdeen, 1885-1907; under-secretary for foreign affairs for five months in 1886; chancellor of the Duchy of Lancaster, 1892-94, and March to May, 1894; president of the Board of Trade, 1894-95; chief secretary for Ireland, 1905-07. He was appointed ambassador to the United States of America, December 31, 1906. He has taken a deep interest in the condition of the Eastern Christians and their emancipation from Turkish misrule. He strongly opposed the war in South Africa, and the Education Act of 1902. Author of "The Holy Roman Empire," "Transcaucasia and Ararat," "The American Commonwealth," "Impressions of South Africa," "Studies in History and Jurisprudence," and "Studies in Contemporary Biography."

Buck, Dudley, organist, composer; born in Hartford, Conn., March 10, 1839; studied at Trinity College, then Leipzig Conservatory of Music, and at Dresden and Paris; for several years organist Music Hall, Boston; was organist Holy Trinity Church, Brooklyn, and director and organist Apollo Club, twenty-five years; retired, 1903. Composer of orchestral, organ, and vocal music.

Buckingham, George Villiers, Duke of, favorite of James I. and Charles I., born in Leicestershire, 1592, rose under favor of the former to the high offices and dignities of the state; provoked by his conduct wars with Spain and France; fell into disfavor with the people; was assassinated at Portsmouth, in 1628, by Lieutenant Felton, on the eve of his embarking for Rochelle.

Buckle, Henry Thomas, born in 1821; historian. In 1857 the first volume of his "History of Civilization in Europe" appeared, and was very well received. The second volume, published in 1861, found, too, an appreciative public, but in 1862 his health gave way, and he died in 1862, leaving his work uncompleted.

Buckley, James Monroe, editor "New York Christian Advocate" since 1880; born in Rahway, N. J., December 16, 1836; educated at Pennington, N. J., Seminary, and one year at Wesleyan University; studied theology at Exeter, N. H.; joined New Hampshire conference, Methodist Episcopal Church, 1859; went to Detroit, 1863; Brooklyn, 1866; pastor in vicinity of New York until 1880. Author: "Oats or Wild Oats," "Faith Healing," "Christian Science and Kindred Phenomena," "Christians and the Theater," "The Land of the Czar and the Nihilist," "Travels in Three Continents — Europe, Asia, Africa," "History of Methodism in the United States," "Extemporaneous Oratory for Professional and Amateur Speakers," "Supposed Miracles." "Buddha (*bod'da*), "the wise or enlightened," is the sacred name of the founder of Buddhism, who appears

to have lived in the Sixth Century B. C. He was born a Hindu, of an intensely contemplative nature, the son of a king, who did everything in his power to tempt him from a religious life, from which, however, in his contemplation of the vanity of existence nothing could detain him; retired into solitude at the age of 30, as Sakyamuni, *i. e.*, solitary of the Sakyas, his tribe; consulted religious books, could get no good out of them, till, by-and-by, he abstracted himself more and more from everything external, when at the end of ten years, as he sat brooding under the Bo-tree alone with the universe, soul with soul, the light of truth rose full-orbed upon him, and he called himself henceforth and gave himself out as Buddha. "Now," he said to himself, "I know it all," as Mohammed in his way did after him, and became a preacher to others of what had proved salvation to himself, which he continued to do for forty years, leaving behind him disciples, who went forth without sword, like Christ's, to preach what they, like Christ's, believed was a gospel to every creature.

Buffon (*boof'-fong*), **Georges Louis Leclerc, Count de**, an eminent French naturalist, a member of the French Academy, and of that of sciences; was born in 1707. His "Natural History," which appeared in 1749, gave him fame, combining in an eminent degree reason, eloquence, and research. Other works from his pen obtained great applause. He professed to be a materialist. In 1739, he was named Intendant of the Jardin Royal des Plantes. Died, 1788.

Bull, Ole Bornemann, famous violinist; born in Bergen, in Norway, 1810; he secured great triumphs both throughout Europe and in America by his wonderful playing. He lost all his money in a scheme to found a colony of his countrymen in Pennsylvania, and had to take again to his violin to repair his broken fortunes. He afterwards settled down at Cambridge, Mass., and had also a summer residence in Norway, where he died in 1880.

Buller, Sir Redvers, born in 1839; soldier, first saw service in the China War of 1860. In 1870 he took part in the Red River expedition, and in 1874 in the Ashantee War. In 1879 he was sent on special service to the Cape, held command of the Frontier Light Horse in the Kaffir War of 1878-79, and served with great gallantry in the Zulu War. He was present at Tel-el-Kebir, at El Teb and Tamai, and accompanied the Nile expedition of 1884. In 1890 he succeeded Lord Wolseley as adjutant-general. Figured prominently in the Boer War.

Bulow, Friedrich Wilhelm von, born in 1775; Prussian general, obtained field marshal's rank in 1813, and by the victory at Lukan saved Berlin from the French. His victories at Grossbeeren and Dennewitz over Oudinot and Ney respectively twice again saved the Prussian capital at critical moments. He was present at Leipzig, and in command of the right wing of the allies he occupied the low countries. In 1814 he marched into France, and he was in command during the Waterloo campaign. Died in 1816.

Bunyan, John (*bun'ydn*), author of the celebrated allegories, "Pilgrim's Progress," and "Holy War"; born in England, 1628, waken when young dissipated, but in early manhood reformed and joined the Baptists, becoming so zealous as to invite persecution. He was sentenced to transportation on a charge of promoting seditious assemblies, but sentence was not enforced; was, however, imprisoned for more than twelve years, and during that time wrote his "Pilgrim's Progress." Died 1688.

Burbank, Luther, naturalist, originator of new fruits and flowers; born in Lancaster, Mass., March 7, 1849; boyhood on farm; educated at Lancaster Academy; always devoted to study of nature, especially plant life. Moved to Santa Rosa, Cal., 1875; conducts Burbank's Experiment Farms. Originator of the Burbank potato; gold and wickson apple; October purple, chalice, America and climax plums; giant, splendor, sugar, and stoneless prunes; a new fruit, the plumcot; peachblow, Burbank, and Santa Rosa roses; gigantic forms of amaryllis, tigridias, the Shasta daisy, giant and fragrance callas; and various new apples, peaches, nuts, berries, and other valuable trees, fruits, flowers, grasses, grains, and vegetables.

Burdett-Coutts, Angelina Georgina, Baroness, born in 1814; the daughter of Sir Francis Burdett, succeeded in 1837 to the great wealth of her grandfather, Mr. Thomas Coutts. The Shoe-black Brigade, the Nova Scotia Gardens, model lodging houses, and Columbia Market are of her foundation. The poor and the distressed at home and abroad have had a constant benefactress in her; the east-end weavers, the Irish fishermen of Cape Clear, the Turkish peasantry after the Russo-Turkish War, are among those who have received her help. In 1871, the queen made Miss Coutts a peeress, and

in 1881 the baroness married Mr. William Ashmead-Bartlett. Died, 1907.

Burgess, John William, educator; born in Conersville, Giles County, Tenn., August 26, 1844; attended Cumberland University, Lebanon, Tenn.; graduate of Amherst, 1867. Admitted to bar, Springfield, Mass., 1869; professor of English literature and political economy, Knox College, 1869-71; studied history, public law and political science, Göttingen, Leipzig, Berlin, 1871-73; professor history and political science, Amherst, 1873-76; professor political science and constitutional law since 1876, dean faculty of political science since 1890, Columbia University. Author: "Political Science and Comparative Constitutional Law" (2 volumes), "The Middle Period," "The Civil War and the Constitution," (two volumes), "Reconstruction and the Constitution," contributor to reviews on historical, political and legal topics.

Burgoyne, John, General (*bur-goin'*), an English officer in the American Revolution, was defeated and surrendered his army to General Gates at Saratoga, in 1777. Born, 1714; died, 1792.

Burke, Edmund, born in 1728; statesman and orator; an Irishman by birth; graduated at Trinity College, Dublin. Going to London, he attracted attention by his essays on the "Sublime and Beautiful," and devoted himself to literature, founding in 1759 "The Annual Register." In 1761 he became private secretary to Hamilton, the new chief secretary for Ireland; and served Lord Rockingham in the same capacity when that nobleman became prime minister. He was returned to Parliament for Wendover, and his speeches on American affairs created a great sensation in the House of Commons. His position in political life was raised still higher by the pamphlets which he wrote on current questions. Returned for Malton, he produced in 1780 his great plan of economical reform; and in 1782 he became paymaster under Lord Rockingham's government. He again took office in the Duke of Portland's coalition ministry, when he made his famous speech on the India bill. In the impeachment of Warren Hastings Burke played a leading part, his opening speech extending over four days. The outbreak of the French Revolution was the occasion of one of his finest efforts of oratory. Burke's attitude in this matter severed his friendship with Fox, and he seceded from the Whig party. In 1794, he retired from parliamentary life, though he continued to produce his pamphlets on political affairs. Died, 1797.

Burleigh (*bur'le*), **William Cecil, Lord**, prime minister of England during the reign of Elizabeth; born in 1520, was regarded as one of the ablest statesmen of his time. Died, 1598.

Burlingame, (*bur'ling-ām*), **Anson**, an American diplomatist; born in Chenango County, N. Y., 1822. He was elected member of Congress by the Republicans of the fifth district of Massachusetts, in 1854-56-58. In 1861, he was sent as minister to China, and, in 1867, appointed ambassador from China to the United States and to the great powers of Europe. In 1868 he visited this country at the head of a Chinese embassy, and concluded a liberal treaty between the United States and China, which was promptly ratified by the Chinese Government. The embassy afterwards visited London, Paris, Berlin, and lastly St. Petersburg, where Burlingame suddenly died, February, 1870.

Burne-Jones, Edward, born in 1833; painter, early fell under the influence of the pre-Raphaelite Brotherhood, and his paintings are marked by the medievalism and realism of that school. He was elected an associate of the Royal Academy in 1885.

Burnett, Frances Hodgson, author, playwright; born (Frances Eliza Hodgson), Manchester, England, November 24, 1849; family moved, 1865, to Knoxville, Tenn.; began writing for magazines, 1867; married Dr. L. M. Burnett, 1873; settled in Washington, 1875; obtained divorce, 1898; married second time, 1900, Stephen Townsend, English author. Author (novels): "That Lass o' Lowrie's," "Dolly, a Love Story," "Kathleen," "Surlly Tin and Other Stories," 1877; "Haworth's," "Louisiana," "A Fair Barbarian," "Through One Administration," "Little Lord Fauntleroy," "Editha's Burglar," "Sara Crewe," "Little Saint Elizabeth," "Two Little Pilgrims' Progress," "The Pretty Sister of Joe," "A Lady of Quality," "His Grace of Ormonde," "The Captain's Youngest," "In Connection with the De Willoughby Claim," "The Making of a Marchioness," "The Little Unfair Princess," "A Little Princess." Plays: "Little Lord Fauntleroy," "Phyllis," "The Snowman's Daughter," "Esmeralda," "The First Gentleman of Europe," "Nixie" (with Stephen Townsend), "A Lady of Quality" (with same).

Burns, Robert, born in 1759; Scottish poet; was the son of an Ayrshire farmer, and with his brothers worked

on the farm. His first volume of poems was published in 1786, and attracted much attention, Burns being invited to Edinburgh and made much of by literary society. At this time he was on the point of emigrating to Jamaica. In 1788 he married Jean Armour, and in 1789 became an excise officer, as well as a farmer in Dumfriesshire. In 1791, farming not being profitable, he removed to Dumfries, where he continued his post in the excise, and wrote poems for the Edinburgh publishers. The irregularities which had marked his earlier life returned in his later days, and accelerated his death in 1796.

Burnside, Ambrose Everett, born in 1824; general in the United States Army, early distinguished himself in border warfare, and in the Civil War was present at the battles of Bull Run, South Mountain, and Antietam. He was defeated by the Confederates at Petersburg, but held command of the ninth army corps, under Grant, until Lee's surrender. Died, 1881.

Burr, Aaron, born in 1756; a vice-president of the United States, distinguished himself in the War of Independence. In 1807 he was arrested on a charge of conspiracy. It was supposed that he aimed to separate the Western States from the Union and annex them to Mexico, but he was acquitted. Going to Europe, he was ordered to leave England for endeavoring to promote a filibustering expedition against Mexico. He returned to America in 1812, and spent the rest of his life in retirement. Died, 1836.

Burroughs, John, essayist; born in Roxbury, N. Y., April 3, 1837; academic education; taught school about eight years; treasury clerk, 1864-73; national bank examiner, 1873-84; since 1874 has lived on a farm, devoting his time to literature and fruit culture. Author: "Wake-Robin," "Signs and Season," "Pepacton," "Riverby," "Birds and Poets," "Winter Sunshine," "Locusts and Wild Honey," "Fresh Fields," "Indoor Studies," "Whitman, a Study," "The Light of Day," "Squirrels and Other Fur Bearers," "Literary Values," "Far and Near," etc.

Burrows, Julius C., United States senator, lawyer; born in Northeast, Erie County, Pa., January 9, 1837; academic education; entered law practice; officer in the Union Army, 1862-64; prosecuting attorney, Kalamazoo County, 1865-67; was appointed, 1867, supervisor internal revenue for Michigan and Wisconsin, declined; tendered office of solicitor of the treasury and declined; member Congress, 1873-75, 1879-83, 1885-95; twice elected speaker pro tem; United States senator, 1895-99, unexpired term of Francis B. Stockbridge, deceased; re-elected for term 1899-1905, and re-elected for term 1905-1911, by unanimous vote of the legislature.

Burton, Theodore E., congressman, lawyer; born in Jefferson, O., December 20, 1851; son of Rev. William and Elizabeth (Grant) Burton; graduate of Oberlin College, 1872; admitted to bar, 1875; since then in practice at Cleveland; member Congress, 1889-91, and 1895-1907, twenty-first Ohio district, Republican. President Grant Family Association of the United States. Author: "Financial Crises and Periods of Industrial and Commercial Depression."

Butler, Benjamin Franklin, an American politician born in New Hampshire, 1818, studied law and settled in Massachusetts, where he became recognized as the leading Democrat of New England. A delegate to the Charleston and Baltimore nominating conventions, he took a leading part in the movement which nominated Breckenridge and divided the party. He promptly entered the service at the outbreak of the Civil War, and had command of the departments of the Gulf and of the South Atlantic, acquiring no military fame but great notoriety for his arbitrary civil regulations. Elected to Congress by the Massachusetts Republicans in 1866 and 1868, but defeated in 1874, he deserted that party, and in 1882 was elected governor by the Democrats; renominated in 1883, he was defeated. Died, 1893.

Butler, Samuel, born in 1612; English satirist; in his seventeenth year became attached to the household of the Earl of Kent, when he frequently attended meetings at the house of a Sir Samuel Luke, a strict Puritan and Parliamentarian. The experiences of this time furnished him with the material for his famous work, "Hudibras," the first part of which appeared in 1663, and achieved the widest popularity. Two other parts of the work appeared at intervals, but of Butler's life during that time little is known. Died, 1680.

Byron, George Gordon, sixth lord; an English poet; was born in London, 1788; son of Captain Byron of the Guards and Catherine Gordon of Gight, Aberdeenshire. He spent his boyhood at Aberdeen, under his mother, and was educated at Harrow and Cambridge, spending, when at the latter, his vacations in London, where his mother had taken a house. He wrote "Hours

of Idleness," a poor first attempt, which called forth a severe criticism in the "Edinburgh Review," and which he satirized in "English Bards and Scotch Reviewers," and soon afterwards left England and spent two years in foreign travel; wrote first part of "Childe Harold," "awoke one morning and found himself famous"; produced the "Giaour," "Bride of Abydos," "Hebrew Melodies," and other works. In his school days he had fallen in love with Mary Chaworth, but she had not returned his affection, and in 1815 he married Miss Milbank, an heiress, who in a year left him never to return, when a storm raised against him on account of his private life, drove him from England, and he never came back. On the Continent, moved from place to place, he finished "Childe Harold," completed several short poems, and wrote "Don Juan"; threw himself into revolutionary movements in Italy and Greece, risked his all in the emancipation of the latter, and embarking in it, died at Missolonghi, in 1824, in a fit, at the age of 36. His poems, from the character of the passion that breathed in them, made a great impression on his age.

Cable, George Washington, author; born in New Orleans, October 12, 1844; educated in public schools. Served Fourth Mississippi Cavalry, Confederate States Army, 1863-65; clerk in cotton factor's office; for a time reporter on New Orleans Picayune, 1865-79; wrote stories for "Scribner's Monthly"; since 1879 devoted to literature. Author: "Old Creole Days," "The Grandisseries," "Madame Delphine," "The Creoles of Louisiana," "Dr. Sevier," "The Silent South," "Bonaventure," "The Negro Question," "Strange True Stories of Louisiana," "John March Southerner," "Strong Hearts," "The Cavalier," "Bylow Hill." Founded, 1887, the Home-Culture Clubs—a system of small clubs designed to promote more cordial relations between divergent ranks of society.

Cabot (ka-bot), John, born in 1420; originally a Venetian pilot, settled in Bristol about 1472; obtained letters patent from Henry VII. to discover unknown lands, sailed with his sons in 1497, and sighted the coast of Newfoundland or Labrador, and Florida. Died, circa 1498.

Cæsar, Calus Julius, the greatest of Roman generals. Elected consul 60 B. C.; formed a secret alliance with Pompey and Crassus known as the first triumvirate. Beginning the Gallic War in 58 B. C., he subdued in the course of one campaign both the Helvetii and the Germans under Ariovistus. Pompey having become his enemy through jealousy, Cæsar crossed the Rubicon 49 B. C., and in a short time became master of Italy; having conquered all his enemies, and subdued Spain and Africa, he was made dictator for life, and received from the senate the title of Imperator. Although beloved by the masses, the patricians feared and hated him, and the result of a conspiracy of Cassius, Brutus and others was his assassination. 100-44 B. C.

Caine, Hall, was born of Manx parentage in 1853, and commenced his career as an architect in Liverpool; then joined the staff of the "Liverpool Mercury," and wrote in the "Academy" and the "Athenæum." Resided with Dante Rossetti in London till the poet's death in 1882. Published "Sonnets of Three Centuries," "Recollections of Rossetti," "The Shadow of a Crime," "A Son of Hagar," "The Deemster," "The Bondman," "The Scapagoat," "The Manxman," "The Christian," "The Eternal City," and "The Prodigal Son," which was published in nine different languages on the same day. Many of his later novels have been dramatized successfully. He was elected to the Manx House of Keys in 1901, and to the British Parliament.

Caird, The Rev. John, born in 1820; principal of Glasgow University; an eloquent preacher of the Scotch Established Church; has published sermons and "An Introduction to the Philosophy of Religion" (1880), which shows the influence of Hegel.

Cairnes, John Elliott, born in 1824; professor of political economy at Queen's College, Galway, and afterwards at University College, London; wrote "The Logical Method of Political Economy," and other treatises marked by severe precision of argument. Died, 1875.

Calderon de la Barca, Don Pedro, born in 1600; Spanish dramatist, educated at the Jesuit College at Madrid, and the University of Salamanca. His mind early assumed a religious cast, first shown in the drama "La Devocion de la Cruz," written at the age of 18. While serving against the Milanese in the Low Countries he wrote the "Siege of Breda," and on the death of Lope de Vega, in 1635, became the leading poet in Spain. In 1651 he took holy orders, and thenceforward wrote little else than sacred dramas, or "autos." Died, 1681.

Calhoun, John Caldwell, born in 1782; American lawyer and statesman, effected great reforms as secretary of war, in 1817 and in 1825 became Vice-President of the

United States. He advocated slavery and the dissolution of the Union. Died, 1850.

Caligula (*ka-li'g-u-la*), the son of Germanicus and Agrippina, was born in A. D. 12. He was named by Tiberius joint heir of the empire. He subsequently became sole emperor, and proved a great tyrant. In the course of a career of incestuous debauchery and degrading voluptuousness, he conceived such a hatred to his subjects, that he openly expressed a wish that the Roman people had but a single neck, in order that he might execute them at a blow. He was murdered in 41.

Calvin, John, born in Noyon in 1509; educated at the colleges of La Marche and Montaigu, Paris, held some livings, but preferring the legal profession did not proceed to priest's orders. While studying law at Bourges he learned Greek, and on reading the New Testament became a Protestant. He removed to Paris, and wrote a commentary on Seneca's "De Clementia," but, forced by persecution to leave France, took refuge in Basle. In 1536 appeared his "Institutions of the Christian Religion." In conjunction with Farel he attempted to establish a kind of theocracy at Geneva, but they were expelled by the council in 1538, and retired to Zurich. Passing on to Strasburg, Calvin became pastor to the French refugees, married, and published his "Romans." In 1541, Calvin was invited back to Geneva. The theocratic government was resumed, and here he labored till his death. Calvin did more than any other man towards formulating the doctrines of the Reformed Church. The opinions on predestination and election called "Calvinistic" are rather those of his disciples than his own. Died, 1564.

Cambacères (*kam-bā-sar'ez*), **Jean Jacques, Duke of Parma**, was born in Montpelier in 1753. He was brought up to the legal profession, and became president of the French Convention in 1792. He voted for pronouncing Louis XVI. guilty, but denied the right of the Convention to proceed to the last extremity, and wished that the unfortunate monarch might be detained in prison, and only put to death in case of invasion. He was afterwards president of the Committee of Public Safety, and of the Council of Five Hundred. When Napoleon Bonaparte was named first, Cambacères was made second consul. During the hundred days after Bonaparte's return, he was president of the Chamber of Peers. He left France when the Bourbons were a second time restored, but was permitted to return. Died, 1824.

Cambyses (*kam-by'-seez*), the son of Cyrus, King of the Persians, succeeded his father in 529 B. C. He conquered Cyprus and Egypt. At Memphis, he caused the bull Aphis to be slaughtered by his priests, and leaving Egypt to return to Persia, he died at Ecbatana of a wound he had received from his own sword when mounting his horse, in 522 B. C.

Camoens, Luiz de (*kām'o-ēnz*), the greatest of Portuguese poets, was born about 1524. After serving in an expedition against the Moors, in which he lost his right eye, he sailed for India, 1539, where he wrote the "Lusiad" the great poem on which his fame rests. On his return from exile, he suffered shipwreck, and lost all his property excepting the manuscript of his epic. Died at Lisbon, in a hospital, 1580.

Campbell, Alexander, founder of the sect known as the "Disciples of Christ"; born near Ballymena, in County Antrim, Ireland, September 12, 1788. He emigrated to the United States in 1807. Though at first a Presbyterian, in 1812 he formed a connection with the Baptists, and for some time he labored as an itinerant preacher. In 1826 he published a translation of the New Testament, in which the words "baptism" and "baptist" gave place to "immersion" and "immerser." By his discussions on public platforms, and his serial publications, as well as his assiduity in preaching tours and training young men for the ministry, Campbell gradually formed a large party of followers, who began about 1827 to form themselves into a sect under the designation of "The Disciples of Christ." In 1841, Campbell founded Bethany College in West Virginia, where he died March 4, 1866.

Campbell, Thomas, an English poet, born in 1777; his reputation rests mainly on his "Pleasures of Hope," and "Gertrude of Wyoming." As a writer of national songs he has never been surpassed. Died, 1844.

Campbell-Bannerman, Rt. Hon. Sir Henry, ex-prime minister of Great Britain, was born in 1836. Educated at Glasgow University and Trinity College, Cambridge (B. A. honors, 1858; M. A. 1861); financial secretary in war office, 1871-74 and 1880-82; secretary admiralty, 1882-84; chief secretary of Ireland, 1884-85; secretary for war, 1886 and 1892-95; chosen leader of the Liberal Opposition in succession to Sir William

Harcourt, February, 1899. Notwithstanding the differences between Liberal Imperialists and other Liberals over the Boer War, a unanimous vote of confidence in his leadership was carried at a meeting of the Liberal party held at the Reform Club, July, 1901. Again received the solid support of the Liberal party in the House in 1903, 1904, and 1905. On the resignation of the Balfour administration in December, 1905, he was summoned by the king and formed a Liberal Cabinet himself becoming first lord of the treasury and prime minister; the general election which followed gave him a tremendous majority.

Canning, George (*kān'ning*), an English statesman and orator, born in London, 1770. He commenced his career at the bar, but being brought into the House of Commons by Mr. Pitt, he abandoned the law for politics. In Mr. Percival's administration, Canning became secretary of state for Foreign Affairs, and largely contributed in that capacity to the overthrow of the plans of Napoleon. In 1816, he was appointed president of the Board of Control of Indian Affairs, and, in 1822, foreign secretary for the second time. On the death of Earl of Liverpool, Canning became first minister of the Crown, and distinguished his government by the liberal tendencies of his home and foreign policy. Died, 1827.

Cannon, Joseph G., congressman, lawyer; born in Guilford, N. C., May 7, 1836; admitted to Illinois bar; State's attorney, Vermillion County, Ill., 1861-68; member of Congress, 1873-91, and again in 1893-1903, 12th Illinois district, and 1903-07, 18th district; chairman of Committee on Appropriations, 55th, 56th, and 57th Congresses; speaker of 58th, 59th, and 60th Congresses.

Canova (*kah-nō'vah*), **Antonio**, one of the greatest of Italian sculptors, born at Possagno, in Venetia, 1757. Among his more celebrated works are the "Venus and Adonis," "Cupid and Psyche," "Mary Magdalen," etc. The ruling characteristic of his style is sentiment—sometimes, indeed, bordering on sentimentality. Died, 1822.

Canute the Dane (*kā-nūt'*), or **Cnut**, called the Great, son of Sweyn, King of Denmark, was born in 994. He invaded England, and after a success or two was elected king by his fleet; the claim was repudiated by the Saxons, and he had to flee. Returned in 1015, and next year.

Capet, Hugh (*kā'pā*), founder of the third, or Capetian dynasty of French monarchs, as Count of Paris, on the death of Louis V., last of the Carolingians, usurped the throne, in possession of which he was confirmed by a confederacy of nobles. The race of Capet has given 118 sovereigns to Europe, thirty-six kings to France, twenty-two to Portugal, five to Spain, eleven to Naples and Sicily, three to Hungary, and three to Navarre; three emperors to the East; seventeen dukes to Burgundy, thirteen to Brittany, two to Lorraine, and four to Parma. Died about A. D. 996.

Capo-D'Istria (*kā-po-dis'tre-ā*), **John**, Count of, a Greek, who gained distinction as a diplomatist, born at Corfu in 1780. His father was a physician, and became governor of the seven Ionian islands when they were occupied by Russia. John, who had studied medicine at Venice, entered the service of Russia; and in 1813, in consideration of his meritorious labors, the Emperor Alexander made him minister for foreign affairs. In 1828, he was made president of the new Greek Government, where he fell by the hand of an assassin in 1831.

Caracalla, a Roman emperor, son of Septimius Severus, born in Lyons; his reign (211-217) was a series of crimes, follies, and extravagances; he put to death 20,000 persons, among others the jurist Papinianus, and was assassinated himself by one of his guards.

Carey, Henry Charles (*kā're*), an American political economist, born in Philadelphia, 1793, became principal partner in the great publishing firm of Carey & Lea, in that city, and was the first to establish the system of bookseller's trade sales. His published works are voluminous, and well known in their relations to trade, finance, and political economy. Died, October 13, 1879.

Carlisle, John Griffin, lawyer; born in Campbell County, Kentucky, September 5, 1835; common school education; admitted to Kentucky bar, 1858; several terms in Kentucky Legislature; State senator, 1866-71; delegate at large, National Democratic Convention, 1868; lieutenant-governor of Kentucky, 1871-75; member of Congress, 1877-80 (speaker, 1883-89); noted low tariff advocate; United States senator from Kentucky, 1890-93; secretary of treasury of United States, 1893-97; Democrat; affiliated with National (gold standard) Democrats, 1896; since 1897, in law

practice, New York. Vice-president of Anti-Imperialist League (Boston).

Carlyle, Thomas (*kār'lil*), an eminent English philosopher and historian, born in 1795, and whose writings have done much to impregnate English philosophy with the characteristic tendencies of the German school. His principal works are: "Sartor Resartus," "History of the French Revolution," "Hero, Worship, and Other Essays," "Latter Day Pamphlets," "Life of Frederick the Great." Died, February 5, 1881.

Carnegie, Andrew, capitalist, manufacturer, philanthropist; born in Dunfermline, Fifeshire, Scotland, November 25, 1837; came with family to United States, 1848, settling in Pittsburgh; first work was as weaver's assistant in cotton factory, Allegheny, Pa.; became telegraph messenger boy, in Pittsburgh office of Ohio Telegraph Company, 1851; learned telegraphy, entered employ of Pennsylvania Railroad, and became telegraph operator, advancing by promotions until he became superintendent of Pittsburgh division of Pennsylvania system; joined Mr. Woodruff, inventor of the sleeping car, in organizing Woodruff Sleeping Car Company, gaining through it nucleus of his fortune; careful investments in oil lands increased his means; during Civil War served as superintendent of military railways and government telegraph lines in the East. After the war he developed iron works of various kinds and established, at Pittsburgh, Keystone Bridge Works and Union Iron Works. Introduced into this country Bessemer process of making steel, 1868; was principal owner a few years later of Homestead and Edgar Thomson Steel Works, and other large plants as head of firms of Carnegie, Phipps & Company and Carnegie Bros. & Company interests were consolidated, 1899, in the Carnegie Steel Company, which, in 1901, was merged in the United States Steel Corporation, when he retired from business; married, 1887, Louise Whitfield, of New York. Has given libraries to many towns and cities in the United States and Great Britain, and large sums in other benefactions, including \$10,000,000 to Carnegie Institute, Pittsburgh, \$5,200,000 to New York for the establishment of branch libraries; \$10,000,000 to Carnegie Institution, Washington; \$10,000,000 to Scotch universities; \$5,000,000 to fund for benefit of employes of Carnegie Steel Company; \$1,000,000 to St. Louis Public Library, etc., total benefactions exceeding \$75,000,000, including over \$40,000,000 for nearly 1,500 municipal library buildings, and \$10,000,000 for college professors' pension fund in United States, Canada, and Newfoundland. Author: "An American Four-in-Hand in Britain," "Round the World," "Triumphant Democracy," "The Gospel of Wealth," "Empire of Business." Lord rector of St. Andrew's University, 1903; LL. D., 1905.

Carnot (*kār-nō*), **Leonard Sadi**, son of Nicolas, founder of thermo-dynamics; in his "Réflexions sur la Puissance du Feu" enunciates the principle of Reversibility, considered the most important contribution to physical science since the time of Newton (1796-1832).

Carpenter, Frank George, journalist; born in Mansfield, O., May 8, 1855; graduate of Wooster University, 1877. Began newspaper work as legislative correspondent for "Cleveland Leader," at Columbus, 1879; spent 1881 in European and Egyptian travel; Washington correspondent "Cleveland Leader," 1882; correspondent American Press Association, 1884; also, 1887, correspondent for "New York World"; trip round the world for newspaper syndicate and "Cosmopolitan" magazine, 1888-89; newspaper tour to Mexico, 1891; to Russia, Germany, and England, 1892; to China, Japan, and Corea, 1894; spent 1898 in South America, 25,000 miles of travel; spent 1900 in Philippines, China, Java, Australia, and New Zealand; made newspaper tour, 1902, to investigate American "commercial invasion" in England, France, Germany, Russia, Holland, Belgium, Norway, Sweden, Denmark. Author: "Carpenter's Geographical Readers—Asia, North America, South America, Europe, Australia," "Our Colonies and Other Islands of the Seas, Africa"; "Through Asia with the Children," "Through North America with the Children," "South America—Social, Industrial, and Political." Has written very many articles in leading American journals and magazines.

Carpenter, William Benjamin, born in 1813; physiologist, son of Dr. Lant Carpenter, wrote "Principles of General and Comparative Physiology," etc., and in 1861, received the medal of the Royal Society. Died, 1885.

Carre, John Mervyn, architect; born of American parents in Rio de Janeiro, Brazil, November 9, 1858; educated in Switzerland; graduate of Ecole des Beaux Arts, Paris, 1882; partner with Thomas Hastings in firm, Carre & Hastings, since 1884. The firm were architects of the Ponce de Leon and Alcazar hotels, St. Augus-

tine, Fla., the New York Public Library, Academy of Design, and many other noted buildings. Fellow American Institution of Architects.

Carroll, Lewis, the pseudonym of the Rev. Charles Lutwidge Dodgson; born circa 1833; humorist and author of, "Alice in Wonderland," "Through the Looking-glass," "The Hunting of the Snark," "Rhyme and Reason," "A Tangled Tale," "Sylvie and Bruno," and other works.

Carson, Christopher, popularly known as Kit Carson, an American frontiersman, born in Kentucky in 1809. He was successively a saddler's apprentice, trapper, hunter, guide in Fremont's explorations, lieutenant in the rifle corps of the army (1847), and Indian agent. During the Civil War he rendered important services in the territories, and was brevetted brigadier general. Died in Colorado, 1868.

Carteret, Philip, an English navigator, who made an expedition to the South Seas in 1766-69, and discovered Queen Charlotte's Isles, and other islands, two of which he called Gower and Carteret.

Cartier, Sir George Etienne (*kār-te'ai*), a Canadian statesman, born in 1814. He was deeply involved in the rebellion of 1837. In 1848, he was elected to the house of assembly, in 1856 was appointed provincial secretary, and soon became attorney-general. In 1857, he became leader of the Lower Canada section of the government, and in 1858, premier; and he held a cabinet office for several years afterward. He was prominent in numerous governmental reforms. Died, 1873.

Cartier, Jacques (*kār-te'ai*), a French explorer, was born 1494. Employed by Francis I. to make explorations on the North American coast, in three successive expeditions, 1534-50; he completed the discovery and colonization of Canada.

Cartwright, Edmund, inventor of the power loom and the carding machine; born in Nottinghamshire; was bred for the Church. His invention, at first violently opposed, to his ruin for the time being, is now universally adopted; a grant of £10,000 was made him by parliament in consideration of his services and in compensation for his losses. He had a turn for versifying as well as mechanical invention. Cartwright was born in 1743, and died in 1823.

Caruso, Signor, who is generally acknowledged to be the finest tenor of the present day, began life as an engineer, with no thought of singing until a friend assured him that there was a fortune in his voice. So he studied for a while, and made a first appearance in opera, some few years ago, in his native city, Naples. His success was immediate, and he now sings at all the greatest opera houses in the world, commanding fees of thousands of dollars per night. Caruso, who is immensely popular in society, is a most genial man. His greatest hobby is drawing, and he might have made a good deal of money as a caricaturist, judging by the remarkably clever pictures of himself and his friends which he is always executing.

Casablanca, Louis, a French naval officer, born in Bastia about 1755, and in 1798, was captain of the flagship "L'Orient" in the expedition to Egypt. He was mortally wounded at the battle of the Nile, August 1, 1798; the ship caught fire, his 10-year-old son would not leave him, and both were floating on the wreck of the ship's mast when the final explosion took place.

Cass, Lewis, born in 1782; American statesman and general, appointed governor of Michigan in 1813. He showed great prudence in his management of Indian affairs and in 1831, became secretary of war in the administration of President Jackson. Whilst representative of the United States in France, he protested vigorously and effectually against the terms of the quintuple treaty, and returning to America was elected to the senate in 1845. In 1857, he became secretary of state, but about five years later withdrew from public life.

Castelar, Emilio, born in 1832; Spanish statesman and writer; condemned to death owing to his attacks on the government in 1868. He fled to France, but shortly returned, and espoused the cause of the Federal Republic; was appointed dictator on the resignation of Amadeus (1873), but resigned a few months later. He was an eloquent speaker, and wrote many works. Died, 1899.

Castlereagh (*kās'-sl-ra*), **Robert Stewart, Lord**, eldest son of the Marquis of Londonderry; was born in 1769. At an early period he entered into public life, and was appointed keeper of the Signet, or privy seal, in Ireland, in 1797; president of the board of control in 1802; and secretary of war in 1805. A difference having arisen between him and his colleague, Mr. Canning, a duel was the consequence, and both quitted office. During Lord Liverpool's administration, Lord Castlereagh again became a member of the government as foreign secretary, and concluded the treaty of Paris in

1814. He remained in office the remainder of his life, which was closed by suicide in 1822.

Catherine of Aragon, Queen of England; born in 1483; daughter of Ferdinand of Aragon and Isabella of Castile; married first Arthur, Prince of Wales, and subsequently his brother, afterwards Henry VIII. She was beautiful and virtuous, yet the king in 1527 sought a divorce on the ground that the marriage was uncanonical. After much temporizing on the part of the pope, the marriage was in 1533, pronounced invalid by Cranmer, Archbishop of Canterbury, and his sentence was ratified by act of parliament. Catherine spent the rest of her life in Kimbolton castle. Died, 1563.

Catherine de Medici, born in 1519; great granddaughter of Lorenzo the Magnificent, niece of Pope Clement VII., and queen to Henri II. of France, acted as regent during the minority of her second son, Charles IX.; her policy was to play off the parties of the Guises and the Condés against one another. She instigated the massacre of St. Bartholomew. Died, 1589.

Catherine Parr, born in 1512; daughter of Sir T. Parr; was married first to Edward Borough, secondly to Lord Latimer, and in 1543 became the sixth and last wife of Henry VIII. She was learned in theology and a zealous Protestant, and, according to Foxe, on one occasion only escaped death as a heretic by timely submission to the king. She survived Henry, and in 1547 married Lord Seymour of Sudeley, who was accused of hastening her death (in child-birth), by poisoning. Died, 1548.

Catherine I., Empress of Russia; born circa 1685; was the outcast infant of a Livonian peasant-girl, and became nurse in the family of the Protestant minister of Marienburg. In 1701 she married a Swedish dragoon, who soon afterwards went with his regiment to Riga, and never returned. After the capture of Marienburg by the Russians, Catherine became the mistress first of General Bauer, with whom she lived at Moscow, secondly of Prince Menschikov, and finally, of Peter the Great, who married her privately near Warsaw in 1711, and publicly the next year at St. Petersburg. She then embraced the Greek religion, and took the name of Catherine. On the death of Peter, in 1725, she was proclaimed Czarina. Her death was the result of intemperance. Died, 1727.

Catherine II., Empress of Russia; born in 1729; the Princess Sophia Augusta, daughter of the Prince of Anhalt-Zerbst, on her marriage in 1745, with Peter, nephew and heir of the Empress Elizabeth, assumed the name of Catherine Alexiovna. Her refinement and love of study contrasted with her husband's vulgarity and intemperance; neglected by him, she ingratiated herself with some of the nobles; her intrigues were discovered by Peter, and, on ascending the throne in 1762, he threatened to repudiate her, whereupon she imprisoned him and had him strangled. The subsequent murder of Ivan, the next heir, left Catherine in undisputed possession of the throne. As empress she seized the Crimea, and took part in the dismemberment of Poland. She promoted the welfare of Russia by encouraging literature and commerce, but her reign, was sullied by disgraceful amours.

Catiline (kal'-e-line), Lucius Sergius, an ancient Roman, was descended from a patrician family, renowned for talent but degraded by crime. He gained the favor of Scylla, who advanced him to offices of great importance. He was a reckless sensualist. Having won for his paramour a member of a distinguished family, he married the daughter he had by her. He was charged with intriguing with a vestal, the sister of Cicero's wife. After Scylla's death, Catiline formed a conspiracy to murder the consuls and senators, and to assume the government. His designs were discovered and exposed in an oration by Cicero, which gave the speaker lasting fame. He attempted to execute his plan, but a great battle ensuing, and victory inclining to the other side, he threw himself into the midst of the enemy and was slain. 63 B. C.

Cavour, Camillo, Count di (kah'-oor'), an eminent Italian statesman; born in 1810. In 1847, he took an active part in the promulgation of the liberal doctrines then agitating his country, and largely assisted in the establishment of the constitution granted by King Charles Albert in 1848. In 1850, he became minister of commerce, and minister of finances the following year. In 1852, he succeeded D'Azeglio as first minister, secured the liberty of the press, favored religious toleration and free trade, and during his seven years' tenure of office brought about the regeneration of Italy by the treaty of Villa Franca in 1857. Died, 1861.

Caxton, William (kaks'tun), the founder of English printing, was born in 1412. During a residence in Flanders, he acquired the new typographic art, and on

his return set up a press in the Almonry, Westminster, where he brought out the first printed book seen in England, the "History of Troy." Died, 1491.

Cenci, Beatrice (chèn'che), a noble Roman lady, whose tragic fate has served as the theme of one of Shelley's best tragedies, lived in the Sixteenth Century. She became the victim of her father, Count Francesco Cenci, a notorious libertine. Failing in her appeal for protection from Pope Clement VIII., she, it has been said, conspired with other members of her family to murder the count. When brought to trial on this charge, she asserted her innocence, but was, nevertheless, put to death, along with her relatives, in 1599. The fine portrait of Beatrice, by Guido Reni, in the Barberini gallery, Rome, is well known.

Cervantes de Saavedra, Miguel, de, Spanish author; born at Alcalá de Henares in 1547, belonged to an ancient Galician family, and was educated at the University of Salamanca, where he spent his time chiefly in writing verses. After following Cardinal Acquaviva as chamberlain into Italy, he enlisted under Marc Antonio Colonna, and distinguished himself at the battle of Lepanto (1571), where he lost his left hand; in 1575, was captured by a corsair, and spent five years in slavery at Algiers. In 1588, he settled at Seville, and for the next ten years devoted his time mainly to writing dramas. In 1605, the first part of "Don Quixote" appeared, and the second followed ten years later. Among the other works of Cervantes are "Novelas Exemplares," "Viage al Parnaso," and "Galatea." Died, 1616.

Chaffee, Adna Romanza, lieutenant-general, United States Army; born in Orwell, O., April 14, 1842; educated in public schools. Entered army, July 22, 1861; first lieutenant, July 3, 1863, for gallantry at Gettysburg; captain, March 31, 1865, for gallantry at Dinwiddie Court House, Va.; major, March 7, 1868, for gallantry in engagement with Comanche Indians on Paint Tree Creek, Tex.; lieutenant-colonel, February 27, 1890, for gallantry in action against Indians in Texas and Arizona. Appointed brigadier-general, United States Volunteers, May 4, 1898; commanded third brigade, second division, fifth corps, Santiago campaign June to August, 1898; commanded second division, fifth corps, August to September, 1898; promoted major-general, United States Volunteers, July 8, 1898; commanded first division, fourth corps, November to December, 1898; chief of staff division of Cuba, December, 1898, to May, 1900. Honorably discharged as major-general, April 13, 1899. Appointed brigadier-general of United States Volunteers, April 13, 1900. Assigned to the command of United States forces for the relief of United States Legation, Peking, June 24, 1900; arrived at Peking, China, August 14, 1900; promoted to major-general of United States Volunteers, June 20, 1900; promoted to major-general of United States Army, February 5, 1901. Assigned to command division of the Philippines and appointed military governor, to take effect July 4, 1901; relieved September 30, 1902, and assigned to command department of the East; detailed to general staff corps, October 2, 1903, and assigned to duty as assistant to chief of staff, Washington; promoted to lieutenant-general of United States Army, January 9, 1904, and chief of staff until his retirement in 1906.

Chalmers, Thomas, born in 1780; Scottish divine, educated at St. Andrews, where he taught mathematics after his ordination. In 1815, he became a minister at Glasgow, and at once attracted attention by his eloquence. He was subsequently professor of moral philosophy at St. Andrews (1823) and of theology at Edinburgh (1828). On the disruption of the Church of Scotland (1843) he joined the Free Church party, and became moderator of its assembly and principal of its college. His writings embrace a wide range of subjects, including natural science and political economy. Died, 1847.

Chamberlain, Rt. Hon. Joseph, British statesman, was born in London, July, 1836; educated in private school and University College, London; joined the firm of Nettlefold, screw makers of Birmingham; was one of the leaders of the defeated unsectarian candidates for the school board of Birmingham in 1870, but in 1873 he was elected chairman, and was also a member of the town council (mayor, 1873). On the death of his father he retired from the firm, in order to devote all his energies to public life. To him was due the transfer of the gas and water works to the borough authorities, and he was the author of the improvement scheme which has entirely transformed the face of central Birmingham. In 1876, he entered parliament and took his seat below the gangway with the Radicals; president of Board of Trade, with cabinet rank, 1880-85, and passed a patents bill and a bankruptcy bill; presi-

dent of Local Government Board in 1885, until his divergence of views on the Irish policy of Mr. Gladstone caused his resignation (March 27, 1886); chief commissioner to the Conference at Washington for the settlement of the dispute between the United States and Canada on the Fisheries Question. Married Miss Endicott, November 15, 1888. In 1895, took office under Lord Salisbury as colonial secretary. The negotiations with the Transvaal, which ended in war, occupied him fully during 1899, and his South African policy was one of the main controversial features of the general election of 1900 and during 1901. He had charge in 1900 of the measure for the constitution of the Australian Commonwealth. On February 14, 1902, he was presented with an address by the City of London Corporation. He presided over the 1902 Colonial Conference. In November, 1902, he visited South Africa, and on his return received an address from the Lord Mayor and Corporation of London (March 20, 1903). In May, 1903, he launched, at Birmingham, his scheme for the revision of the fiscal policy of the country and the adoption of a policy of preferential tariffs; and in September, believing that policy to be at that time unacceptable to the majority in the constituencies, he resigned, in order to be free to devote himself to explaining and popularizing his proposals. He began his campaign for this purpose at Glasgow on October 6, 1903, and the tariff commission was afterwards set up on his initiative. He is president of the Central Liberal Unionist Council and of the Imperial tariff committee. His 70th birthday and completion of thirty years' service as member of parliament for Birmingham were celebrated on July 7, 1906.

Chambers, Robert William, author, artist; born in Brooklyn, May 26, 1865; educated at Julian's Academy, Paris, 1886-93. First exhibited in salon, 1889; illustrations for "Life," "Truth," "Vogue," etc. Author: "In the Quarter," "The King in Yellow," "The Red Republic," "A King and a Few Dukes," "The Maker of Moons," "With the Band," "The Mystery of Choice," "Lorraine," "Ashes of Empire," "The Haunts of Men," "The Cambric Mask," "Outsiders," "The Conspirators," "Cardigan," "The Maid-at-Arms," "Outdoor Land," "The Maids of Paradise," "Orchard-Land," "Forest-Land," "Iole." Also "The Witch of Ellangowan," a drama played at Daly's Theater and written for Miss Ada Rehan; and many magazine stories.

Chamisso, Adalbert von, born at the Castle of Boncourt, in Champagne, France, A. D. 1781; a celebrated lyric poet of Germany, who, though born in France, was driven from that country by the Revolution of 1790, and spent the greater part of his life in Prussia. He is best known by his "Peter Schlemihl, the Story of a Man Who Lost His Shadow," which was published in 1814, and has been translated into most European languages. Died in Berlin, 1838.

Champlain, Samuel de, a French naval officer of the Seventeenth Century. During the reign of Henry IV., of France, he visited many parts of America, and formed the first French establishments at Quebec and Montreal. He was made governor of Quebec, from which he was driven by the English, in 1631. When peace was restored, he was reinstated. He wrote an account of his "Voyages and Travels in New France, called Canada," in 1632; and died in 1635.

Chandler, William Eaton, lawyer; born in Concord, N. H., December 28, 1835; common school education; graduate of Harvard Law School, and admitted to the bar, 1855; became reporter of decisions of Supreme Court, New Hampshire, 1859; member of New Hampshire Legislature, 1862, 1863, 1864, and 1881; speaker, 1863-64; appointed solicitor and judge-advocate-general, navy department, March 9, 1865; first assistant secretary of treasury, June 17, 1865; resigned, November 30, 1867; member of New Hampshire Constitutional Convention, 1876 and 1902; appointed solicitor-general of United States, March 23, 1881, but rejected by senate; secretary of the navy, April 12, 1882, to March 7, 1885; United States senator, 1887-1901; president of Spanish Treaty Claims commission since March 9, 1901.

Channing, Edward, historian; born in Dorchester, Mass., June 15, 1856; graduate of Harvard, 1878; instructor, 1883; now professor of history at Harvard. Author: "The United States, 1765-1865," "A Student's History of the United States," "Town and County Government in the English Colonies of North America," "Narragansett Planters," "The Planting of a Nation in the New World," etc. Collaborator with late Justin Winsor on "The Narrative and Critical History of America"; with Albert B. Hart in "Guide to Study of American History"; and with Thomas W. Higginson in "English History for Americans."

Channing, William Ellery, an eminent American divine, and one of the most elegant writers this country has produced, was born in Newport, R. I., 1780. In 1803, he became pastor of the Federal Street Church, Boston. During the Unitarian controversy, Dr. Channing was the head of the Liberal party, and took an active part in its defense. Among his most successful productions are his lectures on "Self-Culture," and on the "Elevation of the Laboring Classes." His work on slavery, published in 1841, had also a wide circulation. Died, 1842.

Charlemagne, i. e., Charles or Karl the Great, the first Carolingian King of the Franks, son and successor of Pepin le Bref (the Short); became sole ruler on the death of his brother, Carloman, in 771; he subjugated by his arms the southern Gauls, the Lombards, the Saxons, and the Avars, and conducted a successful expedition against the Moors in Spain, with the result that his kingdom extended from the Ebro to the Elbe; having passed over into Italy in support of the pope, he was, on Christmas day, 800, crowned Emperor of the West, after which he devoted himself to the welfare of his subjects, and proved himself as great in legislation as in arms; enacted laws for the empire, called capitularies; reformed the judicial administration, patronized letters, and established schools; kept himself in touch and *au courant* with everything over his vast domain. He died and was buried at Aix-la-Chapelle (742-814).

Charles I., King of England, third son of James I., was born in Dunfermline in 1600. Failing in his suit for the infantia of Spain, he married Henrietta Maria, a French princess, a devoted Catholic, who had great influence over him, but not for good. He had for public advisors, Strafford and Laud, who cherished in him ideas of absolute power adverse to the liberty of the subject. Acting on these ideas brought him into collision with the parliament, and provoked a civil war; himself being the first to throw down the gauntlet by raising the royal standard at Nottingham, in the end of which he surrendered himself to the Scots' army at Newark, who delivered him to the parliament. He was tried as a traitor to his country, condemned to death, and beheaded at Whitehall, January 30, 1649.

Charles II., King of England, son of Charles I., born in St. James Palace, London, in 1630; was at The Hague, in Holland, when his father was beheaded. He assumed the royal title, and was proclaimed king by the Scots; landed in Scotland, and was crowned at Scone. Marching into England, he was defeated by Cromwell at Worcester, September 3, 1651, and fled to France. By the policy of General Monk, after Cromwell's death, he was restored to his crown and kingdom in 1660, an event known as the Restoration. Charles II. was an easy-going man, and is known in history as the "Merry Monarch." His reign was an inglorious one for England, though it is distinguished by the passing of the Habeas Corpus Act, one of the great bulwarks of English liberty next to the Magna Charta. Died, 1685.

Charles V. (I. of Spain), Emperor of Germany, son of Philip, Archduke of Austria, was born in Ghent in 1500, and became King of Spain in 1516, on the death of his maternal grandfather, Ferdinand, and Emperor of Germany in 1519, on the death of his paternal grandfather, Maximilian I., being crowned at Aix-la-Chapelle in 1520, and reigned during one of the most important periods in the history of Europe. The events of the reign are too numerous to detail; enough to mention his rivalry with Francis I. of France, his contention as a Catholic with the Protestants of Germany, the inroads of the Turks, revolts in Spain, and expeditions against the pirates of the Mediterranean. The ambition of his life was the suppression of the Protestant Reformation and the succession of his son Philip to the imperial crown, but he failed in both, and finally resigned in favor of his son, and retired into the monastery at St. Yuste, in Estremadura, near which he built a magnificent retreat, where, it is understood, notwithstanding his apparent retirement, he continued to take interest in political affairs, and to advise in the management of them. Died, 1558.

Charles XII., King of Sweden, son of Charles XI., a warlike prince, ascended the throne at the age of 15. He had to cope with Denmark, Russia, and Poland combined against him; he foiled the Danes at Copenhagen, the Russians at Narva, and Augustus II. of Poland at Riga; but being trapped in Russia, and cooped up to spend a winter there, he was, in the spring of 1709, attacked by Peter the Great at Pultowa, and defeated, so that he had to take refuge with the Turks at Bender; here he was again attacked, captured, and conveyed to Demotica, but escaping, he found his way

miraculously back to Sweden, and making peace with the czar, commenced an attack on Norway, but was killed by a musket-shot at the siege of Friederickshall. Charles XII. was "the last of the Swedish kings." "His appearance among the luxurious kings and knights of the North" at the time, Carlyle compares to "the bursting of a cataract of bomb-shells in a dull ballroom." Born in 1697, and died in 1718.

Charles Martel, the illegitimate son of Pépin d'Héristal, Duke of Austrasia, was himself proclaimed duke in 715, and becoming mayor of the palace during the reigns of Chilperic and Thierry IV., exercised the whole regal power, defeating the Saracens at Poitiers, in 732, in honor of which victory he was called Martel (the Hammer). On the death of Thierry in 736, Charles carried on the government as Duke of the Franks. His son, Pépin, was founder of the Carolingian line of monarchs, taking their name from Charles Martel.

Chase, Salmon Portland, an American jurist and statesman, was born in New Hampshire in 1818. He was sent to the House of Representatives and to the United States Senate from Ohio, and was elected governor of that State. Appointed secretary of the treasury by President Lincoln, at the outbreak of the Civil War, he conducted the finances with rare skill and success. Appointed chief justice of the Supreme Court in 1864, he held this office at his death in 1873.

Chatham, William Pitt, Earl of, born in 1708. English statesman, son of Robert Pitt; became member of parliament in 1735, attaching himself to the so-called patriotic party under the Prince of Wales; he attacked Walpole and Carteret successively, and after the retirement of the latter in 1744, supported the ministries of Pelham and Newcastle, and was made paymaster of the forces, a post which he lost owing to his anti-Hanoverian speeches. As secretary of state in 1756, and again in 1757, under Newcastle, he carried on the war against France with great vigor and success, but on the accession of George III. had to give place to his favorite, the Earl of Bute. Pitt's health was now shattered, but he was carried down to the house to speak against the peace of Paris in 1762, and afterwards supported the repeal of the Stamp Act, an act which led to the revolt of the American colonies. In 1766 he was created Earl of Chatham, and from his place in the house of lords continued to urge a policy of conciliation towards America. It was while thus engaged that he sank down in the fit of apoplexy from which he never recovered. Died, 1778.

Chaucer (shaw'-ser), Geoffrey, an English poet, commonly spoken of as the father of English poetry; born about 1328, of parents who appear to have been citizens of London, and gave him a learned education. In his youth he served under Edward III. in the invasion of France, and was made prisoner by the enemy at the end of 1359, or early in 1360. He afterwards enjoyed court favor, and was employed on several embassies, visiting France and Italy in the course of his foreign missions. In the latter part of the reign of Richard II., he appears to have been involved in the disgrace thrown on the family of the Duke of Lancaster, his patron, and suffered from poverty; but on the accession of Henry IV., he was again taken into royal favor. The writings of Chaucer, in verse and prose, are extensive; and the "Canterbury Tales" is one of the noblest monuments of English poetry. Died October 25, 1400.

Cheops, or Cheopses (tshé'-ops, tshé-ot'-peez), a king of Egypt, who reigned about the year B. C. 1178. He built the great pyramid, and spent 1,060 talents in vegetables alone for the workmen engaged on it. He changed that government into a despotic tyranny which had previously been a limited monarchy, and died, after reigning fifty-six years, hated by his people, 1122 B. C.

Cherubini, Maria Luigi Carlo Zenobi Salvatore (ka-roo-bé'-ne), an eminent Italian composer, was born at Florence in 1760. He was naturalized in France, and settled in Paris, the scene of his greatest triumphs, where he composed operas, of which the chief were "Iphigenia in Aulis," and "Les deux Journées; or The Water-Carrier," his masterpiece; also a number of sacred pieces and requiems, all of the highest merit. Died, 1842.

Chestersfield (tshé'-ter-féeld), Philip Dormer Stanhope, Earl of, was born in 1694, and educated at Cambridge. He represented Lostwithiel in the House of Commons, and in 1726 succeeded to the earldom. He was distinguished at the court of George II., and was sent ambassador extraordinary to Holland in 1728. He was made a knight of the garter in 1730, and received the appointment of lord steward of the household. He was found among the opponents of Sir Robert Walpole. In 1745, he was appointed lord-lieutenant of Ireland, and afterwards became secretary of state. He is now more known by his "Advice to His Son," than by his public services. Died, 1773.

Choate, Joseph Hodges, lawyer, diplomat, ambassador of United States to England, 1899-1905; born in Salem, Mass., January 24, 1832; graduate of Harvard and Harvard Law School, 1852. Admitted to Massachusetts bar, 1855; New York, 1856; settled in New York, 1856. Identified with many famous cases; one of the committees of seventy which broke up the Tweed ring, 1871; secured the reinstatement of General Fitz John Porter to his army rank, etc.; governor of New York Hospital since 1877 (chairman of committee of elections); noted as a public and after-dinner speaker. Author: "Addresses on Abraham Lincoln, Admiral Farragut, Rufus Choate," etc. Elected bencher of the Inner Temple, England, April 10, 1905.

Choate, Rufus (chô't), an eminent American advocate, was born in 1799. After graduating at Dartmouth College, he entered upon the study of law at Cambridge and in Washington. After practicing at Danvers, Salem, and Boston, successively, he was elected to the senate in 1841, which he quitted in 1845. After the death of Daniel Webster, Choate became the recognized leader of the Massachusetts bar, and acquired quite a national reputation. As an advocate and orator, he may be classed with the most distinguished masters of modern eloquence. Died, 1858.

Choiseul (shooi'-zeul), Stephen Francis, Duke of, was born in 1714. He gained a high rank in the army, and was then employed as a diplomatist at Rome and Vienna, and honored with a peerage. He became prime minister of France, it was reported, through the influence of Madame de Pompadour. In 1770, he was dismissed from office, and exiled to one of his estates. He died in 1785.

Christina, Queen of Sweden, born in 1626; succeeded her father, Gustavus Adolphus, in 1632. After her coronation in 1650, she fell under the influence of favorites, and ceased to interest herself in state affairs. She resigned the crown to her cousin, Charles Gustavus, in 1654, was baptized by the pope, and lived for some time at Paris. On the death of Charles Gustavus, in 1660, she vainly endeavored to regain the throne. She died at Rome in 1689.

Christy, Howard Chandler, illustrator, writer; born in Morgan County, Ohio, January 10, 1873; educated at Duncan's Falls, O.; went East in 1893; since then on New York illustrated periodicals; went to Cuba with second United States regulars and "Rough Riders"; saw the fighting before Santiago; his letters and illustrations published in Scribner's Magazine, Harper's Magazine, Collier's Weekly, and by R. H. Russell, publisher. Has charge of illustrating class at Cooper Institute.

Chrysostom, St. John, one of the Greek fathers, born circa 344; gave himself, from an early age, to a life of prayer and asceticism, and, in 397, was made Bishop of Constantinople by the Emperor Arcadius. He was renowned for his eloquence and almsgiving, and his zeal as a reformer made him many enemies, amongst them the Empress Eudoxia. He was summoned before a synod at Chalcedon, deposed, and banished, but an insurrection of the people led to his immediate recall. He was soon afterwards deposed again, and conveyed to the Taurus Mountains, whence he was ordered to proceed to Pityus, on the Euxine, but died on the journey at Comana in 407.

Cicero, Marcus Tullius; born in Arpinum in 106 B. C.; Roman orator and statesman, studied rhetoric under Milo and others; commenced pleading at the age of twenty-six, and offending Sulla by his successful defense of Roscius Amerinus, retired to Athens, where he studied under Antiochus; went as quaestor to Sicily in 76, and on his return impeached Verres, a former governor; was scribe in 69, praetor in 66, and, in 64, was elected consul in opposition to Catiline. His vigor in putting down the conspiracy of the latter gained for him the title of "father of his country." The measures passed by his enemy, the tribune Clodius, obliged him to withdraw from Greece. After about sixteen months, he was recalled by the senate, and, in 52, went as governor to Cilicia. He sided with the senate and afterwards with Pompey against Caesar, but submitted to the latter after Pharsalia, and retiring to his Tusculan villa, wrote his "De Natura Deorum," and other philosophical works. His defense of Caesar's murderers and the "philippic" orations directed against Marcus Antonius led to his proscription on the formation of the second triumvirate. He was murdered by Antonius's emissaries in 43 B. C.

Cid Campeador, Ruy, or Rodrigo Dias de Bivar, hero of Spanish fiction, aided Sancho of Castile against his brother, Alfonso, King of Aragon, but on the death of Sancho, acknowledged Alfonso as King of Castile. He lost the favor of Alfonso, and retired from his court,

but obtained some aid from him in capturing the city of Valencia from the Moors (1094), which he ruled till his death.

Cimabue, Giovanni, born in 1240; Italian artist, founder of the Florentine school, shook himself free from the traditions of Byzantine art, and by following nature and the impulses of his own genius prepared the way for the future greatness of Italy in the fine arts. The exhibition of his table of "The Virgin" for the Rucellai chapel in Santa Maria Novella was the occasion of a public festival. Except the "Madonna," little of his work remains. Died, 1300.

Cincinnatus, Lucius Quinctius (cin-sin-nah'tus), a famous Roman general, who, being made dictator, in 458 B. C., to carry on the war against the *Æqui* and *Volsci*, was found engaged in ploughing his own farm. He gained a decisive victory, and as soon as the war was over, laid down the office, returning to his simple and hardy life. In the year 439 B. C., he was again appointed dictator, on occasion of intestine troubles in Rome.

Clark, Champ, congressman, lawyer; born in Anderson County, Ky., March 7, 1850; educated in common schools, Kentucky University, Bethany College, and Cincinnati Law School; president Marshall College, West Virginia, 1873-74; has worked as hired hand on farm, clerk in country store, country newspaper editor; lawyer; was city attorney of Louisiana, Mo., and later of Bowling Green, Mo.; prosecuting attorney of Pike County; presidential elector; member Congress, ninth Missouri district, 1893-95, and again 1897-1907; chairman Democratic National Convention, St. Louis, 1904.

Clark, Francis Edward, founder United Society Christian Endeavor; born of New England parentage, Aylmer, P. Q., September 12, 1851; graduate of Dartmouth College, 1873; studied theology three years at Andover; became pastor Williston Church, Portland, Me., which from a small mission he built up to a large Congregational Church; founded, February, 1881, the Society of Christian Endeavor, which has extended throughout the world; pastor Phillips Church, South Boston, 1883-87; since then has devoted his time to the Christian Endeavor work as president United Society Christian Endeavor, president World's Christian Endeavor Union, and editor of "The Christian Endeavor World." Author: "Our Vacations," "Our Business Boys," "Looking Out on Life," "Danger Signals," "Young People's Prayer Meetings," "Ways and Means," "Christian Endeavor Saints," "Our Journey Around the World," "The Mossback Correspondence," "Fellow Travelers," "The Everlasting Arms," "The Great Secret," "World-Wide Endeavor," "A New Way Around an Old World," "Training the Church of the Future," "Christian Endeavor Manual," Edited (with introduction), selections: "The Presence of God" (Bishop Jeremy Taylor), "Living and Loving" (Prof. A. Tholuck), "The Kingdom Within" (Thomas à Kempis), "The Golden Alphabet" (Master John Tauler); also "Christian Endeavor Manual," etc.

Clark, William Andrews, United States senator; born near Connellsville, Pa., January 8, 1839; educated at Laurel Hill Academy and other academies; studied law Mt. Pleasant, Ia., University; did not enter legal profession; taught school, Missouri, 1859-60; went to Colorado, 1862; to Montana, 1863; since then merchant, banker, mine-owner, manufacturer, having large interests; owns street railways of Butte, the "Miner" newspaper; etc.; president United Verde Copper Company, of Arizona; State orator, representing Montana at Centennial Exposition, 1876; grand master Masons, Montana, 1877; major Butte battalion, leading it in Nez Percé campaign, 1878; president constitutional conventions, 1884 and 1889; commissioner from Montana to New Orleans Exposition, 1884; Democrat candidate for delegate in Congress, 1888 (defeated); nominated by Democrats for United States senator, 1890, and claimed election, but was denied seat; candidate for United States Senate, 1898, and elected. A contest ensued at Washington, but before investigation concluded he resigned; elected by legislature for term, 1901-07, United States Senate.

Clay, Henry, born in 1777; American orator and statesman; was educated for the law, and in 1811 entered the House of Representatives, of which he was seven times elected speaker; supported the war with Great Britain on the right of search in 1812, and acted as plenipotentiary in the negotiations preceding the treaty of Ghent (1814); was author of the Missouri Compromise, restricting slavery to the Southern States (1821), and of the Omnibus bill, which postponed the Civil War for ten years.

Clemens, Samuel Langhorne ("Mark Twain"), author, lecturer; born in Florida, Mo., November 30,

1835; educated in common schools, Hannibal, Mo.; (M. A., Yale; L. H. D., Yale, 1901; LL. D., University of Missouri, 1902); apprenticed to printer at twelve; became, 1861, private secretary to his brother; city editor Virginia City (Nev.) "Enterprise," 1862; alternated between mining and newspaper work until, becoming noted as a humorist, he began lecturing and writing books; founded, 1884, publishing house of C. L. Webster & Co., failure of which involved him in heavy losses; has since paid its debts by proceeds of lectures and books; has traveled extensively. Club: Lotos. Author: "The Jumping Frog," "The Innocents Abroad," "Autobiography and First Romance," "The Gilded Age" (with late C. D. Warner), "Roughing It," "Sketches New and Old," "Adventures of Tom Sawyer," "Punch Brothers," "Punch," "A Tramp Abroad," "The Prince and the Pauper," "The Stolen White Elephant," "Life on the Mississippi," "The Adventures of Huckleberry Finn," "A Yankee at the Court of King Arthur," "The American Claimant," "Merry Tales," "The £1, 000,000 Bank Note," "Puddin'head Wilson," "Tom Sawyer Abroad," "Joan of Arc," "Following the Equator," "The Man That Corrupted Hadleyburg," "A Double-Barreled Detective Story," "Christian Science."

Cleopatra, Queen of Egypt; born in 69 B. C.; celebrated for her beauty, was the daughter of Ptolemy Auletes, by whose will she was left joint sovereign with her brother Ptolemy (51 B. C.). Expelled by the latter, she sought the assistance of Julius Cæsar, who restored her to the throne in conjunction with a younger brother. She afterwards followed Cæsar to Rome, and in 41 captivated M. Antonius, who rejected Octavia for her sake. A quarrel with Octavius ensued; the fleet of Antonius and Cleopatra was defeated at Actium, and they fled together to Egypt, where they both committed suicide. Died, 30 B. C.

Cleveland, Grover (Stephen Grover Cleveland), ex-President of the United States; born in Caldwell, Essex County, N. J., March 18, 1837; academic education; (LL. D., Princeton, 1897); married, June 2, 1886, Frances Folsom. Went to Buffalo, 1855, became clerk in a law office and was admitted to bar, 1859; assistant district attorney Erie County, 1863-66; sheriff Erie County, 1870-73; established law practice; in 1881 was elected mayor of Buffalo. His veto of extravagant appropriations directed outside attention to him and led to his nomination and election as governor the following year; in 1884 elected President of United States as Democrat, over James G. Blaine, Republican, by majority of thirty-seven electoral votes; in 1888 again Democratic nominee, but defeated by Benjamin Harrison; returned to law practice, locating in New York; in 1892 again elected president as Democrat, defeating President Harrison; in 1896 the Democratic party having declared for the free coinage of silver in the platform of its national convention, Mr. Cleveland withheld his support from the ticket and platform. He took up his residence, after his second retirement from the White House, at Princeton, N. J. Elected trustee Equitable Life Assurance Society of United States, June 10, 1905.

Clews, Henry, banker; born in Staffordshire, England; intended for ministry, but left school at 15 to enter mercantile life in New York, whither his father had taken him for a visit; junior clerkship Wilson G. Hunt & Company, woolen importers; member firm Stout, Clews & Mason, 1858; later Livermore, Clews & Company; at outbreak of Civil War invited by secretary of treasury to become agent to sell government bonds; firm of Henry Clews & Company organized, 1877, its members pledging themselves never to take any speculative risk. Many years treasurer American Geographical Society; treasurer of the Society for the Prevention of Cruelty to Animals; connected with many city institutions and financial corporations; frequent contributor to newspapers and magazines. Author: "Twenty-eight Years in Wall Street," "The Wall Street Point of View."

Clifford, William Kingdon, F. R. S., born in 1845; mathematician and physicist, was educated at Cambridge; appointed professor of applied mathematics at University College, London, in 1871; wrote "Seeing and Thinking," "Lectures and Essays," and scientific works. Died, 1879.

Clinton, George, an American commander and statesman, born in 1739. He served in early life under General Amherst against the French, and afterwards studied the law. During the struggle for independence in the North American Colonies, he sat in Congress, and was made a brigadier-general. With an inferior force, he succeeded in preventing Sir Henry Clinton from assisting General Burgoyne. Died, 1812.

Clinton, Sir Henry, an English general, succeeded Sir William Howe as commander-in-chief in America.

His course, though marked by bravery and good conduct, was but partially successful. After his return to England he was appointed governor of Limerick, and subsequently of Gibraltar, where he died in 1795.

Clovis I., son of Childeric I., was born about 467, and is regarded as the real founder of the French Monarchy. He succeeded Childeric in 481. The victory of Soissons, which he gained in 486, over Syagrius, rendered him master of all the Roman possessions in the center of Gaul. Victorious when opposed to the Germans at Tolbiac near Cologne, in 496, he is said to have made a vow of embracing Christianity, and to have kept his promise. He was baptized by St. Remigius, Archbishop of Rheims. Having conquered Alaric, King of the Visigoths, in 507, he gained most of the south provinces, but was himself overthrown near Arles, by Theodoric, in 509. Died, 511.

Cobden, Richard, an eminent British politician and reformer, was born at Dunford, in Sussex, in June, 1804. His early life was spent in connection with manufacturing industry at Manchester; and it was not till the year 1837, when he unsuccessfully contested the borough of Stockport, that he became publicly known. In 1840, the anti-corn-law agitation commenced; and in the cause of free trade Mr. Cobden took the foremost rank, until the accomplishment of its principles, in 1846. Shortly afterwards a public subscription was raised, and the handsome sum of £70,000 was contributed, as a testimonial of his countrymen to the unwearied exertions of Mr. Cobden. He represented the West Riding of Yorkshire until 1857; and, in 1860, succeeded, with M. Chevalier, in completing a free-trade treaty between France and Great Britain. He died on the 2d of April, 1865.

Cockran, William Bourke, lawyer, orator; born in Ireland, February 28, 1854; educated in Ireland and France; came to the United States, 1871; taught in private academy; later, principal of a public school in Westchester County, N. Y.; then a lawyer, soon becoming prominent in New York City politics; made noteworthy speeches at National Democratic conventions, 1884 and 1892, opposing the nomination of Cleveland; member of Congress, 1887-89, and 1891-95, as Democrat. In 1896, became advocate of the gold standard and campaigned for McKinley. On issue of anti-imperialism, returned to Democratic party, 1900, and campaigned for Bryan. Was again elected to Congress, February 23, 1904, at a special election to fill a vacancy caused by the resignation of George B. McClellan; reelected, 1904 and 1906.

Cockrell, Francis Marlon, United States senator, 1875-1905; lawyer; born in Johnson County, Mo., October 1, 1834; graduate of Chapel Hill College, Lafayette College, Mo., 1853; studied law and practiced at Warrensburg; served in Confederate States Army, becoming brigadier-general. Democrat, chairman of Senate committee on Engrossed Bills, and member of committees on Appropriations, Military Affairs, Rules, etc., and select committee on Industrial Expositions. Appointed interstate commerce commissioner, March 5, 1905.

Cohen, Solomon Solis, physician; born in Philadelphia, September 1, 1857; son of David Myer and Judith Simiah (da Silva Solis) Cohen; graduate (A. B.) of Central High School, 1872, A. M., 1877; graduate of Jefferson Medical College, 1883. Professor of clinical medicine and therapeutics, Philadelphia Polyclinic and College for Graduates in Medicine, 1889-1902; lecturer on clinical medicine, Jefferson Medical College, 1888-1902; professor of clinical medicine, Jefferson Medical College, since 1902. Author: "Therapeutics of Tuberculosis," "Essentials of Diagnosis," and other medical writings. Editor: "System in Physiologic Therapeutics"; was editor of "Philadelphia Polyclinic"; editor of department of "Treatment," in "American Medicine"; one of the editors of "The American Hebrew." Has contributed poems and occasional essays to "Century," "Scribner's," "Lippincott's," "Arena," etc.; also a translator of poems from the Hebrew.

Coke, Sir Edward, born in 1552; judge and law writer, educated at Norwich grammar school and Cambridge, was called to the bar in 1578; early acquired a high reputation, and became solicitor-general in 1592, and attorney-general in 1594. He showed much harshness in his prosecution of Essex, Raleigh, and others; but his loyalty gained him the chief justiceship of the common pleas, in 1606. In this position and that of chief justice of the king's bench (1613), he opposed James I.'s claim to exercise prerogatives and was temporarily deprived in 1616. Entering parliament in 1621, he there resisted the king's encroachments; was imprisoned in the Tower in 1622, and in 1628, took the chief part in drawing up the Petition of Right. The

remainder of his life was spent in compiling his "Commentaries upon Littleton." Died, 1634.

Colbert, Jean Baptiste, born in Rheims, A. D. 1619; a distinguished French statesman, minister of finance in the reign of Louis XIV. His whole life was devoted to financial and fiscal reforms, and to the encouragement of commerce and manufactures. To him the kingdom was indebted for the enlargement of its navy, for the acquisition of many of its foreign possessions, and for a large number of internal improvements. He instituted the Royal Academy of Painting and Sculpture, and also the Academies of Science and of Architecture. The Gardens of the Tuileries, the Hôtel des Invalides, the façade of the Louvre, and several of the quays along the Seine, were all the work of Colbert. Died, 1683.

Coleridge, Samuel Taylor, a poet, essayist, and dramatist, was born at Bristol in 1770. He was sent to Christ's hospital, and subsequently studied at Cambridge, where, in 1792, he obtained the prize for the best Greek ode. His works are many, and are generally distinguished by benevolence and piety. His "Sibylline Leaves" and "Biographia Literaria" found many admirers, and several of his poems were deemed beautiful. Died, 1834.

Coligny, Gaspard de Chatillon, Sire de (ko-lain-ye), a noted French Huguenot, was born in 1517, and murdered in the St. Bartholomew Massacre, 1572. In early life he attained great distinction as a military leader, and was created admiral in 1552. After the accession of Charles IX., he became a Protestant, and on the breaking out of the civil war, he became, with the Prince de Condé, the leader of the Huguenots.

Colt, Samuel, an American inventor, born at Hartford, Conn., in 1814. He early conceived the idea of revolving fire-arms, and, in 1835, took out a patent for the weapon since known the world over as "Colt's revolver." In 1848, he established a company for the working out of his patent, and built at Hartford one of the most extensive armories in the world. Died, 1862.

Columbus, Christopher, discoverer of America, on October 12, 1492, after two months of great peril and, in the end, mutiny of his men; was born in Genoa, 1438. He went to sea at 14, and cherished, if he did not conceive, the idea of reaching India by sailing westward. He applied in many quarters for furtherance, and, after seven years of waiting, was provided with three small vessels and a crew of 120 men. First touching land at the Bahamas, he visited Cuba and Hayti, and returned home with spoils of the land, and was hailed and honored as "King of the Sea." He made three subsequent visits, and on the third had the satisfaction of landing on the mainland, which Sebastian Cabot and Amerigo Vespucci had reached before him; but he became at last the victim of jealousy, and charges were made against him, which so cut him to the heart that he never rallied from the attack, and he died at Valladolid, in 1506, broken in body and in soul. Carlyle, in a famous passage, salutes him across the centuries: "Brave sea-captain, Norse sea-king, Columbus, my hero, royalist sea-king of all."

Comstock, Anthony, secretary and special agent of New York Society for Suppression of Vice since March 2, 1872; born in New Canaan, Conn., March 7, 1844; educated in district school and Wyckoff's Academy, New Canaan, and 1860-61, high school, New Britain, Conn.; left school to earn living, 1861. His brother, Samuel, having been killed at Gettysburg, volunteered to fill his place in regiment, enlisting in 17th Connecticut Volunteer Infantry, December, 1863; mustered out, July, 1865. Appointed, March 3, 1873, and since then, post-office inspector of New York; was prominent in Y. M. C. A. As secretary and special agent of New York Society for Suppression of Vice and post-office inspector, has brought about 2,800 criminals to justice and destroyed ninety tons of obscene literature and pictures, etc. Author: "Frauds Exposed," "Gambling Outrages," "Morals vs. Art," "Traps for the Young."

Conde, Louis de Bourbon, Prince of, born in 1530; joined the Huguenots after the death of Henri II., and, together with Coligny, became their leader during the reign of Charles IX. He was wounded at Dreux (1562), lost the battle of St. Denys (1567), and was killed at Jarnac (1569).

Condorcet (kong-dor-ae), Jean Marie Antoine Nicholas Caritat, marquis de, was born in 1743. He gained celebrity by his successful labors as a mathematician. His treatise on integral calculations, written when he was but twenty-two years of age, was eminently successful, and was considered to indicate a degree of knowledge seldom possessed at so early an age. He was the friend of D'Alembert and of almost all his illustrious contemporaries, as well as one of the disciples of Voltaire. Being appointed governor of the dauphin

by the constituent assembly, he was successively called to the legislative body and to the convention; but subsequently denounced as a partizan of the Girondists, he was outlawed in 1793, and shortly after was taken prisoner, when he poisoned himself, in 1794.

Confucius (*kon-fu-se-us*), the Latinized name of K'ung-Fou-Tseu, a celebrated Chinese philosopher, supposed to have been born in the year 551 B. C. From his youth he devoted his hours to the study of philosophy. A mandarin when but 17 years of age, he resigned his office on the death of his mother, according to custom, and withdrew to solitude, giving himself up to profound meditation. He afterwards established a school, and had many disciples. The King of Lou invited him to his court and appointed him his first minister. He endeavored to correct the manners of his countrymen by his sage maxims. He effected important reforms, but the intrigues of his enemies prevailed against him, and he was sent into exile. He wrote several very important works, and died in 479 B. C.

Conrad III., founder of the Hohenstaufen Dynasty; elected Emperor of Germany in 1138; had Henry the Proud, as head of the German Guelfs, for rival; crushed him at Weinsberg; joined Louis VII. of France on a third crusade, and returning, overthrew the Guelfs again, leaving Barbarossa as his heir; died in 1152.

Constantine I. (*kön-stän-tin*), called The Great; born in 274, at Mœsia, was son of Constantius Chlorus by Helena. On the death of his father at York, where he accompanied him, was proclaimed emperor by the troops; this title being challenged by Maximian, his father-in-law, and Maxentius, his brother-in-law, he took up arms against first the one and then the other, and defeated them. When one day he saw a cross in the sky with the words, "By this Conquer," in Greek, under this sign, known as the labarum, which he adopted as his standard, he accordingly marched straight to Rome, where he was acknowledged emperor by the senate in 312, and thereafter an edict was issued named of Milan, granting toleration to the Christians. He had still to extend his empire over the East, and having done so by the removal of Lucinius, he transferred the seat of his empire to Byzantium, which hence got the name of Constantinople, i. e., Constantine's city. Constantine had himself baptized in 337 as a Christian, after having three years before proclaimed Christianity the state religion. Died, 337.

Cook, Captain James, born in Marton, in the North Riding of Yorkshire, October 28, 1728; a celebrated English navigator, best known through his "Voyages Round the World," which was exceedingly popular in the last, and the earlier part of the present, century. He made three principal voyages, in the course of which he made many important discoveries, but was ultimately killed in a quarrel with the natives of Hawaii, though he had never acted so as to deserve anything but confidence from the natives with whom he came in contact. His kindly disposition, and his scrupulous justice and humanity, were, with his skill as a navigator, among his first recommendations. After his death, at Hawaii, one of the Sandwich Islands, February 14, 1779, many honors were paid to his memory, both in his own and in foreign countries.

Cooper, James Fenimore, an illustrious American novelist, was born in Burlington, N. Y., 1789. After six years' experience of naval life, Cooper retired from the sea in 1810, and took up his residence at Cooperstown, Otsego County. In 1821, appeared his first work, "Precaution." In quick succession followed "The Spy," a tale which at once secured for him a place in the first rank of novelists; his almost unequalled sea stories, "The Red Rover," "Pilot," and "Water-witch"; his famous "Leather Stocking Series" of Indian life and adventure, the "Pioneers," "Last of the Mohicans," "Pathfinder," "Deerslayer," "Prairie," etc. Cooper, after passing some years in Europe, died in 1851. His works have been translated into every European language, and have exhausted numberless editions.

Copernicus, Nicolas, born in 1473 at Thorn, Prussia; founder of the modern system of astronomy, studied at Cracow and Bologna, and became professor of mathematics at Rome. Obtaining a canonry in the chapter of Frauenberg, he there wrote his work in Latin "On the Revolution of the Celestial Orbs," which he deferred publishing until a little before his death, in 1543, aware of the opposition it would arouse.

Corday D'Armands, Marie Charlotte, born in 1768, at St. Saturnin, Normandy, of a noble Norman family; sympathized with the ideas of the French Revolution but was horrified at its excesses; visited Paris in July, 1793, with the purpose, it is said, of assassinating Marat, or Robespierre; obtaining an interview with the former while in his bath, she stabbed him with a knife; was

immediately apprehended and executed four days afterwards.

Corelli, Marie, Miss, Stratford-on-Avon; the adopted child of the poet, Charles Mackay; educated in a French convent, and studied for a musical career. At an early age betrayed literary gifts, and the success of "A Romance of Two Worlds" decided her course. Since then she has written a number of novels which have had large circulations. Persuaded Mr. Edward Morris, of Chicago, to purchase Harvard House, Stratford-on-Avon (which she had restored), and to present it to Harvard University, to which it now belongs.

Corneille (*kor-nayl'*), **Pierre**, born in 1606, in Rouen; French dramatist; was educated for the law, but the success of his first comedy, "Médite," induced him to devote himself to literature. It was followed by other comedies, but from 1636 he preferred tragedy, producing "Médée," "Le Cid" (which established his fame), "Horace," "Cinna," "Polyeucte," "La Mort de Pompée," etc. "Le Menteur" was another successful comedy. Died, 1684.

Cornelia, the daughter of Scipio Africanus, was the wife of Tiberius Sempronius Gracchus, who was consul, 177 B. C. By him Cornelia had twelve children, and was left, still in the prime of life, a widow. To her children she gave all her care, though only three reached maturity, but these owed to their mother the high distinction which they gained in the commonwealth. A lady, after displaying her jewels, asked to see those of Cornelia, who, producing her sons, said "These are mine." Her hand was sought by the King of Egypt, but she withheld her consent. She is said to have encouraged her sons to be too ambitious, which eventually cost them their lives.

Cornell, Ezra, 1807, an American philanthropist; born in Westchester Landing, N. Y. He accumulated a large fortune and is best known as the founder of Cornell University. He began life as a mechanic and miller at Ithaca, N. Y., and subsequently became a contractor for the erection of telegraph lines. He died in Ithaca, in 1874.

Cornwallis, Charles, Marquis, born A. D. 1738; a prominent English statesman and general, celebrated as the general under whom the British forces were finally defeated (A. D. 1782), in the American War of Independence. He was afterwards governor-general and commander-in-chief in India, where he greatly distinguished himself by his victories over Tipoo Sahib; and still later (1798), he was lord-lieutenant of Ireland, and (1802), plenipotentiary of Great Britain to negotiate the Peace of Amiens. Appointed, in 1805, governor-general of India a second time; he died (1805) at Ghazipur, in the province of Benares, while on his way to assume the command of the troops.

Corot (*kō-rō*), **Jean Baptiste Camille**, born in Paris, 1796; French painter, pupil of Michallon and Bertin, and founder of the impressionist school; began to exhibit in 1827, but did not produce his masterpieces, "Dante and Virgil," and "Macbeth meeting the Witches," till 1859. Died, 1875.

Correggio (*kor-ra'-je-o*), **Antonio Allegri da**, an artist of great fame; was born at Correggio in 1494, in the duchy of Modena. He is regarded as the founder of what is called the Lombard School, and was distinguished above all his rivals by the grace and beauty of his figures, and by the richness and harmony of his coloring. He painted "The Assumption of the Virgin," for the cathedral church of Parma; and among his numerous productions are, the "Nativity," the "Marriage of St. Catherine," the "Holy Family," etc. Died, 1534.

Cortelyou, George Bruce, secretary of the treasury; was born in the city of New York, July 26, 1862; was educated at public and private schools; graduated at Hempstead (L. I.) Institute and State Normal School, Westfield, Mass.; is a graduate of the law schools of the Georgetown and Columbian (George Washington) universities; in 1883 was a general law and verbatim reporter in New York; was principal of preparatory schools in New York from 1885 to 1889; in the latter year entered the public service, and has been private secretary to various public officials, among them the post-office inspector in charge at New York, the surveyor of the port of New York, and the fourth-assistant postmaster-general; November, 1895, was appointed stenographer to President Cleveland; February, 1896, executive clerk; July 1, 1898, assistant secretary to President McKinley; April 13, 1900, secretary to the president; reappointed March 15, 1901, and on September 16, 1901, reappointed by President Roosevelt; was appointed secretary of the newly established Department of Commerce and Labor, February 16, 1903, and was confirmed the same day; on June 23, 1904, was elected chairman

of the Republican National Committee, and conducted the campaign which resulted in the election of President Roosevelt. He entered the new cabinet on March 7, 1905, as postmaster-general, and on March 4, 1907, was appointed secretary of the treasury.

Cortez, or Cortez (kor-tez), Fernando, a Spanish adventurer; born in Medellin in Estremadura, in 1483. He was first destined for the law; but a passion for arms carrying him to the military profession, he went early in the Sixteenth Century, with Velasquez, to Cuba, and subsequently obtained the command of the expedition sent against Mexico. With seven hundred men under his command, he landed at Tobasco in 1518, and immediately burned his ships, that his followers might have no hope but in victory. He advanced to Mexico, where he was at first received with friendly demonstrations; but on his seizing Montezuma, the Mexican king, whom he subsequently put to death by fire, a struggle ensued, in which many thousands of lives were lost. He eventually succeeded in putting down all opposition, and in overrunning Mexico, while effecting which he is believed to have perpetrated the most enormous cruelties. He was rewarded with the title of marquis, and a grant of land; but subsequently, on his return to Spain, he had the mortification to find himself neglected. Died, 1554.

Corwin, Thomas, an American statesman; born in Kentucky in 1794; was admitted to the bar in 1818, and after serving some seven years in the State legislature, was elected to Congress in 1830, and to the United States Senate in 1845. In 1850, he was appointed secretary of the treasury, and, in 1861, minister to Mexico. Died in Washington in 1865.

Cox, Kenyon, painter; born in Warren, O., October 27, 1856; studied in Cincinnati and Philadelphia; in Paris under Carolus Duran and Gérôme, 1877-82; returned to New York. Pictures are principally portraits and figure pieces; painted two decorations in Library of Congress, one in Walker Art Gallery, Bowdoin College; one in Minnesota State capitol, one in Citizens' building, Cleveland, O., and frieze in court room, Appellate Court, New York, and other decorative pictures. Has contributed to leading magazines on art subjects; part author of "Modern French Masters," edited by J. C. Van Dyke, and of "The Nineteenth Century." Author: "Mixed Beasts," "Old Masters and New."

Cox, Palmer, artist; born in Granby, Quebec, Canada, April 28, 1840; graduate of Granby Academy; lived in San Francisco, 1863-75, contributing to "Golden Era" and "Alta California"; since 1875, has lived in New York. His specialty is original humorous pictures illustrating his own books. Author: "Squibs of California, or Every-day Life Illustrated," "Hans von Pelter's Trip to Gotham," "How Columbus Found America," "That Stanley," "The Brownies," "Their Book," "Queer People," "Queer People with Wings and Stings," "Queer People with Paws and Claws," "Another Brownie Book," "The Brownies at Home," "The Brownies Around the World," "The Brownies Through the Union," "The Brownies Abroad," "The Brownies in Fairyland" (cantata in two acts), "Palmer Cox' Brownies" (spectacular play in three acts), "The Brownies in the Philippines."

Cralk, Dinah Maria, born in 1826; daughter of Mr. Muloch, a clergyman. Besides poems and essays, she wrote many novels, of which "John Halifax, Gentleman" (1856) is the best known. Died, 1887.

Cranmer, Thomas, born in 1489; Archbishop of Canterbury, obtained the favor of Henry VIII. by furthering his divorce from Catherine of Aragon, and was appointed primate in 1533. He favored the Reformed doctrines during the reign of Henry VIII., and in that of Edward VI. Protestantism was thoroughly established, and the "Book of Common Prayer" compiled (1549) under his guidance. He was committed to the Tower on the accession of Mary, condemned at Oxford for heresy in 1554, and after two years' imprisonment, burnt there, openly rejecting the recantation of Protestantism which he had been induced to sign. Died, 1556.

Crassus, Lucius Licinius, the greatest Roman orator of his day, became consul in 55 B. C.; during his consulship a law was passed, requiring all but citizens to leave Rome, an edict which provoked the Social War (140-91 B. C.).

Crassus, Marcus Licinius, the triumvir with Pompey and Caesar; was avaricious, and amassed great wealth; appointed to the province of Syria, provoked out of cupidity war with the Parthians, in which he was treacherously slain; Ordes, the king, cut off his head, and poured melted gold into his mouth, saying as he did so, "Now sate thyself with the metal of which thou wert so greedily when alive" (115-53 B. C.).

Crawford, Thomas (krau'furd), an American sculptor, was born in New York, in 1814. He early manifested a taste for artistic studies, and, in 1835, repaired to Rome, where he entered the studio of Thorwaldsen. His principal works are the bronze statue of Beethoven, executed for the Boston Music Hall; the colossal equestrian statue of Washington at the capitol, Richmond; and the marble and bronze statuary for the capitol, Washington. Died in London in 1857.

Creasy, Sir Edward (kre'ze), an English historian, born in 1812, is the author of the "Fifteen Decisive Battles of the World," which has exhausted some ten editions; "The Rise and Progress of the English Constitution" (1856); and a "History of England," the first volume of which was published in 1869.

Crispi, Francesco, born in 1819; Italian statesman, joined in the conspiracies which led to the overthrow of the kingdom of the two Sicilies (1848); planned the second Sicilian revolt of 1859-60; fought under Garibaldi; became a minister of state; represented Palermo in the first Italian Parliament, in which he was leader of the constitutional opposition. In 1877, he was appointed minister of the interior; in 1887, president of the council and premier, and resigned in 1891. Died, 1901.

Crittenden, John Jordan (kru'tn-den), an American statesman, born in Kentucky in 1786. After having studied and engaged in the practice of the law, he, in 1816, became a member of the Kentucky House of Representatives, and, in 1817, was elected to the United States Senate. In 1841, he became attorney-general in President Harrison's administration; and, in 1848, was elected governor of Kentucky. He served as attorney-general in President Fillmore's cabinet from July, 1850, till the accession of President Pierce. Throughout his political career, Crittenden's name is identified with most of the measures introduced and advocated by his friend, Henry Clay. Died, 1863.

Crompton, Samuel, inventor of the spinning-mule; born near Bolton; for five years he worked at his project, and after he got it into shape was tormented by people prying about him and trying to find out his secret; at last a sum was raised by subscription to buy it, and he got some £60 for it, by which others became wealthy, while he had to spend, and end, his days in comparative poverty, all he had to subsist on being a life annuity of £63, which some friends bought him (1753-1827).

Cromwell, Oliver, the Protector, son of Robert Cromwell, was born in Huntingdon in 1599, and educated at the free school and at Cambridge, where he did not graduate; represented Huntingdon in the parliament of 1628; always an advocate of puritanical views, first became seriously religious himself about 1638; was member for Cambridge in the short and long parliaments, and soon made himself prominent by his zeal in the cause of liberty; on the outbreak of the civil war raised a troop of horse for the parliament; distinguished himself in the battles which followed, and was specially exempted from the Self-denying Ordinance (1645); joined the Independent party in opposition to the Presbyterians, and by the ejection of members known as "Pride's Purge," secured the condemnation and execution of Charles I. (1649). After reducing Ireland to submission, he attacked the Scottish Royalists, defeating them at Dunbar (1650) and Worcester (1651). He dissolved the Long Parliament in 1653, and, after an unsuccessful attempt at constitutional government, assumed the title of Protector, and ruled as a military despot, enforcing order at home, and winning the respect of foreign countries. Died, 1658.

Cromwell, William Nelson, lawyer; now senior of law firm of Sullivan & Cromwell; specialty is corporation law; organized, 1899, National Tube Company (capital, \$80,000,000); since then many other corporations; appointed assignee and reorganized Decker, Howell & Company, 1890, and later, Price, McCormick & Company, which had failed for several millions, and put both on paying basis; officer, director, or counsel of more than twenty of the largest corporations in the United States, including United States Steel Corporation. Engaged by Panama Canal Company of France, and was instrumental in securing passage of Panama Canal bill in Congress; now engaged in perfecting details of the transfer of Panama Canal to United States Government.

Crookes, Professor Sir William, scientist; born in 1832. Past-president of the Chemical Society; past-president of the Institution of Electrical Engineers; president of the British Association, 1898; vice-president of Royal Society, 1895-96; president of Society for Psychical Research, 1897; discoverer of Thallium and of properties of radiant matter; inventor of the radiometer, spinthariscopes, and other instruments. Wrote "Manu-

facture of Beet Sugar," "Handbook of Dyeing," "Manual of Practical Assaying," "Select Methods in Chemical Analysis," "The Wheat Problem," etc.; editor of the "Chemical News."

Cujas, Jacques (*koo'zhäs*), an eminent French jurist, born in 1520; became professor of the Roman law at Bourges and Valence. Among his numerous works are "Commentaries on Justinian's Institutes," and on the "Pandects and Decretals." Cujas has been styled by Hallam the "greatest of all civil lawyers." Died, 1590.

Culberson, Charles A., United States senator from Texas; born in Dadeville, Ala., June 10, 1855; graduate of Virginia Military Institute, 1874; studied law at University of Virginia, 1876-77; settled in Texas, 1856; county attorney, Marion County, attorney-general of Texas, 1890-94; governor, 1894-98; delegate and chairman of Texas delegations to Democratic National conventions, 1896, 1904; elected United States senator, 1899, to succeed Roger Q. Mills; reelected, 1905; minority leader of the United States Senate, 60th Congress.

Cummings, Albert Baird, governor, lawyer; born in Carmichaels, Pa., February 15, 1850; academic education at Waynesburg, Pa.; admitted to bar; settled in practice in Des Moines, Ia.; member of Republican National Committee, 1896-1900; elected governor of Iowa, 1901, for term expiring January, 1904; renominated, 1903 and 1906.

Curran, John Philpot, born in 1750; Irish politician, of humble birth, educated at Trinity College, Dublin; was, in 1775, called to the Irish bar, where he won a high reputation as an orator; opposed the Union in the Irish Parliament; in 1808, was made Master of the Rolls in Ireland. Died, 1817.

Curtis, William Eleroy, journalist; born in Akron, O., November 5, 1850; graduate of Western Reserve College, 1871. On staff of "Chicago Inter-Ocean," 1873-87; Washington correspondent for "Chicago Record," 1887-1901; "Chicago Record-Herald," since March, 1901. Special commissioner from United States to Central and South American republics; executive officer of International American Conference, 1889-90; director of Bureau of American Republics, 1890-93; chief of Latin-American department and historical section at World's Columbian Exposition, 1891-93; commissioner of Columbian Exposition to Madrid, and special envoy to the Queen Regent of Spain and Pope Leo XIII., 1892. Author: "Tibbalses Folks," "A Summer Scamper," "The Life of Zachariah Chandler," "Children of the Sun," "Capitals of Spanish America," "The Land of the Nihilist," "Trade and Transportation," "Handbook to the American Republics," "Guatemala," "Costa Rica," "Ecuador," "Venezuela: a Land Where It is Always Summer," "The United States and Foreign Powers," "The Existing Autographs of Columbus," 1893 (American Historical Association); "Relics of Columbus," "Recent Discoveries Concerning the Early Settlement of America in the Archives of the Vatican," "The Yankees of the East," "To-day in France and Germany," "Between the Andes and the Ocean," "The True Thomas Jefferson," "The Turk and His Lost Provinces," "Denmark, Sweden, and Norway," "The True Abraham Lincoln," "To-day in Syria and Palestine," "Modern India," "Egypt, Burma, and the British East Indies." Member of nearly all learned societies of United States and several in Europe.

Curzon of Kedleston, Baron, English statesman and author; viceroy of India, 1898-1905. His term of office was extended. In June, 1905, difficulties over the new military scheme in India led to his resigning. The resignation was withdrawn at request of home authorities, but in August, controversy again reached an acute stage, and Lord Curzon finally relinquished office. He remained in India to receive the Prince and Princess of Wales. The "Times" spoke of his work as "among the most brilliant and strenuous accomplished for the empire in our times," and of his having infused into Indian civil administration a new spirit born of his own indomitable belief in reform and his own unshaken determination to carry it into practice. His wife died in 1906. Elected chancellor of Oxford University, March, 1907.

Cushing, Caleb, born in 1800; American lawyer and diplomatist, in 1843, negotiated the first treaty of the United States with China; was attorney-general from 1853 to 1857, and one of three jurists entrusted with the revision of the laws of Congress (1866); in 1872, he was one of the counsel for the settlement of the Alabama claims. Died, 1879.

Cuvier (*ku'-ve-a*), **George Leopold Christian Frederick Dagobert**, Baron, was born at Montbéliard in the duchy of Württemberg in 1769. He devoted himself to the study of natural history, and gained extraordinary celebrity. He was placed by Bonaparte in

the most important offices in the department of public instruction. The additions he made to the general stock of knowledge gave him fame throughout the civilized world, and he was received with appropriate honors by the scientific, when he visited England in 1818, and in 1830. He died in 1832.

Cyrus the Great, born circa, 590 B. C.; founder of the Persian Empire; was the son of Cambyses and Mandane, daughter of Astyages, King of Media. His early history is probably mythical; in 559 B. C., he excited the Persians against the Medes, defeated Astyages, and usurped his throne. He subsequently conquered Lydia and Babylon, and marched against the Massagete, governed by Queen Tomyris, by whom he was defeated and slain. Died, 529 B. C.

Cyrus the Younger, born in 424 B. C.; son of Darius, and governor of the western provinces of Asia Minor; after unsuccessfully plotting against his elder brother, Artaxerxes, raised a large army, including about 12,000 Greek soldiers, with which he marched against him, but was defeated and slain at Cunaxa. Xenophon then conducted the retreat of the 10,000 surviving Greeks. Died, 401 B. C.

Daguerre, Louis Jacques Mande, born in 1789; the inventor of photography by the daguerreotype process, by which the portrait was fixed on a plate of copper thinly coated with silver, by the successive action of the vapors of iodine, bromine, and mercury, in which invention he was associated with M. Niecep Daguerre. He was also celebrated as a dioramic painter; was named by the French Government as an officer of the Legion of Honor, and granted a pension of six thousand francs. Died, 1851.

Daniel, one of the Jewish prophets, is affirmed by Josephus to have descended from the royal family of Judah. While young, he was carried as a captive from Jerusalem to Babylon. There his talents caused him to be advanced to the rank of chief of the magi, or wise men, and to the government of the province; and his wisdom, courage, and skill in prophecy gave him great distinction. He is supposed to have died about year 534 B. C.

Dalzell, John, congressman, lawyer; born in New York, April 19, 1845; removed to Pittsburgh, 1847; graduate of Yale, 1865; admitted to bar, 1867; has practiced ever since; for years one of the attorneys for the Pennsylvania Railroad Company for all its western lines; also attorney for many corporations in Allegheny County, Pa. Member of Congress since 1887; member of Committee on Rules and Committee on Ways and Means, 54th, 55th, 56th, 57th, 58th, 59th, and 60th Congresses.

Daniel, John Warwick, United States senator, 1887-1911; born in Lynchburg, Va., September 5, 1842; educated at Lynchburg College and Dr. Gessner Harrison's University School; in Confederate States Army of Northern Virginia throughout war; became adjutant-general on General Early's staff; studied law at University of Virginia, 1865-66; has practiced ever since. Member of Virginia house of delegates, 1869-70, 1871-72; of State senate, 1875-81; presidential elector, 1876; defeated for governor of Virginia, 1881; member of Congress, 1885-87; member of National Democratic conventions, 1880, 1888, and 1896; permanent chairman of latter. Author: "Attachments Under the Code of Virginia," "Negotiable Instruments," etc.

Dante Alighieri, Italian poet; was born in Florence, 1265. Of his early days little is known, till, as related in his "Vita Nuova," he first met "the lady of his heart, Beatrice." According to Boccaccio, she was the daughter of Folco Portinari, and married Simone de Bardi and to her Dante was passionately but platonically attached. She died in 1290, and shortly afterwards Dante married Gemma Donati, a daughter of one of the "Guelph" families. In 1289, he fought at Campaldino, and was present at the surrender of Caprona. After filling various minor offices, in 1300, he became one of the six priors of Florence. In 1301, he went as ambassador to Pope Boniface VIII., and never returned to his native town. Charles of Valois aided the Neri or Black Guelphs against their opponents, the Whites, of whom Dante was a supporter, and, in 1302, he was banished. He made many unsuccessful attempts to return, and spent the remaining years of his life wandering from town to town, finally settling in Ravenna, where he died in 1321. His most celebrated work is the "Divina Commedia," and others are the "Vita Nuova," the "Convito," and the "Canzoniere."

Danton (*dän'ton*), **George James**, a French advocate, and notorious republican; was born in 1750. He took a leading part in dethroning Louis XVI., and was a prominent actor in the sanguinary scenes that followed. He became a formidable rival to his associate Robespierre,

but was worsted in the strife, and suffered on the guillotine in 1794.

D'Arblay, Francesca Burney, English novelist; born in 1752, was the third child of Dr. Charles Burney. From the age of eighteen to twenty-six she worked at "Evelina," which appeared anonymously in 1778, and won her fame, and the admiration and friendship of Dr. Johnson. "Cecilia" (1782) was not so successful; but her works gained her a position at the court in 1786, and in her "Diary" she gives a graphic description of its decorous dullness. In 1793, she married General D'Arblay, a French refugee. Her later works are "Camille" (1796), "The Wanderer" (1814), and the "Memoirs" of her father. Died, 1840.

Darius, born in 548 B. C.; son of Hystaspes, de-throned Smerdis the usurper, and became King of Persia in 521. He captured Babylon after a siege of twenty months, conquered Thrace, and defeated the Scythians. He sent two armies to Greece to avenge the destruction of Sardis by the Athenians, the first of which was repulsed by the Thracians, and the second by the Athenians at Marathon in 490. He died in B. C. 485, while organizing a third expedition.

Darrow, Clarence S., lawyer; born in Kinsman, O., April 18, 1857; educated in Ohio public schools; studied law; admitted to bar, 1875. Formerly attorney for Northwestern Railway. Has been identified with many prominent cases; of recent years, notably in cases against monopolies, including litigation against gas trust in Chicago; chief counsel for anthracite miners in the anthracite coal strike arbitration at Scranton and Philadelphia, 1902-03, commission appointed by President Roosevelt. Elected Illinois Legislature, 1902. Active in political campaigns as Independent Democrat; twice married. Counsel in Debs strike case and large number of labor injunction and labor conspiracy cases on side of labor; platform speaker. Author: "Persian Pearl" (essays), "Resist Not Evil," "Farmington" (novel), "An Eye for an Eye," various pamphlets on social and economic questions.

Darwin, Charles Robert, an English naturalist; born in Shrewsbury, February 12, 1809; was the son of Dr. Robert Darwin and grandson of Dr. Erasmus Darwin. He was educated at Shrewsbury School, and at the universities of Edinburgh and Cambridge. He early devoted himself to the study of natural history. In 1839, he married his cousin Emma Wedgwood, and henceforth spent the life of a quiet country gentleman, engrossed in scientific pursuits—experimenting, observing, recording, reflecting, and generalizing. In 1859, his name attained its great celebrity by the publication of "The Origin of Species by Means of Natural Selection." This work, scouted and derided though it was at first in certain quarters, may be said to have worked nothing less than a revolution in biological science. In it for the first time was given a full exposition of the theory of evolution as applied to plants and animals, the origin of species being explained on the hypothesis of natural selection. The rest of his works are largely based on the material he had accumulated for the elaboration of this great theory. He died April 19, 1882, and was buried in Westminster Abbey.

Darwin, Erasmus, a poet and physician; born in Eltham near Newark, in 1721. He studied at Cambridge, obtained a doctor's degree at Edinburgh, and settled at Lichfield as a physician. He was a man of great and varied talent, but some of his opinions were deemed extravagantly eccentric. His "Botanic Garden" was admired as a fine specimen of polished verse, and his "Zoonomia," or "The Laws of Organic Life," was admitted to be ingenious, though built upon an hypothesis which was repudiated as absurd. In 1781, he removed from Lichfield to Derby, where he died in 1802.

Davenport, Homer Calvin, cartoonist; born in Silverton, Ore., March 8, 1867; reared on farm in Oregon; never attended art schools; no school education; has been jockey; railroad fireman; clown in circus. Given employment, 1892, on "San Francisco Examiner"; taken to New York by W. R. Hearst, 1895; since then on "New York Journal"; originated the Mark Hanna \$-mark suit of clothes and the giant figure of the trusts in 1899; his work caused attempt to pass anti-cartoon bill in New York, 1897. Author: "Davenport's Cartoons," "The Bell of Silverton," and "Other Short Stories of Oregon." "The Dollar or the Man?"

David (da'-vid), the son of Jesse, of the tribe of Judah; was born in Bethlehem, A. M. 2919. He watched the flocks of his father, when Samuel was sent by the Most High to Bethlehem, to anoint him King of Israel in the place of Saul whom he had rejected, in 2934. War having broken out between the Israelites and the Philistines, he fought and vanquished the giant Goliath. Saul gave

him the command of a body of men, but having conceived a great hatred of him, he was exposed to imminent danger, and compelled to seek a refuge among the Philistines. After the death of Saul, in 2949, he was recognized as King of Israel, and defeated the Philistines, the Moabites, the Syrians, and the Ammonites. Many acts of weakness were committed by him, but he obtained forgiveness from the Almighty by exemplary penitence. He transported the ark to Jerusalem, and is the reputed author of many of the psalms. Died, 2990.

Davidson, Samuel, D. D., LL. D., born in 1807; biblical critic; was educated in Ireland at the Royal College of Belfast. He entered the Presbyterian ministry, and was called in 1835 to the chair of biblical criticism in his own college. In 1842 he became professor of biblical literature and Oriental languages in the Congregational College at Manchester. He was a member of the Old Testament Revision Committee.

Davis, Henry Gassaway, capitalist; born in Baltimore, November 16, 1823; educated at country schools, but being left fatherless went to work young; became superintendent of a plantation, then brakeman, conductor, and later agent at Piedmont, W. Va., of the Baltimore & Ohio Railroad; later merchant and a leading collier; projected and carried on to success the West Virginia Central & Pittsburgh Railway, which was sold to the Wabash, 1902; then built the Coal & Coke Railway of West Virginia, of 200 miles, of which is president; also president Davis National Bank of Piedmont, West Virginia, Trust Company of West Virginia, etc.; member house of delegates, West Virginia, 1865; State senator, 1867-69; United States senator, 1871-83, declining reelection; Democrat delegate to six National Democrat conventions; one of American delegates to Pan-American congress; is member United States Intercontinental Railway Commission; was candidate of Democrat party for vice-president, 1904.

Davis, Jefferson, born in 1808; American statesman and soldier, graduated at West Point in 1826, and served in the army for seven years. In 1845 he was elected to Congress, and was appointed colonel of the first regiment of Mississippi volunteers. In 1853 he was secretary of war, and from 1858-61 was again member of the senate. On February 9, 1861, he was unanimously elected "President of the Confederate States of America." War followed, and commenced with a Confederate victory at Bull Run, but the South soon sustained serious reverses, then finances failed, and Grant's defeat of Lee concluded the war. Davis was captured at Irwinsville, and conveyed to Fort Monroe, where he was imprisoned for two years. He was prosecuted in 1867 for treason, was discharged, and his name included in the general amnesty. Died, 1889.

Davis, Richard Harding, novelist, journalist; born in Philadelphia, 1864; son of the late L. Clarke and Rebecca (Harding) Davis; served as war correspondent "London Times" and "New York Herald" in Turkish-Greek, Spanish American, South African, and Russian-Japanese Wars. Author: "Soldiers of Fortune," "Gallagher and Other Stories," "The Princess Aline," "Our English Cousins," "Van Bibber and Others," "About Paris," "The Rulers of the Mediterranean," "Three Gringos in Venezuela," "Cuba in War Time," "A Year from a Correspondent's Note-Book," "Stories for Boys," "Cuban and Porto Rican Campaigns," "Cinderella and Other Stories," "Dr. Jameson's Raiders," "Exiles," "The King's Jackal," "The Lion and the Unicorn," "West from a Car Window," "Episodes in Van Bibber's Life," "With Both Armies in South Africa," "In the Fog," "Ranson's Folly," "Captain Macklin," "The Bar Sinister," "Kits and Outfits," "Plays: "Taming of Helen," "Ranson's Folly," "The Dictator."

Davy, Sir Humphry, born in 1778; English chemist, was a native of Penzance. Two papers on nitrous oxide obtained him the post of assistant lecturer on chemistry to the Royal Institution, London, and in a few weeks he was raised to the chief lectureship. In 1803 he became a fellow, and in 1807 secretary of the Royal Society. His Bakerian lecture in 1806 gained him the 3,000 franc prize of the French Institute. In 1815 he invented the miner's safety lamp. He was knighted in 1812, made a baronet and elected president of the Royal Society in 1820. Failing health compelled him to leave England, and he died at Geneva in 1829, from paralysis.

Dawson, Sir John William, geologist and naturalist; was born at Pictou, Nova Scotia, 1820. He studied in Edinburgh, and distinguished himself as a paleontologist. Published, "Story of the Earth and Man," "Origin of the World," and "Geology and History." Dawson called in question the Darwinian theory as to the origin of species. For many years he was chancellor of McGill University, and one of the most noted of Canadian educators. Died, at Montreal, 1899.

Day, James Roscoe, clergyman, educator; born in Whitneyville, Me., October 17, 1845; graduate of Bowdoin, 1874, S. T. D.; (D. D., Wesleyan, Conn., and Dickinson College; LL. D., Northwestern University; D. C. L., Cornell College, Ia.). Methodist Episcopal clergyman in Bath, Portland, Boston, and New York. Chancellor Syracuse University since 1894. Elected bishop Methodist Episcopal Church, 1904, but resigned. Is a vigorous writer and speaker, and well known publicist.

Day, William Rufus, jurist; born in Ravenna, O., April 17, 1849; graduate of University of Michigan, 1870; studied in law department, same; admitted to bar, 1872; established in practice at Canton, O.; judge court of common pleas, 1886-90; elected as nominee of both political parties; appointed, 1889, judge United States District Court, northern district of Ohio, but because of failing health resigned before taking office; appointed assistant secretary of State, March, 1897; succeeded John Sherman as secretary of State, April 26, 1898, but in September, 1898, was succeeded by John Hay, becoming chairman United States peace commissioners at Paris, at close of war with Spain; judge United States Circuit Court, sixth circuit, 1899-1903; associate justice United States Supreme Court since February, 1903.

Decatur, Stephen, a United States naval commander, born in 1779. On various occasions he was distinguished by his skill and courage. In the war of 1812, between England and America, he captured the "Macedonian" English frigate. In the year 1815, he was taken by the British, after maintaining a running fight for more than two hours. He died in 1820, being shot in a duel which he fought with Commodore Barron.

Defoe (*de-fō*), **Daniel**, a much admired English novelist; born in 1660, was the son of a butcher. In 1688 he kept a hosiery shop in Cornhill, but proving unsuccessful, he was obliged to depend upon his literary powers for a livelihood. He obtained, in 1695, the appointment of accountant to the commissioners of glass duty, which office he held till that duty was repealed in 1701. He was an active writer, but his "Robinson Crusoe," the work for which he was most celebrated, did not appear till 1719. Among his productions may be mentioned "A Journal of the Plague in 1665," by a supposed witness of it. He died in 1731.

De Kalb (*kālb*), **John, Baron**, was born about 1732, in Alsace, France. After studying the art of war in the French army, he accompanied Lafayette to America in 1777. After being appointed a major-general by Congress, he served in the field in New Jersey and Maryland, and was second in command to General Gates. He was killed in the battle of Camden, 1780.

Deland, Margaretta Wade, author; born (Campbell) in Allegheny, Pa., February 23, 1857; educated in private schools. Author: "John Ward, Preacher," "The Old Garden and Other Verses," "Philip and His Wife," "Florida Days," "Sydney," "The Story of a Child," "The Wisdom of Fools," "Mr. Tommy Dove and Other Stories," "Old Chester Tales," "Dr. Laverda's People," "The Common Way."

Delcasse, Theophile, was born in Pamiers, March 1, 1852, educated in Paris, and began his career as a journalist. He was elected to the chamber in 1889, for Foix; in 1893, became under-secretary for the colonies under MM. Ribot and Dupuy, and colonial minister in the Dupuy cabinet of May, 1894. He has always been a consistent advocate of colonial expansion. When M. Brisson formed his ministry in 1898, he entrusted foreign affairs to M. Delcasse, and it fell to his lot to deal with the difficult position at Fashoda. He retained his portfolio in M. Dupuy's ministry, after the defeat of the Brisson administration. In 1899, he negotiated the agreement with Great Britain as to the Nile Valley and Central Africa, and still remained foreign minister when M. Waldeck-Rousseau succeeded M. Dupuy, and when M. Combes, in 1902, succeeded M. Waldeck-Rousseau. He brought about the rapprochement with Italy, visited England with the president in 1903, and with Lord Lansdowne prepared the Anglo-French Agreement, signed April 8, 1904. The difficulty with Germany about Morocco caused his retirement in 1905.

Delmas, Delphin Michael, lawyer; born in France, April 14, 1844; removed to California in boyhood; graduate of Santa Clara College, California, A. B., 1862; A. M., 1863; Ph. D., 1903; graduate of Yale Law School, LL. B., 1865. Admitted to California bar, 1866; practiced in San Jose, Cal., 1866-83; since then in San Francisco. District attorney of Santa Clara County, Cal., 1868; regent of University of California, 1885; delegate-at-large of Democratic National Convention, St. Louis, 1904. Author: "Speeches and Addresses."

Demetrius, surnamed Poliorcetes, King of Macedonia, was defeated near Gaza by Ptolemy in 318. He delivered Athens from Demetrius Phalerus, but the suc-

cessors of Alexander defeated him at Ipsus (301). In 290, he seized the throne of Macedonia, but was expelled (287), and died in captivity (286 C. B.).

Demosthenes, born circa 385 B. C.; Greek orator, resolved to study rhetoric, though his lungs were weak, his pronunciation bad, and his gesture awkward. He persevered till he surpassed all other orators, and is noted for his "Philippics and Olynthiatics," aimed against Philip of Macedon. On the advance of Antipater he fled, and poisoned himself in preference to falling into his enemies' hands. Died, 322 B. C.

Deneen, Charles Samuel, governor; born in Edwardsville, Ill., May 4, 1863; educated in public schools at Lebanon, Ill., and McKendree College (graduated, 1882); taught school about three years; studied law; admitted to bar. Elected to Illinois House of Representatives, 1892; served one term as attorney for sanitary district of Chicago, December, 1895-96; State's attorney of Cook County, Ill., 1896-1904; governor of Illinois, 1904-08.

Depew, Chauncey Mitchell, an American lawyer; born in Peekskill, N. Y., April 23, 1834; was graduated at Yale College in 1856, and engaged in the presidential campaign for Fremont immediately afterward; studied law, and was admitted to the bar in 1858. He was appointed United States minister to Japan, and after holding the commission a month, declined, and began his career as a railroad official as attorney for the New York and Harlem Railroad. He was made attorney and director of the consolidated Hudson River and New York Central railroads in 1869; general counsel of the whole Vanderbilt system in 1875; second vice-president of the reorganized New York Central Railroad in 1882, and president in 1885. His political career, since 1866, embraces his unsuccessful candidacy as lieutenant-governor on the Liberal Republican ticket in 1872; his election by the legislature as a regent of the State University in 1874; his candidacy for United States senator to succeed Thomas C. Platt, in which he withdrew his name after eighty-two days of balloting, in 1881; his declination of the United States senatorship tendered by the Republicans of the legislature in 1884; his candidacy for the presidential nomination in the national convention in 1888; and his election to the United States Senate, January 17, 1899. He has an international reputation as an unusually entertaining speaker, is constantly in request as a lecturer, and has delivered many addresses of large public importance.

De Quincey, Thomas, English essayist; born in Manchester in 1785. His father, Thomas Quincey (not De Quincey), was a merchant, and left his family well provided for. De Quincey was first educated at Salford and at Bath, and afterwards at Winkworth and the Manchester grammar school, from which he ran away, and subsequently went through the adventures and privations which he described in the "Confessions of an English Opium Eater." In 1803, he went up to Worcester College, Oxford, which he left without a degree, and soon after became acquainted with Coleridge and Wordsworth, took a cottage at Grasmere, and became one of the famous Lake scholars. Here he remained for many years, occasionally visiting London and Edinburgh. In 1830, he removed, with his wife and eight children, to the latter place, and lived there till his wife's death, in 1837. He had acquired the habit of taking opium by using it to cure an attack of neuralgia, and so greatly did it grow upon him that he was known to take as many as 12,000 drops, equal to ten wineglasses, in a day. He was engaged in preparing fourteen volumes of his works for the press within a few days of his death. Besides the "Opium Eater," the following works may be mentioned: "Murder Considered as One of the Fine Arts," "Suspiria de Profundis," "The English Mail Coach," and "A Vision of Sudden Death." Died, 1859.

De Reszke, Edouard, operatic singer; born in Varsovie, Poland, December 22, 1853; studied under Cialfiei and Coletti; début, Theatre des Italiens, Paris, as the king in "Aida," April 22, 1876; later, sang at Turin, Milan, and other European cities; London début as Indra in "Royal Italian Opera," April 13, 1880, remaining there four seasons. Has since then appeared in grand opera in Europe and United States, taking basso rôles.

De Reszke, Jean, operatic singer; born in Varsovie, Poland, January 14, 1850; studied under Cialfiei, Cotogni, and Sbriglia; début as baritone singer in Favorita, Venice, January, 1874; tenor début, Madrid, 1879; has appeared in leading rôles in grand opera in Europe and United States.

Descartes, Rene (*da-kāhrt'*), a great French philosopher and mathematician, was born in Touraine in 1596. He early adopted the profession of arms, and served in

the armies of the Dutch and Bavarians. In 1629, he settled in Holland, in which country he devoted himself to his favorite studies of the natural and exact sciences. In 1637, he produced his celebrated discourse on the "Method of Reasoning, and of Investigating Scientific Truth"; and, in 1641, he published his "Meditationes de Prima Philosophia," a work of the grandest metaphysical research and speculation, indoctrinating a new system, of philosophy named after its author, "Cartesianism." In 1644, appeared his theory of the world as expounded in the "Principia Philosophiæ." In 1647, the French Government gave him a pension of 3,000 livres. About 1648, he proceeded to Sweden upon the invitation of Queen Christina, and died there two years afterwards.

Desmoulins (*da-moo-lang*), **Benedict Camille**, born in 1762; studied with the notorious Robespierre, and was a man of great talent. In 1789, he was much admired as an orator, and harangued on all occasions in favor of liberty; but his companions eventually sent him to the scaffold. He perished by the guillotine in April, 1794.

De Soto, Hernando (*da-so'-do*), a Spanish explorer; born about 1500, followed the path of Cortez and Pizarro, under the latter of whom he served in Peru. In 1539, he conducted an expedition from Florida, which resulted in the discovery of the Mississippi. Died in Louisiana in 1542.

De Vere, Aubrey Thomas, born in 1814; poet and political writer of Irish nationality, first published, in 1842, "The Waldenses." In 1872, he produced the "Legends of St. Patrick"; in 1879, "Legends of the Saxon Saints"; and in 1882, "The Foray of Queen Meade, and Other Legends of Ireland's Heroic Age," etc.

Dewar, Sir James, F. R. S., Fullerton professor of chemistry, Royal Institution, London; was born in Kincardine, September 20, 1842; educated at Dollar Academy and Edinburgh University; M. A. and Hon. LL. D., Glasgow, St. Andrews, Aberdeen, and Edinburgh; D. Sc., Oxford, Victoria, and Dublin. With Sir Frederick Abel he invented cordite, and he has distinguished himself by his researches into the properties of matter at low temperatures, and into the nature and properties of atmospheric air. He was the first to liquefy and solidify hydrogen. Received French Academy's Lavoisier gold medal, in 1894, and Matteucci medal of Italian Society of Science in 1906; elected foreign member of National Academy of Sciences, Washington, in 1907, and corresponding member of Academy of Sciences in 1907. Knighted, June 24, 1904.

Dewey, George, admiral in United States Navy; born in Montpelier, Vt., December 26, 1837; appointed to Naval Academy, September 23, 1854; graduated in 1858, as passed midshipman; LL. D., University of Pennsylvania, Princeton University, 1898. Attached to steam frigate "Wabash," Mediterranean squadron, until 1861; then to steam sloop "Mississippi," of West Gulf squadron; commissioned lieutenant, April 19, 1861; in Farragut's squadron which forced the passage of Fort St. Philip and Fort Jackson, April, 1862, and participated in the attack on Fort St. Philip and the subsequent fights with gunboats and ironclads, which gave Farragut possession of New Orleans. In the smoke of the battle of Port Hudson, the "Mississippi" lost her bearings and ran ashore under the guns of the land batteries, and the officers and men took to the boats after setting the vessel on fire. Was afterward on several vessels in North Atlantic blockading squadron, then in European squadron, and later on various duties and at different stations, being promoted to commander, April, 1872; captain, September, 1884; commodore, February 9, 1896. In January, 1898, assumed command of Asiatic squadron. On May 1, 1898, in Manila Bay, he commanded in the greatest naval battle since Trafalgar, completely annihilating the Spanish Asiatic squadron under Admiral Montojo, destroying eleven and capturing all other vessels and all the land batteries, without the loss of a man on the American side. Immediately upon receipt of official news of victory he was promoted to rear admiral, and thanked by resolution of Congress; member of United States Philippine Commission, 1899; promoted to admiral, March 2, 1899.

De Witt, John, a Dutch statesman; was born in 1625, at Dort, in Holland. A work, entitled the "Elements of Curved Lines," which he produced at the age of 23, was greatly admired. In 1650, he was chosen pensionary of Dort, and subsequently attained the higher dignity of pensionary of Holland. In 1654, he promoted a perpetual edict for abolishing the office of Stadtholder, and was publicly thanked for his patriotic services. At a later period, Holland being invaded by the French, popular rage was unjustly directed against

him, and he, with his brother, Cornelius, were assassinated, with circumstances of great cruelty, by the populace, in 1672.

Dickens, Charles, was born in 1812, in Landport, Portsmouth, where his father held a small appointment in the navy pay-office; but when this position was lost the family came to London and Dickens's youth was spent in constant penury and want. For some time he was employed in a blacking factory, but at 12 years of age he was again sent to school, and after three years' tuition he entered an attorney's office. Then he became a shorthand writer, and at 19 obtained the position of parliamentary reporter. During the years 1831 to 1836 he represented various papers—later the "Morning Chronicle"—and in 1836 his "Sketches by Boz" were published in a collected form. A publishing firm wishing to produce an illustrated periodical, Dickens undertook the letterpress, and produced the "Pickwick Papers." At the same time he was writing "Oliver Twist." In 1842, he visited America, and wrote on his return the "American Notes." In 1843 he began to publish "Martin Chuzzlewit," which at first fell rather flat, and, in order to economize, Dickens went to live at Genoa. When the "Daily News" was started Dickens was appointed editor, but he retired very soon, and busied himself in further novel-writing—"Dombey and Son," "David Copperfield," "Bleak House," and "Little Dorrit," all being produced between 1846 and 1855. In 1850 he started the periodical "Household Words," afterwards changed to "All the Year Round." In 1858, he separated from his wife. In this year he first appeared as a public reader of his own works, and from 1866 to 1870, he was almost continuously employed in this task, his success being unexampled. In 1867, he made a lecturing tour in America, where he was received with great enthusiasm, despite his unpalatable "American Notes." The strain proved too great for his constitution, and he died (1870), suddenly at his house at Gadshill, leaving his last novel, "Edwin Drood," incomplete.

Dielman, Frederick, artist; born in Hanover, Germany, December 25, 1847; came to United States in childhood; graduate of Calvert College; was topographer and draughtsman in United States' engineering department, 1866-72; studied art under Diez at Royal Academy, Munich; opened studio in New York, 1876; National Academician since 1883; president National Academy of Design since 1899; member Art Commission, New York, 1901-03; etc. Illustrator and figure painter; designer of mosaic panels "Law" and "History" in new Congressional Library, and of large mosaic, "Thrifty," Albany Savings Bank, and the decorations in new building of the Washington "Evening Star"; professor descriptive geometry and drawing, college, city of New York, since 1903.

Dill, James Brooks, lawyer, capitalist; born in Spencerport, N. Y., July 25, 1854; graduate of Yale, 1876, New York University Law School, 1878; admitted to bar, 1878; Philadelphia Specialty, corporation law. Author: "Business Corporations," "Dill on Corporations," "Banking and Trust Company Laws of New Jersey."

Dillon, John, M. P., born in 1851; was educated at the Catholic University of Dublin. He assisted Parnell and Michael Davitt in founding the Land League in America, and in 1880, was elected member of parliament for County Tipperary (a position his father, John Blake Dillon, had previously held). In May, 1881, he was arrested, but in a few months was liberated on the ground of ill-health, and for a time withdrew from the political arena, not sympathizing with Parnell's attitude towards the land act. In 1885 he again took his seat in parliament as member for East Mayo, and in 1886, in consequence of his supporting the "Plan of Campaign," was indicted for conspiracy, and bound over to keep the peace. Under Lord Salisbury's administration of 1886, he took one of the most prominent parts in opposition to the government as a leader of the Irish party, and was twice convicted under the Irish crimes act. After enduring an imprisonment of three months, he went to Australia to collect funds for the Irish party. Returning, he was again, with O'Brien, convicted under the crimes act, but escaped from Ireland in a yacht, and came to America to collect funds. During his absence Parnell's leadership was repudiated by the larger section of the Irish party, and Dillon went to France to endeavor to heal the breach. The negotiations having proved fruitless, he returned to England, and was at once arrested and imprisoned under the sentence passed upon him before his tour in America.

Diogenes (*di-oh'-nee*), a philosopher of the school of Cynics; was born in Asia Minor. Becoming a citizen of Athens, he made himself notorious by his abnegation

of all social laws and customs, lived upon alms, and took up his abode in a tub. Of his cynicism many well-known anecdotes are related. Died at Corinth, at the age of 90, 325 B. C.

Disraeli (*dis-rā'le*), Benjamin, an English statesman and author, was born 1805. He was of Jewish descent, and for years was the leader of the conservative party in the Commons, holding the office of prime minister in 1868-70, and 1874-76. In the latter year he was created Earl of Beaconsfield. Died, 1883.

Dixon, Thomas, Jr., lecturer and author; born in Shelby, N. C., January 11, 1864; graduate of Wake Forest College, N. C., 1883, A. M., 1883; graduate of Greensboro, N. C., law school, 1886; admitted to bar all courts, North Carolina and United States district, and Supreme Court, 1886; scholarship, history and politics, Johns Hopkins University, 1883-84; member North Carolina Legislature, 1881-86; resigned to enter Baptist ministry, October, 1886; pastor Raleigh, N. C., 1887, Boston, 1888-89, New York, 1889-90; popular lyceum lecturer, 1889-1903. Author: "The Leopard's Spots," "The One Woman," "The Clansman," "The Life Worth Living."

Dollinger, Johan Joseph Ignaz, an eminent German theologian; was born 1799. He was leader of the German Catholics who refused to accept the doctrine of the pope's infallibility, and which afterwards founded the Old Catholic sect. Died, 1881.

Dolliver, Jonathan Prentiss, United States senator, lawyer; born near Kingwood, Preston County, W. Va., February 6, 1858; graduated at West Virginia University, 1875; admitted to bar, 1878; established practice in Iowa; member 51st, 52d, 53d, 54th, 55th, and 56th Congresses, tenth Iowa district; appointed United States senator to succeed late Hon. J. H. Gear, August 23, 1900; elected 1902, and reelected, 1907. Has earned a high reputation as an orator and lecturer.

Dore, Paul Gustave, French painter and book illustrator; was born in Strasburg, in 1832, and educated at a Parisian lycée. He became known by his illustrations of "Rabelais" and "Don Quixote," and for some years was a constant contributor to the "Journal pour Rire." At the time of the Crimean War he produced his "Alma" and "Inkerman"; in 1861, he published the first of his famous illustrations to Dante's "Divine Comedy," and next his illustrations to the "Bible," "Paradise Lost," "The Ancient Mariner," and "The Idylls of the King." These works secured for him a greater reputation in England than was accorded to him in his native country. He afterwards devoted himself to the production of large pictures on religious subjects, such as "The Dream of Pilate's Wife," "The Entry into Jerusalem," and "Ecce Homo." Died, 1883.

Douglas, William Lewis, governor, manufacturer; born in Plymouth, Mass., August 22, 1845; educated at brief irregular periods in public schools of Massachusetts; when 5 years old lost father by death; at age of 7 went to work for an uncle, who set him to pegging shoes, and except for a brief return to his mother when 11 years old, worked for uncle eight years; worked in cotton mill at Plymouth at 15, and later in factory at Chiltonville, Mass.; afterward went to Hopkinton and South Braintree, Mass., where learned bootmaking; was in Colorado, 1865-68, working at his trade and one year for himself; sold out and returned to Massachusetts, where worked as journeyman and foreman at his trade at Brockton, 1876, when he began with small shop, from which has built up business with two factories with combined capacity of over 15,000 pairs of shoes daily, and owns seventy-five retail shoe stores in large cities selling the "Douglas" shoe. Member Massachusetts House of Representatives, 1883-84, and of Massachusetts Senate, 1886, 1887; mayor of Brockton, 1891; elected, November, 1904, governor of Massachusetts. Delegate to National Democrat Conventions, 1884, 1892, 1896, delegate-at-large, 1904.

Douglas, Frederick, American orator; was born in 1817, a mulatto slave in Maryland, but he escaped as a young man, and in 1841 began to deliver lectures against slavery, which attracted much attention. In 1846, he made a very successful lecturing tour in England, and, returning to America, he became a newspaper editor. From 1877 to 1881 he was United States marshal for the district of Columbia. Died, 1895.

Doyle, Sir A. Conan, the grandson of John Doyle, the famous political caricaturist "H. B.," was born in Edinburgh in 1859, and educated at Stonyhurst and in Germany. In 1876, he commenced to study medicine at the Edinburgh University, and remained there for five years. From 1882 till 1890, he practiced his profession at Southsea, writing all the while various short stories, some of which have been since published under the title of "The Captain of the Polestar." After "A

Study in Scarlet," "Mical Clarke," and "The Sign of Four," came "The White Company," which led to the final abandonment of medicine for literature. "The Adventures of Sherlock Holmes" and "The Memoirs of Sherlock Holmes" formed a brilliant series of detective stories. In 1894, he wrote a short play, "A Story of Waterloo," successfully produced by Sir Henry Irving. "The Exploits of Brigadier Gerard" and "Rodney Stone," in 1896, "Uncle Bernac" in 1897, "The Tragedy of the Korosko," a volume of poems ("Songs of Action") in 1898, "A Duet" in 1899, "The Hound of the Baskervilles" in 1902, "The Adventures of Gerard" in 1903, "Return of Sherlock Holmes" in 1904, "Sir Nigel" in 1906, and "Through the Magic Door" in 1907. He volunteered for service in the Transvaal War, and, in 1900, gave his medical services for some months in the hospitals there, afterwards publishing a history of the war, entitled "The Great Boer War." Knighted, June 26, 1902.

Draco (*drā'kō*) was the first lawgiver of Athens. His code was published in 623 B. C. The laws were severe, and popularly said to have been written in blood.

Drake, Francis, Sir, a distinguished English naval commander, was born in 1540. He circumnavigated the globe under a commission against the Spaniards, destroying many vessels and capturing immense booty in Spanish America. In 1587, he commanded the fleet which destroyed over 100 ships at Cadiz, breaking up a contemplated invasion of England. He was made vice-admiral, and commanded in the battle, in 1588, which destroyed the Spanish Armada. Died, 1595.

Draper, John William (*drā'pur*), an American chemist, physiologist, and author, was born in England, in 1811. He took his degree of M. D. at the University of Pennsylvania in 1836; became successively professor of natural sciences in Hampden-Sidney College, Virginia, and, in 1841, professor of chemistry in New York University, and, in 1850, of physiology. Of his numerous works we may mention "Human Physiology, Static and Dynamical," or the Conditions and Course of the Life of Man," in 1856; and a "History of the American Civil War," in 1867-68. Died, 1884.

Dryden, John (*drī'dn*), an English poet; was born in 1631. After graduating at Cambridge, he entered upon a literary career, and succeeded Sir William Davenant as poet-laureate in 1668. His "Essay on Dramatic Poesy," according to Dr. Johnson, created the school of English criticism. Dryden, by his dramas and political satires,—especially his "Absalom and Achitophel" (1681)—stands at the head of English poets of the second rank, and his works have elicited high eulogy from such judges as Pope, Scott, Macaulay, and Brougham. Died, 1700.

Dudevant, Amantine Lucile Aurore Dupin, born in 1804; French authoress, better known as "George Sand," was educated in a convent, and, in 1822, married M. Dudevant, from whom she separated in 1831, and settled in Paris to earn her living by literature. In 1832, she published "Indiana," a romance which at once secured her reputation, and which was rapidly followed by many others, among them "Valentine," "André," and "Simon." Besides her work in fiction, she contributed to the periodical literature many essays and articles on philosophical and political subjects, her sympathies being of the most advanced type. Among these was the remarkable "Sept Cordes de la Lyre." Her assured position in literature now enabled her to get a divorce from her husband, and she passed her time at Berri, or Paris, educating her children. Having quarreled with the editors of the "Revue des Deux Mondes," she started on her own account the "Revue Indépendante," to which she contributed several romances, including "Consuelo." After the Revolution, she took an active part in politics for a short time, and then turned to dramatic composition. She also wrote "Histoire de ma Vie." Died, 1876.

Dumas, Alexandre, the Elder, a celebrated French author, born in Villers-Cotterets, 1802, son of General Dumas, a Creole; lost his father at four, and led for a time a miscellaneous life, till, driven by poverty, he came to Paris to seek his fortune; here he soon made his mark, and became by-and-by the most popular dramatist and romancier of his time; his romances are numerous, and he reached the climax of his fame by the production of "Monte Cristo" in 1844, and the "Three Musketeers" the year after; he was unhappy in his marriage, and with his wife, as afterwards, he squandered his fortune in reckless extravagance; before the end it was all spent, and he died at Dieppe, broken in health and impaired in intellect, ministered to by his son and daughter. Died, 1870.

Dumas, Alexandre, born in 1824; son of the preceding, and, like him, a novelist and dramatist, accom-

panied his father in a voyage to the Mediterranean in 1846, and, in 1848, produced the work which made his reputation — "La Dame aux Camélias," a novel which drew the encomium of his own father. Since then, his work has been chiefly dramatic, and includes such plays as the "Demi-Monde," "La Princesse Georges," "Monsieur Alphonse," and "Denise." In 1874, he was admitted as a member to the French Academy. Died, 1895.

Du Maurier, George Louis Palmella Busson, artist and draughtsman; born in Paris in 1834, but educated in London, Belgium, and the Netherlands. For many years a valuable contributor to "Punch," at the same time illustrating many other books and magazines. His mode of satirizing the extravagances of the so-called "Aesthetic" school and other society foibles, have procured for him a high reputation. In 1891, he published a novel, "Peter Ibbetson," followed by "Tribby." Died, 1896.

Dunne, Finley Peter, journalist, author; born in Chicago, July 10, 1867; educated in Chicago public schools; entered newspaper life as reporter, in 1885 served on various papers; on editorial staff of "Chicago Evening Post" and "Times-Herald," 1892-97; editor of "Chicago Journal," 1897-1900. Author; "Mr. Dooley in Peace and in War," "Mr. Dooley in the Hearts of His Countrymen," "Mr. Dooley's Philosophy," "Mr. Dooley's Opinions," "Observations by Mr. Dooley."

Duns Scotus, born in 1265; divine and writer. Residing in Paris, he occupied there the post of head of the theological schools, and was known as the "Subtle Doctor." He was the first to promulgate the doctrine of the Immaculate Conception. At one time a follower of Thomas Aquinas, he later founded a school of his own in antagonism to the system of Aquinas. Died, 1308.

Duse, Eleonora, Italian actress of the first rank, was born in Vigevano, October 3, 1859. She appeared about 1880, on the Italian, chiefly Roman, stage, as leading lady in the plays of Dumas and Sardou, but afterwards played parts of greater depth. She earned golden opinions by her combined force and gracefulness; in 1892, appearing at Vienna and Berlin; in 1893, at New York, and her recent visits to England have, by an unanimous accord, reaffirmed her triumphs. Although she appears chiefly in grave parts ("Magda," "Nora," "Adrienne Lecouvreur"), her versatility has also allowed her to please in the lighter vein of Dumas' "Francillon," and as the hostess in Goldoni's "Locandieri." More recently she has produced d'Annunzio's "Gioconda" and "Francesca da Rimini."

Dwight, Timothy, born in 1752; American divine, served as army chaplain in the Confederate army, and, after working on a farm, was ordained a minister. In 1795, he became president of Yale College. He wrote "The Conquest of Canaan," an epic poem, "Theology Explained and Defended," etc. Died, 1817.

Eads, James Buchanan, born in 1820; American engineer, constructed the steel bridge over the Mississippi at St. Louis (completed, 1874); partly carried out a plan of deepening the Mississippi by means of jetties, and was engaged at his death in planning a ship-canal over the Isthmus of Tehuantepec. Died, 1887.

Early, Jubal A., born in 1816; American general and lawyer, served in the Mexican War, and on the Confederate side in the American Civil War, holding Fredericksburg in 1863 and commanding a division at Gettysburg. He has published "Memoirs of the Last Year of the War." Died, 1894.

Eddy, Mary Baker Glover, founder of Christian Science, was born in Bow, N. H., on July 10, 1821; she received a public school education, and was connected with the Congregational Church till 1866, when she discovered what are known as the principles of Christian Science. In 1867 she began to teach them, and in 1879 founded the Church of Christ (Christian Scientist) in Boston, Mass. In 1881 she was ordained to the ministry; in the same year established the Massachusetts Metaphysical College in Boston; and in 1883 started the "Christian Science Journal." She is the author of "Science and Health, With Key to the Scriptures" (the Christian Science text-book); "Unity of God"; "No and Yes"; "Rudimental Divine Science"; "Manual of the Mother Church," and other works on related subjects. In 1908, Mrs. Eddy gave \$1,000,000 for the establishment of a Christian Science Institution for the promotion of the welfare of mankind.

Edison, Thomas Alva, electrician; was born at Milan, O., February 11, 1847; received some instruction from his mother (Ph. D., Union, 1878); at 12 years of age, became newsboy on Grand Trunk Railway; later, learned telegraphy; worked as operator at various places in United States and Canada; invented many

telegraphic appliances, including automatic repeater, quadruplex telegraph, printing telegraph, etc. Established workshop at Newark, N. J., removing to Menlo Park, N. J., 1876, and later to West Orange, N. J. Invented machines for quadruplex and sextuplex telegraphic transmission; the carbon telegraph transmitter; the microtasmeter for detection of small changes in temperature; the megaphone, to magnify sound; the phonograph; the aeroplane; the incandescent lamp and light system; the kinetoscope; also scores of other inventions. Was made chevalier, officer, and afterwards commandant, of Legion of Honor, by French Government; appointed, 1903, honorary chief consulting engineer of Louisiana Purchase Exposition, St. Louis.

Edward, the name of ten kings of England. Of them, three belong to the Anglo-Saxon line. Edward I., "the Elder," son and successor of Alfred the Great, crowned 901, died 925. Edward II., "the Martyr," great-grandson of the former, succeeded his father Edgar, 975, and was assassinated by direction of his step-mother Elfrida, 978. Edward III., "the Confessor," who succeeded his half-brother Edmund Ironsides, 1042, died 1066. In the Plantagenet line there were five of the name; Edward I., "Longshanks," who succeeded his father, Henry III., 1274, died in 1307. Edward II., his son, born in Wales, was the first to assume the title of Prince of Wales, since bestowed upon the heir to the throne. He succeeded his father, 1307, and was murdered by Roger de Mortimer, paramour of his queen, Isabella of France, 1327. Edward III., his son and successor, born in 1312, died in 1377. Edward IV., son of Richard, Duke of York, great-great-grandson of Edward III., was born in Rouen, France, 1441, and claimed the throne in right of his mother and as the head of the house of York, in opposition to Henry VI., king de jure, representing the house of Lancaster. The long and bloody civil "War of the Roses" ensued, Edward finally vanquishing his enemies. Died in 1483. Edward V., his son and successor, born 1470, was murdered along with his younger brother in the Tower of London, 1483, by order of their uncle, Richard, Duke of Gloucester, afterwards Richard III. In the Tudor line there was but one of the name — Edward VI., only son of Henry VIII., by Jane Seymour, born in 1537. He succeeded his father, 1547, and died in 1553. Edward VII., son of Victoria and Albert Edward.

Edward "the Confessor" was born about 1004, son of Etheleth the Unready and Emma, daughter of Richard the Fearless, Duke of Normandy, was brought up at the Norman court, and after his accession, on the death of Hardicanute, in 1042, showed a preference for Norman customs and ideas. Outrages were committed with impunity by his Norman favorites, while the English earls, Leofric of Mercia, and Godwine of Wessex, were engaged in private quarrels. At last, in 1052, Godwine, who had been outlawed, rose in rebellion, installed Stigand, Archbishop of Canterbury, in place of Robert of Jumièges, who had fled with the other Normans, and during the rest of the reign all real power was in the hands of the House of Godwine. Edward codified the customary law of the Anglo-Saxons, which thus became known as the "laws of King Edward." Died 1066.

Edward I., King of England, born 1239, succeeded his father, Henry III., in 1272. Imbued with high notions of feudal sovereignty, he sought to establish his supremacy throughout the island of Britain. His expeditions against Llewellyn-ap-Gruffydd, Prince of Wales (1282), and his brother, David (1283), resulted in the reduction of the principality, the government of which he settled by the statute of Wales (1284). The struggle between John Baliol and Robert Bruce for the throne of Scotland gave him a pretext for interfering in that country (1290). After vainly endeavoring to maintain Baliol as his vassal, he set to work to conquer Scotland for himself, sending the Earl of Warrenne thither as viceroy, but was forced to contend with a succession of claimants, and died near Carlisle, whilst marching against William Wallace. A man of strictly legal, but somewhat narrow mind, he secured order and good government by the Statutes of Winchester and Westminster and other enactments, and carried on Simon de Montfort's work of molding the English Parliament (1295), though, at the same time, somewhat inclined to strain the royal prerogative. His personal character was extremely high. Died, 1307.

Edward VII., King of Great Britain and Ireland, Emperor of India, born November 9, 1841. He studied at Edinburgh, and afterwards attended the public lectures at Oxford and Cambridge. In the summer of 1860 he paid a visit to the United States and Canada. Two years later he traveled in the East and visited

Jerusalem. On March 10, 1863, he married Princess Alexandra of Denmark, the surviving issue being one son and three daughters. Late in 1871, he suffered from a dangerous attack of typhoid fever, and his recovery in February, 1872, was celebrated by a national thanksgiving festival. Between November, 1875, and March, 1876, the prince was engaged in a grand tour of India. He has taken a great interest in exhibitions and institutions, as the Colonial and Indian Exhibitions, the Royal College of Music, and Imperial Institute. Ascended throne as Edward VII., January 22, 1901.

Edwards, Jonathan, was born at East Windsor, Connecticut, October 5, 1703. He was a celebrated metaphysician and divine, chiefly remembered as the author of a treatise on "The Freedom of the Will." He was the author, however, of several other treatises, especially of one on the "Religious Affections," and of a "History of Redemption," which have been many times republished. At the time of his death he had just been appointed to the presidency of Princeton College, New Jersey. As a preacher, Edwards was especially famous; and, according to some authorities, he ranks by his writings, in the Calvinistic school of theology, amongst the greatest luminaries of the Christian Church. Died, 1758.

Egan, Maurice Francis, educator, author, diplomat; born in Philadelphia, May 24, 1852; graduated at La Salle College; entered Georgetown, D. C., College, 1875 (A. M., LL. D.); afterward sub-editor, consecutively, of McGee's "Illustrated Weekly," "Catholic Review," and (editor) "Freeman's Journal"; professor of English literature, University of Notre Dame, Ind.; J. U. D., Ottawa University, 1891. Author: "A Garden of Roses," "Stories of Duty," "The Life Around Us," "The Theater and Christian Parents," Translator (for Mr. Augustin Daly), of "Coppée's Pater," "Modern Novelists," "Lectures on English Literature," "A Gentleman," "Jack Chumleigh," "Jack Chumleigh at Boarding School," "A Primer of English Literature," "The Disappearance of John Longworth," "A Marriage of Reason," "The Success of Patrick Desmond," "The Flower of the Flock," "Preludes" (poems), "Songs and Sonnets," and other poems; "The Vocation of Edward Conway," "The Châtelaine of the Roses," "Jasper Thorne," "In a Brazilian Forest," "The Leopard of Lancianus," "Studies in Literature," "The Watson Girls," "Belinda," "Belinda's Cousins," "The Sexton Maginnis Stories." One of the editors of "The World's Best Literature," "Encyclopedia of Irish Literature," etc. In 1907, appointed United States minister to Denmark.

Egmont, Lamoral, Count, Prince de Gavre, Flemish noble, was born in 1522; accompanied Charles V. on his expedition to Africa (1544), and distinguished himself against the French in the battles of St. Quentin and Gravelines. During the regency of the Duchess of Parma he sought to mediate between her and the people of the Netherlands. Becoming obnoxious to Philip II., owing to his connection with the Prince of Orange, he was seized and executed at Brussels by the Duke of Alva. Died, 1568.

Eiffel, Gustave (*Û-fel*), an eminent French engineer, born at Dijon, 1832; early obtained a reputation for bridge construction; designed the great Garabit viaduct, and also the enormous locks for the Panama canal; his most noted work is the gigantic iron tower which bears his name; in 1893 became involved in the Panama scandals, and was fined, and sentenced to two years' imprisonment.

Eldon, John Scott, Earl of, was born 1751, son of a Newcastle coalfitter; after a successful career at Oxford, entered the Middle Temple (1773), and was called to the bar (1776); entered parliament as a supporter of Pitt (1783); became solicitor-general (1787), and as attorney-general (1793) prosecuted Thelwall, Horne Tooke, and other revolutionary agitators. He became chief justice of the Common Pleas in 1799, and was lord chancellor from 1801 to 1806, and 1807 to 1827. In politics he was an unbending Tory, opposing all improvements in the law or constitution. Died, 1838.

Elliot, Charles William, born in Boston, Mass., March 20, 1834; graduated at Harvard in 1853. He taught mathematics and chemistry at Harvard, and in 1863 he went to Europe for study of chemistry and to investigate the educational institutions of that continent. While at Vienna was chosen in 1865 professor of analytical chemistry in Massachusetts Institute of Technology, which post he filled for a period of four years and again went to Europe and spent fourteen months in further investigation, mainly in France. Dr. Thomas Hill having resigned the presidency of Harvard College, Mr. Elliot was in 1869 chosen to that office, which he has since filled. During his administration,

many notable changes in the government of the college have occurred, its scope has broadened and a great increase in the number of its professors and students is seen, while its wealth by gifts and benefactions has greatly increased, so that now it successfully competes with the great European universities in its curriculum. Mr. Elliot was given the honors of LL.D. by Williams and Princeton colleges in 1869 and by Yale in 1870, and is an honored member of many scientific and literary bodies. Beside numerous addresses, chemical memoirs, and technical investigations, he published in conjunction with Prof. F. H. Storer a "Manual of Inorganic Chemistry," and a "Manual of Qualitative Chemical Analysis." More recently he published "American Contributions to Civilization," "Educational Reform," and "Charles Elliot: Landscape Architect."

Ellot, George, the nom de plume of Marian Evans, the great English novelist. She was born in Warwickshire, England, November 22, 1819. She received a superior education, and became familiar with Latin, German, and the higher mathematics. In 1844-46 she translated Strauss' "Leben Jesu," and later Spinoza's "Ethics," and other works. In 1851 she became assistant editor of the "Westminster Review." At this time she first met George Henry Lewes, and with him she formed a connection, only terminated by his death in 1878. Lewes had been married many years, but his wife proved unfaithful. He condoned her offense by taking her back to his home, and, when she left him finally, he was unable, by reason of the condonation, to secure a divorce under the law of England. Under these circumstances, and after due deliberation, Lewes and Miss Evans decided to live together.

In 1857, the first of the "Scenes of Clerical Life" appeared in "Blackwood," and in 1858 "Adam Bede" was published. This magnificent piece of work at once placed its author in the front rank of living writers. It was followed in succession by "The Mill on the Floss," "Silas Marner," "Romola," and "Felix Holt," the latter appearing in 1866. George Elliot published her first poem, "The Spanish Gypsy," but neither this nor others which followed proved as successful as her prose writings. "Middlemarch," by many considered as even superior to "Adam Bede," was issued in 1871, and five years later appeared "Daniel Deronda," a much inferior work. Mr. Lewes died in November, 1878, and Miss Evans married on May 6, 1880, a stockbroker, named John Cross, a man much younger than herself. Died, 1880.

Elizabeth, Queen of England, daughter of Henry VIII. and Anne Boleyn, was born 1533. Her education was entrusted to the most learned men of the age, and she became an accomplished scholar. During the reign of her sister Mary she was imprisoned for a time in the Tower. On her accession (1558), Mary's enactments in favor of Romanism were abrogated; by the Act of Supremacy the sovereign again became head of the Church, and a form of worship was established which, it was hoped, would conciliate moderate men of all parties. At first the spirit of discontent dared not show itself amidst the general satisfaction. But after the escape of Mary Stuart into England (1568), her presence in the country was a constant source of disquiet. She was the heir to the throne, and as Elizabeth persistently refused to marry, it seemed probable that she would be her successor. The disaffected Papists were further encouraged by the sentence of excommunication pronounced against Elizabeth by the Pope, and by the triumph of their cause abroad; Jesuits from Douay traversed the country in disguise, several plots were formed, and it became necessary to put the penal enactments against Recusants more stringently in force. The Protestantism of the country was acutely aroused, and a strong party in the council urged the queen to put herself forward as the champion of the Reformed faith on the Continent. But Elizabeth chose rather to encourage a feeling of independence and energy at home than to involve England in foreign complications; the prudence and patriotism of her policy were fully proved by the after history of her reign. The growing feeling of nationality proved stronger than the lingering attachment to the old faith, especially after the hopes of the Roman Catholics had been dashed by the execution of Mary (1587), and when Philip of Spain sent his long-projected expedition against England (1588) Papists as well as Protestants came zealously forward in defense of the realm. During the latter part of the reign, the disturbances created by the Puritans foreshadowed the troubles of the opening century. Died, 1602.

Elizabeth, St., of Hungary, was born 1207, a daughter of Andrew II., King of Hungary, and the wife of Louis IV., Landgrave of Thuringia. Left a widow after six years of marriage, and when she was only

twenty years of age, she was deprived of her regency by her husband's brother Henry, and lived for some time in great poverty. Ultimately, the regency was once more offered to her, and her son Hermann was declared heir to the throne; but she preferred henceforth to live in retirement at Marburg, and to devote herself to works of piety under the direction of her confessor Conrad. Died, 1231.

Elliot, Maxine (Mrs. N. C. Goodwin), actress; born in Rockland, Me.; made debut with E. S. Willard in small parts; soon after played leading parts in Rose Coghlan's company; was under Augustin Daly's management two seasons; later played in Nathan Hale as co-star with her husband, Nat. C. Goodwin, to whom she was married February 20, 1898.

Ellsworth, Oliver, jurist, was born in Windsor, Conn., April 29, 1745. He became prominent in State affairs and in the Continental Congress, and was a member of the federal convention of 1787, which prepared the constitution of the United States. It was on his motion that the words "National government" in that organic act were replaced by the definition "Government of the United States." He became United States senator from Connecticut in 1789, and was chairman of the committee which organized the federal judicial system. He led the Federalist party in the Senate, and was an earnest advocate of Jay's treaty with England in 1794. From 1796 to 1799 he was chief justice of the United States Supreme Court, and in 1800 negotiated, with Patrick Henry and Governor Davie, a treaty with France. He afterward served on the governor's council of Connecticut, and in May, 1807, became chief justice of the State Supreme Court. Died, 1807.

Emerson, Ralph Waldo, an American poet and prose writer, born at Boston in 1803. He graduated at Harvard in 1821, for five years taught in a school, and in 1829 became minister to a Unitarian church in Boston, but in 1832 resigned his charge. He spent the greater part of 1833 in Europe, and on his return began his career as a lecturer on various subjects, in which capacity he acted for a long series of years. In 1835 he took up his permanent residence at Concord, Mass., and in 1836 published a small volume called "Nature." He was one of the original editors of the *Dial*, a transcendental magazine begun in 1840. Two volumes of his essays were published in 1841 and 1844, and his poems in 1846. His miscellaneous addresses had been published in England in 1844, and on visiting Great Britain in 1847 he was welcomed by a large circle of admirers. In 1850, he published "Representative Men"; in 1856, "English Traits"; in 1860, "The Conduct of Life"; in 1869, "May Day and Other Poems," and "Society and Solitude"; in 1871, "Parnassus," a collection of poems; in 1876, "Letters and Social Aims." Emerson showed certain similarities with Carlyle, of whom he was a friend and correspondent. Their correspondence appeared in 1883. He was one of the most original and influential writers that the United States has produced. Died, 1882.

Emmanuel, Fillbert, Duke of Savoy, son of Charles III., born 1528, was commander-in-chief of the imperial troops in Italy against the French, who, on his father's death, seized most of his inheritance; appointed governor of the Netherlands by Philip II. in 1556, he attacked France, winning the battle of St. Quentin, and by the Treaty of Chateau-Cambresis (1559) recovered his ancestral domains, and married Marguerite, sister of the King of France. He applied himself to the administrative and military organization of his country, and is considered the founder of the Sardinian monarchy. Died, 1580.

Emmett, Robert, Irish revolutionist, born 1778; son of a Dublin doctor; expelled from Dublin University in 1798 owing to his anti-English sympathies; in 1803 led an unsuccessful attack on Dublin Castle; escaped into Wicklow, but was captured and executed. His fate is the subject of some verses by Moore. Died, 1803.

Epictetus, a Stoic philosopher of the 1st century, A. D., born at Hierapolis in Phrygia; was bought as a slave by Epaphroditus, a favorite of Nero. When emancipated he lived at Rome, until banished by Domitian, and then became a teacher at Nicopolis in Epirus. His lectures were transcribed by his pupil, Arrian.

Epicurus, Greek philosopher, was born about 340 B. C. It is doubtful whether his birth occurred before or after his parents' removal from Gargettus, in Attica, to Samos. His youth was spent in that island, whence he removed to Athens, when about eighteen, and afterwards taught at Colophon, Mitylene, and Lampascus. He returned to Athens about 304, and remained there till his death. He was founder of the Epicurean school, who hold that the *summum bonum* consists in pleasure—chiefly mental pleasure. Died, 270 B. C.

Erasmus, Desiderius, one of the greatest scholars of the Renaissance; born in 1467, at Rotterdam; on his parents' death entered a monastery, which he left to become a teacher at Paris, and, at the invitation of his pupil, Lord Mountjoy, came to England. He settled at Oxford, where he became the friend of More, and studied divinity under Colet, and Greek under Grocyn and Linacre. In 1506 he visited Italy, staying at Bologna and Rome, where he was warmly received, but returned to England, and was made Margaret professor of divinity and professor of Greek at Cambridge. He returned to the Continent, and, after a journey to the Low Countries, settled at Basle, where he published his edition of the New Testament. Erasmus was in favor of moderate reform in the church, as is shown by his "Enchiridion Militis Christiani" and "Encomium Moriae," but he gave little support to Luther, although he refused to write against him. Died, 1536.

Erle the Red, a Norwegian navigator, who, in 982, located on the island of Iceland. In 983 he sailed from Brediford to reach some western shore said to have been visited by one of his countrymen in former times. On the voyage he passed Cape Farewell, and on the coast met with reindeer. He named the country Greenland and the inlet Eriofjord. Returning to Iceland in 985, he interested the people of the island in his discovery, and with twenty-five sail set out for the voyage. Some of the ships were lost in a storm, and others were driven home; but he succeeded in reaching the Greenland coast with fourteen, and located on the fiord, at some distance from the ocean, where there was grass and trees. About twelve years later his son Lief is said to have discovered the continent of North America, which he called Markland and Vinland.

Eriasson, John, engineer, born in Lanzbanshyttan, Sweden, January 31, 1803. At the age of twelve he became cadet of engineers, and at seventeen entered the Swedish army. In 1827 he was promoted captain. In 1828 he constructed a flame engine, and went to London to introduce it, resigning his captaincy in the army. He also produced in succession an instrument for sea-sounding, a hydrostatic weighing machine, and a tubular steam boiler, besides other important devices. In 1833 he constructed the calorific engine, and in 1853 the ship "Eriasson," of 2,000 tons, propelled by this motor. In 1836 Eriasson invented and patented the screw propeller, and in 1839 he came to the United States, where, in 1841, he designed for the government the screw-propelled war ship "Pinecone." This was the pioneer screw war ship; she carried a twelve-inch wrought-iron gun, designed by Eriasson, and a wrought-iron gun carriage, which took up the recoil without breaking. In 1861 he built for the United States Government, in 100 days, the iron-clad "Monitor," which, on March 9, 1862, in Hampton Roads, defeated the Confederate iron-clad ram "Merimac." In 1881 he built for the United States a vessel called the "Destroyer." His recent scientific investigations included computations of the influences that retard the earth's rotary motion, and the intensity of solar heat. Died, 1889.

Erskine, Thomas, Lord, born in 1750; son of the tenth Earl of Buchan; after serving in the army and navy, was called to the bar in 1778, and soon won renown as an advocate by his defense of Lord Keppel and of Lord George Gordon. A strong Whig, he acted for the defense in the political trials of the time, giving his aid to Horne Tooke, Thelwall, and Tom Paine; his defense of the latter cost him the post of attorney-general to the Prince of Wales. He was now regarded as the defender of popular liberties and constitutional rights. From 1790, he sat in parliament as a supporter of Fox; in 1806, became chancellor under him, and was raised to the peerage. Henceforward he took little part in politics, but vigorously supported Queen Caroline in 1821. Died, 1823.

Estaing, Charles Hector, Count d', born in 1729; French admiral; after serving in the army in India, under the Marquis de Bussy, and being made prisoner at the siege of Madras, entered the navy, and led an expedition to Sumatra, capturing several English forts. Placed in command of a squadron sent to aid the United States against England, he captured the Isle of Grenada, but ultimately met with reverses, and returned to France in disgrace. He was guillotined during the Revolution. Died, 1794.

Euclid of Alexandria, a celebrated geometrician. Little is known of his life. According to Proclus, he lived from 328 to 283 B. C., and was one of the Platonic school. He is said to have written other works besides the "Elements of Geometry."

Eugene, Francois, Count of Savoy; born in 1663, son of Eugene Maurice, Count of Soissons; joined the Austrian service; distinguished himself against the

Turks in 1683, and was present at the siege of Belgrade, in 1688. After serving against the French, and defeating Catinat in Italy, he overthrew the Turks at Zenta. Again opposed to the French in the War of Succession he captured Villeroy at Cremona, and joined Marlborough in 1704, taking part in the battle of Blenheim. He then went to Italy, and was defeated at Cassano (1705), but soon afterwards gained a victory, and relieved Turin. In 1708, he joined Marlborough in Flanders, and was present at Oudenarde and Malplaquet. He again distinguished himself against the Turks at the battles of Peterwaradin and Belgrade. Died, 1736.

Euler, Leonhard, mathematician; born in Basle in 1707; was invited by Catherine II. to Russia in 1727, and taught mathematics at St. Petersburg. In 1741, he went to Berlin, but returned to St. Petersburg in 1766. His writings are numerous and valuable. Died, 1783.

Euripides, Greek tragedian; born in Salamis in 480 B. C.; rival and contemporary of Sophocles, and friend of Socrates; studied under Anaxagoras, and produced his first tragedy in 455. He sought in Macedonia a refuge from the satire of Aristophanes. Among his works are the "Alcestis," "Ileuba," and "Medea." Died, 406 B. C.

Eusebius, Pamphili (*ü-sê'-bê-us*), a celebrated divine honored with the title of "Father of Ecclesiastical History," was born in Cesarea in 266. He was bishop of his native city from 314 till his death, about 340.

Eustachio, Bartolommeo (*üs-täsh'-e-ö*), an Italian physician of the Sixteenth Century, settled in Rome, and made several anatomical discoveries, among others those of the tube from the middle ear to the mouth, and a valve on the wall of the right auricle of the heart, both called "Eustachian" after him.

Evans, Robley Dunglison, officer of United States Navy; born in Floyd County, Va., August 18, 1846; educated in public schools of Washington; appointed to the United States Navy for Utah, September 20, 1860; graduate of United States Naval Academy, 1863; rear admiral, February 11, 1901. During the Civil War he participated in both attacks on Fort Fisher, January 15, 1865, and in land attack received four severe rifle-shot wounds. When in command of the "Yorktown" at Valparaiso, Chile, 1891, during period of strained relations between Chile and United States, his actions in connection with various incidents earned him his popular name of "Fighting Bob." In war with Spain, commander of "Iowa" in Sampson's fleet off Santiago, taking active part in battle with Cervera's fleet, July 3, 1898; was president of Board of Inspection and Survey; commander-in-chief at Asiatic Station, October, 1902, and in command of the Asiatic expedition, 1908. Author: "A Sailor's Log."

Everett, Alexander Hill, an American litterateur and diplomatist, was born in Massachusetts in 1792, and died while commissioner to China, in 1847. He was minister to Russia, Holland, and Spain.

Everett, Edward, born in 1794; American author and statesman, brother of the preceding; became professor of Greek at Harvard in 1815; traveled in Europe from 1815 to 1818; became editor of the "North American Review," and was a member of Congress from 1824 to 1834; governor of Massachusetts from 1835 to 1839; and from 1840 to 1845, minister-plenipotentiary to England, in which capacity he succeeded in adjusting several delicate matters. He became secretary of state in 1852, and was elected to the senate in 1853. He wrote "The Dirge of Alaric the Visigoth" (a poem), "Lives of Washington and General Stark," and other works, but was best known as an orator. Died, 1865.

Ezekiel (*e-zê'-ke-el*), one of the four great Hebrew prophets, was the son of Buzi, and one of the sacerdotal race. He was carried to Babylon as a captive by Nebuchadnezzar, 598 B. C. Favored by the Almighty with the gift of prophecy, he soothed and comforted, and admonished his countrymen, till at length he was stoned to death by order of the Babylonian authorities.

Fabius, Maximus Quintus, born about 275 B. C.; Roman general, was great-grandson of the preceding, and was surnamed "Cunctator" because, having, in 217, been appointed dictator for the second time and entrusted with the defense of Italy against the victorious Hannibal, he pursued a course of cautious and patient generalship, never risking a general engagement with his opponent, but cutting off his supplies, and gradually wearing him out, and meeting with signal success. Before his appointment to the dictatorship, he was five times consul. Died, 203 B. C.

Fahrenheit, Gabriel Daniel, born in 1686; Prussian experimental philosopher; after traveling in England, Germany, and France, settled in Holland. About 1714, it occurred to him to use quicksilver instead of

spirits of wine in the construction of thermometers. By this substitution the accuracy of the instrument was greatly enhanced. In 1724, he was elected a Fellow of the Royal Society of London, and in the "Philosophical Transactions" of that year there appeared several papers from his pen. Died, 1736.

Fairbanks, Charles Warren, vice-president of the United States; born on a farm near Unionville Center, Union County, O., May 11, 1852; graduate of Ohio Wesleyan University, Delaware, O., 1872; admitted to Ohio bar, 1874, and established practice at Indianapolis. Was Republican caucus nominee for United States senator, 1893, but defeated by David Turpie, Democrat. Appointed, in 1898, member of Joint High British-American Commission, and chairman of American commissioners. Elected United States senator from Indiana, 1897, and reelected in 1903; elected vice-president, in 1904; term expires in 1909.

Fairfax, Thomas, Lord, an English parliamentarian general, was born in Yorkshire, in 1611. After serving with distinction in the Low Countries, Lord Fairfax was declared general-in-chief of the parliament army at the opening of the civil war, in 1642, and again in 1645. He distinguished himself in most of the great battles and sieges of that struggle, and after its close refused to act as one of the judges of Charles I. In 1659, Lord Fairfax used all his influence with the army to promote the restoration of Charles II. Died, 1671.

Falconio, Diomede, Archbishop and apostolic delegate; born in Pescocostanzo, in the Abruzzi, Italy; entered Franciscan Order, September 2, 1860; on completion of studies, November, 1865, sent as missionary to United States; ordained priest, January 4, 1866, by Bishop Timon, of Buffalo; professor of philosophy and vice-president of St. Bonaventure's College, Allegheny, N. Y., 1866; professor of theology and secretary of Franciscan Province of the Immaculate Conception, 1867; president of college and seminary of St. Bonaventure, 1868; became citizen of United States, 1868; secretary and administrator of cathedral at Harbor Grace, Newfoundland, 1872-82; in United States, 1882-83; returned to Italy, 1883, and elected provincial of Franciscans in the Abruzzi; later reelected and was also commissary and visitor-general, Province of Naples, 1888; synodical examiner in diocese of Aquila; commissary and visitor-general Franciscan Province in Puglia, 1889; procurator-general Franciscan Order and visitor-general in various provinces of the Order, 1889-92. Consecrated, July 17, 1892, Bishop of Lacedonia, and was raised, November 29, 1895, to be Archbishop of Acerenza and Matera, in Basilicata; apostolic delegate to Canada, 1899-1902; apostolic delegate to United States since September 30, 1902. A volume of his "Pastoral Letters" (translated into French) published in Canada, 1900.

Faraday, Michael (*fär'-ah-da*), one of the most eminent of English chemists and physicists, was born in Surrey, in 1791. In 1833, he became professor of chemistry in the Royal Institution, London, where his lectures attracted the admiration of European and American savans. Faraday's great fame principally rests upon his discoveries in electricity and electro-magnetism. Of the latter science he may truly be termed the founder. His earlier writings have been collected into three volumes, entitled "Experimental Researches in Electricity"; and, among his later works, "Experimental Researches in Chemistry and Physics." Died, 1867.

Farragut, David Glasgow, a famous American admiral, of Spanish extraction; born at Knoxville, Tennessee, 1801; entered the navy as a boy; rose to be captain in 1855, and at the outbreak of the Civil War attached himself to the Union; distinguished himself by his daring capture of New Orleans; in 1862 was created rear-admiral, and two years later gained a signal victory over the Confederate fleet at Mobile Bay; was raised to the rank of admiral in 1866, being the first man to hold this position in the American Navy. Died, 1870.

Fenelon (*fên'-a-lông*), **François de Salignac de la Mothe**, an eminent French divine and writer; was born in 1651, and died in 1715.

Ferdinand I., "the Great," King of Castile, of Leon and Galicia; was the second son of Sancho III., King of Navarre and Castile, and succeeded to the latter kingdom in 1035. He was one of the most powerful monarchs of his age, and disputed with Henry III. of Germany for the imperial crown. Died, 1065.

Ferdinand V. of Castile, III. of Naples, and II. of Aragon and Sicily, surnamed "the Catholic." He was the son of John II., and succeeded his father on the throne of Aragon and Sicily in 1466. In 1469 he was married to Isabella, sister of Henry IV. of Castile, and in 1479 became, through her, King of Castile, Isabella

sharing with him the royal dignity. The reign of Ferdinand and Isabella was signalized by the discovery of America by Columbus. Ferdinand died in 1516, Isabella having died twelve years before him. After the death of Isabella, he acted simply as regent of the kingdom, having handed over the crown to his daughter Juana, in accordance with the will of Isabella.

Fichte (fīk'ta), Johann Gottlieb, one of the most eminent German thinkers and philosophers; was born in Upper Lusatia in 1762, and received his education in the universities of Jena, Leipzig, and Wittenberg. At Königsberg, where his friendship with Kant commenced, his first published work, "An Attempt at a Criticism of all Revelation," appeared. The celebrity he thus acquired obtained for Fichte the professional chair of philosophy at Jena, which post he resigned in 1799, in consequence of atheistic views being attributed to him in connection with the new doctrine of metaphysics he had introduced. In 1810, Fichte became professor of philosophy in Berlin University, and took a prominent part in bestirring the patriotism of his countrymen till it found a vent in the war of liberation, 1812-13. Died, 1814.

Field, Cyrus W., an American merchant; was born in Stockbridge, Mass., in 1819. Was the original organizer of the Atlantic Telegraph Company, 1856-60, which succeeded after many reverses in establishing telegraphic communication between the United States and Europe. Died, 1892.

Field, David Dudley, born in 1805; American jurist, and brother of Cyrus Field and Stephen Field; was in 1857, appointed to draw up a political, civil, and penal code, of which parts have been adopted by several of the States. To him is due the formation of an association for the reform of the law of nations, and for the adoption of arbitration in place of war. In 1859, the University of Edinburgh conferred upon him the degree of LL. D. Died, 1867.

Field, Marshall, merchant; born in Conway, Mass., in 1835; spent boyhood on farm; studied at academy until 1852; dry goods clerk, Pittsfield, Mass., 1852-56; in Chicago, 1856-60; junior partner, 1860-65, then senior partner in house, which became, 1865, Field, Palmer & Leiter. Potter Palmer retired, 1867, and Levi Z. Leiter, 1881, Mr. Field becoming head of Marshall Field & Company, now having the largest wholesale and retail dry goods business in the world. Founded, with gift of \$1,000,000, the Field Columbian Museum of Chicago; gave money and land to the amount of \$450,000 to University of Chicago. Twice married; second time in London, September 5, 1905, to Mrs. Delia Spencer Caton, of Chicago. Died in 1906, leaving an immense fortune.

Fielding, Henry, the father of English fiction, and one of the most illustrious prose-writers in the language; was born in Somersetshire, in 1707, of a noble family allied to the imperial house of Austria. After dissipating a handsome fortune in the pleasures of youth, Fielding launched into authorship, and in 1742 produced his "Joseph Andrews," a sparkling satire upon the characteristics of the Richardsonian school of fiction. In 1749, the novel of "Tom Jones" appeared like a comet in the literary world, to still remain without a rival in the language. "Amelia" followed, in 1751, to entrance the minds of such critics as Burke, Gibbon, and Dr. Johnson. Died in Lisbon, in 1754.

Fillmore, Millard, American statesman; born in Summerhill, N. Y., in 1800; was apprenticed to a wool carder, but became a clerk in a judge's office, and then found entrance to the bar. He entered Congress in 1832, was appointed chairman of the committee of ways and means in 1840, and was author of the tariff of 1842. He became controller of the State of New York in 1844, was elected vice-president of the United States in 1848, and succeeded to the presidency on the death of General Taylor in 1850. By signing the act for the surrender of fugitive slaves he brought about the utter defeat of the Whig party in 1853. In 1856 he was nominated for the presidency, but received only scanty support. Died, 1874.

Firdausi (fur-dou'se), or Firdusi, the most eminent of Persian poets, was born in Khorasan, about A. D. 940. During his lifetime his fame filled the East, and he was the recipient of great honors from the Sultan Mahmoud. His chief poem, the "Shah-Namah," or "Book of Kings," has been termed by Sir William Jones "a glorious monument of Oriental genius and learning." Died about 1020.

Fisher, Harrison, illustrator; born in Brooklyn, July 27, 1875; educated in San Francisco; recent books illustrated by him: "The Market Place," by Harold Frederic; "Three Men on Wheels," by Jerome K. Jerome; "The Eagle's Heart," by Hamlin Garland; "Hiawatha," by Longfellow; now illustrating "The Saturday

Evening Post," "McClure's Magazine," "Life," "Puck," "Ladies' Home Journal," "Scribner's," etc.

Fiske, Minnie Maddern, actress; born in New Orleans, in 1865; appeared in child's part when 3 years old; at 12 was alternately playing leading rôles and old women parts, and at 15 became a star, under name of Minnie Maddern. Retired, about 1890, for five years; married March 19, 1890, Harrison Grey Fiske, journalist and playwright, in whose "Hester Crewe" she returned to the stage; since then starring in various plays.

Fitch, William Clyde, author and playwright; born in New York, May 2, 1865; graduated at Amherst, 1886 (A. M., 1902). Author: "A Wave of Life," "The Knighting of the Twins," "Some Correspondence, and Six Conversations," "The Smart Set," "Nathan Hale," "Barbara Frietchie," "Captain Jinks of the Horse Marines." Original plays: "Beau Brummell," "Betty's Finish," "Frederic Lemaitre," "A Modern Match," "Pamela's Prodigy," "April Weather," "His Grace de Grammont," "The Career of Betty Singleton, or Mistress Betty," "The Moth and the Flame," "Nathan Hale," "Barbara Frietchie," "The Cow-boy and The Lady," "The Climbers," "Captain Jinks of the Horse Marines," "Lover's Lane," "The Girl and the Judge," "The Way of the World," "The Last of the Dandies," "The Stubbornness of Geraldine," "The Girl with the Green Eyes," "Her Own Way," "Major André," "Glad of It," "The Coronet of the Duchess," "The Woman in the Case," Adaptations: "The Masked Ball," "Bohemia," "The Frisk," "Mrs. Johnson," "The Head of the Family," "Granny," "Cousin Billy."

Fletcher (fīk'ur), John, an English dramatist, whose name is inseparably associated with that of his friend and co-worker, Francis Beaumont (q. v.); was born in Northamptonshire, in 1576. His plays, such as "The Scornful Lady," and "Rule a Wife and Have a Wife," were during two centuries the delight of the stage. Died, 1625.

Flint, Austin, physician; born in Northampton, Mass., March 28, 1836; removed to Buffalo in infancy; educated at private schools, Buffalo, and freshman, Harvard, 1852-53; studied medicine in office and at medical department University of Louisville, 1854-56; graduate Jefferson Medical College, 1857 (LL. D., 1885); practiced in Buffalo, 1857-59; editor Buffalo Medical Journal, 1857-60; professor of physiology, medical department, University of Buffalo, 1858-59, visiting surgeon, Buffalo General Hospital, 1858. Removed to New York, 1859; professor of physiology, New York Medical College, 1859-60, New Orleans School of Medicine, 1860-61; acting assistant surgeon, United States Army, at general hospital, New York, 1862-65. One of founders and professor of physiology, 1861-68, Bellevue Hospital Medical College; professor of physiology, Long Island College Hospital, 1862-68; Cornell University Medical College, since 1898. Author: "Physiology of Man" (five volumes, two editions), "Chemical Examination of the Urine in Disease" (six editions), "Physiological Effects of Severe and Prolonged Muscular Strain," "Text-Book of Human Physiology" (four editions), "Source of Muscular Power," "Handbook of Physiology." Also many articles on medicine and physiology subjects in medical periodicals and transactions.

Folk, Joseph Wingate, governor; born in Brownsville, Tenn., October 28, 1869; graduate of Vanderbilt University; admitted to bar, 1890; circuit attorney, St. Louis, 1900-04; prosecuted numerous bribery cases; governor of Missouri, 1905-09.

Foraker, Joseph Benson, United States senator, 1897-1909; born in July 5, 1846, on farm near Rainsboro, Highland County, O. Enlisted July 14th as private in 89th Ohio volunteer infantry, and served to end of war, becoming first lieutenant and brevet captain; graduated at Cornell, 1869; admitted to bar and began practice at Cincinnati, 1869. Judge Superior Court, Cincinnati, 1879-82; resigned on account of ill-health; Republican candidate for governor of Ohio, 1883; defeated, but elected governor in 1885 and 1887; again defeated, 1890, for same office; Republican chairman Republican conventions, Ohio, 1886, 1890, 1896, 1900; delegate-at-large from Ohio, national Republican conventions, 1884, 1888, 1892, 1896, 1900, 1904; chairman Ohio delegation in conventions of 1884 and 1888, and presented to both conventions the name of Hon. John Sherman for nomination for the presidency; in conventions of 1892 and 1896 served as chairman committee on resolutions, and as such reported the platform each time to the convention; presented name of William McKinley to the conventions of 1896 and 1900 for nomination to the presidency.

Forrest (fōr'rist), Edwin, an eminent American tragedian; born in Philadelphia, in 1800; was the patriarch of his country's stage, having performed with distin-

guished merit for two generations, both in the United States and in England. In the parts of "Richard III.," "Macbeth," and "Othello," his acting was of the highest order. Died, 1872.

Foster, John Watson, diplomatist; born in Pike County, Ind., March 2, 1836; graduated from Indiana State University, 1855; student one year at Harvard Law School (LL. D., Princeton, Yale, Wabash College); admitted to Indiana bar; was major, lieutenant-colonel, and colonel in Indiana regiments. After war editor of "Evansville Daily Journal"; postmaster, Evansville, 1869-73; minister to Mexico, 1873-80; to Russia, 1880-81. Established, 1881, in practice in international cases in Washington, representing foreign legations before commissions, arbitration boards, etc. Minister to Spain, 1883-85; special plenipotentiary to negotiate reciprocity treaties with Brazil, Spain, Germany, British West Indies, etc., 1891; secretary of state, United States 1892-93; agent for United States in Bering Sea Arbitration, at Paris, 1893; invited by Emperor of China and participated in peace negotiations with Japan; ambassador on special mission to Great Britain and Russia, 1897; member Anglo-Canadian Commission, 1898; agent for United States Alaskan Boundary Tribunal, London, 1903. Author: "Biography of Matthew Watson Foster," "A Century of American Diplomacy," "American Diplomacy in the Orient," "Arbitration and The Hague Court."

Fox, Charles James, statesman; born in Westminster in 1749; was the third son of Henry Fox, Lord Holland, who early inducted him into gambling and the other fashionable vices, which clung to him through life. Educated at Eton and at Hertford College, Oxford, he entered parliament at the age of 19 as member for Midhurst, and, having immediately made his mark as a debater, became a lord of the admiralty, and was in 1773 nominated lord of the treasury. He soon, however, quarreled with Lord North. In 1782 Fox became secretary of state under Lord Rockingham, but on the latter's death (in the same year), refused to serve under Lord Shelburne. On the collapse of the Shelburne administration in 1783, he entered into a coalition with Lord North. The ministry thus formed was defeated on Fox's India bill owing to the machinations of George III. in the House of Lords, and it was twenty-two years before Fox was again called to office, so deep-seated was the king's dislike to him. In the interval he threw himself into an enthusiastic advocacy of the French revolution. At first he found himself in company with most of the Whig party, but, as the revolution ran into wild excesses, there was a large defection of Whigs to the Tory party, and Fox was left with a scanty and dispirited band of followers. His name was struck off the list of privy counselors, and in 1797, he retired from parliamentary life to superintend the education of his nephew, Lord Holland, and to write the "History of the Reign of James II." When his great rival, Pitt, formed his last administration, he wished Fox to join it, but the king gave a steady refusal. On Pitt's death, in 1806, he was at last obliged to admit him to office, and Fox became foreign secretary in Grenville's ministry of "All the Talents." But the term of his life had nearly run out, and he had no time to realize his high expectations of his followers. His last motion in parliament was directed against the slave trade, and he died (at Chiswick in 1806), within a few months of the measure founded upon it being passed into law. He was admittedly the first orator of his time; he was also a man of wide reading, and he showed himself equal to sacrifices to principle such as few statesmen have cared to make.

Fox, George, founder of the Society of Friends; was born in County Leicester, England, in 1624. Early adopting the peculiar tenets and manners known as Quakerism, he suffered for many years continual persecution. In 1671, he sailed for the West Indies and the American Colonies, to propagate the doctrines of the sect he had originated; and on his return to England, in 1673, he was again imprisoned, but soon released through the influence of William Penn. After the accession of William III. to the throne, the public worship of the Society of Friends became tolerated and legalized. Died in London in 1690.

Francis, Joseph Charles, Emperor of Austria and King of Hungary; born in 1830; is the son of the Emperor Francis I., and nephew of the Emperor Ferdinand I. The revolution of 1848 compelled Ferdinand to abdicate, and his brother resigning his claims to the throne in favor of his own son, the latter was at the early age of 18 called to rule an empire shaken by civil war. He took part in the campaign against the Hungarians, and was present at the capture of Raab in June, 1849. Restored to the mastery of his dominions, he proceeded

to undo the work of 1848. The Hungarian constitution was suspended, the absolute authority of the Habsburg monarchy in the Austrian dominions proclaimed, and the imperial ministers were declared responsible only to the emperor. The absolute régime was maintained during the first ten years of his reign, though his own sentiments inclined to a more liberal rule. It was not till Austria had sustained severe reverses abroad that the system fell. The demand of Napoleon III. that the question of the Lombardo-Venetian states should be referred to a European conference being refused, war was declared. The Austrians were defeated at the battle of Solferino on June 24, 1859, and the emperor was compelled to sign the treaty of Villafranca, by which all claims to Lombardy were resigned. A partial return to constitutionalism was then attempted, and representative diets were restored in the different states, but the Hungarians did not cease to demand restoration of their old national institutions in their integrity. A dispute between Austria and Prussia as to Schleswig-Holstein led to war between the two nations in 1866. Here again the Austrians were completely defeated, and were compelled to accept the North German Confederation under the leadership of Prussia, and to give up Venice to Italy. After these disasters the emperor restored national self-government to Hungary, and in June, 1877, was declared king of that country. In later years the emperor's influence in foreign politics has been chiefly directed to forming a closer alliance with Germany and Italy. In 1878, the treaty of Berlin allowed Austria to occupy Bosnia and the Herzegovina. In 1887 the emperor took part in a series of military councils held to provide for the defense of Galicia against Russia. By the suicide of the Crown Prince Rudolph in February, 1889, he was deprived of all hope of a direct successor, and the crown will pass, on his death, to his nephew, Francis Ferdinand, son of his brother, Charles Louis.

Franklin, Benjamin, born in 1706; statesman, philosopher, and publisher; was the fifteenth of seventeen children of a soap-boiler of Boston, Mass. Quarreling with his brother, he went to Philadelphia almost penniless. Here, in 1729, he purchased the "Pennsylvania Gazette," formed a club called "The Junto," and began to acquire political influence. He was chosen clerk of the provincial assembly in 1736, and in 1753, became postmaster-general for British North America. In 1754, when a rupture with France was expected, he sat as a delegate in the Congress at Albany, and in 1756, for a third time held a military command. In 1757, he was sent to England as agent for Pennsylvania, and his reputation as a practical philosopher having preceded him, he was received with great respect, Edinburgh, Oxford, and St. Andrews conferring upon him the degree of doctor of laws. In 1764 he revisited England as colonial agent, and was mainly instrumental in securing the repeal of the stamp act. When the rupture with England took place he was elected a member of the American Congress, signed the Declaration of Independence, and subsequently aided in framing the Constitution of the United States. In 1776 he was appointed ambassador to France, and held the post until 1785. He returned to America to assume the office of president of Pennsylvania, to which he was twice re-elected, retiring from public life in 1788. Among his scientific discoveries was the identity of lightning with electricity, which he demonstrated by his famous kite experiment. He also discovered the course taken by storms over the North American continent. Died, 1790.

Frederick II., usually called "the Great," was born in A. D. 1712; King of Prussia from 1740 to 1786. During his reign the power of Prussia was greatly extended. The Seven Years' War (1756-63), in which he took part with England, secured to him a decided influence in the affairs of Europe, and added Silesia to his dominions; in 1772, he shared in the partition of Poland, and obtained as his portion all Polish Prussia and a part of Great Poland; and, in 1779, by the Treaty of Teschen, he obtained Franconia. Thus, at his death, his kingdom was one-half larger in area than it had been at his accession; his army was as well organized as any in Europe; and the internal affairs of the country were directed by him with vigor, and, on the whole, with prudence. He was in many respects one of the greatest figures in modern history. The "History of Friedrich II. of Prussia, commonly called Frederick the Great," by Thomas Carlyle, brings out clearly and forcibly the good and the bad sides of his character. Died, 1786.

Frederick Charles, Prince of Prussia, born in 1828; known as the "Red Prince" from the color of his favorite hussar uniform, was the eldest son of Prince Charles, brother of the German Emperor William, his mother being a sister of the Empress Augusta. He served in the first Schleswig-Holstein War, and having become a

general of cavalry, with command of the third army corps, he commanded the right wing of the Prussian army during the Danish War of 1864. In the Austrian War of 1866, he commanded the first army, and to him the crowning victory of Sadowa was mainly due. In the Franco-German War he commanded the second army, which he led to victories at Thionville, Gravelotte, and St. Privat, and thus blocked Bazaine in the entrenchments of Metz. After Bazaine's surrender with 170,000 men, the prince hastened westward to check the armies of Chanzy and D'Aureilles de Paladine in their attempts to relieve Paris from the south. A series of battles lasted almost uninterruptedly from the middle of November till the middle of January, when the French army of the west was rendered impotent at Le Mans. In the previous October, he had been created field-marshal. Prince Frederick was father of the Duchess of Connaught. Died, 1885.

Freeman, Edward Augustus, born in 1823; an eminent historian, educated at Trinity College, Oxford. His first work was a "History of Architecture" (1849). After several minor works, his most important one on the "History of the Norman Conquest" appeared between 1867 and 1876, and was followed by that of "The Reign of William Rufus and Accession of Henry I." He also wrote histories of the "Saracens" and of the "Ottoman Power in Europe," and various other works, some of a more popular character, besides many articles and reviews. In 1884, he was appointed Regius professor of Modern History at Oxford. Died, 1892.

French, Daniel Chester, sculptor; born in Exeter, N. H., April 20, 1850; educated in Exeter, N. H.; Massachusetts Institution of Technology, Boston, one year; A. M., Dartmouth College; studied in Boston and in Florence, Italy; had studio in Washington, 1876-78; in Boston and Concord, Mass., 1878-87; and in New York, 1887-1900. Among his best known works are "The Minute Man of Concord," at Concord, Mass.; a statue of General Cass, in the capitol at Washington; statue of Rufus Choate, Boston courthouse; John Harvard, at Cambridge, Mass., and Thomas Starr King statues; "Dr. Gallaudet and His First Deaf-Mute Pupil," the Milmore Memorial; and colossal "Statue of the Republic," at World's Columbian Exposition. Received medal of honor, Paris Exposition, 1900.

Frick, Henry Clay, manufacturer; born in West Overton, Pa., December 19, 1849; began business life as a clerk for his grandfather, a flour merchant and distiller; later embarked in small way in coke business. Was president, and since 1897 chairman, of board of directors of H. C. Frick Coke Company, now largest coke producer in the world, operating nearly 40,000 acres of coal and 12,000 coke ovens, with daily capacity of 25,000 tons. Came into public notice by his vigorous management during the famous strike at Homestead, 1892, when he was several times shot and stabbed by one of the strikers. Chairman of board of the firm of Carnegie Bros., 1899-02, and chairman of board of managers of the Carnegie Steel Company since 1892; is also director or officer in numerous other business enterprises.

Froebel, Friedrich (frä'bēl), the founder of the famous Kindergarten system, was a devoted German educationist on the principles of Pestalozzi, which combined physical, moral, and intellectual training, commencing with the years of childhood. Born, 1782; died, 1852.

Froude, James Anthony (flood), an English essayist and historian, was born in Devonshire, in 1818, and educated at Oxford. In 1849, appeared from his pen that remarkable book, "The Nemesis of Faith." His reputation, however, chiefly rests on his "History of England from the Fall of Wolsey to the Death of Elizabeth." Died, 1894.

Frye, William Pierce, lawyer, United States senator from Maine since 1881; born in Lewiston, Me., September 2, 1831; graduate of Bowdoin College, 1850 (LL. D., 1889; also LL. D., Bates, 1881); studied and practiced law. Member of Maine Legislature, 1861, 1862, and 1867; mayor of Lewiston, 1866-67; attorney-general of Maine, 1867-69; presidential elector, 1864; member of Congress, 1871-81. Chairman of Commerce Commission of Senate; member of Peace Commission, Paris, 1898; president pro tem. of the Senate, 1896-1901, after the death of Vice-President Hobart; discharged the duties of that office during the 50th Congress; also president pro tem. since Mr. Roosevelt's accession to the presidency.

Fuller, Melville Weston, Chief Justice of the United States, was born in Augusta, Me., February 11, 1833. He was graduated from Bowdoin College in 1853, and attended a course of lectures at Harvard Law School. He was admitted to the bar, 1855;

formed a law partnership at Augusta; was associate editor of "The Age," a Democratic paper there, president of the common council, and city solicitor. Went to Chicago in 1856, and practiced law until 1888. Was member of the Illinois State Constitutional Convention, 1862, and of the Legislature, 1863-65. He became Chief Justice of the United States, October 8, 1888.

Fulton, Robert, an American engineer, was born in Pennsylvania in 1765; began life as a miniature portrait and landscape painter, in which he made some progress, but soon turned to engineering. He was one of the first to apply steam to the propulsion of vessels, and devoted much attention to the invention of submarine boats and torpedoes; he built a steamboat to navigate the Hudson River, with a very slow rate of progress, however, making only five miles an hour. Died, 1815.

Funston, Fred, brigadier-general of United States Army; born in Ohio, November 9, 1865; graduate of Iowa, Kan., high school, 1886; studied in Kansas State University, Lawrence, two years, but was not graduated; reporter, Kansas City, 1890; botanist in United States Death Valley expedition, 1891; commissioner for Department of Agriculture to explore Alaska and report on its flora, 1893, camping on the Klondike in winter of 1893-94; floated down Yukon, alone, in a canoe; joined insurgent army in Cuba, 1896; served eighteen months; was wounded; returned to United States; commissioned colonel of 20th Kansas Volunteers, 1898; went to Philippines; took part in several battles; for crossing Rio Grande River at Calumpit on small bamboo raft in face of heavy fire and establishing rope ferry, by means of which the United States troops were enabled to cross and win the battle, he was promoted to brigadier-general of United States Volunteers, May 2, 1899. Continued in active service in Philippines. Organized and commanded expedition resulting in capture of Aguinaldo, head of Filipino insurrection, and was appointed brigadier-general of United States Army, March 30, 1901; commanding department of California, with headquarters at San Francisco, 1905.

Gainsborough, Thomas (gānz'bro), an English painter, born in Sudbury in 1727, was the first great landscapist of the English school. His works, highly prized by collectors, excel in richness of coloring and vigor of chiaroscuro. Died, 1788.

Galen, or Galeus, Claudius, born in Pergamus, in Mysia, about A. D. 130; a very celebrated physician, who practiced first in his native city, and afterwards in Rome, where he attended the emperors Marcus Aurelius and Lucius Verus. He was the author of a large number of medical and philosophical writings, of which upwards of eighty are still extant. Died, about 200.

Galileo, Galileo, astronomer and natural philosopher; born in Pisa in 1564; was educated first in Florence, but afterwards returned to Pisa to study medicine, for which profession his father designed him. Here, after becoming known as an opponent of the Aristotelian maxims, he discovered, in 1582, the law of the vibrations of the pendulum. Soon afterward he began to study mathematics, and was appointed professor at Pisa when only 25. Thence he removed to Padua in 1593, and during his residence there invented a thermometer and constructed his first telescope, the invention of which he had heard of at Venice. He also made astronomical discoveries, and was reestablished in 1610, at Pisa, by his patron, Cosimo de' Medici. Here it was that his opposition to traditional views, and especially his advocacy of the Copernican doctrine that the sun was the center of the universe, brought him into conflict with the Inquisition, but proceedings were dropped on Galileo's promise not to teach the obnoxious doctrine. On the publication, however, in 1632, seventeen years after, of his "Dialogue" on the same subject, he was again summoned to Rome, condemned to imprisonment for life, and required to solemnly recant his opinion. He was confined at first in the house of one of the Inquisitors, his pupil, but was afterwards allowed to live in Florence, where he died, having been blind four years. His works were published in Florence in the years 1843-46. Died, 1642.

Gallaudet, Thomas Hopkins (gāl-law-dit'), an American philanthropist, was born in Pennsylvania in 1787, and died in 1851. He founded the first deaf and dumb asylum in the United States, at Hartford, Conn.

Gallinger, Jacob H., M. D., United States senator from New Hampshire, 1891-1900; born in Cornwall, Ont., March 28, 1837; academic education; graduate in medicine, 1858 (hon. A. M., Dartmouth); practiced medicine until he entered public life. Member of New Hampshire Legislature, 1872-73, 1891; State constitutional convention, 1876; State senator, 1878, 1879, 1880; president of State Senate, 1879, 1880. Surgeon-

general of State, with rank of brigadier-general, 1879-80; chairman of Republican State Committee, 1882-90, 1898-1905; member of Congress, 1885-89.

Galvani, Luigi, born in Bologna, September 9, 1737; a celebrated Italian physiologist, from whom "Galvanism" derived its name. He was educated for the profession of medicine, and, in 1762, was appointed lecturer on anatomy in the University of Bologna, in which city he practiced. It was while holding this lectureship that he made those discoveries, partly by means of experiments on the muscles of frogs, which he published to the world, in 1791, in his treatise entitled, "De Viribus Electricitatis in Motu Musculari Commentarius." The now fully-established doctrine of animal electricity owes its origin to the patient and laborious investigations (at first little thought of) of the Bologna professor. Died, December 4, 1798.

Gambetta, Leon Michel, born in 1838; French statesman; son of a grocer of Cahors; went as a young man to Paris with the object of practicing at the bar, but did nothing remarkable till his thirtieth year. In 1868, he attracted notice by his conduct of the defense in the "procès Delescluze," and in the next year was elected deputy for both Paris and Marseilles, when he immediately became the most influential member of the Opposition. After the outbreak of the war, in the midst of the siege of Paris, he went to Tours in a balloon, and was chiefly instrumental in organizing the government, and the conduct of the war. During the years between the peace and 1879, Gambetta was chiefly occupied with his idea of the revanche and with the development of Opportunism. In the latter year it was his influence which, in the main, brought about the abdication of Marshal Macmahon. On the election of M. Grévy, he became president of the chamber, and, in 1881, prime minister of France, but only held office a few months, resigning on January 27, 1882, after which he took very little part in affairs. He died on December 31st of the same year, from a wound accidentally inflicted on himself by a pistol shot.

Gardiner, Samuel Rawson, born in 1829; English historian; was educated at Winchester and Christ Church. In 1884, he was elected fellow of All Souls, and was for some years professor of modern history at King's College, London. His historical works include "The History of England from the Accession of James I. to the Disgrace of Chief Justice Coke," "Prince Charles and the Spanish Marriage," "England Under the Duke of Buckingham and Charles I.," "The Personal Government of Charles I.," and the "Fall of the Monarchy of Charles I.," all these being republished as a continuous work in 1883-84; "An Introduction to the Study of English History" (with J. B. Mullinger), "History of the Great Civil War," and a complete "History of England."

Garfield, James Abram, born in Orange Township, Cuyahoga County, Ohio, November 19, 1831; the twentieth president of the United States. He was elected to the presidency at the close of 1880, and entered upon office in the spring of the following year; but on the 2d of July, he was shot by an assassin (Guiteau) while at the Washington station of the Baltimore & Potomac Railway, and died at Long Branch, on the Atlantic coast, after lingering for nearly three months. His early poverty, his manly independence, his hard-won attainments, and his incorruptible integrity, had all caused his career to be watched as that of a man of exceptional powers and of brilliant promise; and his untimely death was mourned, not only by his own countrymen, but by the whole civilized world. Died, September 19, 1881.

Garfield, James Rudolph, Secretary of the Interior; son of James Abram Garfield, twentieth president of the United States, was born in Hiram, Ohio, October 17, 1865; graduate of Williams College, Massachusetts, 1885; studied at Columbia Law School; admitted to the bar in 1888; practiced law in Ohio, 1888-1902; member of Ohio Senate, 1896 to 1900; trustee of Williams College; member of United States Civil Service Commission from 1902 to February, 1903; commissioner of corporations, Department of Commerce and Labor, from February, 1903, to March, 1907. Appointed secretary of the interior, March 5, 1907.

Garibaldi (*gàr-e-bàl'dè*), an Italian patriot, began life as a sailor. He associated himself enthusiastically with Mazzini for the liberation of his country, but being convicted of conspiracy, fled to South America, where, both as a privateer and a soldier, he gave his services to the young republics struggling there for life. Returning to Europe, he took part in the defense of Rome against France, but being defeated, fled to New York, to return to the Isle of Caprera, biding his time. He joined the Piedmontese against Austria, and, in 1860,

set himself to assist in the overthrow of the Kingdom of Naples and the union of Italy under Victor Emmanuel. Landing in Calabria, he entered Naples, and drove the royal forces before him without striking a blow, after which he returned to his retreat at Caprera, ready still to draw sword, and occasionally offering it again in the cause of republicanism. Born in 1807; died in 1882.

Garrick, David, English actor, son of a captain in the army; was born in Hereford in 1716, and came to London with Dr. Johnson in 1736, to study law. On the death of his father, however, he joined his brother, a wine merchant, but soon gave this up to go on the stage. He made his first appearance, under the name of Lyddal, at Ipswich, in 1741, and soon after played "Richard" in the theater of Goodman's Fields, where his success enabled him to get an engagement at Drury Lane. In 1743, he went to Dublin; in 1747, became joint patentee of Drury Lane, two years later marrying Mademoiselle Violette. He acted at Drury Lane until 1776, when he retired and sold his share in the concern. His last appearance was on June 1st, as Don Felix in "The Wonder." He died on January 20, 1779, and was buried in Westminster Abbey.

Garrison, William Lloyd, born in 1805; American abolitionist, of humble birth; was apprenticed at the age of 13 to the printer of the "Newburyport (Mass.) Herald," for which paper he afterwards wrote. In 1826, he became owner and editor of the "Free Press," and in the next year, editor of the "National Philanthropist," in which temperance and emancipation were advocated. In 1831, he started "The Liberator," and from henceforth devoted himself entirely, at great personal risk, to the cause of slavery abolition. He visited England three times—in 1833, 1840, and 1866—and was well received. In 1847, "Sonnets and Other Poems" from his pen were published, and, in 1852, a selection from his speeches and writings. Died, 1879.

Gaskell, Mary, born in 1822; English novelist (*née* Stevenson), married a Unitarian minister, and wrote "Mary Barton" (1848), "Moorland Cottage" (1850), and several contributions to "Household Words," which included "Cranford" and "North and South"; "Wives and Daughters" was appearing in the "Cornhill" at the time of her death. She also wrote a biography of Charlotte Brontë. She was a friend and helper of Thomas Wright, and was very active in charitable works during the cotton famine. Died, 1865.

Gates, Horatio, American general; born in England in 1728, and accompanied General Braddock, but subsequently purchased an estate in Virginia, where he lived until the outbreak of the war in 1775, when he was appointed by Congress adjutant-general. He performed many services to the American cause, the greatest of which was the defeat of Burgoyne at Saratoga. In the latter part of the war he held a command in the South, and was not so successful, being defeated by Lord Cornwallis at Camden. Died, 1806.

Gatling, Richard Jordan, born in 1818; American inventor; a doctor by profession. In 1850, he invented a double-acting hemp-brake, and, in 1857, a steam plough; but his most celebrated invention was that of the revolving gun, which bears his name, the conception of which came to him in 1861. In 1865, the gun was improved and tested, and was forthwith brought into use by the United States service; and several European governments also adopted it. Among Dr. Gatling's later inventions were an improved method of casting steel cannon and a pneumatic gun for discharging explosives. Died, 1903.

Gauss, Karl Friedrich, born in 1777; German mathematician and astronomer, patronized by the Duke of Brunswick, who defrayed the expenses of his education at Brunswick and Göttingen, where in 1801 he produced "Disquisitiones Arithmeticae." In 1807, he became professor and director of the observatory at Göttingen, and held the position until his death. During this period he brought out many works on pure mathematics, astronomy, and other sciences, among which the chief are "Theoria Motus Corporum Cælestium, in Sectionibus conicis Ambientium," "Recherches sur la Géométrie supérieure," and invented the Heliotrope. Died in 1855.

Genghis Khan, born in 1162; Emperor of the Mongols, whose real name was Temoutchin, the title meaning "the chief of the most powerful." Having consolidated the Tartar tribes, he marched against the Emperor of China, whose general he was, overran his empire (1212-1214), ravaged northern India, which he temporarily subdued, and penetrated into Russia through Persia. Having reached the Crimea, sacked numerous towns, and slaughtered millions of men, the Tartars returned. Died, 1227.

Genseric, born in 406; King of the Vandals, reigned at first with his brother Gonderic, afterwards alone, and

greatly strengthened the Vandal power in Spain. In 429 he invaded northern Africa, stamped out Christianity, and from his new capital, Carthage, made incursions on the inhabitants of Italy and Sicily. In 455, being invited to Rome by the widow of Valentinian to take part against his murderer Maximus, he caused the city to be sacked for fourteen days, and carried away among his prisoners the Empress Eudocia and her sons, besides much treasure. Genseric professed to be an Arian Christian. Died, 477.

George is the name given to four (Hanoverian) kings of England. **George I.** (Lewis), son of Ernest Augustus, Elector of Hanover, by Sophia, granddaughter of James I., was born at Osnaburg, 1660, and died in 1727. He succeeded his father, 1698, and on the death of Queen Anne was declared her successor under the act of settlement which excluded the Roman Catholic descendants of James II. George was entirely ignorant of the English language, and was only tolerated by the English people. **George II.** (Augustus), son and successor of the former, was born at Hanover, 1683; crowned in 1727, and died in 1760. George distinguished himself in the general European War of 1740, in which he was the ally of Austria against France, Spain, and Prussia, and commanded in person in the victory over the French at Dettingen, 1743. In 1755, war was renewed, and George allied himself with Frederick the Great of Prussia against France in the Seven Years' War. **George III.**, grandson of the former, and son of Frederick, Prince of Wales, was born in 1738, and died in 1820, after the longest reign of any English monarch. During his reign the American colonies secured their independence. **George IV.**, son and successor of the former, was born in 1762, and died in 1830. He was an unpopular monarch, and was succeeded by his brother, William IV.

George, Henry, journalist, author; born in Sacramento, Cal., November 3, 1862; son of Henry G. (political economist); educated at public schools; in printing office at 16; in newspaper work since 1881; accompanied his father, 1883, on lecturing tour in Great Britain, as secretary; on his father's sudden death during mayoralty campaign, 1897, was nominated to succeed his father as candidate of Jeffersonian party for mayor of Greater New York, but received small vote. Author: "Life of Henry George," 1900. Address: 180 St. Nicholas Avenue, New York.

George, Henry, American land reformer; was born in Philadelphia, in 1839, and, after being successively in a counting-house and a printer's office and at sea, settled in California, and in 1866 joined the staff of a San Francisco paper. He afterwards became editor of two papers there, and made his first essay on the land question in "Our Land and Land Policy," published in 1871. In 1876 he was state inspector of gas-meters, but in 1880 removed to New York, and the next year visited Ireland on his way to England. He was there arrested as a "suspect" under Mr. Forster's act, but was soon released. "Progress and Poverty" had been written in 1879, and its author undertook lecturing tours in 1883 and 1889 in support of his principles. Beside this book he published "The Irish Land Question," "Social Problems," and "Protection and Free Trade." In 1886 he was a candidate for the mayoralty of New York. Died in 1897.

Gibbon, Edward, English historian; born in Putney, in 1737, and educated at Westminster and Magdalen College, Oxford. While at the university he was received into the Romish Church, but having been sent to a Calvinist at Lausanne became a Protestant again the next year. At Lausanne he met Voltaire, and fell in love with Mademoiselle Curchod, afterwards Madame Necker. He returned to London in 1758, and after a short term of service in the Hampshire militia, revisited the Continent, staying especially at Paris and Rome. When again in England he wrote "Mémoires Littéraires de la Grande Bretagne," and set to work on his great book, "The Decline and Fall of the Roman Empire," the first volume of which appeared in 1776 and the last in 1788. He entered parliament in 1774, as a supporter of Lord North, wrote the "Mémoire Justificatif," and obtained a place at the board of trade. From 1783 to 1793, he lived at Lausanne, and died (1794), soon after his return.

Gibbons, James, Roman Catholic cardinal; born in Baltimore, July 23, 1834; at early age taken by parents to their former home in Ireland; began his education there; returned to United States, and resided in New Orleans with his family, 1848; entered St. Charles College, Maryland, 1855; transferred, 1857, to St. Mary's Seminary, Baltimore; ordained priest, June 30, 1861; assistant St. Patrick's, Baltimore, for a few months; then pastor of St. Bridget's, Canton (suburb of Baltimore); later private secretary to Archbishop Spalding and chancellor of the arch-diocese; assistant chancellor,

second plenary council of American Roman Catholic Church, Baltimore, October, 1866; vicar apostolic of North Carolina, with rank and title of bishop, 1868; coadjutor archbishop of Baltimore, May 20, 1877; succeeded to the see, October 3, 1877; presided at third national council at Baltimore, November, 1884; was nominated as cardinal; invested with the princely insignia, June 30, 1886. Author: "The Faith of Our Fathers," "Our Christian Heritage," "The Ambassador of Christ."

Gibson, Charles Dana, illustrator; born in Roxbury, Mass., September 14, 1867; educated at Flushing, L. I., also Art Students' League, New York, 1884-85; has done much illustrating in principal magazines; also illustrated numerous books. Author: "Sketches in London," "People of Dickens," "Drawings," "Pictures of People," "Sketches and Cartoons," "The Education of Mr. Pipp," "Sketches in Egypt," "The Americans," "A Widow and Her Friends," "The Social Ladder."

Gildersleeve, Basil Lanneau, professor of Greek in Johns Hopkins since 1876; born in Charleston, S. C., October 23, 1831; graduated at Princeton, 1849, A. M., 1852; studied at universities of Berlin, Bonn and Göttingen (Ph. D., 1853; LL. D., 1869, William and Mary, Harvard, 1896, Yale, 1901, University of Chicago, 1901; D. C. L., University of the South, 1884; L. H. D., Princeton, 1899); professor of Greek, 1856-76, and of Latin, 1861-66, University of Virginia. Editor "American Journal of Philology" since it was founded, 1880. Author: "Latin Grammar," "Latin Series" (primer, reader, school Latin grammar, Latin composition, etc.), "Essays and Studies," "Greek Syntax," Editor: "Persius," "Justin Martyr," "Odes of Pindar."

Gilman, Daniel Colt, educator; born in Norwich, Conn., July 6, 1831; graduated at Yale, 1852 (A. M., 1855); continued studies in Cambridge, New Haven and Berlin (LL. D., Harvard, 1876; St. John's, Md., 1876; Columbia, 1887; Yale, 1889; University of North Carolina, 1889; Princeton, 1898; University of Toronto, 1903; University of Wisconsin, 1904); librarian, secretary of Sheffield Scientific School, and professor of physical and political geography, Yale, 1856-72; president of University of California, 1872-75; first president of Johns Hopkins University, 1875-1902; first president of Carnegie Institution, Washington, 1901-1904. Author "Bi-centennial Discourse, Norwich, Conn.," "Inaugural Address," "Life of James Monroe," "University Problems," "Introduction to De Tocqueville's Democracy in America," "Life of James D. Dana, geologist," "Science and Letters in Yale," editor-in-chief, "New International Encyclopedia."

Giotto, Ambrogio Bondone, born in 1276; Italian painter and architect; pupil of Cimabue and friend of Dante, whose portrait he painted at Ravenna; was son of a citizen of Florence, and apprenticed to a woolstapler; painted frescoes at Assisi, and was probably the founder of the modern school of portrait-painting. About 1299 he went to Rome, where he painted and worked in mosaics; and subsequently was employed at Padua and Florence, where his frescoes in the Peruzzi chapel of Santa Croce were discovered in 1863. He also painted the "Miracle of the Loaves and Fishes" at Naples, and designed the campanile of Florence. He died in 1336, and was buried in the cathedral there.

Girard, Stephen (the-rahd'), an American philanthropist, born near Bordeaux, France, in 1750; rose from a humble sphere of life to become a trader in Philadelphia, in 1776, in which city he eventually became a merchant and banker, and amassed a large fortune. Dying in 1831, he bequeathed \$2,000,000 to the erection of a college for orphan boys, conducted on rigidly secular principles. This building, the finest in the Grecian style in the United States, was commenced in 1833, and completed in 1848.

Gladden, Washington, author, Congregational clergyman; born in Pottsgrove, Pa., February 11, 1836; graduate of Williams, 1859 (D. D., Roanoke College, Va., LL. D., University of Wisconsin and Notre Dame University, Ind.); held several pastorates and editorial positions prior to becoming (1882) pastor of First Congregational Church, Columbus, O.; especially known as writer upon social reforms. Author: "Plain Thoughts on the Art of Living," "From the Hub to the Hudson," "Workmen and Their Employers," "Being a Christian," "The Christian Way," "The Lord's Prayer," "The Christian League of Connecticut," "Things New and Old," "The Young Men and the Churches," "Applied Christianity," "Parish Problems," "Burning Questions," "Santa Claus on a Lark," "Who Wrote the Bible," "Tools and the Man," "The Cosmopolis City Club," "The Church and the Kingdom," "Seven Puzzling Bible Books," "Social Facts and Forces," "Art and Morality," "The Christian Pastor," "How Much

is left of the Old Doctrines," "Straight Shots at Young Men," "Social Salvation," "The Practice of Immortality," "Where Does the Sky Begin?" "Christianity and Socialism."

Gladstone, William Ewart (*glăd'stun*), statesman, orator, and scholar; born in Liverpool in 1809, son of a Liverpool merchant, sometime of Leith, and of Ann, daughter of Andrew Robertson, Stornoway; was educated at Eton and Oxford, and entered parliament in 1832, as member for Newark in the Tory interest. Gladstone delivered his maiden speech on slavery emancipation, May 17, 1833; accepted office under Sir Robert Peel in 1834, and again in 1841 and 1846; and as member for Oxford, separating from the Tory party, took office under Lord Aberdeen, and, in 1859, under Lord Palmerston, became chancellor of the exchequer; elected member for South Lancashire in 1865, he became leader of the Commons under Lord John Russell; elected for Greenwich, he became premier for the first time in 1869, holding office until 1875; after a brilliant campaign in Midlothian, he was returned for that county in 1880, and became premier for the second time; became premier a third time in 1886, and a fourth time in 1892. During his tenure of office, he introduced and carried a great number of important measures, but failed from desertion in the Liberal ranks to carry his pet measure of home rule for Ireland, so he retired from office into private life in 1895, and spent his last days chiefly in literary work, the fruit of which, added to earlier works, gives evidence of the breadth of his sympathies and the extent of his scholarly attainments; but, being seized by a fatal malady, his strong constitution gradually sank under it, and he died at Hawarden, May 19, 1898, and was buried in Westminster Abbey.

Glasgow, Ellen Anderson Gholson, novelist; born in Richmond, Va., April 22, 1874; private education. Author; "The Descendant," "Phases of an Inferior Planet," "The Voice of the People," "The Freeman and Other Poems," "The Battle Ground," "The Deliverance."

Glenn, Robert Brodnax, governor, lawyer; born in Rockingham County, N. C., August 11, 1854; educated by tutor at home, high school, Leaksville, N. C., Davidson College, N. C., University of Virginia, and Pearson's Law School, Richmond Hill, N. C. Engaged in general practice of law at Winston, N. C., since 1878, of firm of Glenn, Moody & Hendren; was assistant director for Southern Railway, attorney for Western Union Telegraph Company, etc. Was member of legislature, 1881; solicitor for State, 1886; elected for Cleveland, 1884, 1892; district attorney for United States, 1893-97; governor of North Carolina, 1905-09.

Godfrey de Bouillon, crusader, King of Jerusalem; set out in 1096; took Nicaea and Antioch in 1097; defeated the Saracens next year, and, in 1099, after a month's siege, took Jerusalem, and slaughtered the inhabitants. In the same year he was elected king, but refused to assume the title, and won the battle of Ascalon, dying, probably by poison, in 1100.

Goethe, Johann Wolfgang von, German poet, philosopher, and romance writer; was born in Frankfurt-on-the-Main in 1749, of noble family, and received a liberal education. At sixteen, he went to Leipzig to study law, to which, however, he did not confine himself. After about two years' study of alchemy and mystical writers, he went to Strasburg in 1769, where he came under the influence of Herder and met Wagner. On his return to Frankfurt, two years later, he published "Goetz von Berlichingen" and "Lieder der Werther," the latter of which was immensely popular. In 1775, he went to Weimar, where the grand duke gave him the office of chamberlain; and, in 1786, to Italy, where he traveled for two years, and conceived some of his greatest works. The dramas of "Iphigenia," "Egmont," and "Torquato Tasso" were produced between 1786 and 1790, in which year also the first fragments of "Faust" were published. In 1794, Goethe's botanical researches brought him into connection with Schiller, and in the same year he produced "Wilhelm Meister." The results of his scientific studies were, besides "The Metamorphosis of Plants," the "Beiträge zur Optik" (1791-92), and a book on the theory of color, "Farbenlehre," published in 1810, in opposition to Newton's theories. Meanwhile "Hermann und Dorothea" had appeared in 1797, and the greater part of "Faust" in 1807, the latter not being finished till the year before his death. Next year he accompanied the Grand Duke of Weimar to Erfurt, and had an interview with Napoleon. During his last years he was occupied with his autobiography. Died, 1832.

Goldsmith, Oliver, born in 1728; English poet and romance writer; son of a poor Irish clergyman of Pallas,

Longford, went as sizar, in 1744, to Trinity College, Dublin, where he led a miserable life till he took his degree five years later. After this—having failed to obtain ordination, took pupils for a time, and lost his money by extravagance—he went to Edinburgh in 1752, and from thence to Leyden; but, after staying there a year, found himself penniless, and traveled to London through France, Switzerland, and Northern Italy, supporting himself by flute-playing. After a precarious existence as a surgeon, an author, and a literary hack, he produced, in 1759, his "Inquiry into the Present State of Polite Learning in Europe." This sold well, and gained for the author the acquaintance of Dr. Johnson. Soon after he was engaged to contribute to the "Public Ledger," and the "Citizen of the World," and among other contributions wrote the "Letters from a Nobleman to His Son," "The Traveler" followed in 1765, and "The Vicar of Wakefield" (sold for fifty guineas only) in 1766, but Goldsmith was improvident as ever. As a dramatist he became known as the writer of the "Good-Natured Man," brought out at Covent Garden in 1768, and "She Stoops to Conquer" in 1773, and as a poet by "The Deserted Village" (1770), and his last work, "The Retaliation." He wrote numerous other works, among which may be mentioned "Animated Nature." Died, 1774.

Gompers, Samuel, president of American Federation of Labor; born in England, January 27, 1850; cigar-maker by trade; has been advocate of the rights of labor, and connected with the efforts to organize the working people since his 15th year; one of the founders of American Federation of Labor and editor of its official magazine; has written a number of pamphlets on the labor question and the labor movement; with an intermission of one year, has been president of American Federation of Labor, since 1882.

Goodwin, Nathaniel C., actor; born in Boston in 1857; studied under Wyzemam Marshall, then manager of Boston Theater; went to New York and played in "Law of New York," 1876, and later as Captain Cross-tree in "Black-eyed Susan" (burlesque); starred in Rice's "Evangeline," "Hobbies," "The Member from Slocum," "In Mizoura," "Nathan Hale," and other plays.

Goodwin, William Watson, educator; born in Concord, Mass., May 9, 1831; graduate of Harvard, 1851; studied at universities of Göttingen, Berlin, and Bonn (Ph. D., Göttingen, 1855; LL. D., Amherst, 1881; Cambridge, Eng., 1883; Columbia, 1887; Edinburgh 1890; Harvard, 1891; Chicago, 1901; Yale, 1901; D. C. L., Oxford, Eng., 1890). Tutor at Harvard, 1856-60; first director of American School of Classical Studies, Athens, Greece, 1882-83; knight of Greek Order of the Redeemer; professor of Greek literature, Harvard, 1860-1901; professor emeritus since 1901; overseer of Harvard, 1903. Author: "Syntax of the Moods and Tenses of the Greek Verb," "Greek Grammar." Editor: "Demosthenes on the Crown."

Goodyear, Charles, the inventor of vulcanized rubber, was born in New Haven, Conn., in 1800. His career was a troubled one; he failed as an iron-founder, and when, after ten years' labor, amidst every disadvantage of poverty and privation, he, in 1844, produced his new method of hardening rubber by means of sulphur, he became involved in a fresh series of troubles, as well as poverty, consequent on the infringement of his inventions. His patents latterly amounted to sixty, and both medals and honors were awarded him in London and Paris. Died, 1860.

Gordon, George Angier, Congregational clergyman; born in Scotland, January 2, 1853; educated in common schools, Inch, Scotland; graduate of Harvard, 1881 (D. D., Bowdoin and Yale, 1893, Harvard, 1895); Minister of Old South Church, Boston, since 1884; lecturer in Lowell Institute Course, 1900; Lyman Beecher lecturer, Yale, 1901. Author: "The Witness to Immortality," "The Christ of To-day," "Immortality and the New Theodicy," "The New Epoch for Faith." University preacher to Harvard, 1886-90; Yale, 1888-1901; Harvard overseer.

Gordon, Major-General George Charles, born in Woolwich, January 23, 1833; a distinguished military commander and administrator, who was killed while defending Khartoum against the forces of the Mahdi during the expedition to the Soudan in 1884-85. He had already distinguished himself in the course of the Crimean War, and, subsequently, in China and in India. From 1865 to 1871, he lived quietly at Gravesend, devoting himself chiefly to works of philanthropy; but in the latter year he was appointed British representative on the European Commission of the Danube, and, two years later, governor of the equatorial provinces of Egypt. He held this position, with marvelous success, till the close of 1874, when he returned to England;

but, in 1877, upon the khedive's earnest solicitation, he went out once more to the Soudan, afterwards serving his own government for a time in India and in South Africa. In January, 1884, he accepted from the king of the Belgians the command of the anti-slavery expedition which was about to be dispatched to the region of the Congo; but, before he could set out, he was offered by the English Government, and accepted, a commission to go again to the Soudan, on the enterprise which ultimately cost him his life. Died, January 26, 1885.

Gorky, Maxim, a Russian Zola, whose works have great force, whose spirit is embittered by his hard life as a worker on the Volga and in Russian bakehouses, and by his imprisonment as a political offender in 1905. "In 1878, I was apprenticed to a shoemaker; 1879, I was apprenticed to a designer; 1880, scullion on board a packet boat; 1883, I worked for a baker; 1884, I became a porter; 1885, baker; 1886, chorister in a troupe of strolling opera players; 1887, I sold apples in the street; 1888, I attempted to commit suicide; 1890, copyist in a lawyer's office; 1891, I crossed Russia on foot; 1892, I was a laborer in the workshops of a railway. In the same year I published my first story."

Gould, George Jay, capitalist; born in New York, February 6, 1864; private education; president and director of Missouri Pacific Railway since May 10, 1893, Texas & Pacific Railway Company since 1893, International & Great Northern Railroad Company since 1893, Little Rock Junction Railway since 1888, Manhattan Railway Company since 1892, St. Louis, Iron Mountain & Southern Railway Company since 1893, Arkansas Midland Railway, Kansas City Northwestern Railroad Company, Kansas & Arkansas Valley Railway, Sedalia, Warsaw & Northwestern Railway Company, Weatherford, Mineralwells & Northwestern Railway; chairman board of directors of Wabash Railroad Company, Denver & Rio Grande Railroad Company, Rio Grande Western Railway Company; vice-president and director of Western Union Telegraph Company, Rio Grande Southern Railroad, Kansas City Southern Railway Company; director Chicago, Burlington & Quincy Railroad Company, Chicago & Alton Railway Company, Union Pacific Railroad Company, Southern Pacific Company, Equitable Life Assurance Society of United States, National Bank of Commerce, National Surety Company, Mercantile Trust Company, Colorado Fuel & Iron Company, Colorado Midland Railway Company, Oregon Short Line Railroad Company, Pacific Mail Steamship Company, American District Telegraph Company, and numerous other corporations.

Gould, Helen Miller, born in New York, June 20, 1868; daughter of late Jay and Helen Day (Miller) Gould; identified with benevolent work; gave United States Government \$100,000 at beginning of war with Spain; active member Women's National War Relief Association; gave freely to its work; at Camp Wikoff made care of sick and convalescent soldiers her personal care, and gave \$50,000 for needed supplies.

Gounod, Charles François, French composer; born in Paris in 1818, and educated at the Conservatoire under Halévy and Zimmermann, whose daughter he married in 1847. In 1839, he gained the prize for composition, and, after visiting Rome and Vienna, became an organist in Paris, where, in 1849, a high mass by him attracted attention. "Sappho," his first opera, was produced in 1851, and the composer was soon after appointed director of the Orphéon. After some minor works, "Faust" appeared in 1859, being brought out at the Théâtre Lyrique. "Mireille" followed in 1864, and "Roméo et Juliette" in 1867. Of his later works the chief are "Jeanne d'Arc," "The Redemption," and "Mors et Vita." Died, 1893.

Gracchus (grāk'-kus), Calus Sempronius, a Roman orator and statesman who, as tribune, was the originator of many excellent laws; was born B. C. 159, and killed in a massacre organized by Optimus, 121. His brother, Tiberius Sempronius, born B. C. 168, was elected tribune, and was also killed in an uprising of the patricians against his proposal to distribute the public lands. Died, 133.

Grant, Frederick Dent, brigadier-general United States Army; born in St. Louis, May 30, 1820; son of Ulysses S. and Julia D. Grant; graduated at West Point, 1841; assigned to fourth cavalry, was lieutenant-colonel United States Army when he resigned his commission, 1841; afterward United States minister to Austria, and more recently, police commissioner, New York, until January, 1898. Became colonel of 14th New York volunteer infantry upon beginning of war for Cuba, and May 27, 1898, was appointed brigadier-general, United States volunteers. Served in Porto Rico one year, and after war commanded military district of San Juan; transferred to Philippines, April, 1899; commanded sec-

ond brigade, first division, 8th Army Corps (Lawton's); occupied advance of southern line fighting battles of Big Bend, October 3, and Binacian, October 6, 1899; transferred November 1, 1899, to second brigade, second division for the advance into Northern Luzon, where this brigade covered flanks and rear of McArthur's division; later detached to invade provinces of Batuan and Zamballes; assigned January, 1900, to district Northern Luzon, which he commanded during guerilla war (this district was first brought under control to accept civil government); transferred to separate brigade, Southern Luzon, October, 1901—order restored; transferred, April, 1902, to Sixth Separate Brigade, Samar, where he received surrender of last of insurgent forces; appointed brigadier-general United States Army, February 18, 1901; commanded department of Texas, 1902, January 15, 1904, department of lakes until September 28, 1904; now commanding department of the East.

Grant, Ulysses Simpson, born in 1822; American general and statesman; entered the army in 1843, and served with distinction in the Texas campaign of 1845. In 1848, he married, and in 1854, resigned his commission. During the Civil War he captured Fort Henry (February, 1862), and Fort Donelson; won the battle of Shiloh (April 6-7); defeated Price at Iuka (September 19th), and for his capture of Vicksburg in July, 1863, was made major-general. He further distinguished himself by the relief of Chattanooga in November, and was voted a gold medal for his services. In March, 1864, he became lieutenant-general and commander-in-chief of the Federal Armies, and in little more than a year brought the war to a close. On July 25, 1866, he was named general of the armies of the United States, and in 1868, became president, being re-elected in 1872. He successively superintended the pacification of the Southern States, the restoration of the finances, and the disbanding of the army, and he obtained from England the payment of the Alabama claims. On his retirement from office he made a tour round the world. Having lost his moderate fortune in an unfortunate speculation, he wrote an account of his life, which, being successful, to some extent relieved him. He died, in 1885, of cancer, after a year's severe suffering.

Grattan, Henry, born in 1746; Irish patriot, educated at Trinity College, Dublin, and called to the Irish bar in 1772; entered the Irish Parliament in 1775, and became an Opposition leader. In 1780 he moved that the crown was the only link between England and Ireland, and in 1782, by means of the volunteer movement, succeeded in obtaining legislative independence for his country. His views on Catholic emancipation were not shared by the whole of his party, and, after the recall of Fitzwilliam, power passed from his hands to the United Irishmen. Having been some years in retirement, he actively opposed the union, and after an interval of two years entered the British Parliament as member for Malton. He was offered office by Fox, but refused; supported the Irish insurrection bill of 1807, and devoted his last years to the cause of the Catholic emancipation. Died, 1820.

Gray, Asa, a distinguished American botanist; born in Paris, Oneida County, N. Y., in 1810; graduated in medicine in 1842; became Fisher professor of natural history at Harvard, and in 1874, succeeded Agassiz as regent of the Smithsonian Institution. His writings did much to promote the study of botany in America on a sound scientific basis, and also to forward the theories of Darwin. In conjunction with Doctor Torrey, he wrote "The Flora of North America," and by himself various manuals of botany and "Natural Science and Religion." Died, 1888.

Gray, George, jurist; born in New Castle, Del., May 4, 1840; graduated at Princeton, 1859 (A. M., 1863; LL. D., 1889); studied law at Harvard; admitted to bar, 1863; practiced at New Castle, 1863-69; afterward at Wilmington; attorney-general of Delaware, 1879-85; United States senator, 1885-99; Democrat; member foreign relations and judiciary committees in senate; in 1896 affiliated with the national (gold-standard) Democrats in the presidential election; member Peace Commission, Paris, 1898; appointed by the president member of the Joint High Commission at Quebec, 1898, and member of the International Permanent Court of Arbitration under The Hague convention, November, 1900; judge United States Circuit Court, third judicial circuit, since 1899; chairman Anthracite Coal Strike Commission, 1902.

Gray, Thomas, an English poet, was born in London, 1716, and educated at Cambridge, in which university he became professor of modern literature in 1769. His "Odes" occupy a high rank in English poetry, and his well-known "Elegy" written in a Country Church-

yard" (1749), is one of the most perfect compositions of its kind in the language. Died, 1771.

Greeley, Horace, born in 1811; American journalist and politician; son of a New Hampshire farmer; came to New York, and, after some failures, established in 1841, the "New York Tribune," in which he supported Lincoln and the Union. In 1848, he became a member of Congress, and, though not prominent there, was one of the founders of the Republican party in 1855. He ultimately, however, became a Democrat, and unsuccessfully opposed Grant for the presidency in 1872, but died (1872) the same year. He twice visited Europe. He was author of "The American Conflict," "What I Know about Farming," and "Recollections of a Busy Life."

Green, John Richard, English historian; born in Oxford in 1837, and educated at Magdalen College school and Jesus College; took orders in 1860, and was some time vicar of St. Philip's, Stepney, becoming in 1868, librarian at Lambeth. He was author of "A Short History of the English People," "A History of the English People," "The Making of England," and "The Conquest of England," published after his death, in 1883, by his wife, who assisted him in various other works, and herself wrote "Henry II." in the "Twelve English Statesmen" series. Died, 1883.

Greene, Nathaniel, born in 1742; American general; educated himself, and broke with the Quakers on account of his later military pursuits; distinguished himself at the battle of the Brandywine; was defeated several times by Cornwallis, but won the battle of Eutaw Springs. Died, 1786.

Gregory I., Pope, called the "Great"; was appointed by the Emperor of the East Governor of Rome, but, on inheriting his father's wealth, resigned it, and became Abbot of St. Andrew's, Rome. After being secretary to Pelagius I., he succeeded him as Bishop of Rome; renounced communion with the Eastern Christians because of the assumption of the title "Universal Bishop" by the patriarch of Constantinople; composed chants, and established a musical school, in which he taught, himself, and collected and arranged fragments of ancient hymns. He was a great opponent of secular learning, but was author of numerous sacred works, of which the chief was his "Morals on the Book of Job." Died, 604.

Gregory VII., "Hildebrand"; born in 1028; a man of modest birth, who became monk of Clugny and Archdeacon of Rome; exercised great influence over Leo IX. and succeeding popes, till he was himself appointed, in 1073, to succeed Alexander II. He attacked simony and concubinage in the Church, and carried the power of the papacy to a high pitch, declining to submit to ratification of election from the emperor, and attempting to enforce spiritual control over the sovereigns of Europe. He was firmly opposed by William I. of England and Philip I. of France, but he excommunicated Henry IV. of Germany, and compelled him to do penance in 1077, although he was eventually deposed by him. He died in Salerno, in 1085, where he had been taken after his rescue from the castle of St. Angelo by the Normans of Apulia.

Grevy, Francois Paul Jules, born in 1813; French statesman, came to the front at Paris as a defender of republicans in political cases, and in 1848, was elected a member of the constituent assembly. He joined the Côté Gauche, became vice-president of the Assembly, and opposed the presidency of Louis Napoleon. In 1868, his native department (the Jura) returned him for the Assembly, and, on resuming public life, he strongly opposed the second empire. He became president of the Assembly in 1871, and was reelected three times. Between 1873 and 1876, when he was a private member, he strongly opposed the Monarchists, and he afterwards vigorously resisted the schemes of MacMahon, on whose resignation, in 1879, he became President of the Republic, in which office he displayed much tact, and in 1885, made peace with China on his own responsibility. In December of that year he was reelected, but in 1887, was obliged to resign owing to the discovery of his son-in-law's (M. Wilson) implication in the decoration scandals. Died, 1891.

Grey, Lady Jane, born in 1537; grand-niece of Henry VIII.; was appointed heir to the throne by Edward VI. in contravention of the previous settlement of the succession, and having married a son of Dudley, Duke of Northumberland, was made queen and reigned ten days; she was beheaded with Lord Dudley. Died in 1554.

Griggs, James M., congressman, lawyer; born in Lagrange, Ga., March 29, 1861; graduate of Peabody Normal College, Nashville, Tenn., 1881; taught school and studied law; admitted to bar, 1883; practiced at

Alapaha, Berrien County, Ga.; was for short time in newspaper business; removed to Dawson, Ga., 1885; solicitor-general (prosecuting attorney) Pataula judicial circuit, 1888-93; judge of same circuit, 1893-96; member of Congress, since 1897, second Georgia district; chairman of Democratic Congressional Committee, 1902.

Grimm, Jakob Ludwig (*grim*), a German philologist born at Hanau, was associated in his literary labors with his brother, Wilhelm Karl, born 1786. Their principal joint work is the well-known and highly esteemed "German Dictionary" bearing their names, and published in 1859. Jakob, who died in 1863, was also the author of the "Legal Antiquities of Germany," a "History of the German Language," and "German Mythology"—all standard works. Wilhelm died in 1859.

Grosvenor, Charles Henry, lawyer; born in Pomfret, Windham County, Conn., September 20, 1833; went to Ohio, May, 1838; attended country log-school house; taught school; studied law; admitted to bar, 1857; engaged in practice. Served in Eighteenth Ohio volunteers, July, 1861, to November, 1865, as major, lieutenant-colonel, colonel, and brevet brigadier-general. Member of Ohio Legislature, 1874-78 (speaker, two years); presidential elector, 1872 and 1880; trustee Ohio Soldiers' and Sailors' Orphans' Home, 1880-88, and president for five years; delegate at large to National Republican Convention, 1896 and 1900; member of Congress 1885-91, and again from 1893 to 1907, eleventh Ohio district; member of Committee on Ways and Means, and chairman of Committee on Mines and Mining, 55th, and member of Committee on Ways and Means, Committee on Rules, and chairman of Committee on Merchant Marine and Fisheries, 56th, 57th, 58th, and 59th Congresses. Author: "William McKinley, His Life and Work."

Grosvenor, Edwin Augustus, educator, author; born in Newburyport, Mass., August 30, 1845; graduate from Amherst, 1867, Andover Theological Seminary, 1872 (A. M., Amherst, 1871; LL. D., Wabash, 1903, Alfred University, 1904); professor of history, Robert College, Constantinople, 1873-90; professor of European history, 1892-93, modern governments and their administration, 1898-1901, modern government, and international law since 1901, Amherst. Author: "The Hippodrome of Constantinople," "Constantinople" (2 vols.); "The Permanence of the Greek Type"; "Contemporary History"; etc.

Grote, George, born in 1794; historian and politician; educated at the Charterhouse; entered the family bankinghouse, but devoted his leisure time to literary work. He published many pamphlets on reform, and contributed to the "Westminster Review." In 1833 he was elected for the City of London, for which he continued to sit till 1841, as one of the "Philosophical Radicals." His "History of Greece" appeared between 1846 and 1856, and was followed by "Plato and Other Companions of Socrates." Died, 1871.

Grotius, Hugo, German statesman and writer; born at Delft, 1583; entered public life as pensionary of Rotterdam; went to England in 1615 as a commissioner on the Greenland fisheries' question, and there met Casaubon. As a friend of Barneveldt, and a supporter of Arminius, he was imprisoned by the stadtholder, Maurice (1619), but two years after his wife contrived his escape, and he went to Paris for some years. After a short stay in Holland, and a residence of two years at Hamburg, he returned to Paris in 1635, as Swedish ambassador, where he remained till shortly before his death. Chief among his many works were "Poemata Sacra," "De Jure Belli et Pacis," and "Annotationes in Novum Testamentum." Died, 1645.

Grouchy, Emmanuel, Marquis de (*groo-she'*), a marshal of France; born in Paris, 1766. He served with distinction under Napoleon I.; received a marshal's baton in 1814, and, in 1815, refused to march his corps from Wavre to the assistance of the emperor at Waterloo, alleging his having received no order from Napoleon to that effect. It is not certain whether he intended to betray the cause of Napoleon, but his culpable indecision certainly contributed to the disaster which befell the French arms. Exiled in the same year, he was restored to his rank and honors in 1830, and died in 1847.

Guericke, Otto von, born in 1602; German philosopher; born in Magdeburg, of which he became burgo-master, after traveling in France and England, and studying at Leyden. He invented the air-pump, and made experiments before the diet at Ratisbon in 1654. He also constructed the first electric machine, and described his "Magdeburg Hemispheres," in his "Nova Experimenta." Died, 1686.

Guffey, James McClurg, petroleum producer; born in Westmoreland County, Pa., January 19, 1839; educated in public schools and a term in commercial school; railroad and express clerk in South; returned to Penn-

sylvania, 1872; since then in oil and gas production; probably the largest individual oil producer in the United States; extensively engaged in silver and gold mining, with large bituminous coal holdings; well-known as a leader in Democratic politics, and a member for Pennsylvania on National Committee, but never held or was a candidate for office.

Guido (gué'do), Reni, a famous Italian painter of the Bolognese school; born in 1575. After studying under the Caracci, he took up his residence in Rome, where he obtained the patronage of Pope Paul V. His pictures are characterized by an exquisite grace of expression and delicacy of touch. Among his "chef-d'œuvre" may be quoted "The Martyrdom of St. Peter" (in the Vatican), "The Assumption," and "The Massacre of the Innocents." Died, 1642.

Guiscard, Robert, born in 1015; Norman soldier; son of Tancred d'Hardeville; defeated Leo IX. at Civitella, and, with his brother Humphrey, was invested by him with the dukedom of Apulia. Subsequently he rescued Gregory VII. from the Emperor Henry IV., invaded the Greek Empire, and died when on another expedition against it, having defeated the fleets of the Eastern Empire and Venice. Died, 1085.

Gulleras, John, professor of general pathology and tropical diseases, University of Havana, since August, 1900; born in Matanzas, Cuba, January 4, 1852; educated at La Empresa, Matanzas; M. D., University of Pennsylvania, 1873 (Ph. D.). In marine hospital service, 1879-89; served as expert in yellow fever in all epidemics since 1881; was professor of pathology, University of Pennsylvania; on staff of General Shafter as yellow fever expert in Santiago campaign, 1898. Prominent in Cuban politics in this country. Editor "La Revista de Medicina Tropical."

Guizot, François Pierre Guillaume (ge-zo'), a distinguished French scholar, historian, and statesman, was born in 1787. As an author, Guizot has been pronounced by the "Edinburgh Review" "the greatest French writer of his time, and scarce owning an equal in any other country." His chief works are a translation of Gibbons's "Decline and Fall," a "History of Civilization (fifth edition, 1845), "Histoire de la Révolution d'Angleterre (1827-56), a "Life of Oliver Cromwell," and a "History of France" (1870). Died, 1874.

Gustavus (gus-táv'us) is the name of four kings of Sweden. Gustavus I. (Vasa) was born at Stockholm, 1496. He drove the Danish usurper, Christian II., from the country, and was crowned king, 1527; died, 1559. Gustavus II. (Adolphus), grandson of above, one of the greatest generals of history, was born, 1594; crowned, 1611; killed at the battle of Lützen, Germany, 1632. He defeated the Prussians and Poles, and as champion of the Protestant cause overran nearly the whole of Germany. Gustavus III., born in 1746, was crowned, 1771; assassinated by Ankarström, one of his nobles. 1792. Gustavus IV., born in 1778, succeeded his father, Gustavus III., 1792; was deposed, and died in Switzerland, 1837.

Gutenberg, Johann (goo'ten-bairn), the inventor of the art of printing; born in Mentz, Germany, 1400. In 1450, he entered into partnership with John Faust (q. v.), a connection severed five years later by a lawsuit between the parties, in consequence of which Gutenberg was compelled to resign to Faust all the appliances and profits of his invention. Died, 1468.

Guyot, Arnold, born in 1807; Swiss geographer and geologist; went to America in 1849, and devoted his life to science; was professor of geology and physical geography at Princeton College; formed an intimacy with Agassiz, and made numerous maps, mathematical tables and text-books. His greatest works were "The Meteorological and Physical Tables," issued by the Smithsonian Institution, and his "Earth and Man." Died, 1884.

Hadley, Arthur Twining, president of Yale since June 29, 1899; born in New Haven, Conn., April 23, 1856; graduate of Yale, 1876; student of University of Berlin (LL. D., Harvard, 1899; Columbia, 1900; Johns Hopkins, 1902). Tutor, 1879-83, lecturer, 1883-86, Yale; appointed commissioner of statistics, Connecticut, 1885; professor of political science, Yale, 1886-99. Author: "Railroad Transportation, Its History and Laws," "Connecticut Labor Reports, 1885-86," "Economics: An Account of the Relations Between Private Property and Public Welfare," "The Education of the American Citizen," "Freedom and Responsibility." American editor of the tenth edition of Encyclopedia Britannica.

Haeckel, Ernst Heinrich, born in Potsdam, 1834; German naturalist, was appointed in 1861 professor of zoology at Jena. He afterwards traveled in all parts of Europe, and visited Egypt, Syria, and Asia Minor. In

1881, he went to India. His chief works are "Natural History of Creation," "The Origin of the Human Race," "Popular Lectures on Evolution," contributions to the "Voyage of H. M. S. Challenger," etc.

Haggard, Henry Rider, English novelist; born in Bradenham, Norfolk, 1856; went to Natal in 1875, as secretary to Sir H. Bulwer, and was afterwards master of the High Court of the Transvaal. In 1879, he returned to England, and published in 1882, "Cetewayo and his White Neighbors." This was followed by several novels, the chief of which were "Dawn," "The Witch's Head," "King Solomon's Mines," and "She," "Jess," "Cleopatra," "Beatrice," and "Eric Brighteyes," etc.

Hahnemann, Christian Samuel Friedrich, born in 1755; German physician, the founder of homoeopathy, to which he was led by experiments made on himself with Peruvian bark. He practiced at Leipzig, but was obliged to retire on account of the hostility of the apothecaries there. He was invited to Köthen by the Duke of Anhalt, and afterwards spent eight years in Paris. He expounded his system in "Organon of the Healing Art," and other works. Died, 1843.

Hale, Edward Everett, author, chaplain United States Senate; born in Boston, April 3, 1822; studied in Boston Latin school; graduate of Harvard, 1839, S. T. D., 1879; (LL. D., Dartmouth, 1901, Williams, 1904); studied theology, licensed to preach, minister Church of the Unity, Worcester, Mass., 1846-56. Prominent promoter of "Chautauqua" circles and "Lend-a-Hand" clubs. Editor "Lend-a-Hand Record." Author (stories): "The Man Without a Country," "Ten Times One is Ten," "Margaret Percival in America," "In His Name," "Mr. Tangier's Vacations," "Mrs. Merriam's Scholars," "His Level Best," "The Ingham Papers," "Ups and Downs," "Philip Nolan's Friends," "Fortunes of Rachel," "Four and Five," "Crusoe in New York," "Christmas Eve and Christmas Day," "Christmas in Narragansett," "Our Christmas in a Palace." Other works: "Sketches in Christian History," "Kansas and Nebraska," "What Career?" "Boy's Heroes," "The Story of Massachusetts," "Sybaris and Other Homes," "For Fifty Years" (poems), "A New England Boyhood," "Chautauquan History of the United States," "If Jesus Came to Boston," "Memories of a Hundred Years," "Ralph Waldo Emerson," "We, the People," "New England Ballads," "Prayers in the United States Senate." Editor: "Modern Achievement," ten volumes, 1905.

Hale, Eugene, United States senator from Maine, 1881-1911; born in Turner, Oxford County, Me., June 9, 1836; academic education (LL. D., Bates College, Colby University and Bowdoin College); admitted to bar, 1857; county attorney of Hancock County for nine years; member of Maine Legislature, 1867, 1868, and 1880; member of Congress, 1869-79. Was appointed postmaster-general by President Grant, 1874, but declined; was tendered naval portfolio by President Hayes, but declined; delegate to National Republican conventions, 1868, 1876, and 1880.

Hale, Sir Matthew, born in 1609; English judge, was called to the bar in 1636. Though a Royalist, he was appointed head of the committee for prevention of delays and expenses of law in 1652; became a judge of common pleas in 1655, and sat in parliament till the Restoration, when he was made lord chief baron. In 1671, he became lord chief justice, and resigned just before his death. He wrote a "History of the Pleas of the Crown," "Difficulties Nuge," and an essay on "Gravitation of Fluids." Died, 1676.

Hall, Granville Stanley, president and professor of psychology, Clark University, since 1888; born in Ashfield, Mass., February 1, 1846; graduate of Williams, B. A., 1867, A. M., 1870; (Ph. D., Harvard, 1878; LL. D., University of Michigan, 1888; Johns Hopkins, 1902). Professor of psychology, Antioch (O.) College, 1872-76; studied in Berlin, Bonn, Heidelberg and Leipzig; lecturer on psychology in Harvard and Williams 1880-81; professor of psychology, Johns Hopkins, 1881-88; married. Author: "Aspects of German Culture," "Hints Toward a Select and Descriptive Bibliography of Education" (with John M. Mansfield); "Adolescence" (2 vols.); editor and founder of "The American Journal of Psychology," "The Pedagogical Seminary," "American Journal of Religious Psychology and Education."

Hallam, Henry, an English historian; born in Windsor, in 1779. His greatest works comprise a "View of the State of Europe During the Middle Ages," "The Constitutional History of England from the Accession of Henry VII. to the Death of George II.," and his masterpiece, the "Introduction to the Literature of Europe in the Fifteenth, Sixteenth, and Seventeenth Centuries." Died, 1859.

Haman, a courtier of Ahasuerus, King of Persia; out of motives of personal revenge, sought the extermination of the Jewish race in that kingdom, in which design he was thwarted by Esther (q. v.), who effected his disgrace, about 485 B. C.

Hamlicar Barca, a Carthaginian leader, father of Hannibal, and head of a faction at Carthage; commanded in Sicily in the first Punic War, at the close of which he defeated the mercenaries, who had rebelled; was killed in battle with the Vettones when meditating a fresh attack upon the Romans. Died, 228 B. C.

Hamilton, Alexander, American general and statesman; born in St. Kitts in 1757; published, when 17, some papers on the rights of the colonies, and before he was 19, was captain of artillery. In 1777, he was Washington's aide-de-camp, in 1782, a member of Congress, and, in 1787, a delegate to the convention which drew up the American Constitution. Washington appointed him secretary to the treasury, and, in 1798, he became second-in-command of the army, of which he became afterwards commander-in-chief. He was killed (1804) in a duel with Colonel Burr, Vice-President of the United States.

Hamilton, Sir William, Bart., born in 1788; Scottish metaphysician, became, in 1821, professor of moral philosophy at Edinburgh, and, subsequently, of universal history. From 1836, when he became professor of logic and metaphysics, he was widely known as a philosophical writer. His chief books were an edition of Reid's works, "Discussions on Philosophy, Literature, and Education," and his "Lectures," published after his death. He left his library to the University of Glasgow. Died, 1856.

Hamlin, Hannibal, American statesman; born in Paris, Maine, in 1809; practiced as a lawyer, and became a member of the State Legislature. In 1842, he was elected as a Democrat to Congress; was United States senator from 1848 to 1857, when he was elected governor on the Republican ticket, but resigned immediately on again being elected senator. In 1861, he became vice-president under Lincoln, whose views he shared. He was again senator from 1869 to 1881, when he was named minister to Spain. He was chiefly instrumental in passing the "Wilnot proviso" through the House of Representatives. Died, 1891.

Hammond, James Bartlett, typewriter inventor; born in Boston, April 23, 1839; graduate of University of Vermont, 1861; newspaper correspondent during Civil War; graduate of Union Theological Seminary, 1865; studied philosophy and science at University of Halle, Germany; devoted many years to mechanical experiments; patented, 1880, a typewriting machine made on scientific principles; introduced "Ideal" keyboard and true alignment in the "Hammond Typewriter"; put machine on market, 1884; won highest honors in competitions. Collaborator on American translation of "Lange's Commentary on The Psalms," 1884.

Hammond, John Hays, mining engineer; born in San Francisco, March 31, 1855; graduate of Sheffield Scientific School, Yale, Ph. B., 1876 (A. M., Yale); mining course at Royal School of Mines, Freiberg, Saxony. Special expert of United States Geological Survey, 1880, examining California gold fields; later in Mexico, and afterward consulting engineer of Union Iron Works, San Francisco, and to Central and Southern Pacific railways; has examined properties in all parts of the world; became consulting engineer for Barnato Bros., 1893; and later for Cecil Rhodes, of whom he became a strong supporter; consulting engineer of Consolidated Gold Fields of South Africa, British South Africa Company, and the Randfontein Estates Gold Mining Company. Was one of four leaders in reform movement in the Transvaal, 1895-96; after Jameson Raid (with which he was not in sympathy), was arrested and sentenced to death; sentence was afterward commuted to fifteen years' imprisonment; and later was released on payment of a fine of \$125,000; went to London and became interested in many large mining companies; returned to the United States and has traveled extensively, examining mines in United States and Mexico.

Hampden, John, an English patriot and parliamentary leader, was born in London, in 1594. During the twenty-two years he held a seat in the House of Commons, he identified himself as an advocate of public opinion and champion of popular rights, when the latter were encroached upon by Charles I. and his government. He suffered imprisonment for his refusal to pay the obnoxious ship money; was one of the framers of the Grand Remonstrance; and also one of the five members illegally committed to prison by order of the

king. Hampden was killed in the fight of Chalgrove Field, 1643.

Hancock, John, born in 1737; American politician, was one of the leaders in the revolt in Massachusetts, the seizure of his sloop, "The Liberty," being the occasion of a riot in Boston. He was very active in denouncing the "Boston massacre," and was one of the persons whose seizure was attempted by the expedition which led to the Lexington affair. He was president of the Continental Congress from 1775-77, and governor of Massachusetts from 1780 till his death in 1793.

Hancock, Winfield Scott, an American general; born in Pennsylvania in 1824; after graduating at West Point in 1844, served with great gallantry during the Mexican War. Appointed brigadier-general of volunteers in 1861, he took part in the campaign on the Potomac, fought at Antietam, and commanded a corps in the battle of Gettysburg, where he was wounded, 1863. In August, 1864, Hancock became brigadier-general in the regular army; held from August, 1867, till March, 1868, the command of the 5th Military District. June, 1880, became the unsuccessful Democratic nominee for president. At his death, February 9, 1886, he was in command of the Department of the East.

Handel, George Frederick, the greatest composer of oratorio music that has yet appeared, was born in Halle, Germany, in 1684. After producing some minor operas, etc., in Italy, he settled in England, in 1712, where he became chapel-master to George I. In 1740, appeared his oratorio of "Saul," and in the following year, that sublime conception, "The Messiah." "Samson," "Moses in Egypt," "Joshua," and "Jephthah" are his later works. Died, 1759.

Hanly, J. Frank, lawyer; born in St. Joseph, Ill., April 4, 1863; educated in common schools, Champaign County, Ill. Taught school nine years in Warren County, Ind.; admitted to bar, 1889; practiced at Williamsport, Ind., 1889-96; elected to State Senate, 1890; Congress, 1894, serving one term; candidate for United States Senate, 1899; governor of Indiana, 1905-09.

Hanna, Marcus Alonzo, an American politician and legislator; born in New Lisbon (now Lisbon), Columbiana County, O., September 24, 1837. He was appointed to the United States Senate as a Republican by Governor Bushnell, March 5, 1897, to fill vacancy caused by the resignation of John Sherman, who resigned to accept the position of secretary of state in President McKinley's cabinet; took his seat March 5, 1897. His term of service under the appointment expired in January, 1898, and he was elected for a full term, and served until his death in 1904.

Hannibal, born in 247 B. C.; Carthaginian general, son of Hamlicar Barca, who devoted him from an early age to war with the Romans. After attacking the allies of the latter in Spain, he marched into Italy, over the Pyrenees and Alps, and, arriving in 218, won the battles of the Ticinus and the Trebia, and next year defeated Flaminius on Lake Trasymene. After his great victory at Cannæ in 216, he wintered at Capua, but was unable to take Rome. In 203, he returned to Africa, and was defeated at Zama in the following year by Scipio Africanus. He became chief magistrate at Carthage, but was compelled by the hostility of rivals to flee to the court of Antiochus. When his surrender was demanded by the Romans, he took refuge in Bithynia, but took poison from apprehension of being given up. Died, 183 B. C.

Happgood, Norman, editor, author, and critic; born in Chicago, March 28, 1868; graduate of Harvard, 1890, LL. B., Harvard Law School (A. M., 1893); Author: "Literary Statesmen," "Daniel Webster," "Abraham Lincoln," "The Stage in America"; Dramatic critic of "New York Commercial Advertiser" and "Bookman," 1897-1902; editor of "Collier's Weekly" since 1903.

Hardy, Thomas, novelist, educated as an architect; born in Dorsetshire in 1840, the scene of his novels being laid in the south of England, the early Wessex. His chief works are "Desperate Remedies," "Under the Greenwood Tree," "Far from the Madding Crowd," "The Trumpet Major," "The Woodlanders," "The Mayor of Casterbridge," and "Wessex Tales," "Tess of the d'Urbervilles," etc.

Harlan, John Marshall, associate justice United States Supreme Court, since November 29, 1877; born in Boyle County, Ky., June 1, 1833; graduated at Centre College, Ky., 1850 (LL. D., Bowdoin, 1883; Centre College, and College of New Jersey, 1884); studied law at Transylvania University; practiced at Frankfort; county judge, 1858; Whig candidate for Congress in Ashland district, 1859; elector on Bell and Everett ticket, 1860; removed to Louisville in 1867 and practiced law

there. Colonel 10th Kentucky regiment in Union Army, 1861-63; attorney-general Kentucky, 1863-67; returned to practice; Republican nominee for governor, 1871; defeated, and again in 1875, defeated; his name was presented by Republican convention of Kentucky for vice-president of United States in 1872; member Louisiana Commission, 1877; one of American arbitrators on Berne Sea Tribunal which met in Paris, 1893.

Harmon, Judson, ex-attorney-general United States; born in Hamilton County, O., February 3, 1846; graduated Denison University, 1866 (LL. D., 1892); graduated Cincinnati Law School, 1869. Judge common pleas court, 1876-78; superior court of Cincinnati, 1878-87—resigned; attorney-general United States, June 8, 1895, to March 6, 1897; resumed practice; president Ohio Bar Association, 1897-98; member faculty law department, University of Cincinnati.

Harold I., King of England, surnamed Harefoot on account of his fleetness in running, was second son of Canute the Great, and succeeded to the throne in 1037 and died three years later.

Harold II., son of Godwin, Earl of Kent, was proclaimed King of England in 1066, on the death of Edward the Confessor; and in the same year utterly defeated an invasion of the Norsemen, only to be a few days later overthrown himself by William Duke of Normandy, near Hastings, on the 14th of October.

Haroun Al Raschid, born in 763; Khalif of Bagdad, organized his dominions against the attacks of the Eastern Empire; massacred the Barmecides; compelled Nicephorus to resume payment of his tribute, and ravaged his dominions when the peace was not kept; sent an embassy to Charles the Great. He died in 809, when on an expedition against Khorassan.

Harper, William Rainey, president of University of Chicago since 1891; born in New Concord, O., July 26, 1856; graduated at Muskingum College, 1870; (Ph. D., Yale, 1875; D. D., Colby, 1891; LL. D., University of Nebraska, 1893, Yale, 1901, Johns Hopkins, 1902); principal Masonic College, Macon, Tenn., 1875-76; tutor, 1876-79; principal preparatory department Denison University, Granville, O., 1879-80; professor of Hebrew, Baptist Union Theological Seminary, Chicago, 1879-86; professor of Semitic languages, Yale, 1886-91, and professor Biblical literature, 1889-91; principal Chautauqua College Liberal Arts, 1885-91; head professor of Semitic languages and literature, and president of University of Chicago, 1891 to 1906. Author: "Elements of Hebrew," "Elements of Hebrew Syntax," "Hebrew Vocabularies," "Introductory New Testament Greek Method" (with Revere F. Weidner), "A Teacher's Manual for an Inductive Latin Primer" (with I. B. Burgess), "Elements of Latin" (with I. B. Burgess), "Constructive Studies in the Priestly Element in the Old Testament," "Religion and the Higher Life," "The Structure of the Text of the Book of Amos," "The Structure of the Text of the Book of Hosea," "The Trend of Higher Education." Died in 1906.

Harris, Joel Chandler, author; born in Eatonton, Ga., December 8, 1848; served apprenticeship to printing trade; an editor of Atlanta "Constitution" twenty-five years, now retired. Author: "Uncle Remus: His Songs and His Sayings," "Nights with Uncle Remus," "Uncle Remus and His Friends," "Mingo," "Little Mr. Thimblefinger," "On the Plantation," "Daddy Jake, the Runaway," "Balaam and His Master," "Mr. Rabbit at Home," "The Story of Aaron," "Sister Jane," "Free Joe," "Stories of Georgia," "Aaron in the Wild Woods," "Tales of the Home Folks," "Georgia, From the Invasion of De Soto to Recent Times," "Evening Tales," "Stories of Home Folks," "Chronicles of Aunt Minerva Ann," "On the Wings of Occasion," "The Making of a Statesman," "Gabriel Tolliver," "Wally Wanderer," "A Little Union Scout," "The Tar Baby Story and other Rhymes of Uncle Remus," "Told by Uncle Remus," etc.

Harrison, Benjamin, twenty-third President of the United States; born in North Bend, O., August 20, 1833. He was a great-grandson of Benjamin Harrison, signer of the Declaration of Independence, and grandson of William Henry Harrison, ninth President of the United States. He was graduated at Miami University; studied law in Cincinnati; removed to Indianapolis, Ind., in 1854, and laid the foundation of a fine legal practice; entered the Union Army in 1862, serving with conspicuous gallantry in the Atlanta campaign, finally returning to civil life at the close of the war with the rank of brevet brigadier-general; was the Republican candidate for governor of Indiana in 1876, but was defeated; was elected to the United States Senate in 1881, where he became a reputation as a sound thinker and a polished debater; at the Republican convention held in Chicago, June, 1888, he was nominated for the presidency of the United States; elected in the ensuing November; and

inaugurated March 4, 1889. His administration was quiet, successful and measurably popular. It was marked by the amicable settlement of the trouble with Chile and by the passage of the McKinley tariff bill. In 1892 he received again the nomination in the National Republican Convention, but by this time the able and persistent attacks of the Democracy on the high tariff policy led to a general revulsion against it, and he was defeated at the election by Cleveland. He thereupon pursued a private law practice, occasionally giving public addresses. He died in Indianapolis, Ind., March 13, 1901.

Harrison, William Henry, born in 1773; ninth president of the United States, distinguished himself in wars with the Indians, and in that of 1812-15 with Great Britain. He was for some time governor of the newly-formed Territory of Indiana, and was made in 1828 minister to Colombia. After his recall he was an unsuccessful candidate for the presidency, but was elected in 1839 in opposition to the Democrat, Van Buren. He died suddenly soon afterwards.

Hart, Albert Bushnell, professor of history, Harvard; born in Clarksville, Pa., July 1, 1854; graduated at Harvard, 1880 (Ph. D., Freiburg, Baden, 1883; LL. D., Richmond College, 1902). Author: "Introduction to the Study of Federal Government," "Epoch Maps," "Formation of the Union," "Practical Essays on American Government," "Studies in American Education," "Guide to the Study of American History" (with Edward Channing), "Salmon Portland Chase," "Handbook of the History, Diplomacy and Government of the United States," "Foundations of American Foreign Policy," "Actual Government," "Essentials of American History." Editor: "Epochs of American History" (three volumes), "American History Told by Contemporaries" (four volumes), "American Citizen Series," "Source-Book of American History," "Source Readers in American History" (four volumes), "The American Nation." Joint editor: "American History Leaflets," "Harvard's Graduates' Magazine," "American History Review since 1895."

Harte, Francis Bret, American writer; born in Albany in 1839; was at different times a miner, school-teacher, printer, and editor. From 1864 to 1870 he was in San Francisco as secretary of the United States Mint, where, in 1869, he published "The Heathen Chinee." He was named American consul at Crefeld in 1878, and at Glasgow in 1880, and after leaving the latter in 1885, lived in London. Chief among his works are "Condensed Novels," "The Luck of Roaring Camp and Other Sketches," "Poetical Works," "Tales of the Argonauts," "The Twins of Table Mountains and Other Stories," "By Shore and Sedge," "A Millionaire of Rough and Ready and Devil's Ford," "A Ward of the Golden Gate," etc. Died, 1902.

Harvard, John, born in 1607; son of a butcher in Southwark, was educated at Emmanuel College, Cambridge, and in 1637 married and went to New England, but died next year (1638), and left one half of his estate to be devoted to the foundation of a college at Cambridge, Massachusetts, which subsequently became Harvard University.

Harvey, George Brinton McClellan, editor of "North American Review," and president of Harper & Brothers; born in Peacham, Vt., February 16, 1864; educated at Peacham Academy; was consecutively reporter "Springfield Republican," "Chicago News," and "New York World"; managing editor "New York World"; insurance commissioner, New Jersey; colonel and aide-de-camp of governors Green and Abbott, New Jersey; constructor and president of various electric railroads; bought "North American Review," March, 1899; president of Harper & Brothers, October, 1900; bought "Metropolitan Magazine," 1903.

Harvey, William, born in 1578, English physiologist; discovered the circulation of the blood. He studied at Cambridge and at Padua, and, on his return to England, became physician at St. Bartholomew's hospital and delivered the Lumeian lectures. His great discovery was described in, "Exercitatio Anatomica de Motu Cordis et Sanguinis," published in 1628. He was afterwards physician to Charles I. and warden of Merton College, Oxford. Died, 1657.

Hastings, Warren, born in 1732; English administrator in India; went to Bengal as a writer in 1750, but was seven years later appointed agent of the East India Company at the court of the Nabob of Bengal. In 1764, he returned to England, where he remained four years studying Eastern literature. On his return to India he became a member of the council of Madras, and in 1772, Governor of Bengal, a position which, in 1774, became that of Governor-General of India. He was now involved in quarrels with his council, and sent in his resign-

nation, which, however, when accepted, he disavowed. The Supreme Court decided in his favor, and he was reappointed. During his first term of office he sold the vale of Rohilcond to Sujah Dowlah and obtained the execution of Nuncomar, his enemy. During his second term, in order to obtain money, he took those measures against the Rajah of Benares and the Nabob of Oude which were afterwards charged against him, but left the affairs of the company in a very prosperous condition. Three years after his return he was impeached before the lords for high crimes and misdemeanors, but, after a trial which proceeded at intervals for seven years, and in spite of the eloquence of Burke and Sheridan, he was acquitted in 1795. He was ruined by the expense, but was granted an annuity by the court of directors. Died, 1818.

Hawthorne, Nathaniel, an eminent American romancer, was born at Salem, Mass., in 1804. He graduated at Bowdoin College in 1825, and two years later published his "Twice-told Tales," a work highly spoken of by the "North American Review." In 1846, he was appointed surveyor of the port of Salem, and in 1854, United States Consul at Liverpool, England, a position he held for four years. Hawthorne's reputation will mainly rest upon "The Scarlet Letter," "The House of the Seven Gables," and "The Blithedale Romance," works of the very highest order of merit. Died, 1864.

Hay, John, an American statesman and writer; born in Salem, Ind., 1838. He was graduated from Brown University, and settled in Illinois as a lawyer, but went to Washington in 1861, as one of Lincoln's private secretaries, acting also as his aide-de-camp. He served under generals Hunter and Gillmore with the rank of major and assistant adjutant-general. He was subsequently in the United States diplomatic service, stationed at Paris, Vienna, and Madrid. In 1897, he was made ambassador to England, and in 1898, secretary of state. His literary reputation rests upon "Pike County Ballads," "Castilian Days," a volume of travel; and "Life of Abraham Lincoln" (with J. G. Nicolay). As secretary of state, Mr. Hay gained a standing equal to that of the most eminent men who have held that high office. In coolness, foresight, and statesmanlike appreciation of current and coming events he had no superior among contemporary diplomats. Died, 1905.

Haydn, Joseph, a celebrated musical composer; born in Austria, 1732, and studied under Porpora. In 1791, Haydn produced in London six grand symphonies followed at Vienna, in 1780, by his "chef-d'œuvre," "The Creation." Died, 1809.

Hayes, Rutherford Birchard, the nineteenth president of the United States, succeeding Grant, was born in Ohio, 1817, and practiced law in Cincinnati. Married, in 1852, Lucy Ware Webb. He supported Scott in 1852, Fremont in 1856, and Lincoln for the presidency. He entered the army as major of the 23d Ohio Infantry, and participated in the campaigns of West Virginia and the battles around Winchester; was severely wounded at South Mountain; elected to Congress from Ohio in 1864; twice governor of Ohio; nominated for the presidency by the Republican Convention at Cincinnati, June, 1876, in opposition to S. J. Tilden, of New York; took his seat March 4, 1877. Died, 1893.

Hayne, Robert Young, an American statesman; born in South Carolina in 1791; was admitted to the bar in 1812; served in the war with Great Britain; and at its close returned to his practice in Charleston. He sat in the United States Senate from 1823 to 1832. He was a vigorous opponent of protection, and in 1832 boldly supported in Congress the doctrine of Nullification. Daniel Webster's reply ranks among his ablest speeches. In November, 1832, South Carolina adopted an ordinance of nullification, in December Hayne was elected governor, and the State prepared to resist the federal power by force of arms. A compromise, however, was agreed to and the ordinance was repealed. Hayne died September 24, 1839.

Hazlitt, William, born in 1778; critic and essayist, son of a Nonconformist minister; as an artist became acquainted with Leigh Hunt and Lamb, and published his "Essays on the Principles of Human Action," after which he contributed to the "Examiner" many essays, including "The Round Table," "Table Talk," criticisms on "The Spirit of the Age," and lectured on Elizabethan dramatists at the Surrey Institution. He also wrote "Characters of Shakspeare's Plays," "View of the Contemporary English Stage," and a "Life of Napoleon." Died, 1830.

Hearst, Phebe, philanthropist; born in 1840; maiden name Apperson; married in 1861 George F. Hearst, late United States Senator from California, who died in 1891. Has established and endowed five kin-

dergarten classes for poor children, and a manual training school in San Francisco; several kindergartens, and a kindergarten training school in Washington, D. C.; made donations to the American University, Washington and given \$200,000 to build National Cathedral School for girls; has donated from \$3,000,000 to \$4,000,000 for buildings for the Greater University of California, having previously paid the cost of a competition of the best architects of America and Europe for the plans; maintains a school for mining engineers at the University of California as a memorial to her husband; has built, endowed and given thousands of dollars to free libraries, established working girls' clubs, and done much other educational and charitable work.

Hearst, William Randolph, newspaper publisher; born in San Francisco in 1863; son of late Senator George F. and Phebe Apperson Hearst; educated in public schools, San Francisco, and Harvard. Editor and proprietor of "San Francisco Examiner," 1886; bought "New York Journal," 1895; later bought "Advertiser," to secure news franchise, and consolidated it with the "Journal"; started "Chicago American," 1900. In 1902 changed name of morning issue in Chicago to "The Examiner," and of evening issue in New York to "The American." Elected to 58th and 59th congresses, 11th New York district; Democrat. President of National League of Democratic Clubs. Candidate for mayor of New York on Municipal Ownership ticket, 1905; and for governor, 1906. Promoter of the Independence League.

Hedin, Sven Anders, Swedish traveler; born in Stockholm, 1865, and educated at Stockholm and in Germany. He began his explorations in Persia in 1885, and has traveled through Khorsan and Turkestan, several times through Tibet and other parts of Central Asia. His books include "Through Asia, 1898," "Central Asia and Tibet," and "Scientific Results of a Journey in Central Asia 1899-1902."

Hegel, Georg Wilhelm Friedrich (*hā'-gail*), a German metaphysician; born in Stuttgart, 1770, became, in 1801, a lecturer in Jena University; in 1816 entered upon the professorship of philosophy at Heidelberg, and two years later filled a similar chair at Berlin. The Hegelian system of philosophy is looked upon as an attempt to combine the real and the ideal, and, though perhaps, but imperfectly understood so far, it is accounted in Germany as forming, or rather associating together, the salient doctrines of the Pantheistic school. Died, 1831.

Heine, Heinrich, German poet; born in 1799 in Düsseldorf of Jewish parents, and sent to Hamburg to prepare for a commercial life, but preferred studying law. At Bonn he was pupil of Schlegel, and at Berlin made the acquaintance of Varnhagen von Ense. In 1825, he renounced Judaism, and after 1830 lived at Paris, where he married Mathilde Mirat. He traveled much, but in 1847 had an attack of paralysis, and soon after became blind. His chief works are "Buch der Lieder," followed by other poems; "Reisebilder," "Der Salon," "Ueber Börne," a satire; "Deutschland ein Wintermärchen," and "Atta Troll." Died, 1856.

Helmholtz, Hermann Ludwig Ferdinand, a German scientist; born in Potsdam, 1821, became professor of physiology at Heidelberg, 1858. He ranks among the ablest of recent natural philosophers; has written many profoundly erudite treatises on the relations of physical forces; and is the inventor of the ophthalmoscope, an instrument for the examination of the ball of the eye. Died, 1894.

Hemans, Felicia Dorothea, née Browne, born in 1794; English verse-writer; wrote "Early Blossoms" before she was 15, and afterwards "Domestic Affections," "Hymns for Children," etc. She died in Dublin, 1835, where she lived after Captain Hemans left her.

Heney, Francis Joseph, lawyer; born in Lima, N. Y., March 17, 1859; resident of San Francisco since 1864; educated at public primary, grammar and night schools, 1866-75; University of California, 1879-80, Hastings Law School, 1883-84. Admitted to bar, September, 1883; in cattle business in Arizona, 1885-89; conducted Indian trader store, Fort Apache, Arizona, 1886-88; practiced law, Tucson, Arizona, 1889-95; took prominent part in litigation by which titles under Mexican land grants in Arizona were settled, and in argument of three land-grant cases before United States Supreme Court; was attorney-general of Arizona, 1893-94; removed to San Francisco, 1895, and confined cases to civil business until urged by United States Attorney-General Knox to undertake land fraud cases at Portland, Ore.; discovered conspiracy of United States Attorney John H. Hall to protect guilty politicians in consideration of reappointment; secured removal and indictment of

Hall, and indictment of Senator Mitchell, George C. Brownell, and others.

Hennepin, Louis, a French recollet friar, missionary, and traveler in North America; born in Flanders about 1640. At length he embarked for Canada and arrived at Quebec in 1675. Between that period and 1682 he explored the regions afterward called Louisiana, and returning to Europe, published an account of his researches. The geographical portions of his works are feeble but they present much interest as descriptions of the manners of the aboriginal races which the author visited. He died in Utrecht about 1706.

Henry I., King of England; born in 1068, youngest son of William I., seized the throne on the death of William II. (1100), and forced Robert to be content with Normandy, but deprived him of this also after the battle of Tenchebrai; married Matilda, daughter of Malcolm III. and descendant of the Saxon kings; established "Justices in Eyre," the court of exchequer, and a standard of weights and measures, abolished the curfew, and compromised the Investiture question by an agreement with Paschal II. His charter was the foundation of the Great Charter. Died, 1135.

Henry II., born in 1133, grandson of last-named, and son of Maud and Geoffrey Plantagenet; came to the throne in 1154, married Eleanor of Aquitaine (divorced wife of Louis VII.), and acquired by the marriage Guenne and Poitou; put down private war and jurisdictions, and subdued the last great feudal rising, which was aided by William the Lion, of Scotland, whom he compelled to do homage; was engaged in a long quarrel with Becket as representative of the immunity of clerks from civil jurisdiction, and sanctioned the first expedition against Ireland, afterwards accepting the kingdom. His last years were much troubled by wars with his sons. The most important enactments of his reign were the Assizes of Clarendon and Northampton, and the Assizes of arms, besides the grant of charters to towns. He was the most powerful prince of his time, was offered the imperial throne, and possessed by various titles the greater part of France. Died, 1189.

Henry III., born in 1206, son of John by Isabella of Angoulême; came to the throne in 1216 when a minor, and in the course of a long reign provoked much hostility by his foreign favorites and his submission to papal exactions, discontent culminating in the Barons' War (1262-65), in which he was defeated at Lewes and compelled to submit to control of the government by De Montfort and his friends. These, however, quarreled among themselves, and at Evesham De Montfort was defeated and slain. During this reign the Great Charter (with important clauses omitted) was frequently renewed, and Westminster Abbey was almost entirely built. Died, 1272.

Henry VII., born about 1456; first of the Tudor Dynasty, son of Edmund Tudor and Margaret Beaufort, a descendant of John of Gaunt; invaded England in 1485, and defeated Richard III. at Bosworth, after which he married Elizabeth, daughter of Edward IV. His reign was marked by three Yorkist risings, which he defeated, by the measures he enforced against the nobles, by his system of marriages with foreign princes, and the enactment of Poyning's law. Died, 1509.

Henry VIII., born in 1491; son of Henry VII., whom he succeeded in 1509; married Katherine of Aragon, wife of his deceased brother, his divorce from whom was the proximate cause of the Reformation. Papal jurisdiction was renounced, more especially by the Acts of Supremacy and of Appeals, but the king was strongly averse to doctrinal changes. The early years of the reign were marked by a war with France, in which Henry took part in person; attempts at union with Scotland were made, but defeated by French and papal influence; a system of balance was maintained in foreign relations; a large amount of ecclesiastical property was annexed to the Crown, which gained complete control over the Church; the rising called the Pilgrimage of Grace was suppressed; and the king became practically absolute, being granted by parliament the right of making laws by proclamation, and of settling the succession in his will. Died, 1547.

Henry II., King of France, was born in 1519; son of Francis I., whom he succeeded in 1547. By his alliance with the German Protestants, he acquired Metz, Toul, and Verdun, while he also regained Calais from the English. He carried on his father's war with Spain with some success until the disaster at St. Quentin, and died (1559) of a wound inflicted in a tournament held to celebrate its conclusion by the marriage of his daughter and Philip II.

Henry IV., of France, was born in 1553; as son of Anthony of Navarre, a descendant of Louis IX., was founder of the Bourbon Dynasty, succeeding Henry

III. in 1589. His marriage with Marguerite de Valois, in 1572, was the occasion of the Bartholomew massacres. In 1576, he quitted the court and became leader of the Huguenots and opponent of the League, being the rival of the Guises for the succession. He defeated them at Arques and Ivry, but was unable to conquer Paris without becoming a Roman Catholic, which he did in 1593. He concluded peace with Philip II. at Vervins, and issued the Edict of Nantes. The rest of his reign was occupied by domestic reforms. He was assassinated by Ravaillac. Died, 1610.

Henry IV., of Germany, born in 1050; son of Henry III., began the Investiture disputes with the papacy, in the course of which he deposed Gregory VII., but was himself excommunicated and deposed, and was obliged to submit at Canossa in 1076, but, in 1084, again invaded Italy, and captured Rome. In Germany he had enemies in Rudolf of Swabia (whom he defeated finally at Wolsheim in 1080), in the Saxons, and in his sons, Conrad and Henry, by the latter of whom he was dethroned. Died, 1106.

Henry, Joseph, an eminent American physicist; born in Albany, N. Y., in 1797; was appointed professor of natural philosophy in the College of New Jersey at Princeton, in 1832; and, in 1846, was called to the office of secretary or director of the Smithsonian Institution at Washington, to the organization and wide reputation of which he had mostly contributed. Henry made most important discoveries in electro-magnetism. Died, 1878.

Henry, Patrick, born in 1736; American politician, nephew of Robertson and cousin of Lord Brougham; practiced as an advocate in Virginia, where he first came into prominence in 1763, by his pleading in the case of clerical incomes; was an active opponent of the Stamp Act, and the chief leader of the revolution in Virginia, being more extreme in his views than Washington. He was for some years governor of his State, during which he opposed the Federal Constitution as not democratic enough. He was an eloquent but reckless speaker, and was obliged to resume his profession in order to cover his heavy debts. Died, 1799.

Hepburn, William Peters, congressman; born in Wellsville, O., November 4, 1833; taken to Iowa Territory, April, 1841; educated in local schools and in a printing office; admitted to bar, 1854; in Union army, 1861-65; captain, major, and lieutenant-colonel, 2d Iowa cavalry; presidential elector, 1876 and 1888; member of Congress, 1881-87, and since 1893, from 8th Iowa district. Chairman of Committee on Interstate and Foreign Commerce, and author of the Hepburn Bill to regulate interstate commerce.

Herbert, Victor, conductor, composer; born in Dublin, Ireland, February 1, 1859. Began musical education in Germany at 7, studying under leading masters; first position of prominence that of principal violoncello player in court orchestra, Stuttgart; heard in concerts throughout Europe before coming to the United States as solo violoncellist in Metropolitan Orchestra, New York, 1886; since then has been connected with Theodore Thomas's, Seidl's, and other orchestral organizations as soloist and conductor. Bandmaster of 22d Regiment Band, New York, since 1894; conductor of Pittsburgh, Pa., Orchestra, 1898-1904; Victor Herbert's New York Orchestra since 1904. Composer: "The Captive" (oratorio written for and performed at Worcester, Mass., Festival); "Prince Ananias," "The Wizard of the Nile," "The Serenade," "Cyrano de Bergerac," "The Ameer," "The Viceroy," "The Idol's Eye," "The Fortune Teller," "The Singing Girl," "Babetta," "Babes in Toyland," "It Happened in Nordland" (all comic operas). Also several compositions for orchestra, songs, and a concert for violoncello and orchestra.

Herod the Great, born in 73 B. C.; King of Judæa; put to death his wife, Mariamne, and two sons; massacred the children of Bethlehem, and rebuilt the Temple. Died, 3 B. C.

Herodotus, born in Halicarnassus, in Caria, 484 B. C.; an eminent Greek historian, usually called "the Father of History." His great work, for which he appears to have collected the materials during long travel, is believed to have been written at Thurii. It comes down to 478 B. C.; and, except for the author's love of the marvelous, his history is considered one of the most trustworthy of all ancient histories, while in the grace of its style it is unrivaled. The best English translation of Herodotus is probably that by Canon Rawlinson (1858-60). Died, in Thurii, in Italy, about 424 B. C.

Herschel, William, Sir, an eminent astronomer; born in Hanover, in 1738, and died in 1822. Most of his life was spent in England. John Frederick William, his son, who was also distinguished in the same line, was born in England in 1790, and died in 1871.

Hezekiah, son of Ahaz, ascended the throne of Judah in 726 B. C. He uprooted idolatry, and obtained the help of God against the Assyrians under Sennacherib, who had invaded his dominions. Died, 697.

Higginson, Henry Lee, banker; born in New York, November 18, 1834; entered Harvard, 1851, but did not complete course. Employed in counting-house of S. & E. Austin, Boston; then went to Vienna; studied music; served in United States volunteers in Civil War, becoming major and brevetted lieutenant-colonel of 1st Massachusetts Cavalry; severely wounded at Aldie, Va., June, 1863; later of Lee, Higginson & Company, bankers, Boston. He has devoted a considerable sum to organization of a symphony orchestra in Boston.

Higginson, Thomas Wentworth, American writer; born in Cambridge, Mass., in 1823; at first a Unitarian minister, entered keenly into the movement against slavery, and was severely wounded during the Civil War. Among his works are "Malbone: an Oldport Romance," and "Oldport Days," "Harvard Memorial Biographies," "Brief Biographies of European Statesmen," "Common-sense About Women," and "Women and Men," "Part of a Man's Life," and many other books.

Hildreth, Richard, born in 1807; American historian; author of a "History of the United States," "Japan as It Was," "The White Slave," a novel; was for some time consul at Trieste. Died, 1865.

Hill, David Jayne, diplomat; born in Plainfield, N. J., June 10, 1850; graduate of Bucknell University, Pa., 1874; A. M. (LL. D., Colgate, University of Pennsylvania, Union); student in Universities of Berlin and Paris. President of Bucknell University, 1879-88; president of University of Rochester, 1888-96; resigned; spent nearly three years in study of public law of Europe; professor of European diplomacy in School of Comparative Jurisprudence and Diplomacy, Washington. Assistant secretary of state of United States, 1898-1903; envoy extraordinary and minister plenipotentiary of United States to Switzerland, 1903-05; to the Netherlands, 1905-07; ambassador to Germany, since 1908. Author: "Life of Washington Irving," "Life of William Cullen Bryant," "Elements of Rhetoric," "Science of Rhetoric," "Elements of Psychology," "Social Influence of Christianity," "Principles and Fallacies of Socialism," "Genetic Philosophy," "International Justice," "A Primer of Finance," "The Conception and Realization of Neutrality," "The Life and Work of Hugo Grotius," "The Contemporary Development of Diplomacy," "A History of Diplomacy in the International Development of Europe." Also numerous political pamphlets in English and German, and printed addresses.

Hill, James J., railway official; born near Guelph, Ont., September 16, 1838; Scotch-Irish descent; educated in Rockwood Academy; left his father's farm for business life in Minnesota; was in steamboat offices in St. Paul, 1856-65; agent of Northwestern Packet Company, 1865; later established general fuel and transportation business on his own account; head of Hill, Griggs & Company, same line, 1869-75; established, 1870, Red River Transportation Company, which was first to open communication between St. Paul and Winnipeg; organized, 1875, the Northwestern Fuel Company, and three years later sold out his interest, in the meantime having organized a syndicate which secured control of the St. Paul & Pacific Railroad, from Dutch owners of the securities; reorganized system as St. Paul, Minneapolis & Manitoba Railway Company, and was its general manager, 1879-82; vice-president, 1882-83; president since 1883; it became part of Great Northern system, 1890; interested himself in building the Great Northern Railway, extending from Lake Superior to Puget Sound, with northern and southern branches, and a direct steamship connection with China and Japan, 1883-93; president of entire Great Northern system, 1893. Gave \$500,000 toward establishing Roman Catholic Theological Seminary at St. Paul, Minnesota.

Hoar, George Frisbie, statesman; born in Concord, Mass., August 29, 1826; graduated from Harvard College in 1846, and afterwards from the Dane Law School, Harvard. He practiced law at Worcester, was elected to the State Legislature in 1852, to the State Senate in 1857; was member of Congress 1869-77, and United States Senator from 1877 until his death. He has left valuable memoirs of his observations during his long career. Died in Worcester, Mass., September 30, 1904.

Hobbes, Thomas, philosopher; born in Malmesbury in 1588, and educated at Oxford; met Descartes and Gassendi at Paris when tutor to members of the Devonshire family; was afterwards mathematical tutor

to Prince Charles (Charles II.). He received a pension at the Restoration, but his chief works were censured by parliament; these were "The Leviathan" and "De Cive." He also wrote "Behemoth," a history of the Civil War. Died in 1679.

Hobson, Richmond Pearson, congressman; born in Greensboro, Ala., August 17, 1870; graduated from United States Naval Academy, 1889; also student at Ecole National Supérieur des Mines and Ecole d'Application du Génie Maritime, Paris. Served on flagship New York in blockade duty, in bombardment of Mantanzas, in expedition against San Juan de Puerto Rico; commanded collier "Merrimac" and sunk her in Santiago Harbor; prisoner in Spanish fortress, June 3d to July 6, 1898; inspector of Spanish wrecks; in charge of operations to save same; success with Teresa; on duty in far East, 1899-1900; directed reconstruction at Hong-Kong of three Spanish gunboats — Isla de Cuba, Isla de Luzon, and Don Juan de Austria; in charge of construction department, Cavite, P. I.; special representative Navy Department, Pan-American Exposition, 1901, Charleston Exposition, 1901-02; superintending naval construction, Crescent Shipyard, Elizabeth, N. J., May-June, 1902; resigned from United States Navy, February 6, 1903, and elected to Congress from the sixth Alabama district, 1907. Author: "A Study of the Situation and Outlook in Europe," "The Disappearing Gun Afloat," "The Yacht Defender, and the Use of Aluminum in Marine Construction," "The Sinking of the Merrimac," "Why America Should Hold Naval Supremacy," "Paramount Importance of Immediate Naval Expansion," "America Must be Mistress of the Seas."

Hodges, George, dean, Episcopal Theology School, Cambridge, Mass., since 1894; born in Rome, N. Y., October 6, 1856; graduated from Hamilton, 1877 (A. M., 1882; D. D., University of Pennsylvania, 1892; D. C. L., Hobart, 1902); ordered deacon, 1881; ordained priest, 1882; assistant, 1881-89; rector, 1889-94, Calvary Church, Pittsburgh. Author: "The Episcopal Church," "Christianity Between Sundays," "The Heresy of Cain," "In This Present World," "Faith and Social Service," "The Battles of Peace," "The Path of Life," "William Penn" (Riverside Biographical Series), "Fountains Abbey," "The Human Nature of the Saints," "When the King Came," "The Cross and Passion."

Hoe, Robert, manufacturer, inventor; born in New York, 1839; educated at public schools; entered printing press factory of R. Hoe & Company, founded by his grandfather Robert. Has developed the printing press from the "Hoe cylinder" of the 1846 patent to the present double-sextuple Hoe, and also presses of greatly improved type for printing in colors; also manufacturer of circular saws and saw-bits. Has large factories in New York and London. One of founders Metropolitan Museum of Art.

Holmes, Oliver Wendell, jurist; born in Boston, Mass., March 8, 1841; graduated from Harvard, 1861; Harvard Law School, 1866; (LL. D., 1895; Yale, 1886); served three years 20th Massachusetts volunteers; wounded in breast at Ball's Bluff, October 21, 1861, in neck at Antietam, September 17, 1862, in foot at Marye's Hill, Fredericksburg, May 3, 1863. Engaged in practice in Boston; editor "American Law Review," 1870-73; member law firm of Shattuck, Holmes & Munroe, 1873-82; professor of law, Harvard Law School, 1882; associate justice, 1882-99, chief justice, 1899-1902, Supreme Judicial Court, Massachusetts; associate justice Supreme Court of United States since December 4, 1902. Author: "The Common Law" (lectures at Lowell Institution), "Speeches," etc. Edited: "Kent's Commentaries" (twelfth edition).

Holmes, Oliver Wendell, born in Cambridge, Mass., 1809; a distinguished American author and man of letters. He has published one or two novels, besides essays and poems, but is best known for his three works, "The Autocrat of the Breakfast Table," "The Professor at the Breakfast Table," and "The Poet at the Breakfast Table." These first appeared in the "Atlantic Monthly," and are full of a quaint knowledge, breadth of thought, and genial humor which will keep them favorites wherever the English language is spoken. Died, October 7, 1894.

Holst, Hermann Eduard von, a German-American historian; born in Fellin, Livonia, Russia, June 19, 1841. Coming to the United States in 1866, he engaged in literary work and lecturing; he returned to Europe, becoming professor in the universities of Strasburg (1872), and Freiburg (1874); appointed professor in the University of Chicago (1892), he came to this country again. He has written: "Constitutional and Political History of the United States," "Constitutional Law of the United States," "Life of John Calhoun," etc. Died, 1904.

Hood, Thomas, born in 1799; poet, son of a publisher; as sub-editor of the "London Magazine" in 1821,

became connected with Lamb and others. A civil list pension was granted in 1844 to his wife, his own health having broken down. Among his chief works were "Whims and Oddities," "The Comic Annual," "Miss Kilmansegg," and various pieces, of which the "Song of the Shirt," and the "Bridge of Sighs" are the best known. Died, 1845.

Hooker, Joseph, American soldier; born in Massachusetts in 1814; resigned his commission to go to California in 1853, but returned to the army at the outbreak of the Civil War, and particularly distinguished himself at Williamsburg, and afterwards at Fair Oaks, Glendale, and Malvern. He compelled Jackson to evacuate Manassas, took a prominent part in the Maryland campaign, and was in 1863 given the command of the army of the Potomac. In the ensuing campaign Jackson was mortally wounded, but the Confederates were successful, and Hooker resigned his command. Died, 1879.

Hopkins, Mark, born in 1802; American educationist, principal of Williams College from 1836 to 1872, and professor of moral philosophy, wrote "The Law of Love and Love as a Law," and "An Outline Study of Man." Among his pupils was President Garfield. Died, 1887.

Hopkinson, Francis, born in 1737; American writer, one of the signers of the Declaration of Independence; wrote "The Battle of the Kegs" (1778), "The Pretty Story" (1774), "The Political Catechism" (1777), and other works in prose and verse. His son, Joseph (died in 1842), judge of the United States District Court, wrote "Hail Columbia!" Died, 1791.

Horace, Quintus Horatius Flaccus, one of the greatest of Latin poets, born at Venusia, 65 B. C., studied at Rome under Orbilius Pupillus, and completed his education at Athens. He then joined the Roman army, and fought under Brutus at Philippi; thereby occasioning the confiscation of his patrimonial estate. On his return to Rome, he embraced literature as a profession, and was so fortunate as to find a liberal and life-long patron in Mæcenas. His poetical works consist of odes, satires, and epistles—all replete with elegance of diction and perfect propriety of thought and expression, and withal pervaded by a certain atmosphere of calm and well-bred philosophy, that renders them irresistibly attractive to the minds and tastes of cultivated men. Died, S. B. C.

Hornaday, William Temple, director of the New York Zoological Park since 1896; born in Plainfield, Ind., December 1, 1854; educated at Iowa Agricultural College; studied zoology and museology in this country and Europe; as collecting zoologist visited Cuba, Florida, the West Indies, South America, India, Ceylon, the Malay Peninsula, and Borneo, 1875-79; married September 11, 1879, Josephine Chamberlain, Battle Creek, Mich. Chief taxidermist United States National Museum, 1882-90; in real estate business Buffalo, N. Y., 1890-96. Since 1896 has been director New York Zoological Park. Author; "Two Years in the Jungle," "Free Rum on the Congo," "The Extirpation of the American Bison," "Taxidermy and Zoological Collecting," "The Man Who Became a Savage," "Guide to the New York Zoological Park," "The American Natural History," etc.

Hosmer, Harriet, American sculptor; born in Watertown, Mass., 1830, was a pupil of Gibson at Rome, and executed busts of "Daphne," "Enone," "Beatrice Cenci," and "Zenobia in Chains." She also devised a method for converting Italian limestone into marble.

Houston, Sam, an American general, was born in Virginia, 1793. He entered Congress in 1823, and four years later became Governor of Tennessee. After emigrating to Texas in 1832, he was elected to the chief command of the army which defeated the Mexicans under Santa Anna at San Jacinto, April 21, 1836. He was elected President of Texas the same year, and re-elected in 1841. After the admission of Texas into the Union as a State, Houston twice represented her in the National Senate, and filled the gubernatorial chair in 1859. Died, 1862.

Howard, John, a noted philanthropist, was born in Hackney, Middlesex, 1727. Howard was left in easy circumstances at his father's death. A bitter experience as a French prisoner of war and observations made whilst acting as sheriff of Bedfordshire roused him to attempt some reform of the abuses and misery of prison life; he made a tour of the county jails of England, and the mass of information which he laid before the House of Commons in 1774, brought about the first prison reforms; he continued his visitations from year to year to every part of the United Kingdom, and to every quarter of the continent; during 1785-87, he made a tour of inspection through the principal lazarettos of Europe, visited plague-smitten cities, and voluntarily underwent the rigors of the quarantine system, and finally died, 1790, at the Crimea whilst on a journey to the East. He published

at various times accounts of his journeys. His deep piety, cool sense, and single-hearted devotedness to his one great object, won him universal respect throughout Europe.

Howe, Julia Ward, an American author; born in New York City, May 27, 1819. A philanthropist, interested especially in woman's suffrage, she was the wife of Dr. Samuel G. Howe, the philanthropist, and with him edited the anti-slavery journal, the "Boston Commonwealth." She is best known as the author of the "Battle Hymn of the Republic" written during a visit to the camps near Washington. Among her works, besides several volumes of verse, are: "The World's Own," a drama; "Life of Margaret Fuller."

Howell, Clark, editor; born in Barnwell County, S. C., September 21, 1863; has lived in Atlanta, Ga., from infancy; graduated from University of Georgia, June, 1883. Entered newspaper work, succeeding Henry Grady as managing editor, "Atlanta Constitution," in 1889, and succeeded his father as editor-in-chief in 1897. In 1901 bought out Colonel W. A. Hemphill's stock in "Constitution" and succeeded him as president of the company. Member of Georgia House of Representatives six years (speaker, 1890-91); member from Georgia of Democratic National Committee since 1892; member and president of Georgia Senate, Atlanta district, since 1900; director of Associated Press of America for past eight years.

Howells, William Dean, American novelist, born in Martinsville, Ohio, 1837; was United States consul at Venice from 1861 to 1865. From 1871 to 1880 he edited the "Atlantic Monthly," but soon began to devote his time to novel-writing. Chief among his novels are "The Lady of the Aroostook," "A Modern Instance," "A Fearful Responsibility," etc., and "The Shadow of a Dream." He also wrote lives of Lincoln and Hayes, "Modern Italian Poets," and some poems.

Hubbard, Elbert, author, journalist, lecturer; born in Bloomington, Ill., 1859; common school education. Editor, "The Philistine"; proprietor "The Roycroft Shop," devoted to making de luxe editions of the classics. Author: "No Enemy but Himself," "Little Journeys to the Homes of Good Men and Great," "Little Journeys to the Homes of American Authors," "Little Journeys to the Homes of Famous Women," "Little Journeys to the Homes of American Statesmen," "Little Journeys to the Homes of Eminent Painters," "Ali Baba of East Aurora," "As it Seems to Me," "A Message to Garcia," "Time and Chance," "The Legacy," "Forbes of Harvard," "One Day," "A Tale of the Prairies," "Little Journeys to Homes of English Authors," "Little Journeys to Homes of Great Musicians," "Little Journeys to Homes of Eminent Orators," "Little Journeys to Homes of Eminent Artists," "Little Journeys to Homes of Great Philosophers," "Old John Burroughs," "Contemplations," "Consecrated Lives," "The Man of Sorrows."

Hughes, Charles Evans, lawyer; born in Glens Falls, N. Y., April 11, 1862; graduate from Brown University, 1881, A. M., 1884; graduated from Columbia Law School, 1884. Teacher Delaware Academy, Delhi, N. Y., 1881-82; admitted to New York bar, June, 1884; practiced in New York, 1884-91; prize fellow Columbia Law School, 1884-87; professor of law (contracts, evidence, etc.), Cornell University School of Law, 1891-93; active practice in New York since 1893; special lecturer at Cornell University School of Law, 1893-95. New York Law School, 1893-1902. Trustee of Brown University; member of law firm Hughes, Rounds & Schurman; Republican nominee for mayor, New York, 1905, but declined; attorney for Armstrong Commission of New York Legislature, investigating methods of large life insurance companies. Governor of New York 1906-08.

Hughes, Thomas, born in 1823. English writer; educated under Arnold at Rugby, and at Oriel; was called to the bar in 1848, and sat in parliament as a liberal for Lambeth (1865-68), and Frome (1868-74). He became Queen's counsel in 1869, and county court judge in 1882. His chief works are "Tom Brown's School Days," "Tom Brown at Oxford," and "A Memoir of Daniel Maecilian."

Hugo, Victor Marie, French poet and romance writer; born of noble parents in Besancon, 1803; began to write verse at the age of 14, and soon deserting classic models, became the founder, with Sainte-Beuve and others, of the French romantic school. In like manner his early royalism gave place to ardent republicanism. "Cromwell," "Le Dernier Jour d'un Condamné," "Marion Delorme," and, above all, "Hernani" were strongly censured by the Académie; but Charles X. would not prohibit the performance of the last. "Le Roi s'amuse," was, however, interdicted by the ministry. Between the

years 1830-40 appeared also "Nôtre-Dame de Paris," and several volumes of verse, and the poet was elected to the Académie in 1841. In 1845 he also became "pair de France." In 1848, he was elected by Paris to the Constitutional Assembly, and acted with the moderates, but in the next Assembly he became one of the orators of the left, and, having attempted to resist the *coup d'état* of Louis Napoleon, was banished in 1851. He lived chiefly in Jersey and Guernsey, and wrote "Les Contemplations" and "La Légendes des Siècles." He refused to avail himself of the amnesties of 1859 and 1869, but returned to Paris in 1870. In 1866, appeared "Les Travailleurs de la Mer," and, after the return, "Quatre-vingt-Treize," "L'Histoire d'un Crime," and many other works. "Hernani" was revived in 1867, and Hugo became a senator in 1879. He was buried in the Panthéon, which was secularized for the purpose. Chief among his lyrics were his early "Odes et Ballades," "Les Feuilles d'Automne," "Les Chants du Crépuscule," "Les Rayons et les Ombres," and "Chansons des Rues et des Bois." The romance "Les Misérables," was translated into twelve languages. Died, 1885.

Hull, Isaac, an American naval officer; born in Derby, Conn., March 9, 1775. In July, 1812, he commanded the frigate "Constitution," which was chased by a British squadron for three days, but escaped by skillful sailing. While cruising in the Gulf of St. Lawrence he met the British frigate "Guerriere," which, after a bloody fight of half an hour, surrendered, August 19, 1812. The "Guerriere" was so injured in the battle that she soon sunk. The British ship lost 100 men; the "Constitution" had fourteen men killed and wounded, and within an hour or so was ready for another fight. This was the first naval battle of the War of 1812, and Congress gave Captain Hull a gold medal for his services. He died in Philadelphia, Pa., February 3, 1843.

Humboldt, Friedrich Heinrich Alex., Baron von, great traveler and naturalist, born in Berlin, 1769, devoted all his life to the study of nature in all its departments, traveling all over the continent, and in 1800, with Aimé Bonpland for companion, visiting South America, traversing the Orinoco, and surveying and mapping out in the course of five years, Venezuela, Colombia, Ecuador, Peru, and Mexico, the results of which he published in his "Travels." His chief work is the "Kosmos," or an account of the visible universe, in four volumes, originally delivered as lectures in Paris in the winter of 1827-28. He was a friend of Goethe, who held him in the highest esteem. Died, 1859.

Hume, David (hūm), an eminent historian, born in Edinburgh, 1711, after laying the basis of a great literary reputation by his "Treatise on Human Nature," produced "Essays, Moral, Political, and Literary," and other works, published between the years 1754 and 1761. His celebrated "History of England," for two generations esteemed the ablest work of its class, was considered by many critics open to objection on the score of skepticism and undue partiality. Died, 1770.

Hunter, John, the most eminent English anatomist of modern times; born near Glasgow in 1728; became surgeon of St. George's Hospital, London, and a Fellow of the Royal Society, and acquired high celebrity by his discoveries in comparative anatomy and physiology. Died, 1793.

Huss, or Hus, Johann, born probably in 1369; Bohemian reformer, attacked abuses in Prague University and among the clergy, and opposed German predominance. He was excommunicated by John XXIII. for giving adhesion to Wycliffe's doctrines, and afterwards wrote his "Tractatus de Ecclesia." Having gone to the council of Constance under a safe-conduct from the emperor, his enemies procured her imprisonment as a heretic, and, on refusal to retract, he was burnt. Died, 1415.

Huxley, Thomas Henry, an English biologist and essayist; born in Ealing, England, May 4, 1825. He was graduated at London University in 1845. In 1846-1850 he sailed around the world as a naval surgeon. In 1851 he was made F. R. S. by the Royal Society; he became professor of natural history in the School of Mines in 1854; hunterian professor in the Royal College of Surgeons in 1863; president of the British Geological and Ethnological Societies in 1869; secretary of the Royal Society in 1872; Lord Rector of Aberdeen University in 1872; and president of the Royal Society in 1883. He was an able advocate of Darwinian evolution, and was perhaps best known to the popular apprehension by his agnostic speculations, in expounding which he came into controversy with the defenders of Theism and Christianity. He wrote a number of scientific works. He died in Eastbourne, England, June 29, 1895.

Huyghens, Christian, born in 1629; Dutch natural philosopher and astronomer; was compelled to leave

Paris by the revocation of the Edict of Nantes. He had been invited to France by Colbert, and during his residence there visited England, and was made Fellow of the Royal Society. He applied the pendulum to clocks, ascertained the laws of collision of elastic bodies, and discovered the rings of Saturn. Died, 1693.

Hypatia, born circa 370; daughter of Theon, head of the Platonic school of Alexandria, gave public lectures in philosophy, but was brutally murdered by the partisans of the Patriarch Cyril. Died, 415.

Ibsen, Henrik, born in 1828; Norwegian dramatist, appointed director of the theater at Bergen in 1852, and, in 1857, of that at Christiania. Among his plays are "Brand," "Peer Gynt," "The Pillars of Society," "The Doll's House," "Ghosts," etc. Died, 1906.

Ingalls, Melville Ezra, railroad president; born in Harrison, Me., September 6, 1842; brought up on a farm; educated in Bridgeton Academy and studied in Bowdoin College; graduate of Harvard Law School, 1863; practiced first at Gray, Me., but soon removed to Boston; member of Massachusetts Senate, 1867. President in 1870, receiver in 1871, of the Indianapolis, Cincinnati & Lafayette Railroad, and from bankrupt condition, with aid of reorganizations in 1873 and 1880, put its successor, the Cincinnati, Indianapolis, St. Louis & Chicago, upon a sound footing, consolidating it with other roads into the Cleveland, Cincinnati, Chicago & St. Louis Railroad, of which he is chairman (comprising the "Big Four" system); also from October 1, 1888, until February, 1900, president of Chesapeake & Ohio Railway Company; president of Merchants' National Bank, Cincinnati. Was Democratic candidate for mayor of Cincinnati, 1903; president of National Civic Federation, 1905.

Ingersoll, Robert Green, born in 1833; American lawyer; was colonel of a federal regiment, 1862-65; and, in 1866, State attorney-general. Was a well-known orator and anti-Christian lecturer. Died, 1899.

Innocent III., Pope, born circa 1160; son of Count Trasimund, a Roman noble; elected in 1198, aimed at making the papacy supreme in all European affairs. In 1212, he deposed the Emperor Otho, setting up Frederick II. in his place. His dispute with John of England concerning the appointment of Langton to the See of Canterbury, lasted from 1207 to 1213. In that year John admitted Langton, and surrendered England to the pope, at the same time receiving it back as a papal fief. Innocent favored the fourth crusade (1200). Died, 1216.

Ireland, John, Roman Catholic Archbishop of St. Paul since May, 1888; born in Ireland, September 11, 1838; came to United States in boyhood. Educated in Cathedral School, St. Paul; studied theology, France; (LL. D., Yale, 1901); ordained priest, December 21, 1861; chaplain of 5th Minnesota regiment in Civil War; rector cathedral, St. Paul; secretary and later coadjutor to Bishop Grace, of St. Paul; consecrated December 21, 1875. Author: "The Church and Modern Society," etc.

Irving, Sir Henry (John Henry Brodribb), actor; born in Keinton, near Glastonbury, in 1838; acted at the Theater Royal, Edinburgh, from 1856 to 1859, and afterwards for seven years at Manchester. He played in London in 1859, but attracted little notice till his appearance at St. James' Theater in 1866. He soon established a connection with the Lyceum, of which he became manager in 1878. There he played his chief parts, in conjunction with Miss Ellen Terry, producing, amongst other plays, "Hamlet," "The Merchant of Venice," "Faust," "Macbeth," "Henry VIII.," "The Bells," and other well-known productions. Died, 1905.

Irving, Washington, born in 1783; American man of letters, son of a New York merchant; was admitted to the bar in 1806, but devoted himself to literature. In 1810, he became a partner in his brother's commercial establishment, which failed in 1817. He lived in Europe from 1815 to 1832, acting as secretary to the American embassy in London from 1829 to 1831. From 1842 to 1846, he was United States minister to Spain. Among his works are "Knickerbocker's History of New York," "Geoffrey Crayon's Sketch Book," "The Life of Columbus," "The Chronicle of the Conquest of Granada," and lives of "Mahomet" and "Washington." Died, 1859.

Isabella of Castile, born in 1451; daughter of John II.; was married to Ferdinand of Aragon in 1469, and, in 1474, succeeded her brother, Henry IV., on the throne of Castile. Isabella promoted the expedition of Columbus. She was a wise and humane ruler, but her religious zeal led her to consent to the establishment of the Inquisition. Died, 1504.

Isaiah was one of the most eminent of the Hebrew prophets. He was the son of Amoz, but of his personal

history very little is known. He prophesied under Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah. His prophecies, though delivered later in point of time than several of those uttered by other prophets, occupy, in our Bible, the first place, both on account of their bulk, and for the sublimity and importance of the predictions.

Ito, Marquis Hirobumi, a Japanese statesman; born in the province of Choshu, in 1840. In 1871, he visited the United States for the purpose of examining the coinage system, and on his return to Japan was successful in establishing a mint at Osaka. In 1878, he was transferred from the office of minister of public works to the home office. He became prominent in the Japanese cabinet in 1886, and made many reforms. In 1897-98, he made a tour of the United States and Europe. In the latter year he visited China to arrange an alliance between that country and his own, and, in 1900, on the resignation of the Yamagata ministry, he was summoned by the emperor to form a cabinet. He revisited the United States in 1901.

Jackson, Andrew, the seventh President of the United States, was born in South Carolina, March 15, 1767, of Irish parentage. After a harum-scarum youth, Jackson, in 1788, commenced the practice of the law in Nashville, Tenn., and became that State's sole representative in Congress in 1796, and senator in the following year. Between 1798 and 1804, he served as a judge of the Supreme Court of Tennessee; in 1806, killed Mr. Charles Dickinson in a duel; in 1807, appeared as the champion of Aaron Burr; and, in 1812, upon the breaking out of hostilities with England, offered his services to the Government. In 1813, he was severely wounded in a duel fought with Colonel Benton, and defeated the Creeks at Talladega in the same year. In May, 1814, after receiving the appointment of major-general in the United States Army, he commanded in the battle won over the British Army at New Orleans, in January, 1815. This great victory raised the reputation of Jackson as a general to the highest point, and made him the idol of a large portion of the American people. In 1817-18, General Jackson conducted the Seminole War to a successful conclusion, and was appointed governor of Florida in 1821. Two years later he was an unsuccessful aspirant for the presidency, to which office he was, however, elected in 1828, and reelected at the end of his four-years' term, in 1832. Among the chief occurrences during his double tenure of office were: the grant of a new charter to the Bank of the United States; the proclamation denouncing the South Carolina Nullification movement; and the senatorial censure passed on the president for his authorizing the removal of the public deposits from the Bank of the United States. Died, June 8, 1845.

Jackson, Thomas Jonathan, better known the world over as "Stonewall Jackson," an American general; born in Lewis County, Virginia, in 1824, and graduated at West Point Academy in 1846. After serving with distinction in the Mexican War, Jackson became a professor in the Military Institute at Lexington, Va., until the outbreak of the Civil War. Appointed brigadier-general in the Confederate service at the battle of Bull Run, July 21, 1861, his command on that occasion "stood like a stone wall," to use the words of a distinguished general present. In September, he received the rank of major-general; defeated General Banks at Strasburg, May 23, 1862; fought an indecisive battle with Fremont at Cross Keys, June 8th; commanded a corps in the battle of Gaines' Mill, June 27th, and Malvern Hill, July 1st; again defeated General Banks at Cedar Mountain, August 9th; captured Harper's Ferry with 11,000 Federal prisoners, September 15th; commanded a corps at Antietam, September 17th; and was made lieutenant-general for his services in largely contributing to the National defeat at Fredericksburg, December 13, 1862. On May 2, 1863, by a clever flank movement, he defeated the 11th corps of General Hooker's army at Chancellorsville; and on the evening of the same day was fired at by a patrol party of his own men, who mistook him and his staff, in the darkness, for a detachment of Union cavalry, and died of his wounds on the 10th.

Jacquard, Joseph Marie (*shah-kahr*), a French mechanic and inventor, was born in 1752, and died in 1834. His invention of the Jacquard loom revolutionized the art of weaving.

James. The name of a number of sovereigns of European states, the most noted of whom were James I. (VI. of Scotland) of England, who was born in 1566, and crowned King of Scotland while an infant on the abdication of his mother, Mary Queen of Scots, Elizabeth of England having declared in his favor. He succeeded to her throne in 1603, and died in 1625.

James II., born in 1633, succeeded his brother, Charles II., in 1685, was driven from his kingdom by William Prince of Orange, in 1688, utterly defeated in Ireland, and died an exile in France, in 1701. **James IV.** of Scotland, "the handsomest and most chivalrous prince of his age," born in 1468, succeeded his father, James III., who was murdered after the disastrous defeat near Bannockburn, in 1488; James was killed in the sanguinary battle at Flodden Field, in 1513, in which nearly the entire Scotch peerage of mature age perished with their king.

James, St., one of Christ's favorite apostles, son of Zebedee and brother of St. John. He was martyred about 44, by order of Herod Agrippa.

James, Edmund James, educator; born in Jacksonville, Ill., May 21, 1855; educated at Illinois State Normal School and Northwestern and Harvard universities (A. M., Ph. D., 1877, University of Halle; LL. D., Cornell College, Wesleyan, Queen's College); principal high school, Evanston, Ill., 1878-79; principal Model High School, Normal, Ill., 1879-82; professor of public finance and administration, Wharton School of Finance and Economy, University of Pennsylvania, 1883-95; professor of political and social science, University of Pennsylvania, 1884-95; professor of public administration director of extension division of the University of Chicago, 1896-1901; president of the Northwestern University, February 1, 1902 to September 1, 1904; president of University of Illinois since September 1, 1904. Author: "Relation of the Modern Municipality to the Gas Supply," "The Legal Tender Decisions," "The Canal and the Railway," "Federal Constitution of Germany," "Federal Constitution of Switzerland," "Education of business Men in Europe," "Charters of City of Chicago," "Growth of Great Cities in Area and Population," "Government of a Typical German City—Halle," also over 100 papers, monographs, and addresses in transactions of societies, etc.

James, Henry, author; born in New York, April 15, 1843; educated in France and Switzerland, and Harvard Law School; began as contributor to periodicals, 1866; since 1869, has lived in England; brother to professor William James, of Harvard. Author: "Watch and Ward," "A Passionate Pilgrim," "Roderick Hudson," "Transatlantic Sketches," "The American," "French Poets and Novelists," "The Europeans," "Daisy Miller," "An International Episode," "Life of Hawthorne," "A Bundle of Letters," "Confidence," "Diary of a Man of Fifty," "Washington Square," "The Portrait of a Lady," "Siege of London," "Portraits of Places," "Tales of Three Cities," "A Little Tour in France," "Beltraffio," "The Bostonians," "Princess Casamassima," "Partial Portraits," "The Aspern Papers," "The Reverberator," "A London Life," "The Tragic Muse," "Terminations," "The Spoils of Poynton," "What Maisie Knew," "In the Cage," "The Two Magics," "The Awkward Age," "The Soft Side," "A Little Tour in France," "The Sacred Fount," "The Wings of the Dove," "The Better Sort," "Questions of our Speech," "The Lesson of Balzac" (two lectures).

James, William, born in New York, January 11, 1842. An eminent American psychologist and philosophical writer, professor of Philosophy in Harvard University since 1897. In 1900-02 he was Gifford lecturer at the University of Edinburgh. Author: "Principles of Psychology," "The Will to Believe," and other essays, "Talks to Teachers," "Human Immortality," "The Varieties of Religious Experience," etc.

Jay, John, an eminent American statesman, was born in New York City, 1745, where he was admitted to the bar in 1768. In 1774, as a member of the first Continental Congress, he formed one of the committee of three which drew up the celebrated address to the people of Great Britain. He also largely assisted in framing the National Constitution, and, in 1777, was appointed chief justice of New York, and in the following year president of Congress. He next took part in negotiating the treaty of peace entered into at Paris, 1783, between Great Britain and the United States. On his return he was appointed secretary of foreign affairs, and in 1789 chief justice of the Supreme Court. In 1794 he proceeded on a special mission to England, where he concluded a treaty which met with violent opposition from the Anti-Federalist party. He afterwards held the governorship of New York State, and, after refusing a second nomination to the chief-justiceship, died, 1820.

Jeejeebhoy, Sir Jamsetjee, Indian philanthropist; a Parsee by birth and creed, born in Bombay in 1783; realized a fortune as a merchant, and employed it in releasing debtors from jail by paying their debts, and in founding a hospital and schools; in 1857 was made a baronet. Died, 1859.

Jefferson, Thomas, third President of the United States, was born in Virginia, 1743, and, after graduating at William and Mary College, was admitted to the bar in 1767. He practiced law with signal success, and in 1769, became a member of the Virginia House of Burgesses, and in 1773, a delegate to the first Continental Congress, where he assisted in framing the celebrated "Summary View of the Rights of British America." In 1775, he took his seat in the Continental Congress, and with a commanding voice in its deliberations, so that in the year following he was appointed chairman of the committee which drew up the Declaration of Independence. In 1779, he succeeded Patrick Henry in the governorship of Virginia. In 1783, he acted as chairman of the committee charged with the report to Congress of the treaty of peace entered into at Paris, 1783, and, two years later, succeeded Franklin as minister at Paris. On his return, in 1789, he entered General Washington's first cabinet as secretary of state. In this position he gradually came to be considered the head of the Democratic party. In 1793, he resigned office, and four years afterwards became Vice-President of the United States, and *ex-officio* president of the Senate. In 1801, he was elected to the presidency, which office he filled with high credit till 1809, when he retired into private life. Died, 1826.

Jehoiachin (*je-hoi'ah-kîn*), a king of Judah; succeeded his father Jehoiakim, 598 B. C., and was carried a prisoner to Babylon by Nebuchadnezzar 606 B. C. (2 Chron. xxxvi, 8-10).

Jehoiakim (*je-hoi'ah-kim*), a king of Judah, succeeded his father Josiah, 609 B. C. During his reign, Jerusalem was plundered by Nebuchadnezzar. Died, 593 B. C.

Jehoram, or Joram, king of Judah; succeeded his father Jehoshaphat, 892 B. C.; died, 885 B. C. Also a king of Israel, son of Ahab, succeeded his brother Ahab, B. C. 886; died, 884 B. C.

Jehoshaphat, king of Judah, succeeded his father Asa at the age of 35, 914 B. C., and reigned with wisdom. Died, 890.

Jehu, king of Israel, was an officer in the army of Jehoram, whom he killed. He reigned twenty-eight years, 884-856 B. C. (2 Kings ix, x.)

Jelliffe, Smith Ely, physician; born in New York, October 27, 1866; graduate of Brooklyn Polytechnic, 1886; medical department of Columbia University, 1889, A. M., Ph. D., Columbia, 1900. Began practice, 1889; interne St. Mary's Hospital, Brooklyn; spent one year in Europe; since January, 1895, practicing in New York; professor of pharmacognosy and instructor in pharmacology and therapeutics, Columbia. Author: "Essentials of Vegetable Pharmacognosy" (with Dr. H. H. Rusby), "Morphology and Histology of Plants" (with same), also "Nervous Diseases" in Butler's Diagnostics, "Outlines of Pharmacognosy," Reviser "May's Physiology," "Butler's Materia Medica," "Shaw on Nervous Diseases." Editor and translator: "Dubois' Psychoneuroses"; co-editor, "Encyc. Americana," "Scientific American," 1904; editor "Reissig," "Haus Arzt," "Medical News," New York, since 1900; magazine editor "Journal of Nervous and Mental Disease," since 1902; also contributor to medical, botanical, and pharmaceutical press.

Jenks, Jeremiah Whipple, professor of political economy and politics, Cornell, since 1891; born in St. Clair, Michigan, September 2, 1856; graduated from University of Michigan, 1878, A. M., 1879, LL. D., 1903; Ph. D., University of Halle, 1885; studied law; admitted to Michigan bar; taught Greek, Latin, and German, Mt. Morris College; professor of political science and English literature, Knox College, 1886-89; professor of political economy and social science, Indiana University, 1889-91; expert agent of United States Industrial Commission on Investigation of Trusts and Industrial Combinations in the United States and Europe, 1899-1901, and consulting expert of United States Department of Labor on same subject. Special commissioner of War Department, United States, to investigate questions of currency, labor, internal taxation and police in the Orient, 1901-02. Author: "Henry C. Carey as National-ökonom, Jena," "The Trust Problem," "Vol. VIII. Report of Industrial Commission of Industrial Combinations in Europe," "Report on Certain Economic Questions in the English and Dutch Colonies in the Orient." Editor and part author: (Reports United States Industrial Commission) "Trusts and Industrial Combinations," Vol. I., 1900, Vol. XIII. Compiler: "Statutes and Digested Decisions of Federal, State, and Territorial Law Relating to Trusts and Industrial Combinations." Part author and compiler of "Reports of Commission on International Exchange." Frequent contributor to periodical literature on economic and political questions. Special expert on currency reform

of government of Mexico, 1903; member of United States Commission on International Exchange in special charge of reform of currency in China.

Jenner, Edward, born in 1749, studied at Prague, Paris, and Oxford, where he adopted the views of Wycliffe. On his return to Bohemia he became an ardent supporter of Huss. He followed him to the Council of Constance, but was imprisoned and induced to recant. He afterwards maintained his views boldly at the stake. Died, 1823.

Jeremi'ah, in Scripture one of the greatest of the Hebrew prophets, and author of the book which bears his name, and of "Lamentations." He flourished in the Sixth Century, B. C.

Jeroboam, two kings of Israel bore this name, viz., one who was elected, 975 B. C., by the ten tribes who had rebelled against Rehoboam. Died, 954. The other, a son of Joash, ascended the throne about 825 B. C., and filled it for forty-one years. Died, 784 B. C.

Jerome, or Hieronymus, St., born circa 346, in Stridon, in Dalmatia, of Christian parents, studied at Rome under Donatus; after traveling in Gaul and elsewhere, adopted a studious and ascetic life, spending four years in the desert of Chalcis, in Syria; was ordained presbyter in 387; visited Constantinople, where he became the friend and pupil of Gregory Nazianzen; returning to Rome, became secretary to Pope Damasus, but after his death (384), withdrew to the Holy Land, accompanied by Paula, Eustochium, and other Roman ladies devoted to the ascetic life. For the remainder of his days he presided over a monastery established by Paula at Bethlehem. Here he completed his translation of the Bible from Hebrew into Latin, known as the Vulgate. He wrote numerous commentaries on the Old and New Testaments, and was engaged in controversies with Rufinus, the Pelagians, and others. Died in 420.

Jerome, William Travers, lawyer; born in New York, April 18, 1859; educated at Williston Seminary and Amherst College (honorary A. M.); graduated from Columbia Law School, 1884; admitted to bar, 1884; justice of special sessions, 1895-1902; district attorney New York County, elected 1901; Democrat. Re-elected as independent candidate, 1905. Author: "Liquor Tax Law in New York."

Jesus Christ (Iesous, the Greek form of Joshua or Jeshua, contracted from Jehoshua, meaning, help of Jehovah, or saviour; Christos, anointed), the Son of God, the Saviour of men, whose birth, life, and death were predicted by prophets, and attended with miraculous manifestations of divine power, was born of the Virgin Mary, of the tribe of Judah, who was betrothed to Joseph, the descendant and heir of the house of David. Two genealogies of Joseph are given—one by Matthew, chapter one; the other by Luke, chapter four. The former is supposed to contain the list of heirs of the house of David, whether by direct or indirect descent; the other the direct ancestors of Joseph. It was foretold that Christ should be of the seed of Abraham and the son of David. The place of His birth was Bethlehem; the time, according to the received chronology, was in the year of Rome 754. Scholars are now almost unanimously agreed that this date is too late, and it is generally placed about four years earlier. The coming of a forerunner to the Saviour, John the Baptist, in the spirit and power of Elias, was foretold by an angel (Luke i: 17). The angel Gabriel announced to Mary that the power of the Highest should overshadow her, and that she should bear a son who should rule over the house of Jacob forever; and on the night of His birth an angel appeared to some shepherds, and announced the coming of a Saviour. On the eighth day He was circumcised according to the law of Moses, and on the fortieth was presented in the temple, where the aged Simeon pronounced Him to be the light of nations and the glory of Israel. Herod ordered the extirpation of all children of Bethlehem and its vicinity of the age of less than two years, for the purpose of effecting the death of Jesus. But Joseph, being miraculously warned of the danger, fled to Egypt with the virgin and her child, and on his return, after the death of Herod, went to reside at Nazareth in Galilee, whence Jesus is called a Nazarene. We have no further accounts of the earlier years of Jesus, except the remarkable scene in the temple when He was 12 years old, and the general observation of Luke, that He remained in Nazareth with His parents and served them. At the age of about 30 (Luke iii: 23), He was baptized by John in the River Jordan, the Spirit of God descending upon Him like a dove, and a voice from heaven proclaiming, "Thou art my beloved Son; in thee I am well pleased." Previously, however, to entering on His office of divine teacher He retired to a

solitary place, where He passed forty days in fasting, meditation, and prayer, previous to the remarkable scene of the temptation described by the evangelists — Matt., chap. iv.; Mark i: 12-13; Luke, chap. iv. He was afterward transfigured in the presence of three of His disciples, when Moses and Elias appeared to Him from heaven, and His raiment became white and shining, and His face shone as the sun. On this occasion again, a voice came from heaven saying, "This is my beloved Son; hear ye Him" (Matt., chap. xvii.; Mark, chap. ix.; Luke, chap. ix., verses 28-36). His mission is generally considered to have occupied three years, spent in acts of mercy (chiefly miraculous), in inculcating a purer system of morals, more exalted notions of God, and more elevating views of man and his destiny than had yet been presented to the world. His doctrine is embodied chiefly in the Sermon on the Mount (Matt., chap. v.-viii., and Luke, chap. vi.), containing the form of prayer He taught to His disciples, commonly called the Lord's Prayer; in His discourses to the Jews in John, chap. v.-viii. and x.; to His disciples, chap. xiv.-xvi.; and His intercessory prayer, chap. xvii. He chose twelve apostles to be the companions of His ministry, the witnesses of His miracles, and the depositories of His doctrine; and He was betrayed into the power of His enemies by one of these with the mockery of a friendly salutation. Betrayed by one, denied by another, and abandoned by all. He was carried before the Jewish priests, found guilty, and by them delivered over to the Roman magistrates, who alone had the power of life and death. Condemned to death as a disturber of the public peace, He was nailed to the cross on Mount Calvary, and it was in the agonies of this bitter death that He prayed for the forgiveness of His executioners, and with a touching act of filial love commended His mother to His favorite disciple. The evangelists relate that from the hour of noon the sun was darkened and three hours after, Jesus, having cried out, "It is finished!" gave up the ghost. The veil of the temple, they add, was torn asunder, the earth shook, rocks were rent, and the tombs opened. The centurion who was present, directing the execution, exclaimed, "Truly this was the Son of God!" The body of Jesus was taken down by Joseph of Arimathea and placed in a tomb, about which the Jewish priests, remembering His prophecy that He should rise on the third day, set a guard, sealing up the door. Notwithstanding these precautions His prophecy was fulfilled by His resurrection on the first day of the week (Sunday), and He appeared repeatedly to His disciples to encourage, console, and instruct them. On the fortieth day after His resurrection, while with them on the Mount of Olives, after He had given them instructions to teach and proselytize all nations, promising them the gift of the Holy Spirit, a cloud received Him out of their sight, and He was taken up to heaven. While the disciples stood gazing after Him two men in white apparel appeared to them, and predicted His coming again in like manner as they had seen Him go. See the closing chapters of the four evangelists and Acts i: 1-14.

Joan of Arc, the "Maid of Orleans"; born in Domrémy, in Lorraine, in 1412; while tending sheep in her native village heard voices summoning her to deliver France from the English. She presented herself before Charles VII., who gave her some troops, and with these she raised the siege of Orleans in May, 1429. In June Talbot was defeated at Patay, and in July Joan caused Charles to be crowned at Rheims. She now declared that her mission was over, but was persuaded by Charles to remain. In May, 1430, she was taken prisoner while attempting to raise the siege of Compiègne, and, after a trial conducted by the Bishop of Beauvais, was condemned as a sorceress, and burned in the market-place of Rouen in 1431.

John, St., called the Baptist, son of Zacharias, a priest of the Jews, and of Elizabeth, was the cousin of Mary, the mother of Jesus. He early exercised the apostolic call, and began to preach in the valley of the Jordan, where Jesus received baptism at his hands. He afterwards suffered imprisonment and death by command of Herod.

John, St., the Apostle; born, circa 4; was one of the earliest of Christ's disciples. During the crucifixion our Lord commended His mother to his care, and he "took her to his own home." John afterwards became Bishop of Ephesus. According to Tertullian, he was plunged into a caldron of boiling oil during the persecution under Domitian, but received no injury. He was subsequently exiled to the island of Patmos, where he wrote the "Book of Revelation." He was also author of the Gospel and Epistles which bear his name. Died, circa 99.

John XXII., Pope (Jacques d'Euze); born circa 1244; a native of Cahors, was elected in 1316, during the "Babylonish Captivity." He was at variance with

the Emperor Louis of Bavaria, whom he excommunicated in 1324. He was nominally deposed by Louis in 1327, but continued to exercise the papal functions at Avignon. Died, 1334.

Johnson, Andrew, seventeenth President of the United States, was born in Raleigh, N. C., in 1808. By trade a tailor, and a self-educated man, he became a member of the Legislature of Tennessee (his adopted State); was elected to Congress, 1843-53, and became governor of Tennessee in 1853, and again in 1855. In 1857, he was elected to the National Senate, and, in 1862, appointed military governor of his State. Elected Vice-President of the Union by the Republican party in 1864, he was sworn in as President in the following year, on the assassination of Mr. Lincoln. In this position, his opposition to the measures adopted by Congress for the reconstruction of the Southern States involved him in a struggle, which ended in 1868, with his impeachment on charges of high crimes and misdemeanors against the state. He was accordingly brought to trial, March 13th, and acquitted on the 26th of May following. In January, 1875, he was elected to the United States Senate for the second time. Died, July 31, 1875.

Johnson, Eastman, artist; born in Lovell, Me., in 1824; educated in public schools, Augusta, Me.; studied two years in Royal Academy, Düsseldorf. Among many notable genre pictures are "The Kentucky Home," "Husking Bee," "The Stage Coach," "Pension Agent," "Prisoner of State," and portraits "Two Men," ex-President Arthur, Cleveland, and Harrison; W. H. Vanderbilt, Commodore Vanderbilt, Secretary Folger, Daniel Webster, John Quincy Adams, Wm. B. Astor, John D. Rockefeller, W. D. Sloane, Mrs. Alexander Hamilton, Mrs. Dolly Madison (from life), Mrs. August Belmont, Mrs. Hamilton Fish, Mr. and Mrs. I. A. Burden, Mrs. W. T. Blodgett; College Presidents McCosh, Noah Porter, Barnard, and Andrew White; Charles O'Connor, Wheeler H. Peckham, Longfellow, Hawthorne, Emerson, Bishop Potter, Morris K. Jesup, etc. Represented in the Metropolitan Museum of Art and Lenox Galleries, New York; Corcoran Gallery, White House and Treasury Building, Washington; capitol at Albany; Knickerbocker, Century, and Union League Clubs, Chamber of Commerce, Board of Trade, etc., New York.

Johnson, John A., journalist, governor of Minnesota; born in St. Peter, Minn., July 28, 1861; educated in public schools, St. Peter. Care of family devolving upon him at 12, went to work in printing office in St. Peter, and has continued in that business, becoming member of firm of Essler & Johnson, publishers of the St. Peter "Herald," of which he is editor. Democrat. Served seven years in Minnesota National Guard, becoming captain. Was State senator from St. Peter district; elected governor of Minnesota, 1904, for term expiring January 1, 1907.

Johnson, Tom Loftin, capitalist, mayor; born in Georgetown, Ky., July 18, 1854; went to Indiana in boyhood; educated there; clerk in street railway office, Louisville, Ky., 1869-75; invented several street railway devices; bought a street railway in Indianapolis; later acquired large street railway interests in Cleveland, Detroit, and Brooklyn; is also iron manufacturer in Cleveland. Member of Congress, 1891-95; prominent advocate of the "single-tax" theories of late Henry George. Has now retired from business and is devoting his entire time to taxation questions and official duties; mayor of Cleveland since 1901.

Johnston, Albert Sydney, a distinguished American Confederate general, was born in Kentucky, in 1803, and graduated at West Point in 1826. In 1837, he superseded General Houston as commander-in-chief of the Texan army; next became Texan war secretary, and served as a colonel of American regulars during the Mexican War. In 1857, he commanded the expedition sent against the Mormons of Utah; and in 1860, was made military commander of the department of Kentucky and Tennessee, by the so-called Confederate Government. After the surrender of Fort Donelson, he formed a junction with the army of General Beauregard, and fell in the battle of Shiloh, April 6, 1862.

Johnston, Joseph Eggleston, born in 1807; American soldier, joined the Confederate army, and became commander of the Federal forces in South Carolina in February, 1863, but surrendered with his army in the following August.

Jonah, or **Jonas**, one of the lesser prophets of Israel, is said by some to have lived in the reign of Jeroboam II., about 800 B. C.; by others, in that of Jehu. He forms the subject of the canonical book of the Old Testament which bears his name.

Jonathan, son of Saul, and the bosom friend of David, who bewailed his untimely death in one of the

most beautiful of his songs. Also, a son of Mattathias, and brother of Judas Maccabeus. He succeeded his brother Judas in the leadership of the Jews, and was made high-priest by Alexander Balas. After some vicissitudes of fortune, he renewed the league his brother had formed with the Romans, and was at last treacherously slain by Tryphon.

Jokai, Maurice, born in 1825; Hungarian novelist; took part as a journalist in the revolution of 1848; has written about 200 novels, including "Tinar's Two Worlds," "Black Diamonds," "The Romance of the Coming Century," etc. Died, 1904.

Jones, Paul (real name John Paul), a brilliant American naval commander in the Revolution, was born in Scotland in 1747. After the conclusion of peace with Great Britain, he became rear-admiral in the Russian service, but was dismissed on account of a private quarrel, and died in Paris (1792) in poverty.

Jonson, Benjamin, or Ben, born circa, 1574; dramatist, was educated at Westminster under Camden. It is uncertain whether he studied at Cambridge. After following the trade of a bricklayer, he went as a volunteer to Flanders, and on his return became an actor, also writing plays in conjunction with others. His first independent work, "Every Man in His Humour" was followed by "Every Man Out of His Humour," "Cynthia's Revels," "Sejanus," "Volpone," "The Alchemist," and many others. Died, 1637.

Jordan, David Starr, president of Leland Stanford Jr. University; born in Gainesville, N. Y., January 19, 1851; graduate of Cornell, M. S., 1872; M. D., Indiana Medical College, 1875 (Ph. D., Butler University, 1878; LL. D., Cornell, 1886, Johns Hopkins, 1902). Professor in various collegiate institutions, 1872-79; assistant to United States Fish Commission, 1877-91; professor of zoology, 1879-85, and president, 1885-91, Indiana University; president of Leland Stanford University since 1891; president of California Academy of Sciences, 1896-98; also United States commissioner in charge of fur seal investigations, etc. Author: "A Manual of Vertebrate Animals of Northern United States," "Science Sketches," "Fishes of North and Middle America," "Footnotes to Evolution," "Matka and Kotik," "Care and Culture of Men," "The Innumerable Company," "Imperial Democracy," "Animal Life," "Animal Forms" (with V. L. Kellogg and H. Heath); "The Strength of Being Clean," "Standeth God Within the Shadow," "To Barbara" (verse), "The Philosophy of Despair," "The Blood of the Nation," "Food and Game Fishes of North America" (with B. W. Evermann), "A Guide to the Study of Fishes," "Voice of the Scholar," "The Call of the Twentieth Century"; also numerous papers on ichthyology in proceedings of various societies and government bureaus.

Joseph. In Scripture, one of the twelve patriarchs, the favorite son of Jacob, born in Mesopotamia about, 1525 B. C. He was sold by his envious brothers and taken to Egypt as a slave, but rose to be prime minister. Also the name of the husband of Mary, mother of the Saviour. Two German emperors bore this name. James I., born in 1676, was made King of Hungary and of the Romans, and succeeded his father Leopold I. as emperor in 1705, and died in 1711. James II., born in 1741, succeeded his father, Francis I., in 1764, and died in 1790.

Joshua, or Hoshea, son of Nun; commander of the Israelites after the death of Moses, led them into the Holy Land, and obtained many victories over the tribes of Canaan.

Josiah succeeded his father, Amon, as King of Judah in 641. He died in a war with Pharaoh Necho, King of Egypt, in 609 B. C.

Joubert, Petrus Jacobus, born in 1831; one of the triumvirate who organized a Transvaal revolt against the British Government in 1880, held the chief command in the engagements at Laing's Nek, Ingogo River, and Majuba Hill. In 1899, was commander-in-chief of the Boer forces in the war with England. Died, 1900.

Joule, James Prescott, born in 1818; electrician, pupil of Dalton; made discoveries in electro-magnetism, and, in 1849, established his theory of the mechanical equivalent of heat. Died, 1889.

Jourdan, Jean Baptiste, Comte, born in 1762; French marshal; served in the wars of the republic, and, in 1799, was appointed commander of the army of the Danube by the Directory. In 1797, he became president of the Council of Five Hundred, but was expelled in 1799, owing to his opposition to Bonaparte, by whom, however, he was afterwards employed. He subsequently followed the fortunes of Joseph Bonaparte. He owed his title to Louis XVIII., but joined in the revolution of 1830. Died, 1833.

Jowett, Benjamin, M. A.; born in 1817; successively scholar, fellow, and master of Balliol College, Oxford, and Regius professor of Greek since 1855. His works include translations of Plato and Thucydides. He contributed a paper on "The Interpretation of Scripture to 'Essays and Reviews.'" Died, 1893.

Judas Iscariot, one of the twelve disciples chosen by Jesus, and the one who betrayed his Master for thirty pieces of silver; after which he very properly "went and hanged himself."

Jude, St., or Judas. One of the apostles, brother of St. James the Less, and supposed to have been martyred at Berytus about the year 80. The "Epistle" which bears his name is one of the smallest and least important books in the canon of the New Testament, and one whose canonical authority has been much disputed both in ancient and quite modern times.

Judith. A heroine of Israel, whose name has been given to one of the Apocryphal books of the Bible. She is said to have by artifice gained the tent of the Assyrian general, Holofernes, at Bethulia, whom she decapitated during his sleep; bearing away his gory head in triumph. The most general opinion among critics is that the history of Judith is a Jewish romance, written, probably in the age of the Maccabees, in order to animate the Jews in their struggles against the Assyrians.

Judson, Harry Pratt, president of the University of Chicago, since 1906; born in Jamestown, N. Y., December 20, 1849; graduate of Williams, 1870 (A. M., 1883; LL. D., 1893; LL. D., 1903, Queens University, Canada). Teacher and principal of high school, Troy, N. Y., 1870-85; professor of history, University of Minnesota, 1885-92; was co-editor of "American Historical Review." Author: "History of the Troy Citizens' Corps," "Caesar's Army," "Caesar's Commentaries" (co-editor), "Europe in the Nineteenth Century," "The Growth of the American Nation," "The Higher Education as a Training for Business," "The Latin in English," "The Mississippi Valley" (in Shaler's United States of America), "The Young American," "The Government of Illinois," "Graded Literature Readers" (co-editor), "The Essentials of a Written Constitution."

Jugurtha, a king of Numidia at the end of the Second Century, B. C., was the grandson of Massanissa, but illegitimate, and brought up by Micipsa, along with his own sons, and left a share of the kingdom by him at his death. He, however, murdered both of them, and made himself master of the whole. The Romans, therefore, made war upon him, and after a long struggle he was conquered, made prisoner, led in triumph by Marius, and starved to death in prison at Rome, 106 B. C.

Julian, Julianus Flavius Claudius, surnamed "The Apostate," a nephew of the Emperor Constantine the Great, was born in Constantinople, A. D. 331, and was Emperor of Rome from A. D. 361 to 363. He was one of the best emperors of the later period, but he is chiefly remembered by his unwise and necessarily unsuccessful attempt to restore the effete and dethroned paganism of Rome.

Julius II. Pope (Cardinal Giuliano della Rovere), born in 1441; distinguished as a warrior and patron of the arts; became pope in 1503. He endeavored to extend the papal territory, and, after driving Caesar Borgia from the Romagna, formed the league of Cambray with Maximilian and Louis XII. against Venice (1508). After the submission of the republic, he turned his arms against France (1510). In 1511, the Holy Alliance was formed, and the French army driven back over the Alps, Died, 1513.

Justinian I., Emperor of the East; born in 483; succeeded his uncle, Justin I., in 527. He issued a famous code, forming, together with his collections of "Pandects," "Institutiones," and "Novellæ," the "corpus juris civilis." Under Justinian, the boundaries of the empire were much extended through the victories of Belisarius and Narses over the Persians, Vandals, and Ostrogoths. Died, 565.

Juvenal, a celebrated Latin poet and satirist, born in Aquinum; a friend of Martial and contemporary of Statius and Quintilian; his satires, sixteen in number, are written in indignant scorn of the vices of the Romans under the empire, and in the descriptions of which the historian finds a portrait of the manners and morals of the time (42-120).

Kant, Immanuel, a celebrated German philosopher; born in Königsberg, 1724; was the son of a saddler, of Scotch descent, and fortunate in both his parents. He entered the university in 1740, as a student of theology; gave himself to the study of philosophy, mathematics, and physics; wrote an essay, his first literary effort, on "Motive Force" in 1747; settled at the university as a

private lecturer on a variety of academic subjects in 1755; became professor of logic and metaphysics in 1770, when he was 46, and continued till his retirement, in 1797, from the frailties of age, spending the last seventeen years of his life in a small house with a garden in a quiet quarter of the town. His great work, the "Kritic of Pure Reason," was published in 1781, and it was followed by the "Kritic of Practical Reason" in 1788, and the "Kritic of Judgment" in 1790. His works inaugurate a new era in philosophic speculation, and by the adoption of a critical method dealt a death-blow to speculative dogmatism on the one hand and skepticism on the other. It was, he says, the skepticism of Hume that first broke his dogmatic slumber, so that had Hume not been, he had not been, and the whole course of modern thought different. Kant by his critical method did for philosophy what Copernicus did for astronomy; he centralized the intelligence in the reason or soul, as the latter did the planetary system in the sun. Kant was a lean, little man, of simple habits, and was never wedded. Died, 1804.

Kaufmann, Angelica, painter; born in Chur in 1741; in 1766 went to England. She was elected a member of the Royal Academy in 1768. In 1783 she married the Venetian artist, Antonio Zucchi, and thenceforward lived in Italy. Died, 1807.

Kean, Charles John, actor; born in Waterford, in 1811; son of Edmund Kean; was educated at Eton; made his debut at Drury Lane in 1827, but did not establish his reputation till 1833, when he acted as Hamlet, Richard III., and Sir Giles Overreach. In 1842 he married Miss Ellen Tree, a celebrated actress. From 1850 to 1859 he was manager of the Princess's theater. Died, 1868.

Keats, John, born in 1795; poet, son of a livery stable proprietor in Finsbury; was educated at a school at Enfield, where he formed a lifelong friendship with the master's son, Charles Cowden Clarke. He was apprenticed to Mr. Hammond, a surgeon at Edmonton, whom he left in 1812, but pursued his studies at Guy's Hospital till 1817. He then determined to follow the bent of his genius. "Endymion," his first long poem, appeared in 1818. "Isabella or the Pot of Basil," "Hyperion," "Lamia," "The Eve of St. Agnes," and the "Odes," were written in the course of the next two years. Meanwhile, an hereditary tendency to consumption had developed itself, and in September, 1820, he was forced to undertake a journey to Italy. He was accompanied by his friend, Joseph Severn, who nursed him tenderly during his last illness at Rome, where he died in February, 1821.

Keller, Joseph Warren, ex-speaker United States Congress; born in Clark County, O., January 30, 1836; educated at Antioch College; since 1858 in law practice, Springfield, O.; served in Ohio volunteers in field, 1861-65; four times wounded; declined appointment as lieutenant-colonel 26th United States Infantry, 1866; member Ohio Senate, 1868-69; department commander Ohio G. A. R., 1868-70; vice-commander-in-chief G. A. R., 1871-72; delegate to Republican National Convention, 1876; member of Congress, 1877-85, and since 1905 (speaker, 1881-83); president of Lagonda National Bank, Springfield, O., since 1873. Appointed and served, 1898-99, as major-general volunteers in war against Spain. Author: "Slavery and Four Years of War."

Kellar, Harry, public entertainer (magician); born in Erie, Pa., July 11, 1849; graduated from Painesville, O., High School, 1866. When a young man was assistant to the "Fakir of Ava," the magician; joined Davenport Brothers, spirit mediums, as business manager, 1867; with Fay toured South America and Mexico as Fay & Kellar, 1871-73; with Ling Look and Yamadura, under name of Kellar, Ling Look & Yamadura, royal illusionists, played through South America, Africa, Australia, India, China, Philippine Islands, and Japan (Ling Look and Yamadura died in China, 1877); then with J. H. Cunard, as Kellar & Cunard, traveled five years through India, Burma, Siam, Java, Persia, Asia Minor, Egypt, and Mediterranean ports; since 1884 has performed in leading American cities.

Kelly, Howard Atwood, physician; born in Camden, N. J., February 20, 1858; graduated from University of Pennsylvania, B. A., 1877, M. D., 1882; founder of Kensington Hospital, Philadelphia; associate professor of obstetrics, University of Pennsylvania, 1888-89; professor gynecology and obstetrics, Johns Hopkins University, 1889-99; professor of gynecology, Johns Hopkins University. Author: "Operative Gynecology" (two volumes), "The Vermiform Appendix and Its Diseases," also about 270 articles in medical journals.

Kemble, The, a celebrated family of actors. (1) John Philip, born in 1757; son of Roger Kemble, manager

of a traveling company; was educated for the Roman Catholic priesthood. His first appearance in London was in the character of Hamlet at Drury Lane (1783). He was manager of Drury Lane 1788-1802, and part proprietor of Covent Garden, 1803-17. Died in 1823. (2) Sarah Kemble (Siddons). (3) Charles, born in 1775; educated at the college of Douay, appeared at Drury Lane in 1794 as Malcolm in Macbeth; in 1803 joined his brother and sister at Covent Garden, of which he was manager for a short time in 1817; visited the United States in 1832; retired from the stage in 1840. Died in 1854. (4) Frances Anna, born in 1811.

Kemp's, Thomas, a born at Kempen, near Düsseldorf; son of a poor but honest and industrious craftsman named Hamerkin; joined, while yet a youth, the "Brotherhood of Common Life," at Deventer, in Holland, and at 20 entered the monastery of St. Agnes, near Zwolle, in Overijssel, where he chiefly resided for seventy long years, and of which he became sub-prior, where he spent his time in acts of devotion and copying manuscripts, that of the Bible, among others, in the Vulgate version of it, as well as in the production of works of his own, and in chief the "Imitation of Christ," a work that in the regard of many, ranks second to the Bible, and is thought likely to survive in the literature of the world as long as the Bible itself; it has been translated into all languages within, as well as others outside, the pale of Christendom.

Kent, James, an eminent American jurist; was born in Putnam County, N. Y., 1763. His most important work, "Commentaries on American Law," is a production of great literary merit, and a work of high authority in England as well as in the United States. Died, 1847.

Kepler, Johann, astronomer; born of poor parents at Württemberg, in 1571; studied at Tübingen under Mastlin; in 1603 became professor of astronomy at Graz; in 1600 visited Tycho Brahe at Prague, became his assistant, and on his death (1601), was appointed mathematician to the Emperor Rudolph. He was afterwards professor at Linz, and finally at Rostock. He died in 1630, at Ratisbon. Two of Kepler's laws—that enunciating the elliptic form of the planetary orbits, and that of the "equable description of areas"—are contained in "Astronomia Nova." His third law, that the squares of the periodic times of the planets are as the cubes of their mean distances, is to be found in the "Harmonice Mundi."

Key, Francis Scott, author of "The Star Spangled Banner," was born in Maryland, United States, in 1780. He wrote the words that have immortalized him when he saw the national flag floating over the ramparts of Baltimore in 1814. Died, 1857.

King, Henry Churchill, president of Oberlin College, since November 19, 1902; Hillsdale, Mich., September 18, 1858; graduate from Oberlin, 1879; Oberlin Theological Seminary, 1882 (B. D.); post-graduate from Harvard, 1882-84 (A. M., 1883), Berlin, 1893-94; (D. D., Oberlin, 1897, Western Reserve, 1901, Yale); Tutor in Latin, Oberlin Academy, 1879-81; tutor of mathematics at Oberlin College, 1881-82; associate professor of mathematics at Oberlin College, 1884-90; associate professor of philosophy, 1890-91; professor, 1891-97; professor of theology since 1897; dean of Oberlin College, 1901-02. Author: "Outline of Erdmann's History of Philosophy," "Outline of the Microcosm of Hermann Lotze," "The Appeal of the Child," "Reconstruction in Theology," "Theology and the Social Consciousness," "Personal and Ideal Elements in Education," "Rational Living," also various pamphlets on philosophy, etc.

Kinglake, Alexander William, historian; born in Taunton, 1811, educated at Cambridge; was called to the bar in 1837; represented Bridgewater in parliament, 1857-68. His works are "Eöthen," and the "History of the War in the Crimea." Died, 1891.

Kingsley, Charles, an English divine and popular writer; born in Devonshire, 1819. His best works embrace the well-known politico-economic novel "Alton Locke"; the powerful philosophical romance "Hypatia," and the historical novel entitled "Westward Ho!" His writings have gone through several English and American editions. In polemics, he belonged to the "broad" school of the Anglican Church. Died, 1875.

Kipling, Rudyard, author; born in Bombay, India, December 30, 1865; educated in United Services College, North Devon, England; assistant editor of "Civil and Military Gazette and Pioneer in India," 1882-89; traveled in Japan, China, Africa, and Australia. Author: "Departmental Duties," "Plain Tales from the Hills," "Soldiers Three," "In Black and White," "The Story of the Gadabys," "Under the Deodars," "Phantom Rickshaw," "Wee Willie Winkie," "Life's Handicap," "The Light that Failed," "Barrack-Room Ballads," "Many

Inventions," "The Jungle Book," "Second Jungle Book," "The Seven Seas," "Captains Courageous," "The Day's Work," "Stalky & Co.," "From Sea to Sea," (reprint of newspaper articles), "The Brushwood Boy," "The Absent-Minded Beggar," "Kim of the Rishi," "Just So Stories," "The Five Nations," "Traffics and Discoveries."

Kirkland, James Hampton, chancellor, Vanderbilt University, since 1893; born in Spartanburg, S. C., September 9, 1859; graduate Wofford College, 1877 (A. M., 1878; Ph. D., Leipzig, Germany, 1885; LL. D., University of North Carolina, 1894; D. C. L., University of the South, 1902); professor of Greek and German, Wofford College, 1881-83; traveled and studied abroad, 1883-86; professor of Latin, 1886-93, Vanderbilt University. Editor: "Satires and Epistles of Horace." Has published monographs, philological review articles, etc.

Kleber, Jean Baptiste, born in 1754, distinguished himself in the wars of the French revolution, and under the Directory became commander of the army of the Sambre and Meuse. He went to Egypt with Napoleon, and on his departure remained behind as commander-in-chief. He captured Cairo, and entered into an alliance with Murat Bey, but was assassinated by an Arab. Died, 1800.

Knapp, Martin Augustine, chairman of Interstate Commerce Commission; born in Spafford, N. Y., November 6, 1843; graduate from Wesleyan University, Connecticut, 1868 (A. M., 1871, LL. D., 1892; honorary A. M., Syracuse University, 1892); admitted to New York bar, 1869; since 1870 in practice at Syracuse, N. Y.; corporation counsel, 1877-83. Appointed interstate commerce commissioner by President Harrison, February, 1891; reappointed by President Cleveland, February 1897; reappointed by President Roosevelt, December, 1902; elected chairman of the commission January, 1898.

Kneisel, Franz, musician, director of Kneisel Quartette; born in Rumania (of German parentage), 1865; studied music; violin instruction under Grün and Hellmesberger; was concert master of Hofburg Theater Orchestra, Vienna; later of Bille's Orchestra, Berlin; concertmaster Boston Symphony Orchestra; especially prominent as violin soloist.

Knox, John, a Scottish divine and ecclesiastical reformer; born in Haddingtonshire, 1505, and was educated at St. Andrews University. In 1542, Knox became a fiery advocate of the Reformed faith, thereby encountering much persecution. In 1551, he was appointed chaplain to Edward VI. of England, and subsequently passed three years at Geneva, where he enjoyed the friendship of Calvin. On his return to his native country in 1559, he became the leading spirit of the Reformation of Scotland, and induced the parliament to abjure the papal authority, and to declare Protestantism the religion of the land. Tried for treason at the instance of Queen Mary, he was acquitted; and assisted in bringing about that sovereign's abdication, together with the consequent elevation of her brother, the Earl of Murray, as Regent of Scotland. Died, 1572.

Knox, Philander Chase, lawyer, United States senator, Pennsylvania, since June 10, 1904; born in Brownsville, Pa., May 6, 1853; graduate of Mt. Union College, Ohio, 1872 (LL. D., University of Pennsylvania, 1905); admitted to bar, 1875. Was assistant United States district attorney, Western District of Pennsylvania, 1876-77; resigned; has been engaged in practice since 1877, with James H. Reed under firm name of Knox & Reed, representing many large corporations, including the Carnegie Company; attorney-general of the United States, 1901-04.

Koch, Robert, M. D., born in 1843 in the Hartz Mountains; between 1879 and 1883 succeeded in identifying the germs of cattle disease, of consumption and of cholera. In 1884, he established the existence of a bacterium as the cause of cholera. In 1885, he was appointed professor of hygiene at Berlin; in 1890, brought out a lymph for the cure of consumption.

Kohlsaat, Hermann Henry, capitalist, journalist; born in Albion, Edwards County, Ill., March 22, 1853; educated in common schools, Galena, Ill., and Skinner School, Chicago. Began business life as cash boy and later cashier in dry-goods store; traveling salesman for two other firms and, 1875-80, for Blake, Shaw & Co., wholesale bakers; became junior partner, 1880, and had charge of a bakery lunch established by this firm; bought that branch of the business, 1883, and greatly enlarged it; H. H. Kohlsaat & Co. (incorporated) now owning several large establishments and also doing large wholesale bakery business; part owner in Chicago "Inter-Ocean," 1891-93; editor and publisher "Chicago Times-

Herald," 1894 (amalgamated with "Chicago Record," becoming "Record-Herald," 1901); also of "Chicago Evening Post," 1894-1901; retired from the "Record-Herald," 1902. Has been largely identified with local real-estate operations; presented statue of General Grant to City of Galena, Ill.; has contributed largely to charities; member of National Republican Convention, 1896.

Kosciusko, Tadeusz, born in 1746; Polish patriot; came to America and became aide-de-camp to Washington; in 1789, received the appointment of major-general in the Polish army; distinguished himself in the campaign of 1792, especially at the battle of Dubienka; after the submission of Stanislaus retired to Leipzig; on the outbreak of the second Polish rising, in 1794, was chosen commander-in-chief; although scantily supplied with troops, succeeded in expelling the Russians from Poland, but was finally overwhelmed at Maceiowice in October. He was imprisoned in a fortress near St. Petersburg, but released on the accession of the Emperor Paul. In 1798, he settled in France. He died in Soleure, Switzerland, 1817.

Kossuth, Louis, born in 1802; Hungarian patriot; in 1847, was returned to the diet as deputy for Pesth; became leader of the party of reform; held the office of minister of finance in the new Hungarian ministry, and after its fall was made president of the committee of national defense. In April, 1849, the Hungarians declared themselves independent, and Kossuth carried on the government from Dedreczin, and afterwards from Szegedin; but, finding it impossible to act in conjunction with Görgey, he resigned in August, 1849. The ill-success of his countrymen in the field compelled him soon afterwards to flee to Turkey, whence he removed to England in 1851. During his late years he lived chiefly in Italy. Died, 1894.

Kotzebue, August Friedrich Ferdinand von, born in 1761; German man of letters; in 1781, was attached to the Prussian embassy at St. Petersburg; afterwards entered the Russian Service, and in 1817, was sent by the Tsar as consul-general to Prussia. His Russian sympathies made him unpopular in Germany, and led to his assassination. His works embrace a wide range of subjects. Died, 1819.

Krapotkin, Prince Peter, born in 1842, Russian Nihilist; in 1871 went to Belgium and Switzerland; became an internationalist; after his return to Russia, lectured under assumed names; was imprisoned, but escaped to Switzerland; has since taken part in the agitation carried on throughout Europe against existing social arrangements.

Krauskopf, Joseph, rabbi, lecturer, author; born in Ostrowo, Prussia, January 21, 1858; came to America, 1872, and worked as clerk at Fall River, Mass.; graduated B. A., University of Cincinnati, 1883; also as rabbi from Hebrew Union College, 1883 (D. D., 1885); soon after graduation accepted call from Hebrew congregation, Kansas City; rabbi of the Reform Congregation Keneeth Israel, Philadelphia, 1887; founded Jewish Publication Society of America; founded, and president since organization, National Farm School, in which Jewish boys are trained in practical and scientific agriculture. Author: "The Jews and Moors in Spain" (lecture); "Evolution and Judaism," "A Rabbi's Impressions of the Oberammergau Passion Play," "The Seven Ages of Man," "Old Truths in New Books," "Society and its Morals," "Some Isms of To-day," "Gleanings from Our Vineyard," "The Service Manual," "The Service Ritual," "The Mourner's Service," "The School Service," "Sunday Lectures."

Kruger, S. J. Paul, born in 1825, Boer statesman; formed with Joubert and Pretorius a provisional government (December, 1881), and shortly afterwards became president of the Transvaal, or South African Republic; held this office during the war with England; was re-elected in 1883, 1888, 1893, and 1898. Died, 1904.

Krupp, Alfred, a metal and steel founder, was born in Essen, where through his father he became the proprietor of a small foundry which grew in his hands into such dimensions as to surpass every other establishment of the kind in the world. The Bessemer process was early introduced into England in the manufacture of steel, which Krupp was the first to employ in the manufacture of guns. The works cover an immense area, and employ 20,000 people, and supply artillery to every government of Europe. Born, 1810; died, 1887.

Ladd, George Trumbull, an American educator; born in Painesville, O., January 19, 1842; he was educated at Western Reserve College and Andover Theological Seminary; was pastor of Spring Street Congregational Church, Milwaukee, Wis., in 1871-79; and professor of philosophy at Bowdoin College in 1879-

81, when he assumed the chair of philosophy at Yale. His works include "Principles of Church Polity," "Doctrines of Sacred Scripture," and "Elements of Physiological Psychology." He lectured on philosophy in India, 1899-1890, and was decorated by the Emperor of Japan.

La Farge, John, artist; born in New York, March 31, 1835; studied architectural decoration; then studied painting with Couture and William M. Hunt. Began painting with religious subjects and decorative work; painted flowers, a few portraits, and many landscapes; for a short time made illustrations for books and magazines; then devoted himself to mural painting, mostly of religious or ecclesiastical character; afterward, was for years, and still is, devoted to the making of stained glass windows, for which he invented the new methods known in Europe as "American," changing and reforming entire art of the glass-stainer, from the making of the new glass by new methods to the painting of same; much of his work is in churches and residences in Boston, New York, Chicago, Cleveland, Philadelphia, Washington, Detroit, and elsewhere. Author: "Lectures on Art," "Letters from Japan," etc. Died, 1907.

Lafayette, Marie Jean Paul Roche Yves Gilbert du Motier, Marquis de, born in 1757; educated at the College of Plessis; took part in the American War of Independence, and was entrusted by Washington with the defense of Virginia; was one of the earliest leaders in the French Revolution, presenting his "Declaration of Rights," to the Constituent Assembly, and receiving the command of the National Guard in July, 1789; retained his post till 1791, but, by opposing mob violence, excited the animosity of the Jacobins, which was increased by his letter denouncing the clubs (June, 1792). After vainly attempting to make his presence felt in Paris, he fled over the frontier, but was captured by the Austrians (August, 1792), and remained in prison till released by Napoleon in 1797. After holding office under the Bourbons, he took part in raising Louis Philippe to the throne (1830), but afterwards opposed his government. Died, 1834.

La Follette, Robert Marion, lawyer, statesman; born in Primrose, Wis., June 14, 1853; graduate of University of Wisconsin, 1879 (LL. D. 1901); admitted to bar, 1880. District attorney, Dane County, 1880-84; member of Congress, 1885-91; as member of Ways and Means Committee, he took prominent part in framing McKinley Bill; well known as orator. Led movement to nominate all candidates by direct vote, adopted by State, 1904; also to tax railway property by same system and at same rate as other taxable property, adopted, 1903; also for the control of railway rates within State by State commission; legislature of 1905, pledged to enact such a law. Was elected United States senator, January 25, 1905. Has made important contributions toward railroad and other public reforms.

Lagrange, Joseph Louis, Count, mathematician; of French extraction, born in Turin in 1736; became professor of mathematics in that town at the age of 19. In 1766, he succeeded Euler as director of the Academy of Berlin. Removing to Paris in 1787, he remained there during the Revolution, and was afterwards patronized by Napoleon. Died, 1813.

Lamartine, Alphonse Marie Louis du Prat de, born in 1790; French author and statesman; held diplomatic posts in Italy from 1820 to the accession of Louis Philippe; traveled for two years in the East; returning in 1833, sat in the National Assembly till the revolution of 1848, when he became minister of foreign affairs, but retired, owing to what he considered the absence of liberal views among his colleagues. His chief prose works are "Histoire des Girondins," "Souvenirs d'Orient," "Le Tailleur de Pierres de St.-Point," and "Histoire de la Restauration." Died, 1869.

Lamb, Charles, essayist and poet, was born in the Temple, where his father was clerk to a bench, in 1775; received his education at Christ's Hospital; became a clerk in the South Sea House, and afterwards in the India House, retiring on a pension in 1825. His life was devoted to the care of his sister, Mary, who always remained subject to fits of insanity. Most of the "Essays of Elia" were published in the "London Magazine" between 1820 and 1826; others appeared in the "New Monthly" and the "Englishman's Magazine." Lamb also wrote "Rosamund Gray," "John Woodville," a drama; studies of the Elizabethan dramatists, and many short lyrics. He died in Edmonton in 1834.

Landor, Walter Savage, born in 1775, descended from a good Warwickshire family; was educated at Rugby and Trinity College, Oxford, where he won a high reputation as a scholar. He next passed three years of solitude in South Wales, and there wrote "Gebir," "Simoniada" appeared in 1806, and "Count Julian"

in 1811. In the same year he married, and his agricultural schemes at Llanthony Abbey resulting in failure (1814), went abroad with his wife, with whom he lived very unhappily at Florence and other places, and at last separated from her in 1835. From 1837 to 1858, he resided at Bath, and from 1858 till his death at Florence in 1864. The first series of "Imaginary Conversations" was published in 1824.

Landis, Kenesaw Mountain, jurist; born in Millville, O., November 20, 1866; educated in public schools, Logansport, Ind.; graduate of Union College of Law, 1891; admitted to bar, 1891. Practiced law in Chicago, 1891-1905, except for two years while he was private secretary to secretary of state Gresham; judge of United States District Court, northern district of Illinois, since March 28, 1905.

Landseer, Sir Edwin Henry, youngest son of John Landseer, was born in London in 1802; showed his genius at an early age; was elected A. R. A. in 1825, and R. A. in 1830; declined the presidency in 1865. Among his chief works are "High Life" and "Low Life," "Bolton Abbey in the Olden Time," "The Old Shepherd's Chief Mourner," "Dignity and Impudence," "Night," "Morning," and "Children of the Mist." Died, 1873.

Langtry, Lillie, actress; born in Island of Jersey in 1852; daughter of Rev. W. C. Le Breton; married (1), 1874, Edward Langtry (died, 1897); (2) 1899, Gerald, son of Sir Hugo de Bathe. Debut, Haymarket Theater, London, 1881, as Hester Grazebrook, in "An Unequal Match"; made American tours, appearing as Pauline in "The Lady of Lyons"; Rosalind in "As You Like It"; has also appeared in "A Wife's Peril," "Nos Intimes," "Esther Sandraz," "As in a Looking Glass," etc.; twice leased Prince's (now Prince of Wales) Theater, London; became naturalized citizen of United States, 1887; leased Princess's Theater, London, 1891.

Lankester, Edwin Ray, F. R. S., LL. D.; born in 1847; zoologist, educated at St. Paul's School and Christ Church, Oxford; was appointed professor of zoology and comparative anatomy in University College, London, in 1874, and reelected in 1882. He has written "Fossil Fishes of the Old Red Sandstone," "Degeneration: a Chapter in Darwinism," and other works, and is chief editor of the "Quarterly Journal of Microscopic Science."

Laotze (i. e., the old Philosopher), a Chinese sage; born in the province of Ho-nan about B. C. 565, a contemporary of Confucius, who wrote the celebrated "Tao-te-King" canon, that is, of the Tao, or divine reason, and of virtue, one—and deservedly so on account of its high ethics—of the sacred books of China; he was the founder of one of the principal religions of China, Confucianism and Buddhism being the other two, although his followers, the Tao-ists, as they are called, are now degenerated into a set of jugglers.

Laplace, Pierre Simon (lah-plah's), an illustrious French astronomer and mathematician; born in Calvados, in 1749. In 1768, through the influence of D'Alembert, he became professor of mathematics in the military school, and, in 1785, a titular member of the Academy of Sciences. In 1796, his "Exposition of the System of the Universe" attracted general attention, and opened to him the doors of the French Academy. In 1817, he became president of that body, and was created a marquis. The grandest monument of his genius—the "Traité de la Mécanique Céleste"—has placed him as a scientist among the greatest names either of ancient or modern times. Died, 1827.

Lardner, Dionysius, born in 1793, son of a Dublin solicitor; educated in Cambridge; in 1827, became professor of natural history in the University of London, and set on foot his "Cabinet Encyclopædia" for which he wrote most of the scientific articles. Died, 1859.

Lardner, Nathaniel, born in Hawkhurst, in Kent, A. D. 1684; a distinguished Unitarian minister, celebrated as the author of "The Credibility of the Gospel History" (published between 1730 and 1757). He was also the author of a "Collection of Jewish and Heathen Testimonies." These two works—the value of which in Christian apologetics can hardly be over-estimated—occupied Dr. Lardner for the greater part of forty-three years. Died, 1768.

Larned, Josephus Nelson, author, librarian; born in Chatham, Ont., May 11, 1836; educated in public schools, Buffalo; on editorial staff of "Buffalo Express," 1850-72; superintendent of education, Buffalo, 1872-73; superintendent of Buffalo library, 1877-97. Author: "Talks About Labor," "History for Ready Reference," "Talk About Books," "History of England for Schools," "A Multitude of Councilors," "Primer of Right and Wrong," "History of the United States for Secondary

Schools," "Seventy Centuries—a Survey." Editor: "The Literature of American History."

Lassalle, Ferdinand, founder of Socialism in Germany; born in Breslau, in 1825, of Jewish parents. He attended the universities of Breslau and Berlin; became a disciple of Hegel; took part in the Revolution of 1848, and was sent to prison for six months. In 1861, his "System of Acquired Rights" started an agitation of labor against capital, and he was again thrown into prison; and on his release founded an association to secure universal suffrage and other reforms. Returning to Switzerland, he conceived a passionate affection for a lady betrothed to a noble whom she was compelled to marry, and whom he challenged, but by whom he was mortally wounded in a duel in 1864.

La Salle, Robert Cavalier de, born in 1643; French traveler; traced the Mississippi to its source in 1682; in 1684, attempted to establish a fortified settlement on the Gulf of Mexico, but was murdered by his companions, in Texas, in 1687.

Laurier, Sir Wilfrid, G. C. M. G., the first French-Canadian Premier of the Dominion, was born in St. Lin, 1841, and educated for the bar. Called in 1864, he rose rapidly in his profession, and in 1871 was elected as a liberal to the Quebec Provincial Assembly. In 1874 he was elected to the Federal Assembly, and his high personal character, his undoubted loyalty and attachment to the connection of the colony with Great Britain, together with his great oratorical powers, which have earned for him the title "Silver-tongued Laurier," soon gave him high rank in the Liberal party. On the retirement of Mr. Blake in 1891 he was chosen as leader of the Liberal party, and at the general election of 1896 he led his followers to a notable victory. His tariff legislation during 1897, giving Great Britain the benefit of preferential trade with Canada, aroused much enthusiasm both in the colony and at home, and he was warmly welcomed when he went to London to attend the Jubilee festivities. He was then appointed a member of the privy council and made a G. C. M. G. In 1900 he again secured the approval both of the dominion and of the empire by the prompt despatch of Canadian troops to aid the mother country in South Africa, and led his party to another victory at the polls in November. He attended the colonial conference and the coronation in England in 1902. He was again returned to power in 1904, and in 1907 attended the imperial conference in London.

Lavoisier, Antoine Laurent, born in 1743; French chemist; after studying at the Collège Mazarin, obtained the post of farmer-general (1769), and devoted much of his time to chemical experiments, resulting in a new theory of chemistry, the "anti-phlogistic" (1773-75), on which the modern science is based. In arriving at his results he was much indebted to Priestley, who made known to him his discovery of oxygen. During the revolution he was accused of adulterating tobacco, and guillotined in 1794.

Lawson, Thomas William, banker and broker, yachtsman, author; born in Charlestown, Mass., February 26, 1857; educated at public schools, Cambridge, Mass.; in business as banker and broker since April, 1870; now senior member of firm of Lawson, Arnold & Company, members of Boston and New York Stock Exchanges; Republican; prominent as yachtsman; contributor to magazines, reviews, and newspapers since 1875. Author: "The Krack," "A History of the Republican Party" (large illustrated 4to.), "Secrets of Success," "Collection of Poems and Short Stories from Magazines," "Lawson History of the America's Cup" (for private distribution), "Frenzied Finance."

Lea, Henry Charles, author; born in Philadelphia, September 19, 1825; private education (LL. D., University of Pennsylvania, Harvard and Princeton); member many learned societies in Europe and the United States, in publishing business, 1843-80; then retired. Author: "Superstition and Force," "An Historical Sketch of Sacerdotal Celibacy in the Christian Church," "Studies in Church History," "A History of the Inquisition of the Middle Ages," "Chapters from the Religious History of Spain," "Formulary of the Papal Penitentiary in the Thirteenth Century," "A History of Auricular Confession and Indulgences in the Latin Church," "The Moriscos of Spain: Their Conversion and Expulsion," "History of the Inquisition of Spain," also many articles in periodicals.

Lee, Robert Edward, born in 1807; American general, educated at West Point, entered the corps of engineers; served in the Mexican War; was superintendent of West Point, 1852-55; after the outbreak of Civil War was placed in command of the army of Northern Virginia (May, 1862); repelled McClellan, and relieved Richmond; defeated the Northern army near Manassas Junction; was beaten by McClellan at Antietam (Sep-

tember); gained the victories of Fredericksburg (December), and Chancellorsville (May, 1863); was defeated at Gettysburg (July); fought several battles against Grant, and defended Petersburg for ten months; became general-in-chief of the Confederate Armies in February, 1865; surrendered at Five Forks in April. Died, 1870.

Le Gallienne, Richard, journalist, author; born in Liverpool, Eng., January 20, 1866; in business seven years, but abandoned it for literature; for some time in journalism and literary work in United States. Editor: "Isaak Walton, The Compleat Angler," "Hazlitt's 'Liber Amoris,'" "Hallam's 'Remains,'" Author: "My Ladies," "Sonnets," "Volumes in Folio," "George Meredith," "The Book-Bills of Narcissus," "English Poems," "The Religion of a Literary Man," "Prose Fancies," "Robert Louis Stevenson and Other Poems"; retrospective reviews. "Prose Fancies," second series, "The Quest of the Golden Girl," "If I were God," "Omar Khayyam, a Paraphrase," "The Romance of Zion Chapel," "Young Lives," "Worshiper of the Image," "Travels in England," "The Beautiful Lie of Rome," "Kudyard Kipling, a Criticism," "The Life Romantic," "Sleeping Beauty," "Mr. Sun and Mrs. Moon," "Perseus and Andromeda," "An Old Country House," "Odes from the Divan of Hafiz," "Painted Shadows."

Lenormand, Francis, a distinguished archaeologist; born in Paris in 1837; a man of genius and of vast learning; his chief works: "Manuel d'Histoire Ancienne de l'Orient," "Lettres Assyriologiques," "Les Premières Civilisations," and "Les Sciences Occultes en Asie." Died, 1883.

Leo I., "the Great," Pope; born circa, 309; succeeded Sixtus III. in 440; zealously opposed the Manichæans and Pelagians, and secured the condemnation of the Eutychian heresy at the general council of Chalcedon (451). He induced Attila to spare Rome (452), but it was pillaged by Genseric (455). Died, 461.

Leo X., Pope (Cardinal Giovanni de' Medici); son of Lorenzo the Magnificent; born in Florence in 1475; was banished with his family in 1497; traveled in Germany and Flanders, and formed a friendship with Erasmus; on his return to Italy became legate to Julius II.; was taken prisoner at Ravenna (1512); became pope in 1513. In his efforts to extend the papal dominions he allied himself at one time with France, at another with the empire. In 1515 he signed the famous concordat with Francis I. His pontificate is one of the most brilliant periods in the history of art and literature, and is also memorable as the time when the Reformation began. Died, 1521.

Leo XIII. (Giacchino Pecci), Pope; son of Count Ludovico Pecci; born in Carpineto, in the Papal States, in 1810; educated at the Collegio Romano and the Academy of Noble Ecclesiastics; administered the districts of Benevento, Spoleto, and Perugia successively; became archbishop of Damietta, 1843, and bishop of Perugia, 1846; was nuncio to the King of the Belgians, 1843-46; was created a cardinal, 1853, and in 1877, became chamberlain. He was elected pope as representative of the Moderates in 1878, and down to his death in 1903, was one of the foremost figures of modern times.

Leonidas was a Spartan King who succeeded his brother, Cleomenes I., 492 B. C. In 480, he, with a few soldiers, defended the Pass of Thermopylae against Xerxes and his Persian Army, nearly a million strong, the Greeks perishing to a man after killing five times their number.

Leopardi, Giacomo, modern Italian poet; born near Ancona, 1788; a precocious genius; an omnivorous reader as a boy, and devoted to literature; of a weakly constitution, he became a confirmed invalid, and died suddenly; had sceptical leanings; wrote lyrics inspired by a certain somber melancholy. Died, 1837.

Leopold I., King of the Belgians, son of the Duke of Saxe-Coburg; born in 1790; in his youth served in the Russian Army; visited England in 1815, and married Princess Charlotte, who died two years later; he declined the throne of Greece in 1830, but accepted that of the Belgians in 1831, and proved a wise, firm, constitutional sovereign; in 1832 he married the French Princess Louise; he was succeeded by his son Leopold II. Died, 1865.

Leopold II., born in 1835; son of the preceding; married the Archduchess Maria of Austria in 1853, and succeeded his father in 1865. His reign has been marked by the quarrels of the Liberals and Roman Catholics. He is the leading spirit of the International African Association.

Le Sage, Alain Rene, French novelist and dramatist; born in Sarzeau in Brittany, in 1668; educated in the Jesuit College at Vannes; went to Paris in 1692; learned Spanish, and translated or imitated several Spanish dramas;

in 1707 produced "LeDiable Boiteux," and soon afterwards a comedy called "Turcaret." "Gil Blas" was published in three parts. Died, 1747.

Lesseps, Ferdinand, Vicomte de, born in 1805; after holding various consular posts, went to Madrid as ambassador in 1848. While in Egypt, in 1854, he proposed the scheme of the Suez canal to Saïd Pasha, and, a company having been formed, the canal was begun in 1859, and completed in 1869. He was also author of the Panama canal scheme. Died, 1894.

Lessing, Gotthold Ephraim, born in Kamenz, Lusatia, in 1729; educated at the Meissen Fürstenschule and the university of Leipzig; between 1749 and 1760 lived chiefly in Berlin, where Mendelssohn and Nicolai were his literary associates; was secretary to General Tauentzien, governor of Silesia, 1760-65; in 1770 became librarian to the Duke of Brunswick at Wolfenbüttel. By publishing Reimarus's "Wolfenbüttel Fragments," of which he was supposed to be the author, he incurred the hostility of the Church. His chief works are "Laokoon," a treatise on art, and the following dramas: "Miss Sarah Sampson," a tragedy, "Minna von Barnhelm," a comedy, "Emilia Galotti," a tragedy, and "Nathan der Weise." Died, 1781.

Lieber, Franz (Léber), born in Berlin, 1800; after suffering imprisonment for his political opinions, came to America (1827), and was made professor of history in Columbia College, South Carolina. He edited the "Encyclopedia Americana" (1829-33), and wrote "Political Ethics" (1838), "Civil Liberty and Self-Government" (1853), "Guerilla Parties" (1862), etc. Died, 1872.

Liebig, Justus (Lébig), Baron von, chemist, born in Darmstadt, 1803; studied at Bonn and Erlangen; went to Paris, and attracted the attention of Humboldt by a paper on fulminic acid; was appointed professor at Giessen (1824), where his laboratory became celebrated, and afterwards at Munich (1852). Among his chief works are "Organic Chemistry in its Application to Agriculture" (1840), and "Annalen der Chemie," edited in conjunction with Wöhler. Died, 1873.

Lillokalani, Lydia Kamekeha, ex-queen of the Hawaiian Islands; born in Honolulu, H. I., December 2, 1838; made vice-regent when King Kalakaua left Hawaii, and after his death in San Francisco, was proclaimed queen, January 29, 1891. Her attempts to abolish the constitution of 1887 and restore absolute monarchy, though abandoned, led to her dethronement, January 30, 1892. A provisional government was set up, and although President Cleveland declared in favor of her restoration to the throne, her efforts in that direction failed. After her dethronement she came to the United States. Hawaii being annexed to United States, July, 1898, she returned to the islands in August, 1898.

Lincoln, Abraham, sixteenth President of the United States; born near Hodgenville, Kentucky, February 12, 1809. His father was a poor farmer, who, in 1816, removed from Kentucky to Indiana. In the rude life of the backwoods, Lincoln's entire schooling did not exceed one year, and he was employed in the severest agricultural labor. He lived with his family in Spencer County, Indiana, till 1830, when he removed to Illinois, where, with another man, he performed the feat of splitting 3,000 rails in a day, which gave him the popular sobriquet of "the Rail-splitter." In 1834, he was elected to the Illinois Legislature. At this period, he lived by surveying land, wore patched homespun clothes, and spent his leisure hours in studying law. He was three times re-elected to the legislature; was admitted to practice law in 1836; and removed to Springfield, the State capital. In 1844, he canvassed the State for Mr. Clay, then nominated for president. Mr. Clay was defeated, but the popularity gained by Lincoln in the canvass secured his own election to Congress in 1846, where he voted against the extension of slavery; and in 1854 was a recognized leader in the newly-formed Republican party. In 1855, he canvassed the State as a candidate for United States senator, against Mr. Douglass, but without success. In 1856, he was an active supporter of Mr. Fremont in the presidential canvass, which resulted in the election of Mr. Buchanan. In 1860, he was nominated for the presidency by the Chicago Convention over Mr. Seward, who expected the nomination. The non-extension of slavery to the Territories, or new States to be formed from them, was the most important principle of his party. There were three other candidates — Mr. Douglass of Illinois, Northern Democrat; Mr. Breckenridge of Kentucky, then vice-president, and afterwards a general of the Confederate army, Southern Democrat; and Mr. Bell of Tennessee, Native American. With this division, Mr. Lincoln received a majority of votes over any of the other candidates, though a million short of an absolute major-

ity; every Southern and one Northern State voted against him. He was installed in the president's chair, March 4, 1861. His election by a sectional vote and on a sectional issue hostile to the South, was followed by the secession of eleven Southern States, and a war for the restoration of the Union. As a military measure, he proclaimed, January 1, 1863, the freedom of all slaves in the rebel States; and was re-elected to the presidency in 1864. The war was brought to a close April 2, 1865; and on the 15th of the same month, Lincoln was cut off by the hand of an assassin. He was characterized by a strong sense of duty and great firmness. Died, 1865.

Lind, Jenny (Madame Otto Goldschmidt), the Swedish nightingale, was born at Stockholm in 1821. Giving evidence of her power of song in childhood, she was put under a master at 9; too soon put to practice in public, her voice at 12 showed signs of contracting, but after four years recovered its full power, when, appearing as Alice in "Robert le Diable," the effect was electric; henceforth her fame was established, and followed her over the world; in 1844 she made a round of the chief cities of Germany; made her first appearance in London in 1847, and visited New York in 1851, where she married, and then left the stage for good, to appear only now and again at intervals for some charitable object; She was plain looking, and a woman of great simplicity both in manners and ways of thinking. Died, 1887.

Linnaeus, or Carl von Linne (Lin-né-us or Lin-nä'), was born at Rashult, in the province of Smaland, Sweden, May 24, 1707. He was the most eminent naturalist of his day, for many years professor of physic and of botany in the University of Upsala. He was the son of a clergyman, whose real name was Bengtsson, but who, before going into orders, had assumed the name of Linnaeus. He ascribed his love for the study of botany to his father, who was himself attached to the culture of his garden; but this love for the science was greatly developed during his residence, as a student, at the University of Lund, where a physician, who possessed a good library and a museum of natural history, received the young student into his house, and gave him every assistance and encouragement. In 1730, having received some further education at the University of Upsala, he became assistant and deputy to Rudbeck, then professor of botany in the university; and ten years later, having in the meantime traveled through Holland, France, England, and other countries, in pursuit of knowledge, he was himself appointed to the professorship at Upsala, which he held nominally till his death. He was the author of numerous works, of which the most important was "Systema Naturæ," which was first printed in 1735 in twelve folio pages, and grew by 1768 into three volumes. In 1757 he was raised to the rank of the nobility, and then took the name of Von Linné. Although his system of classification has long been to a large extent superseded, he undoubtedly prepared the way for other discoverers, and he did much to advance the study of natural science. His library and herbarium were purchased for the sum of one thousand pounds by Sir J. E. Smith, and were by him presented to the Linnæan Society of London, which was instituted in 1788, and incorporated in 1802, for the promotion of the science to which Linnaeus had devoted his life. Died at Upsala, 1778.

Lippi, Fra Filippo (Lip-pé), Italian painter, born in Florence, 1412; left an orphan, was brought up in a monastery, where his talent for art was developed and encouraged; went to Ancona, was carried off by pirates, but procured his release by his skill in drawing, and returning to Italy practiced his art in Florence and elsewhere, till one day he eloped with a novice in a nunnery who sat to him for a Madonna, by whom he became the father of a son no less famous than himself; he prosecuted his art amid poverty with zeal and success to the last; distinguished by Ruskin as the only monk who ever did good painter's work; he had Botticelli for a pupil. Died, 1469.

Liszt, Franz (Abbé) (list), one of the most brilliant pianists who ever lived, was born October 22, 1811. He made his first appearance at a concert in his ninth year. He took orders and received the tonsure on April 25, 1865. In 1871 his native country of Hungary granted him a pension of £600 a year, and in 1876 he was named director of the Hungarian Academy of Music. One of his two daughters married Richard Wagner. Died, 1886.

Livingston, Edward, American lawyer and statesman, was born 1794; was elected to Congress in 1794; followed his profession at New Orleans (1804-23); represented that town in Congress (1823-9); entered the Senate (1829); became secretary of state (1831);

was minister to France (1833-5). He wrote a celebrated "System of Penal Law" (1833). Died, 1836.

Livingstone, David, born at Blantyre, in Lanarkshire, 1813. He worked during childhood and youth in a cotton mill; was sent to South Africa by the London Missionary Society in 1840; resided for several years at various stations near the Limpopo, discovering Lake Ngami in 1849, and penetrating to the Makololo country in 1851; in 1853-4 crossed Africa from the Zambesi to the Congo, and in 1854-6 made his way from Loando to Quilimane, following the course of the Zambesi, and discovering the Victoria Falls; went to England in 1856, and published "Missionary Travels" (1857); returned to Africa as consul at Quilimane in 1858; explored the country north of the Zambesi (1858-64), discovering Lakes Shirwa and Nyassa, and in 1865 published his "Narrative" of the journey; undertook his third expedition in 1866, and spent the remainder of his life endeavoring to ascertain whether the Nile flowed from the water-system west of Lake Tanganyika. In November, 1871, he was found by Stanley at Ujiji. He died of dysentery at the village of Ilala, 1879.

Livy, or **Titus Livius**, was born at Patavium (*Padua*), in the north of Italy, 59 B. C. He was the most eminent of the Roman historians, distinguished for the animation of his narrative and for the purity of his style, though not for the reliableness of his historical statements. His "History of Rome" was written partly at Rome and partly at Naples, under the patronage of the Emperor Augustus. It consisted originally of 142 books; but of these only thirty-five have come down to us, and some of these in a very imperfect state. Of all but two, however, we possess fragments, with short epitomes from another hand. The "History" (or, as it was called by its author, "The Annals of the Roman People") begins with the foundation of the city, and ends with the death of Drusus, the younger brother of the Emperor Tiberius, 9 B. C. He died, 17 A. D.

Locke, John, an English philosopher; born in Wrington, in Somersetshire, in 1632. He was educated at Westminster and Christ Church College, Oxford. When, in 1672, Lord Shaftesbury was appointed lord chancellor, he made Locke secretary of presentations, and at a later period, secretary to the Board of Trade. As a philosopher, Locke stands at the head of what is called the Sensational School in England. His greatest work is the "Essay on the Human Understanding," in which he endeavors to show that all our ideas are derived from experience, that is, through the senses, and reflection on what they reveal to us. He is best known to Americans as the author of a peculiar constitution for North Carolina, which included orders of nobility, etc. It was never put in operation. He died in 1704.

Lockwood, Belya Ann Bennett, lawyer; born in Royalton, N. Y., October 24, 1830; daughter of Lewis Johnson and Hannah (Green) Bennett; graduate of Genesee College, Lima, N. Y., 1857 (A. M., Syracuse University, 1871); taught school, 1857-63. Worked for and secured passage by Congress of bill giving women employés of the government equal pay for equal work. Studied law in Washington; graduate of National University, B. L., 1873; admitted to District of Columbia bar; secured passage of a bill admitting women to United States Supreme Court, 1879; was admitted under it, February, 1879; also to United States Court of Claims; has been engaged in many important law cases, several before United States Supreme Court; for years identified with claims of North Carolina Cherokee Indians vs. United States; now has bill before Congress to remove intruders from Cherokee Nation; was one of attorneys in probate of will of Myra Clarke Gaines. Took a course of lectures, University Extension, in Oxford, England, 1890. Prominent in temperance, peace, and woman suffrage movements; nominated, 1884 and 1888, by Equal Rights Party for president of United States; commissioned by State Department to represent United States at Congress of Charities and Corrections, Geneva, Switzerland, 1896; one of committee appointed by Federation of Women's Clubs which secured law giving equal property rights for women and equal guardianship of their children in District of Columbia. Elected, January 18, 1901, president of Woman's National Press Association; president of District of Columbia Woman Suffrage Association; secretary of American branch international peace bureau; lecturer. Writer on peace and arbitration and on political and social subjects; has prepared amendments to Statehood bill before Congress, granting suffrage to women in Oklahoma, Arizona, and New Mexico.

Lodge, Henry Cabot, author, statesman, was born in Boston, Mass., May 12, 1850; received a private school and collegiate education; was graduated from Harvard College in 1871; studied law at Harvard Law

School and graduated in 1875, receiving the degree of LL. B.; was admitted to the Suffolk bar in 1876; in the same year — 1876 — received the degree of Ph. D. from Harvard University for his thesis on "The Land Law of the Anglo-Saxons"; profession, that of literature; has published, 1877, "Life and Letters of George Cabot"; 1881, "Short History of the English Colonies in America"; 1882, "Life of Alexander Hamilton"; 1883, "Life of Daniel Webster"; 1885, edited the works of Alexander Hamilton in nine volumes; published, in 1886, "Studies in History"; 1889, "Life of Washington," two volumes; 1891, "History of Boston" (in the Historic Towns Series, published by the Longmans); 1892, "Historical and Political Essays," and a volume of selections from speeches; 1895, in conjunction with Theodore Roosevelt, "Hero Tales from American History"; 1897, "Certain Accepted Heroes," and Other Essays; 1898, "Story of the Revolution," two volumes; 1899, "Story of the Spanish War"; "A Fighting Frigate, and Other Essays"; 1906, "A Frontier Town, and Other Essays"; is a member of the Massachusetts Historical Society, of the Virginia Historical Society, of the American Academy of Arts and Science, of the New England Historic and Genealogical Society, and of the American Antiquarian Society, and has received the degree of doctor of laws from Williams College, Clark University, Yale University, and Harvard University; was permanent chairman of the Republican National Convention which met in Philadelphia, June 19, 1900; chairman of the committee on resolutions of the Republican National Convention of 1904 at Chicago; was a member of the Commission on Alaskan boundary appointed by President Roosevelt; regent of the Smithsonian Institution during service in the House of Representatives, and appointed regent again in 1905; served two terms as member of the House of Representatives of the Massachusetts Legislature; was elected to the 50th, 51st, 52d, and 53d Congresses; was elected to the Senate, 1893, and reelected in 1899 and 1905.

Loeb, Jacques, professor of physiology, University of California, since 1902; born in Germany, April 7, 1859; graduate of Aseanisches Gymnasium, Berlin; studied medicine at Berlin, Munich and (graduate M. D.) Strassburg, 1884. State examiner, Strassburg, 1885; assistant in physiology, University of Würzburg, 1886-88; same, University of Strassburg, 1888-90; biological station, Naples, 1889-91; associate in biology, Bryn Mawr, 1891-92; assistant professor of physiology and experimental biology, 1892-95; associate professor, 1895-1900; professor, 1900-02, University of Chicago. Author: "The Heliotropism of Animals and Its Identity with the Heliotropism of Plants," "Physiological Morphology," "Comparative Physiology of the Brain and Comparative Psychology," "Studies in General Physiology." Also various monographs relating to artificial parthenogenesis and kindred topics.

Long, John Luther, lawyer, author; born in Pennsylvania, 1861. Author: "Madam Butterfly," "Miss Cherry Blossom of Tokyo," "The Fox-Woman," "The Prince of Illusion," "Naughty Nan," "Heimweh, and Other Stories."

Longfellow, Henry Wadsworth, an American poet; born in Portland, Maine, February 27, 1807; was graduated at Bowdoin College. While at college he distinguished himself in the study of modern languages, and published some short poems. In 1826 he accepted the professorship of modern languages at Bowdoin, being allowed three years to prepare himself for the post by study and travel in Europe. He was elected to the chair of modern languages and literature in Harvard University. After spending another year in Europe, studying Scandinavian languages and literature, he entered on his professorship in 1836. In 1839 he published "Hyperion, a Romance"; "Evangeline" in 1847; in 1855 "Hiawatha"; in 1858 the "Courtship of Miles Standish"; in 1863 "Tales of a Wayside Inn"; in 1871 the "Divine Tragedy"; in 1874 "The Hanging of the Crane." He resigned his chair at Harvard in 1854. In 1868-69 he again traveled in Europe, and received the degree of LL. D. and D. C. L., from the Universities of Cambridge and Oxford, respectively. His poems are equally popular on both sides of the Atlantic. He died in Cambridge, Mass., March 24, 1882.

Lorimer, George Horace, editor-in-chief of "Saturday Evening Post" since March 17, 1899; born in Louisville, Ky., October 6, 1868; educated at Mosely High School, Chicago; college course at Colby and Yale; Author: "Letters From a Self-Made Merchant to His Son," "Old Gorgon Graham."

Lotze, Rudolf Hermann (*lôt'se*), a German philosopher; born in Bautzen, Saxony, May 21, 1817. He ranks among the first of metaphysicians, and has given impulse to the recent development of physiological

psychology. Among his works are "Metaphysik" (1841), "Universal Pathology" (1842), "Logik" (1843), "On the Idea of Beauty" (1846), "Medical Psychology" (1852), "Microcosmus," "Ideas for a History of Nature," and "Humanity" (1856), "System of Philosophy" (1874-84). He died in Berlin, July 1, 1881.

Louis IX. was born in 1215 and succeeded his father, Louis VIII., in 1226, under the regency of his mother, Blanche of Castile. In 1229 the Albigensian crusade was brought to a close, and the county of Toulouse was incorporated with the French kingdom. Henry III. of England made some unsuccessful attempts to recover his lost provinces, and in 1259 yielded them to Louis. In 1248 Louis embarked on a crusade, wasted much time in Egypt (1248-50), where he was taken prisoner, and returned from Palestine in 1254 without having effected anything. He undertook another crusade in 1270, but died whilst besieging Tunis. He was canonized in 1297. Died, 1270.

Louis XII., son of Charles, Duke of Orleans, was born in 1462, and succeeded Charles VIII. in 1498. He laid claim to the kingdom of Naples and the duchy of Milan. In 1499 he invaded Italy, and gained possession of Milan. With the assistance of Ferdinand of Aragon, he conquered Naples in 1500, but, having quarreled with his ally, was expelled in 1503. In 1508 he united with Ferdinand, Pope Julius II., and the Emperor, in the League of Cambrai against the Venetians. In 1511 Ferdinand joined Julius in the Holy League against the French, who were finally driven out of Italy by means of the Swiss in 1513. In the same year Henry VIII. invaded France, and was successful at Guinegate. In 1499 Louis married Anne, Duchess of Brittany, widow of Charles VIII. By his good government he earned the title of "Father of his People." Died, 1515.

Louis XIV. was born 1638, and succeeded his father, Louis XIII., in 1643. His mother, Anne of Austria, was nominally regent, but the government was carried on by Cardinal Mazarin. France was then engaged in the Thirty Years' War, in which Truene and Condé gained many successes. Peace was made in Germany by the Treaty of Westphalia (1648), but the war with Spain continued till 1659, when Louis married Maria Theresa, daughter of Philip IV. The unpopularity of Mazarin's government occasioned the rising of the Frondeurs (1648-53). After his death (1661) Louis conducted the government himself, following in financial matters the advice of his minister, Colbert. In 1665, he invaded the Netherlands, in violation of his agreement with Spain. In consequence of his attack on Holland (1672), an alliance against him was formed between Spain, the Emperor, and the Elector of Brandenburg, and a war ensued, which was terminated by the Treaty of Nimègue (1678). The Edict of Nantes was revoked in 1685. Another war, undertaken to check the growing power of France, was concluded by the Peace of Ryswick (1697). In 1700 began the war of the Spanish Succession between the rival claimants, Philip, Duke of Anjou, Louis' grandson, and the Archduke Charles of Austria, who was supported by England and the Emperor. Died, 1715.

Louis XV., "le Bien-Aimé," was born 1710, and succeeded his great-grandfather, Louis XIV., in 1715, under the regency of Philip, Duke of Orleans, a nephew of Louis XIV. Fleury became chief minister in 1725. The King's attempt to enforce the claim of his father-in-law, Stanislas, to the throne of Poland, led to a war with the Emperor (1733-38). France was next engaged in the war of the Austrian Succession, Louis supporting the claim of Charles, Elector of Bavaria (1741-48). During the Seven Years' War (1756-63) France was deprived by England of most of her colonial possessions. Died, 1774.

Louis XVI. was born in 1754, and succeeded his father, Louis XV., in 1774. In 1770 he had married Marie Antoinette, daughter of Maria Theresa of Austria. The finances were in complete disorder, and Louis was not fortunate in his choice of ministers. Turgot and Necker were in turn dismissed, and succeeded by the incapable Calonne (1783-87) and Loménie de Brienne (1787-88). Necker was recalled, and advised the summoning of the States-General (May, 1789), who were reconstituted as the National Assembly. The dismissal of Necker was followed by the taking of the Bastille (July 14th). In October a mob of armed women from Paris made an attack on the palace of Versailles, after which the king and queen were forcibly removed to Paris. In 1789 the States-General of the kingdom were convoked at Versailles. This body, which had always been formidable to monarchical authority, had not been convoked since 1614. Within a few days it was superseded by the National Assembly, which assumed the whole legislative authority; and then began the revolution, which culminated (so far as the king was con-

cerned) in the insurrection of June, 1792, and in his execution on the scaffold in January of the following year. Died, 1793.

Louis Philippe I. (-le-leep'), born in Paris, 1773, was the eldest son of Louis Philippe, Duc d'Orleans, commonly known as "Philippe Egalité." While still young he was educated in opinions of advanced political liberalism, and served in the revolutionary army against the Austrians, 1792, under Dumouriez, in whose conspiracy he became involved. After an exile of many years, during which he resided in many countries (the United States among others) and underwent singular vicissitudes, this prince shared in the restoration of his house, 1814; and, after the fall of the elder Bourbon dynasty in 1830, was popularly elected to the vacant throne, under the title of "King of the French." Louis cultivated peaceful relations with foreign powers, sought to strengthen his throne by gaining the support of the middle classes, and repressed all the extreme parties by what became known as the "Juste-milieu" policy. The extreme democrats hated him, and frequent attempts were made upon his life. The country prospered under his government, but a demand for reform in the electoral system became loud and general, and this being unwisely opposed by the king and his minister Guizot, led to the revolution of February 22, 1848, when Louis Philippe, deserted by all, fled with his queen to England, where he died, 1850.

Low, Seth, an American educator; born in Brooklyn, N. Y., January 18, 1850; was graduated at Columbia University in 1870; made a member of his father's mercantile firm in 1875; mayor of Brooklyn in 1881-1885; and was elected president of Columbia University in 1890. In 1895, he erected for that institution a grand university library at a cost of \$1,175,000. In honor of President Low's generosity and in accord with his desire, the trustees of Columbia founded twelve scholarships in the university for Brooklyn boys and the same number in Barnard College for Brooklyn girls, and also agreed to found eight annual scholarships. In 1899, he was appointed by President McKinley a member of the delegation to represent the United States at the International Peace Conference at The Hague. Mr. Low was an unsuccessful candidate for mayor of Greater New York in 1897; and was again nominated for the office on a fusion ticket in 1901. He was elected after a hard-fought campaign, and was again candidate on the fusion ticket in the autumn of 1903, and defeated.

Lowell, James Russell, an American poet, was born in Boston in 1819. He was educated at Harvard University. His "Legend of Brittany" appeared in 1844. In 1845, he published a prose work entitled "Conversations on Some of the Old Poets." His "Fable for Critics" and "The Biglow Papers," are racy with humor. In 1854, he succeeded Longfellow as professor of modern languages at Harvard; from 1857 to 1862, was editor of the "Atlantic Monthly," and from 1863 to 1872, of the "North American Review." He received the degree of LL. D. from the English University of Cambridge in 1874. Was Minister to Great Britain 1880-85. In 1869, he published "Under the Willows, and Other Poems"; and "The Cathedral," an epic; in 1870, a collection of essays; in 1871, "My Study Windows"; in 1886, "Democracy"; in 1888, "Political Essays." He died in Cambridge, 1891.

Loyola, Ignatius de (lô-yô'lah), was born at Loyola, in the Basque Provinces, 1491. He was an ecclesiastic of the Roman Catholic Church, the founder of the order of Jesuits, or "the Society of Jesus." He was the son of a Spanish nobleman (Bertram de Loyola), and was early devoted to the profession of arms; but, being wounded at the siege of Pampeluna, in Navarre, in 1521, he devoted his life to the service of the Virgin, made a pilgrimage to Jerusalem, and founded the Society of Jesus on his return to Paris, in 1534. The institution of the society was confirmed by a bull of Pope Paul III., September 27, 1540; and in the following year Loyola was appointed the first General of the order. He was canonized by Pope Gregory XV. in 1622. Died in Rome, 1566.

Lubbock, Sir John, born in 1834; entered parliament as a liberal in 1870; in 1871 passed the bank holidays act; has represented London University since 1880. He has published "Pre-Historic Times," "Ants, Bees and Wasps," "The Pleasures of Life," etc.

Lucretius, Titus Carus, Roman poet of the First Century B. C.; wrote "De Rerum Natura," in hexameter verse, expounding the epicurean system of philosophy. He is said to have been driven mad by a love philtre, administered by his wife, and to have committed suicide.

Luke, St., one of the four Evangelists, was the associate of St. Paul in his mission of evangelizing the Gen-

tiles. The time and place of his nativity are not known with any approach to authenticity, though it would appear from the style and substance of his writings that he must have received a liberal scholarship. Besides the Gospel called after him, he was author of "The Acts of the Apostles," written, like the former, in Greek.

Luna, Antonio, a Filipino insurgent; born in Manila, Philippine Islands, about 1854; was educated in Europe; returned to Manila early in 1898; became editor of "La Independencia"; and was the first minister of war in the so-called government of Aguinaldo. Later he was placed in command of the Filipino insurgents with the rank of general. He was killed presumably by the guards of Aguinaldo, who, fearing that Luna might attempt to assassinate him, gave orders to his body guard to kill any one regardless of his rank who should try to enter his headquarters. Luna endeavored to pass this guard and was shot dead, June 8, 1899.

Luther, Martin, one of the greatest of religious leaders, was born in Eisleben, Germany, 1483. After studying at the University of Erfurt, he became a monk of the Augustine order in that city, and in 1507, was made professor of philosophy at Wittenberg. After a visit to Rome, in pursuance of a vow he had made, his ideas regarding the tenets and practices of the Roman Church underwent a gradual change. In 1512, he began openly to declare his heterodox views upon scriptural theology. These views, embodied in his celebrated "ninety-five propositions," at once plunged him into bitter controversy and exposed him to as bitter persecution. He soon found friends, however, among some of the most powerful of the German princes. Summoned by the pope to defend his opinions, through the intervention of the Elector of Saxony, it was arranged that a hearing should be given to Luther at Augsburg, before the papal legate. That interview was held, and it decided nothing. Luther then continued his public discussions, and also gave vent to his polemic innovations in writings—one of which, the "De Captivitate Babylonica Ecclesie," created so great a sensation that a papal bull was issued, condemning to a public *auto-da-fé* it and others of his productions. Luther, however, finding that the crisis had come, proceeded to the walls of Wittenberg, attended by a number of his friends and disciples, there burned the pope's bull, and by that act dis severed forever his remaining ties with the Church of Rome. After this Luther became the spokesman of a propaganda whose labors never rested till the spirit of the Protestant religion had taken deep and lasting root throughout Northern Germany, and thence extended among her Scandinavian neighbors. Cited to appear before the Diet of Worms, 1521, Luther appeared there, attended by a retinue of the Protestant princes and the nobles of Germany, and after ably pleading his cause—that of religious liberty—before the Emperor Charles V. in person, he was seized, on his returning home, at the instigation of his friend, the Elector of Saxony, and carried to the castle of Wartburg, where he remained for a period of ten months. Returning then to Wittenberg, he doffed his monastic character, married, published his translation of the New Testament in 1522, and his German version of the Old Testament in 1534. The closing years of the life of Luther were passed in comparative tranquillity. Died, 1546.

Lyell, Sir Charles, geologist, was born in Forfarshire in 1797; educated at Oxford; was called to the bar in 1825, but abandoned the legal profession in 1827; after traveling on the Continent, and contributing papers to the "Transactions" of the Geological Society, published "Principles of Geology" (1830-3), which substituted the Huttonian doctrines for the old "catastrophic" theory, thus raising geology to the rank of a branch of inductive science. He became president of the Geological Society in 1836, and again in 1850. He visited America in 1841 and 1845, and published narratives of both expeditions, written in a popular style. In 1863 appeared "The Antiquity of Man," in which he gave his assent to the Darwinian theory. Died, 1875.

Lytton, Edward George Earle Lytton Bulwer-Lytton, Lord, an eminent English novelist, was born in Norfolk, of an ancient family, in 1805. In 1826, he graduated at Cambridge, and published, in 1827, his first novel, "Falkland." In the year following "Pelham" appeared—a work which placed him at once in the first rank of contemporary writers of fiction. Thenceforward his literary career was one of meteoric brilliancy; novel after novel, drama after drama, flowed from his pen almost without intermission. For a quarter of a century he reigned the great master of English fiction—the successor to Scott, the predecessor of Dickens. In 1866 he was created a peer of the realm. Among his principal novels are: "The Disowned," "Devereux," "Paul Clifford," "Eugene Aram," "The Pilgrims of the Rhine,"

"The Last Days of Pompeii," "Rienzi," "The Last of the Roman Tribunes," "Ernest Maltravers," and its sequel, "Alice, or the Mysteries," "Night and Morning," "Zanoni," "The Last of the Barons," "Lucretia, or the Children of the Night," "Harold, the Last of the Saxon Kings," "The Caxtons," "My Novel," "What Will He Do With It," and "A Strange Story." He is also author of the successful and favorite plays "The Lady of Lyons," "Richelieu," and "Money," and of the poems, "The New Timon," and "King Arthur." Died, 1873.

Macaulay, Thomas Babington, Lord, born in 1800; British historian and statesman; graduated at Cambridge, was called to the bar in 1826, and entered parliament for Calne in 1830, as a Whig. He was secretary at war (1839-41), and paymaster-general (1846-48), and, having represented Edinburgh for many years, was created a peer in 1857. His chief works were "History of England from the Accession of James II.," "Critical Essays," most of which were written for the "Edinburgh Review," and "Lays of Ancient Rome." Died, 1859.

Macchiavelli, Niccolò di Bernardo del, born in 1469; Florentine writer and statesman; son of a jurist of good family; as secretary of state at Florence from 1498 to 1512, went on several important missions, but was deprived and exiled in the latter year by the Medici. His chief works were "Il Principe," "Istorie Fiorentine," "Arte della Guerra," some comedies and poems, and "Discorsi sulla Deche di Tito Livio." In 1521, he again took part in affairs for a short time, but died in poverty, in 1527, a few years later.

Macdonald, Sir John Alexander, distinguished Canadian statesman; born in Glasgow in 1815; was called to the Canadian bar in 1836, and became receiver-general of Canada (1847), commissioner of crown lands (1847-48), attorney-general (1854-62 and 1864-67), prime minister in 1858, government leader in the assembly (1864-67), and minister of militia affairs (1862-65-67). He was chairman of the London Colonial Conference of 1866-67, and more than any other person was responsible for Canadian federation; was head of the new Dominion Government, as minister of justice and attorney-general, from 1867 to 1873, when he resigned on the Pacific Railway charges. From 1873 till his death in 1891, he was premier of the Dominion.

MacKenzie, Alexander, Canadian statesman; born in Perthshire, 1822; early emigrated to Canada, where he became a contractor and journalist. After sitting in the Canadian Parliament for six years, he was elected to the Dominion Legislature, and was also provincial secretary and treasurer in Ontario till 1872. From 1873 till 1878 he was premier and minister of public works for the Dominion. He more than once declined the honor of knighthood. Died, 1892.

MacMahon, Marie Edme Patrice Maurice de, French soldier and statesman of Irish descent; born, 1808; served in the Algerian War of 1830, took part in the expedition to Antwerp in 1832, and in 1855, succeeded to Canrobert's command in the Crimea. For his services in Italy in 1857, he was made Duc de Magenta and marshal of France, and became governor-general of Algeria in 1864. On the outbreak of war with Prussia he was given the command of the first army corps. He shared in the disaster at Woerth, and was in chief command at Sedan, where he was severely wounded and made prisoner. On his return to France in March, 1871, he conducted the siege of Paris against the Communists, and reorganized the army. In 1873, he was named president of the Republic for seven years. In 1877, he began to entertain monarchical designs, but was defeated in the elections, and two years later retired rather than submit to the law against monarchical officers. He continued to live in retirement in Paris until his death in 1893.

Macready, William Charles, actor; born in London, in 1793; educated at Rugby; made his first appearance at Birmingham in 1810, and was engaged at Covent Garden in 1816. He played Richard III. in 1819, and removed to Drury Lane in 1822, and after a tour in the United States, appeared as Macbeth in 1827. He subsequently visited Paris, and held the management of Covent Garden and Drury Lane. In 1849, he nearly lost his life in a riot promoted by the friends of Forrest at the Astor Opera House, New York; and he made his last appearance at Drury Lane in 1851. Died, 1873.

Mac Veagh, Wayne, lawyer; born near Phoenixville, Chester County, Pa., April 19, 1833; graduated from Yale, 1853; admitted to bar, 1856; district attorney, Chester County, Pa., 1859-64; captain of infantry, 1862, and of cavalry, 1863, when invasions of Pennsylvania were threatened; chairman Republican State Committee of Pennsylvania, 1863; United States minister to Turkey, 1870-01; member Pennsylvania, constitutional convention, 1872-74; head of "Mac-

Veagh commission" sent to Louisiana, 1877, by President Hayes to amicably adjust disputes of contending parties there; United States attorney-general in cabinet of President Garfield, 1881, but resigned on accession of President Arthur, resuming law practice at Philadelphia; supported Cleveland for president, 1892; ambassador to Italy, 1893-97; chief counsel of United States in the Venezuelan arbitration before The Hague Tribunal, 1903.

Madison, James, fourth President of the United States; was born in King George, Virginia, March 16, 1751. He graduated at Princeton, N. J., in 1771, and studied law. In 1776, he was a member of the Virginia Convention, and, though too modest for an orator, he became one of the most eminent, accomplished, and respected of American statesmen. He was elected to the Federal Congress in 1779; in 1784, to the Legislature of Virginia, in which he supported the measures of Mr. Jefferson in the revision of the laws, and placing all religious denominations on an equality of freedom without State support. As a member of the convention of 1787, which framed the Federal Constitution, Mr. Madison acted with Jay and Hamilton, and with them wrote the "Federalist." He supported the adoption of the constitution, but opposed the financial policy of Hamilton, and became a leader of the Republican or Jeffersonian party. He declined the mission to France, and the office of secretary of state, but in 1792 became the leader of the Republican party in Congress, and wrote the Kentucky Resolutions of 1798, which contain the basis of the State-rights doctrines. In 1801, Mr. Jefferson having been elected president, Mr. Madison was made secretary of state, which post he held during the eight years of his administration. In 1809, he was elected president. The European wars of that period, with their blockades and orders in council, were destructive of American commerce. The claim of the English Government to impress seamen from American vessels was violently resisted. Mr. Madison vainly endeavored to avoid a war with England, which was declared in 1812, and continued for two years, at a cost of 30,000 lives and 100,000,000 dollars. He was one of the four presidents elected for a second term, during which he approved the establishment of a national bank as a financial necessity—a measure he had opposed and vetoed. In 1817, he retired to his seat at Montpelier, Virginia, where he served as a rector of the University of Virginia, and a promoter of agriculture and public improvements. Without being a brilliant man, he was a statesman of eminent ability and purity of character. He died at Montpelier, January 28, 1836.

Maeterlinck, Maurice, Belgian author; was born in 1862. The following is a list of his works, some of which have been translated into English and have attracted considerable attention: "La Princesse Maleine," "Pelléas et Mélisande," "Alladine et Palomides," "Ag-lavaine et Selysette," "Douze Chansons," "Le Trésor des Humbles," "La Mort de Tintagiles," "L'Intruse," and "La Sagesse et la Destinée." He is also the author of the dramas "Ariane et Barbebleue" and "Sœur Béatrice," "Monna Vanna," and of "Joyzelle."

Magdalene, Mary, a Galilean, belonging to Magdala, on the sea of Galilee, who followed Christ, stood by the cross, prepared spices for His sepulchre, to whom He first appeared after His resurrection, and who is supposed by some recent critics to be the sole voucher for His rising again.

Magellan, Ferdinand, Portuguese navigator; born, 1479; served his country first in the East Indies and Morocco, but dissatisfied with King Manuel's treatment of him, offered himself to Spain; under Charles V.'s patronage he and Ruy Faleiro set out to reach the Moluccas by the west in 1519; he reached the Philippines, and died in battle in Matan; on this voyage he discovered the Magellan Strait, 375 miles long and fifteen miles wide, between the South American mainland and Tierra del Fuego; he gave name to the Pacific from the calm he exceptionally, it appears, experienced on entering it. Died, 1521.

Magoon, Charles E., lawyer, governor; born in Minnesota, December 5, 1861; educated at high school, Owatonna, Minn.; University of Nebraska; admitted to bar, 1882, and engaged in general practice; was judge advocate of Nebraska National Guard; law officer of Bureau of Insular Affairs, War Department, Washington, 1899-1904; general counsel, Isthmian Canal commission, 1904-05; governor Canal Zone, 1905-06; American minister to Panama since 1905-06; since 1906, provisional governor of Cuba. Author: "The Law of Civil Government Under Military Occupation."

Mahan, Alfred Thayer (*ma-han*'), an American naval officer and writer; born in West Point, N. Y., September 27, 1840; was graduated at the United States Naval Academy in 1859; served in the Civil

War; was president of the Naval War College, Newport, in 1886-89 and 1890-93; visited Europe in command of the "Chicago" in 1893, receiving many honors, among them degrees from both Oxford and Cambridge. He was retired at his own request November 17, 1896. During the war with Spain he was a member of the Naval Board of Strategy; and in 1899 was appointed by President McKinley as one of the American delegates to the Universal Peace Conference at The Hague. His chief work, "Influence of Sea Power upon History," with its continuation, "Influence of Sea Power upon the French Revolution and Empire," gave him a world-wide reputation.

Maine, Sir Henry Sumner, F. R. S., D. C. L., born in 1822; English jurist, educated at Cambridge, where in 1847, he became Regius professor of civil law. After being reader at the Temple, he was law member of the council of India for seven years, and in 1870, became Corpus professor at Oxford. His chief works were "Ancient Law," "Village Communities," and "Early History of Institutions," etc. In 1871 he became member of the secretary of state for India's council, and in 1877 master of Trinity Hall, Cambridge. Died, 1888.

Mailbran de Beust, Maria Felleita, born in 1808; French singer, daughter of Manuel Garcia; made her début in the Italian opera in 1825, and soon afterwards married her first husband, from whom she was divorced in 1836, her second being De Beriot, the violinist. She met with much success in "Semiramis," and other operas, making tours in England, the Continent, and the United States. She died from the consequence of a fall while riding. Died, 1836.

Malory, Sir Thomas, flourished in the Fifteenth Century; was the author of "Morte d'Arthur," being a translation in prose of a labyrinthine selection of Arthurian legends, which was finished in the ninth year of Edward IV., and printed fifteen years after by Caxton "with all care."

Malpighi, Marcello, born in 1628; Italian anatomist and chief physician to Pope Innocent XI.; lectured in Bologna, Pisa, and other places, and wrote works on the anatomy of plants, the physiology of the silkworm, and medical subjects. His name was given to the Malpighian genus. Died, 1694.

Malthus, Thomas Robert, F. R. S., born in 1766; English political economist; some time Fellow of Jesus College, Cambridge; published in 1798 his "Essay on Population," afterwards took orders, and held from 1804 the professorship of history and political economy in the East India Company's college, Haileybury. Died, 1834.

Mann, Horace, an American statesman; born in Franklin, Mass., 1796; is chiefly remembered for his untiring efforts in the cause of educational extension and reform, in the suppression of slavery, and in the promotion of temperance. Died, 1859.

Mann, Louis, actor; born in New York, 1865; began acting at 6, at 18 traveling with small companies; later played with the elder Salvini, Lewis Morrison, J. K. Emmett, etc.; then "barn-stormed" in classical drama; played Utterson, the lawyer, in Daniel Bandmann's production of "Dr. Jekyll and Mr. Hyde"; appeared in one of leading rôles in "Incog"; subsequently was original caricaturist of Svengali in "Merry World"; created German comedy parts in "The Strange Adventures of Miss Brown," and in "Girl from Paris"; has since been one of the leading impersonators of these and character rôles; starred five years jointly with Clara Lipman, his wife. Author of short stories.

Mannerling, Mary, actress; born in London, England, April 29, 1870; daughter of Richard and Florence Friend (stage name taken from maiden name of her father's grandmother); educated at private schools; studied for stage under Herman Vesin; went on stage at 15; appeared in "Hero and Leander" at Shaftesbury Theater, London; toured English provinces two years, playing Shakespearean rôles; then leading parts in "Sowing the Wind"; "The Late Mr. Costello," "Called Back" (revised for English provinces); etc.; came to United States under management of Daniel Frohman; American debut at Parsons' Theater, Hartford, Conn., November 20, 1896, in "The Courtship of Leoni"; New York debut, Lyceum Theater, four days later; has since appeared in leading rôles in modern drama; married, May 2, 1897, J. K. Hackett.

Manning, Henry Edward, Cardinal, born in 1808; English Roman Catholic prelate, educated at Harrow and Balliol; was some time Fellow of Merton; subsequently took orders, and became Archdeacon of Chichester in 1840. In 1851, however, he seceded to the Roman Church, publishing "Grounds of Faith" next year. In 1865 he succeeded Wiseman as Archbishop

of Westminster, and ten years later was made cardinal. He approved the infallibility dogma of the Vatican Council of 1869, and carried on a controversy with Mr. Gladstone on the subject. He sat on several commissions, and took a leading part in bringing to a conclusion the dock strike of 1889. Died in 1892.

Mansel, Henry Longueville, born in 1820; English philosopher and theologian; one of the strongest opponents of the Broad Church school; was educated at Merchant Taylors and Oxford, where he was successively Waynflete professor of moral philosophy and professor of ecclesiastical history, and in 1858, delivered the Bampton lectures on "The Limits of Religious Thought." He had previously published an edition of Aldrich's "Logic," and several works on metaphysics. His appointment to the deanery of St. Paul's, in 1869, was strongly opposed. Died, 1871.

Mansfield, Richard, actor, was born in Heligoland, Germany, in 1857; studied for East Indian civil service, but came to Boston and opened a studio; studied art in England and later entered theatrical profession. Played small parts in comic opera; came to United States again and appeared at Standard Theater, New York, as Dromezin in "Les Manteaux Noirs." Was very successful in a wide repertoire from Koko in Mikado to Richard III. Head of his own company, and has created such parts as Beau Brummel, Baron Chevalier, and the titular rôles in "Dr. Jekyll and Mr. Hyde." Appeared as Cyranoe de Bergerac in 1899, and has played Shylock, Henry V., Beauceire and Brutus in Julius Cæsar. Married Beatrice Cameron, his leading woman. Author: "Blown Away," "Monsieur," "Ten Thousand a Year," and "Don Juan." Died, 1907.

Mansfield, William Murray, Earl of, was born at Perth, March 2, 1704. He was a distinguished judge, from 1756 to 1788 chief justice of the King's Bench. He was remarkable for his accomplishments and for his eloquence, and was styled by Pope "the silver-tongued Murray"; but his political opinions were not popular, and, in the Gordon riots of 1780, his house in Bloomsbury Square, London, was burnt down by the mob. He was buried in Westminster Abbey. Died, 1793.

Mantell, Robert Bruce, actor; born in Irvine, Ayrshire, Scotland, February 7, 1854; professional début, Rochdale, England, as the Sergeant in "Arrah-na-Pogue," October 21, 1876; came to United States and played juvenile rôles with Mme. Modjeska, 1878; returned to England, and for three years supported Miss Wallis (now Mrs. Lancaster) as leading man. Later appeared in New York as Loris Ippanhoff in "Fedora," with Fanny Davenport; afterward became a star, and has been at the head of his own company in classic and romantic plays, including "Hamlet," "Othello," "Richard III.," "Macbeth," "Romeo and Juliet," "Richelieu," "Lady of Lyons," "Corsican Brothers," "Monbars," "Dagger and Cross," etc.

Marat, Jean Paul (*mah-rah'*), a fanatical democrat, born in Neuchâtel, 1743. His father was an Italian his mother a Genevese; studied and practiced medicine, came to Paris as horse-leech to Count d'Artois; became infected with the revolutionary fever, and had one fixed idea: "Give me," he said, "two hundred Naples braves, armed each with a good dirk, and a muff on his left arm by way of shield, and with them I will traverse France and accomplish the Revolution," that is, by wholesale massacre of the aristocrats; he had more than once to flee for his life, and one time found shelter in the sewers of Paris, contracting thereby a loathsome skin disease; he was assassinated one evening as he sat in his bath, by Charlotte Corday, but his body was buried with honors in the Pantheon by a patriot people, "that of Mirabeau flung out to make room for him," to be some few months after himself cast out with execration. Died, 1793.

March, Francis Andrew, American philologist; born in Milbury, Mass., in 1825; was made professor of English language and comparative philology at Lafayette College, Pennsylvania, in 1857; became president of the American Philological Association in 1873, and took the direction in America of Dr. Murray's "New English Dictionary on Historical Principles," in 1879. His chief works are "Method of Philological Study of the English Language," "Comparative Grammar of Anglo-Saxon," and "Introduction to Anglo-Saxon."

Marconi, Guglielmo, LL. D. Sc., electrical engineer and pioneer of wireless telegraphy, was born in Griffone, near Bologna, in 1874. His father was an Italian, his mother an Irishwoman. He was educated at Leghorn and Bologna Universities. It was at Bologna that his system of wireless telegraphy first attracted attention. In 1896, he visited England, and, with his invention, sent messages across the Bristol Channel from Penarth, near Cardiff, to Weston-super-

Mare. He afterwards set up installations of wireless telegraphy between the South Foreland and the East Goodwin light-vessel, the South Foreland and Wimeux in France, Harwich and Chelmsford. His system was definitely adopted by the Admiralty in 1900. In December, 1901, Mr. Marconi succeeded in communicating across the Atlantic Ocean. In 1902, he set up a station at Glace Bay, Nova Scotia, and in October, 1907, began a public service of wireless telegraphy across the Atlantic.

Marcus Aurelius Antoninus, a Roman emperor; born in A. D. 121, succeeded Antoninus Pius in 161, and was associated with Lucius Verus in the imperial rule. By his successes over the barbarians beyond the Danube, Marcus acquired the title of "Germanicus." Died in Pannonia, during an expedition to the East, in 180. Marcus was not only one of the wisest and best of the Roman emperors, but one of the noblest and most complete characters of the ancient world. He was one of the most eminent members of the Stoic school, and has left us in his "Meditations" a most precious record of his moral and religious sentiments and opinions.

Margaret of Austria, born in 1480; daughter of the Emperor Maximilian and Mary of Burgundy; married first John of Castile, and secondly Philip of Savoy; was made governor of the Low Countries in 1507, and negotiated both the League of Cambrai (1508) and the "Paix des Dames" (1529). Died, 1530.

Margaret of Denmark, born in 1353; succeeded her father, Waldemar III., became queen also of Norway on the death of her husband, Haco VIII., but was soon expelled; recovered Norway in 1387, and, having defeated Albert of Mecklenburg in 1389, united the three Scandinavian kingdoms by the union of Colmar in 1397. Died, 1412.

Margaret of Valois, born in 1492; sister of Francis I., and grandmother of Henri IV.; married first the Duc d'Alençon, and secondly Henri d'Albret, titular King of Navarre; supported the Reformation, and wrote "Miroir de l'Âme Pécheresse," and "Contes et Nouvelles" (the "Heptameron"). Died, 1549.

Maria Theresa, born in 1717; Queen of Hungary, and daughter of the Emperor Charles VI.; married Francis of Lorraine in 1735, and was supported by England against the Elector of Bavaria, who claimed the empire, and was supported by France; carried on the Seven Years' War, with the help of France, against Prussia, who had obtained part of Silesia; took part, against her will, in the first partition of Poland. Died, 1780.

Marie Antoinette, born in 1755; Queen of France, daughter of the Empress Maria Theresa; married Louis XVI. when dauphin, becoming queen four years later; was much calumniated, and became unpopular with the court and people as a foreigner; fled with the king to Varennes in June, 1791, and a year after was imprisoned with him, being finally tried and guillotined in October, 1793.

Marie de' Medici, born in 1573; Queen of France, daughter of Francis of Tuscany; married Henri IV. in 1600, and became mother of Louis XIII., during whose minority she was regent, but was overthrown by Richelieu after a long contest, and left France in 1630. Died, 1642.

Mark, the Evangelist. "John, whose surname was Mark," was the son of Mary, a woman of piety who lived in Jerusalem, where the disciples occasionally assembled at her house for prayer, and was sister to Barnabas. He is also called Marcus. He accompanied the Apostle Paul and Barnabas to Antioch, Cyprus, and Perga in Pamphylia, returned to Jerusalem, and went afterwards to Cyprus, and thence to Rome. Ecclesiastical tradition speaks of a missionary expedition of Mark to Egypt and the west of Africa, of his suffering martyrdom about the year 62 or 66 (the Coptic Church still consider him their founder and first bishop), and of the transmission of his gospel to Venice, which city has chosen him for its patron saint. It is said that he wrote at Rome the gospel which bears his name.

Mark Antony, **Marcus Antonius**, an eminent Roman, was born about 83 B. C. He was one of the most active partisans of Julius Cæsar down to the death of the latter. After the death of Cæsar, he endeavored to succeed to power, but was defeated by Octavianus, the great-nephew of the dictator, and was obliged to cross the Alps. He afterwards became reconciled to Octavianus; and Antony, Octavianus, and Lepidus divided the government between them under the title of Triumvirs. Cicero, who had attacked Antony in his Philippic orations, now fell a victim to Antony. Antony afterwards went to Asia, which he had received as his

share of the Roman world, and there the greater part of his remaining life was spent. There he became captivated by the charms of Cleopatra, and assumed the pomp and ceremony of an Eastern despot. After the sea-fight off Actium (September 2, 31), he fled with Cleopatra to Alexandria, and put an end to his life in the following year, when Octavianus (Augustus) appeared before the city. Died, 30 B. C.

Marlborough, John Churchill, first Duke of; born in 1650; soldier and diplomatist; obtained a commission through the influence of his sister with the Duke of York, and first served under Turenne; deserted James II. at the Revolution, but, though created earl and commander-in-chief by William III., intrigued with his former master; after a period of disgrace, went to The Hague to organize the Grand Alliance; was appointed captain-general and duke under Anne, and won the victories of Blenheim (1704), Ramillies (1706), Oudenarde (1708), and Malplaquet (1709), but was recalled in 1710, and dismissed on a charge of peculation. He was restored by George I. in 1714, but never fully trusted. Died, 1722.

Marlowe, Julia, actress; born in England, in village of Caldecote, Cumberlandshire, August 17, 1870; came, at age of 5, to United States with parents; lived in Kansas two years; moved to Ohio, locating finally in Cincinnati; attended public schools until 12th year; then joined juvenile opera company, which gave "Pinafore," "Chimes of Normandy," and other light operas. Was christened Sarah Frances Frost, but in the juvenile company was called Frances Brough (the latter a family name); later played a child's part in "Rip Van Winkle," and, the next season, played small parts in a company which gave classic dramas in the West; retired from stage and studied three years in New York; made metropolitan debut as Parthenia in "Ingomar"; since November, 1888, has starred in Shakespearean and other tragic and romantic rôles in United States; married Robert Taber, who had been leading man in her company, but afterward secured legal separation.

Marshall, John, an eminent American jurist, was born in Fauquier County, Va., in 1755. He served in several battles of the Revolution, afterwards entered upon the study and practice of the law, and, in 1788, became a member of the convention of his native State, where he took an active part in promoting the settlement of its constitution, and supported the Federalist party. In 1797, he was a colleague of Mr. Gerry and General Pinckney on a special mission to the French Directory; in 1799, entered Congress, and there highly distinguished himself. In the following year he entered upon the duties of secretary of state, and, in 1801, was appointed to the chief-justiceship of the Supreme Court of the United States, a position he filled with high honor to himself and his decisions during the long period of thirty-four years. Marshall was a statesman of the first order. Died, 1835.

Martineau, Harriet, born in 1802; English writer of Huguenot descent, daughter of a Norwich surgeon; visited the United States in 1834, and the East in 1846, publishing descriptive works on her return; wrote "Deerbrook," "The Hour and the Man," and other novels, and many tales for children, and was also author of a condensation of Comte, and "History of England During the Thirty Years' Peace." Died, 1876.

Martineau, James, born in 1805; theologian, brother of the last-named; educated at Norwich and Manchester New College, York; after being minister at little Portland Street Unitarian Chapel for more than twelve years, became principal of Manchester New College, London, in 1869. His chief works are "Essays, Philosophical and Theological," "The Relation Between Ethics and Religion," "Types of Ethical Theory," "A Study of Religion," and "The Seat of Authority in Religion." Died, 1900.

Marx, Karl, German Socialist; born in 1818, in Trèves, where his father was a lawyer; educated at Bonn and Berlin; took an active part in the Liberal movement of 1840, and, after the suppression of the "Rhenish Gazette" (edited by him), he went to Paris, but had to leave it for Brussels on the demand of the Prussian Government. Having been expelled from Belgium, he was invited to Paris, but soon went to Cologne, where he attempted to revive the "Rhenish Gazette." He now settled in London, where he was engaged in literary work, and took an active part in the International Working Men's Association. After the secession of the Anarchist section in 1873, he took little further part in affairs, and died at Hampstead ten years later (1883). His chief work was "Das Kapital."

Mary I., Queen of England; born in 1516, daughter of Henry VIII. by Catherine of Aragon; came to the throne in 1553, after a short struggle with Northumber-

land; restored the abbey lands taken by Henry VIII. and first-fruits to the papacy; deprived and imprisoned the Protestant bishops, and, having married Philip II. of Spain, persecuted the Protestants, contrary to the promises made before her accession. The end of her reign was marked by a war, in conjunction with Spain, against France, when Calais was lost by England. Died, 1558.

Mary of Guise, born in 1515; daughter of Claude, Duc de Guise; married James V. of Scotland in 1538, and became mother of Mary, Queen of Scots; as regent of Scotland, after her husband's death, opposed the Reformation, till deposed in 1559, by the Lords of the Congregation. Died, 1560.

Mary, Queen of Scots, or Mary Stuart, was born at Linlithgow, December 8, 1542; a daughter of James V. of Scotland and Mary of Lorraine, daughter of the Duke of Guise; and, on the death of her father, before she was a week old, his successor to the throne. She was educated at the French court, and when 16 years of age married the Dauphin of France, who, in 1559, succeeded his father, Henry II., under the title of Francis II. Already, however, instigated by Henry II., Francis and Mary had assumed the arms and title of the King and Queen of England, on the ground of Elizabeth's illegitimacy, and this step ultimately proved fatal to Mary. Soon after the death of her husband in 1560, she returned to Scotland, and, five years afterwards (July 29, 1565), married Henry Stuart, Lord Darnley. On the 9th of March, 1566, Darnley murdered David Rizzio, an Italian (whom he accused of improper relations with Mary), in the Palace of Holyrood; and exactly twelve months afterwards he was himself murdered by the Earl of Bothwell, who married Mary after an interval of less than three months. These proceedings, and an attempt on the part of Bothwell to secure the young Prince (afterwards James VI.) who had been born in the previous June, so incensed the nobles that they took up arms against Mary. She was able to lead an army against them, but it melted away without striking a blow on the field of Carberry, near Edinburgh (June 15, 1567); and nothing was then left to her but to abandon Bothwell, and to surrender herself to the Confederated Lords, by whom she was conducted first to Edinburgh, and next to an island castle in Loch Leven, in the county of Kinross. After a year's confinement in this castle, during which she was compelled to sign an act of abdication in favor of her son, she escaped and gathered together her supporters, but was defeated by the Regent Murray at Langside, near Glasgow (May 12, 1568), and then crossed the Solway into England, to place herself under the protection of Elizabeth. By Elizabeth, however, she was treated as a prisoner; was confined successively at Carlisle, Bolton, Tutbury, Wingfield, Coventry, Chatsworth, Sheffield, Buxton, Chartley, and Fotheringay Castle in Northamptonshire; and there at last, after nineteen years of suffering and, as was asserted, of constant conspiracy, she was brought to trial on a charge of complicity in a plot against the life of Elizabeth, and was beheaded. She was at first buried in the cathedral at Peterborough; but in 1612 her remains were removed to Westminster Abbey by her son (at this time James I. of England), and Fotheringay Castle was razed by him to the ground. Died, 1587.

Mather, Cotton, born in 1663; Puritan minister at Boston, where he carried on a witchcraft persecution, and wrote "Memorable Providences Relating to Witchcraft" and other works. Died, 1728.

Mather, Increase, father of the preceding; born in 1639 in Dorchester, Mass., where his father had been pastor; became president of Harvard in 1685, and visited England to obtain a new charter for his colony in 1688. He also wrote many works. Died, 1723.

Matthew, one of the twelve apostles of Christ, was also called Levi, and was the son of Alphaeus. He appears to have resided at Capernaum, where he was a revenue officer or publican. Of his personal history nothing more is recorded in the sacred volume.

Matthias Corvinus, King of Hungary; born in 1443; was proclaimed king in 1458, soon after his release from imprisonment at Prague; maintained the throne against the emperor, and, after having engaged in successful wars with the Turks, received the Bohemian Crown from the pope on condition of extirpating the Hussites. While thus engaged a revolt took place in Hungary, supported by Poland and other powers, which combination he routed. After this he engaged in two wars with the emperor, and captured Vienna in 1485, living there till his death, in 1490.

Maupassant, Henri Guy de (Mô-pâ-son' (g)), French novelist, was born, 1850; pupil and follower of Flaubert, under whom he studied for seven years, beginning

to write in 1880. His chief works are "La Maison Tellier," "Les Contes de la Bécasse," "Yvette," "Contes du Jour et de Nuit," "Pierre et Jean," and "Afloat." In 1891 his mind became deranged. Died at Passy, 1893.

Maurice of Nassau, Prince of Orange, son of William of Orange, "the Silent," was born, 1567; became Stadtholder of the United Provinces and head of the army in 1587, and successfully carried on the struggle against Spain; refused peace in 1598, but consented to a truce in 1609; afterwards supported the Romanists against the Remonstrants, and put to death Barneveldt, and concluded a treaty with France and England just before his death. Died, 1625.

Maximilian I., Emperor of Germany, son of Frederick III., born in 1459; acquired Burgundy and Flanders by marriage, which involved him in a war with France; became emperor on the death of his father, in 1493; became by marriage, Duke of Milan, and brought Spain under the power of his dynasty by the marriage of his son Philip to the daughter of Ferdinand and Isabella; it was he who assembled the Diet of Augsburg at which Luther made appeal to the pope. Died, 1519.

Maximilian II., Emperor; born in 1527, son of Ferdinand I.; married a daughter of Charles V., and was made regent in 1548; was elected King of Bohemia (1562) and of Hungary (1563), and became emperor in the following year; showed great toleration in his religious policy, and tried to unite the German Protestants, besides remonstrating with Philip II. on the subject of his persecutions in the Netherlands. Died, 1576.

Max O'Rell, nom de plume of "Paul Blouet"; born in 1848; French writer, who graduated at Paris in 1864-65; entered the army in 1869, was taken prisoner at Sedan, and fought against the Commune, after which he went to England as a correspondent; was French master at St. Paul's School from 1876 to 1884, and lectured in England and America. He has written "John Bull et son Ile," "Les Filles de John Bull," etc.

Maxwell, James Clerk, F. R. S., physicist; born in Kirkcubright in 1831; after being second wrangler and Smith's prizeman, became professor of natural philosophy at Aberdeen, and of physics and astronomy at King's College (1860-68). In 1871, he was elected professor of physics at Cambridge, where he made numerous researches, resulting in "The Kinetic Theory of Gases," "Electricity and Magnetism," etc. Died, 1879.

May, Sir Thomas Erskine, Right Hon., historian; born in 1815; was called to the bar in 1838, and became clerk to the House of Commons in 1871. He wrote "A Treatise on the Laws, Privileges, Proceedings, and Usage of Parliament," "The Constitutional History of England from 1760 to 1860," and several other works, and was created a peer a few days before his death. Died, 1886.

Mazarin, Giulio, Cardinal, French statesman, of Italian birth, born in 1602. After being in the diplomatic service of Spain, he came to France in 1634, as nuncio-extraordinary of the pope, and, having been favored by Richelieu, joined him five years later in opposition to the papacy, and became naturalized in France. In 1641, he was created cardinal, and, having succeeded to the place of Richelieu soon after, supported Anne of Austria, and, after having twice been exiled by his enemies' influence, was recalled by Louis XIV. in 1653, and remained supreme till his death (1661). He had a share in the Treaty of Westphalia, and negotiated the Treaty of the Pyrenees between France and Spain.

McBurney, Charles, surgeon; born in Roxbury, Mass., February 17, 1843; graduate of Harvard, 1866, A. M., 1869; College of Physicians and Surgeons, New York, 1870. In practice as surgeon, New York, since 1870; professor of clinical surgery, College of Physicians and Surgeons, since 1896. Was consulting surgeon to President McKinley after he was shot by the assassin.

McCall, Samuel Walker, congressman, lawyer; born in East Providence, Pa., February 28, 1851; graduate of Dartmouth College, 1874; admitted to bar, 1876; delegate to National Republican conventions, 1888, 1900; member of Massachusetts House of Representatives, 1888, 1889, and 1892; member of Congress, 8th Massachusetts district, since 1893; member of Committee on Ways and Means. Author: "Life of Thaddeus Stevens" (American Statesmen Series).

McClellan, George Brinton, mayor of New York; born on November 23, 1865, in Dresden, Saxony, where his parents, General George B. (U. S. A.) and Ellen M. (Marcy) McClellan, were on a visit. Graduate of Princeton, 1886; worked as reporter and in editorial positions on New York dailies; treasurer of New York & Brooklyn Bridge, 1889-92; admitted to bar, 1892; president of board of aldermen, New York, 1893 and

1894; member of Congress, 1895-1903; Democrat. Mayor of New York since January 1, 1903.

McClellan, George Brinton, American general; born in 1826; distinguished himself in the Mexican War, and drew up a report on the organization of European armies after a visit to the Crimea; during the Civil War commanded the army of the Potomac, but after indecisive engagements, was superseded in 1862 (November). In 1865, as a Democrat, he was the unsuccessful opponent of Lincoln for the presidency. In 1877, he was elected governor of New Jersey. Died, 1885.

McKinley, William, twenty-fifth President of the United States; born in Niles, O., January 29, 1843. He was educated at the public schools, and at the Poland, Ohio, Academy. In May, 1861, he volunteered for the army, and entered the 23d Ohio Infantry as a private. He served four years, rising by merit and faithfulness to the captaincy of his company, and to the rank of major when mustered out in 1865. He at once began the study of law; in 1867 was admitted to the bar, and commenced practice at Canton, O., where he afterward had his residence. In 1869 he was elected prosecuting attorney for Stark County, where his success attracted local attention. Entering politics, he was elected to Congress in 1876, and was reelected for six successive terms. In 1882, his election was contested, and he was unseated, but triumphantly returned at the next election. His reputation in Congress rests chiefly on the tariff bill that bears his name. It was drawn by him as chairman of the Ways and Means Committee, and passed by the fifty-first Congress. This bill and his able advocacy of it before the House distinguished him as the leader of the Republican party, on the tariff question. The Republican party went before the country in 1892 almost solely on the issue raised by the McKinley tariff, but a reaction against it had set in, and Mr. Cleveland was elected. Meanwhile McKinley failed of reelection in his district, though largely reducing the adverse plurality created by a redistricting that changed the limits of the district. In 1891 he was elected governor of Ohio by a large plurality over former Governor James E. Campbell, a very popular Democrat, and reelected in 1893 in the reactionary tidal wave of politics following a contrary tariff policy, that carried the Republican party back to power in Congress, having a plurality of over 80,000. By this time his name was frequently mentioned as a future candidate for the presidency. In 1895, a systematic canvass in McKinley's behalf was instituted by his supporters, which was continued till the election of 1896. He was nominated and elected by a plurality of 603,514, and an electoral majority of 95, after a campaign of more intense interest than was displayed in any election since the Civil War.

President McKinley's first term is memorable chiefly for the occurrence of the Spanish-American War and its unexpected results. That his policy during 1896-1900 was acceptable was shown by his unanimous re-nomination and reelection in 1900 by a plurality of 349,000 and an electoral majority of 137. His second term began most auspiciously and ended tragically. On September 5, 1901, he visited the Pan-American Exposition in Buffalo, N. Y., that day having been set apart in his honor and called the "President's Day." On the afternoon of the following day, while holding a public reception in the Temple of Music, he was shot twice by Leon F. Czolgosz, an anarchist, who was at once arrested. The wounded president was first taken to the Emergency Hospital on the exposition grounds, for immediate treatment, and then removed to the residence of John G. Milburn, the president of the exposition. Hopes of his recovery were entertained for several days, but on September 13th he began to sink rapidly and died at 2.15 A. M., September 14th. His remains were removed to Washington on September 16th, laid in state in the capitol on the 17th, and taken to his home city, Canton, Ohio, where they were interred on the 18th, amid universal mourning.

McKim, Charles Follen, architect; born in Chester County, Pa., August 24, 1847; student of Harvard Scientific School, 1866; Ecole des Beaux Arts, Paris, 1867-70. Began practice, 1872; joined in partnership by Wm. R. Mead, 1877, and by Stanford White in 1879. Awarded Royal gold medal by King Edward for promotion of architecture, 1903. President of American Institution of Architects.

McLean, Emily Nelson Ritchie (Mrs. Donald McLean), regent of New York City Chapter of Daughters of American Revolution; born in Prospect Hall, Frederick, Md., January 28, 1859; daughter of Judge John and Betty Ritchie; graduate of Frederick Seminary (now Woman's College), June, 1873; post-graduate courses in language, history, and mathematics; married

in Frederick, Md., April 24, 1853, to Donald McLean. Charter member of Daughters of American Revolution; regent of New York City Chapter for seven years. Scholarship bearing her name established, 1898, in Barnard College by Daughters of American Revolution, New York Chapter. Was commissioner from New York to Cotton States and International Exposition, 1895-96; accepted appointment as commissioner to South Carolina Exposition, 1901-02. Best known by her public addresses throughout the country on patriotic and educational themes.

McMaster, John Bach, professor of American history in University of Pennsylvania since 1883; born in Brooklyn, June 29, 1852; graduate of College of City of New York, 1872, A. M., Ph. D., Litt. D., LL. D.; civil engineer, 1873-77; instructor in civil engineering Princeton, 1877-83. Author: "A History of the People of the United States" (six volumes published), "Benjamin Franklin as a Man of Letters," "With the Fathers," "Studies in American History," "Origin, Meaning and Application of the Monroe Doctrine," "A School History of the United States," "A Primary School History of the United States," "Daniel Webster," "Brief History of the United States," "The Struggle for the Social, Political, and Industrial Rights of Man."

Meade, George Gordon, general in the United States army, was born in Cadiz, Spain, where his father was an agent of the United States navy, December 30, 1815. He graduated at West Point in 1835, and, after serving but one year in the army, resigned to begin practice as a civil engineer. He was frequently employed by the government, and reentered its military service in 1842. He served with distinction on the staffs of Taylor and Scott in the Mexican War, and in scientific work. At the outbreak of the Civil War he was placed in command of a brigade of volunteers, soon rising to the command of a division, and joining his fortunes permanently to those of the army of the Potomac. He led his division through the Seven Days' battle, being severely wounded at Glendale, through the Antietam campaign, and at Fredericksburg, where he particularly distinguished himself. At Chancellorsville he commanded the fifth corps; and when Hooker resigned the command of the army, and while the army itself was in hasty movement northward to check Lee's invasion of the North in 1863, Meade was appointed to the command. He accepted it with the greatest reluctance, and altogether from a sense of duty. He had inclined to fight on the line of Pipe Creek, to the south of Gettysburg; but Reynolds fell into collision with Lee's advance at Gettysburg, other corps hurried to support, and Gettysburg became historical. When Grant assumed general command in 1864, Meade continued to command the army of the Potomac under him, and mutual good-feeling enabled them to maintain this delicate relation without friction, and with the best results. At the close of the war, being major-general in the regular army, he commanded the military division of the Atlantic until his death at Philadelphia, November 6, 1872.

Medici, Lorenzo, "il Magnifico," born in 1445; son of Pietro, became dominant in Florence after the suppression of the Pazzi, by whom his brother, Giuliano, had been murdered (1478). His alliance with Venice and Milan excited the jealousy of the papacy, and Sixtus IV. excommunicated Florence on his account. He was reconciled, however, with Innocent VIII., and his son, Giovanni, was made cardinal. He was a great patron and collector of manuscripts. Died, 1492.

Meissonier, Jean Louis Ernest, painter; born in Lyons in 1813; attracted attention by his "Little Messenger" in 1836, and continued to exhibit at the Paris Salon for many years, his best pictures distinguished for minute detail being the "Napoleon Cycle," among which the picture called "1814" was sold, in 1887, for the highest price ever obtained during an artist's lifetime (\$170,000). Meissonier served in the Italian campaign and the early part of the Franco-Prussian War, and was colonel at the siege of Paris. Died, 1891.

Melancthon, Philip, born in 1497; German reformer; studied under Reuchlin, and was appointed professor of Greek at Wittenberg at an early age, thus becoming acquainted with Luther. He drew up the Confession of Augsburg, of which he sent a copy to the patriarch of Constantinople inviting his adhesion; and by his moderation as well as his writings did much to help the reformation. Died, 1560.

Melba, Madame, operatic vocalist, born in Australia, May 19, 1865. At 6 sang ballads to her own accompaniment at a charitable concert. Studying under Madame Marchesi in Paris, she made her stage debut October 15, 1887, in "Rigoletto," at the Théâtre de la Monnaie, Brussels. Next year appeared as Lucia at Covent Garden. In 1889 played "Ophelia" at Paris

Grand Opera. For her Bemberg specially wrote "Elaine," produced in London in 1892. She has taken a prominent part in recent opera seasons in London and New York.

Mellen, Charles Sanger, railway official; born in Lowell, Mass., August 16, 1851; in railway service since September 22, 1869, beginning as clerk in cashier's office Northern New Hampshire R. R.; clerk to chief engineer Central Vermont R. R., 1872-73; superintendent's clerk to chief clerk and assistant treasurer of Northern New Hampshire R. R., 1873-80; assistant to manager of Boston & Lowell R. R., 1880-81; auditor, 1881-83, superintendent, 1883-84, general superintendent, 1884-88, Boston & Lowell and Concord railroads; general purchasing agent, 1888, assistant general manager, 1888-89, general traffic manager, 1889-92, Union Pacific System; general manager New York & New England R. R. at Boston, 1892; 2d vice-president New York, New Haven & Hartford R. R., 1892-96; president of Northern Pacific Railway Co., 1896-1903. New York, New Haven & Hartford R. R. Co., since 1903.

Mendelssohn-Bartholdy, Felix (*-bar-ôl'de*) a distinguished German musical composer, born in Hamburg, 1809, manifested a precocious taste and genius for music. In his 18th year he produced his famous "Overture to the Midsummer Night's Dream," as well as the opera of the "Wedding of Camacho." His fame was at once secured. In 1836, appeared his oratorio of "St. Paul," and in 1846, the magnificent one called "Elijah"—a masterpiece, second only to the greatest works of Handel. Mendelssohn's "Songs Without Words" are the most admired of his minor compositions. Died, 1847.

Meredith, George, poet and novelist, is a native of Hampshire, and was born in 1828. After studying for some time in Germany he commenced his literary career with the publication of a volume of poems. This was followed by the "Shaving of Shagpat, an Arabian Entertainment," "Farina, a Legend of Cologne," "The Ordeal of Richard Feveril," "Modern Love: Poems and Ballads," "Emilia in England," "Rhoda Fleming," "Victoria," "The Adventures of Harry Richmond," "The Egoist," "The Tragic Comedians," "Poems and Lyrics of the Joy of Earth," "Diana of the Crossways," "One of Our Conquerors," "Lord Ormont and his Aminta," "The Amazing Marriage," and a volume of short stories.

Merivale, Charles, dean of Ely; born in Exeter; held a succession of appointments as lecturer; wrote a history of Rome from its foundation in 753 to the fall of Augustus in 476, but his chief work is the "History of the Romans under the Empire," indispensable as an introduction to Gibbon (1808-1893).

Merritt, Wesley, major general of United States Army, retired June 16, 1900; born in New York, June 16, 1836; graduated from West Point, 1860; commissioned brigadier-general United States volunteers, June 29, 1863; major-general, United States volunteers, April 1, 1865. Since war regularly promoted from lieutenant-colonel to major-general, United States Army. Served in army of the Potomac until June, 1864; participated in all its battles and earned six successive brevet promotions for gallantry at Gettysburg, Yellow Tavern, Hawes' Shop, Five Forks, etc. Afterward accompanied General Sheridan on cavalry raid toward Charlottesville, and engaged in battle of Trevilian's Station; commanded cavalry division in Shenandoah campaign, August, 1864, to March, 1865; was engaged in battles of Winchester, Fisher's Hill, etc.; commanded corps of cavalry in Appomattox campaign; one of three commanders from National Army to arrange with Confederate commanders for surrender of Army of Northern Virginia. After war served in various departments, participated in several Indian campaigns; superintendent of United States Military Academy, 1882-87; commanded department of the Atlantic until assigned, May, 1898, to command of United States forces in the Philippine Islands, continuing there until summoned to the aid of the American Peace Commissioners in session in Paris, December, 1898; returned to United States; on duty in command of department of the East, Governor's Island, until retirement.

Merry del Val, Raphael, pontifical secretary of state, was born in London of Spanish parents on October 10, 1865, and educated in England, where he has resided for some length of time at different periods in his career. He was at first attached to the diocese of Westminster, acted for many years as Cameriere Partecipante of Pope Leo XIII., and was appointed president of the Accademia Pontificia in 1899, and Italian Archbishop of Nicosia in 1900. He visited England as papal envoy on the occasions of Queen Victoria's Jubilee and King Edward's Coronation, and was sent to Canada on an educational mission. In July, 1903, on the death of Leo XIII., he

was nominated consistorial secretary, and in October succeeded Cardinal Rampolla as secretary of state, being afterwards created a cardinal.

Metternich, Clemens Wenzel, Prince von, a great Austrian diplomatist and statesman; born in Coblenz, 1773, after a distinguished diplomatic career, became foreign minister of the empire in 1809. This high office he held with consummate ability for a period of thirty years, exercising, almost without control, the highest authority in Austria. The revolution of 1848 sent him into exile, from which he returned three years after. Died, 1859. Prince Metternich was an adroit intriguer, and exercised in his day a powerful influence upon the cabinets of Europe.

Meyer, Adolf, pathologist, alienist; born in Niederweningen, near Zürich, Switzerland, September 13, 1866; educated at gymnasium, Zürich, University of Zürich, M. D., 1892; post-graduate studies in Paris, London, Edinburgh, Zürich, Vienna, and Berlin, 1890-92; (U. D., Glasgow, 1901); came to the United States, September, 1892. Honorable fellow and later docent in neurology, University of Chicago, 1892-95; pathologist to Illinois Eastern Hospital for the Insane, Kankakee, Ill., 1893-95; pathologist and later director of clinical and laboratory work, Worcester (Mass.) Insane Hospital, and docent in psychiatry, Clark University, 1895-1902; director Pathology (psychiatric) Institute, New York State Hospitals, since 1902. Professor psychiatry, Cornell University Medical College. Extensive contributor to neurology, pathology and psychiatry, etc.

Meyer, George von Lengerke, United States postmaster general; born in Boston, June 24, 1858; graduated at Harvard, 1879; has since been engaged in business as merchant and trustee. Member of Boston common council, 1889-90; member of board of aldermen, 1891; member of Massachusetts Legislature, 1892-96, and speaker of house, 1894-96; chairman of Massachusetts Paris Exposition Managers; elected member of Republican National Committee, 1899. Director of Ameskeag Manufacturing Company, the Armory Company, Old Colony Trust Company, National Bank of Commerce; the Electric Corporation, United Electric Security Company, Walter Baker Company; president of Ames Plow Company. United States ambassador to Italy, 1900-05. Ambassador to Russia, 1905-07; postmaster-general since 1907.

Michael-Angelo Buonarroti (*ān'je-lo boo-o-nah-rōl'ē*), one of the greatest of Italian artists—painter, sculptor, architect—was born of noble family in Tuscany, 1474. He studied art under Ghirlandajo, and early acquired the favor and patronage of Lorenzo "the Magnificent." In 1505, he repaired to Rome at the invitation of Pope Julius II., and there designed the world-famous cathedral church of St. Peter's, and decorated with frescoes the ceiling and walls of the Sistine Chapel in the Vatican. Under Clement VII., Michael-Angelo rebuilt the library and chapel of San Lorenzo, Florence, and in 1529 helped to fortify and shared in the defense of that city against a papal army. In 1546, he was appointed architect for the completion of St. Peter's, Rome, begun in 1506, and erected the Farnese palace and others of the architectural glories of the Holy City. Died, 1563. As a painter, Michael-Angelo's fame rests chiefly upon his "Last Judgment," a fresco in the Sistine Chapel, which contains about 300 figures, and occupied the artist eight years. As a sculptor, his masterpiece is commonly deemed to be the statue of "Moses" in the church of San Pietro in Vinculo.

Michael VIII. (Palaeologus), born in 1224, having been crowned Emperor at Nicæa with John Lascaris, regained Constantinople from the Latins in 1261, and ordered his colleague to be blinded, for which he was excommunicated and did public penance; attempted to unite the Eastern and Western Churches at the Council of Lyon (1274), and subsequently defeated a French invasion. Died, 1282.

Miche'let, Jules, born in Paris, August 21, 1798; a popular French historian, for many years professor of history in the College of France. In 1843-46, he became widely known, not only in his own country, but also in England, by his attacks upon the Jesuits in his three works: "The Jesuits," "Priests, Women, and Families"; and "The People." He was the writer of many other works, several of them of considerable interest; but those of most permanent value are his "History of France," his "History of the French Revolution," and his "History of the Nineteenth Century." Died, February 9, 1874.

Mil'man, Henry Hart, born in London A. D., 1791; an ecclesiastical historian and poet, for several years professor of poetry in the University of Oxford, and from 1849 to his death Dean of St. Paul's Cathedral. His best known poems are "The Fall of Jerusalem,"

and "The Martyr of Antioch"; his historical works are a "History of the Jews," a "History of Christianity from the Birth of Christ to the Abolition of Paganism in the Roman Empire," and a "History of Latin Christianity, including that of the Popes to the Pontificate of Nicolas V." Died, 1868.

Miles, Nelson Appleton, an American military officer; born in Westminister, Mass., August 8, 1839. At the breaking out of the Civil War, he was engaged in mercantile pursuits in Boston, Mass.; entered the service as first lieutenant of the 22d Massachusetts Regiment in October, 1861; and distinguished himself at the battles of Fair Oaks, Charles City Cross Roads, and Malvern Hill. In September, 1862, he was commissioned colonel of the 61st New York regiment, which he led at Fredericksburg and Chancellorsville, where he was severely wounded. He commanded the first brigade, first division, second army corps, in the Richmond campaign, and was promoted brigadier-general, May 12, 1864; and brevetted major-general for gallantry at Ream's Station in December, 1864. At the close of the war he was commissioned colonel of the 40th United States Infantry. He was promoted brigadier-general in December, 1880; major-general in April, 1890; and succeeded Lieutenant-General John M. Schofield as commander of the army in 1895. He took a prominent part in the wars with the Indians in 1874, and thereafter. On July 13, 1898, he went to the front and assumed personal command of the army around Santiago, Cuba; and after the surrender of the Spanish Army commanded the expedition which left Guantanamo Bay, July 21st, landed at Guanica, Porto Rico, July 25th, and was marching on San Juan, the capital, when the armistice stopped hostile operations. On the reorganization of the army in 1901, the grade of lieutenant-general was revived and he was promoted to it. In December, 1901, he publicly expressed satisfaction with Admiral Dewey's report on Rear-Admiral Schley and was reprimanded therefor. He was retired upon reaching the age limit, August, 1903.

Mill, James, a British historian and political economist, was born in Montrose in 1773. He has written much that is of standard value; as witness his "History of British India" (five volumes); the "Liberty of the Press," the "Law of Nations," "Elements of Political Economy," and "Analysis of the Phenomena of the Human Mind." Died in London in 1836. His son, John Stuart M., born in London in 1806, established his reputation, in 1843, by the publication of "A System of Logic" "Ratiocinative and Inductive," a work the success of which paved the way for "The Principles of Political Economy, with some of their Applications to Social Philosophy." His later works are an "Essay on Liberty," "An Examination of Sir William Hamilton's Philosophy," and the "Subjection of Women," in which he avows himself a partisan of what has been popularly termed the "Woman's Rights Movement." Died, 1873.

Milton, John, born in 1608; English poet; son of a London scrivener of some culture, who sent him to St. Paul's school and Cambridge (Christ's College), after leaving which he lived with his father in Buckinghamshire, and then traveled in France and Italy. In 1644 he published "Areopagitica," a speech for the liberty of unlicensed printing, among his other prose works being "Eikonoklastes" and "Defensio pro Populo Anglicano" (in answer to Salmassius), this last work being the immediate cause of his loss of sight. He was appointed foreign secretary to the Council of State in 1649, and some years after became blind. "The Allegro," "Penseroso," "Comus," "Lycidas," etc., were written in his early days, and his greatest work, "Paradise Lost," was published in 1667, and "Paradise Regained" in 1671. He was married three times. Died, 1674.

Mitchell, John, labor leader, was born at Braidwood, Ill., February 4, 1870; received common school education, read law one year, and made special study of economic questions; began work in coal mines, 1882, and has since, as worker or labor leader, been identified with mines and mining; his official connection with the United Mine Workers of America began in 1895, and from 1899 to 1908 he served as president of that organization. He is the author of a book, "Organized Labor, Its Problems, Purposes, and Ideals."

Modjeska, Helena (Mme. Chlapowski), actress; born in Cracow, Poland, October 12, 1844; début, Bochnia, Poland, 1861; soon became leading actress in her native country; married in 1868, Charles Bozenta Chlapowski, compatriot. First appearance in English, San Francisco, 1877, in Adrienne Lecouvreur, followed by a starring tour through United States. Returned here after two London engagements and played leading Shakespearean parts, "Camille," "Mary Stuart," etc.

Mohammed, was in his youth employed as a camel-driver between Mecca and Damascus by his uncle, who had adopted him, but at the age of twenty-eight married Kadiah, a rich widow. He now led a life of meditation, during which the Koran was drawn up. When at the age of 40 he claimed to be a prophet, he was opposed by his family, and in 622 left Mecca for Medina (the Hegira). Here his followers increased, and were incited by him against the Arabian Jews. Mecca was stormed, and in time all Arabia and Syria conquered, but the prophet died (632) soon after at Medina, perhaps from poisoned food.

Mollere, Jean Baptiste (Poquelin), born in 1622; dramatist: was educated by the Jesuits, and studied law, but about 1645, changed his name, and became an actor. He began to write plays in 1653, and took part in them himself, first performing before Louis XIV. in 1658. In 1673, while playing Argan in "Le Malade Imaginaire," he was seized with convulsions, and died soon after (1672). It was only by the intervention of the king that the Church allowed him burial. His chief plays were "L'Elouirdi," "L'Ecole des Femmes," "Le Misanthrope," "Le Médecin Malgré Lui," "Tartuffe," "Le Bourgeois Gentilhomme."

Moltke (*molt'ka*), von, **Helmuth Karl Bernhard**, Count, chief marshal of the German Empire; was born in Parchim, in Mecklenburg, in 1800. He entered the Prussian service in 1822, as a lieutenant in the eighth infantry regiment. In 1835, he undertook a tour in Turkey, remained there several years, and took part in the campaign of the Turks in Syria, against the viceroy of Egypt. He became a lieutenant-general in 1859, and sketched the plans of the campaigns against Denmark, 1864, and Austria, 1866. He was the commander-in-chief in the recent Franco-German War, 1870-71, and to his brilliant strategy are ascribed the splendid victories of the German arms. The illustrious marshal, who is generally regarded as the first strategist of the day, was created a count in 1870, and chief marshal of the German Empire in 1871. Died, 1891.

Monk, George, Duke of Albemarle, an English general; born in County Devon in 1608; after a brief service in Holland, fought at first on the side of Charles I. during the civil war; then, changing his coat, he commanded a republican army in Ireland, 1646-50, and in 1651 reduced Scotland into submission to Cromwell. In 1653, he commanded in the sea-fight in which the Dutch were defeated, and their admiral, Van Tromp, killed. After the death of the Protector, 1658, Monk proclaimed his son, Richard Cromwell, his successor, and himself retained command of the army in Scotland. With that army, he, in 1660, marched upon London, and declared for the restoration of Charles II., which consummation he succeeded in bringing about. After gaining a great victory at sea over the Dutch in 1666, Monk died in 1670.

Montaigne, Michel Eyquem de, born in 1533; French writer; was educated at the Collège de Guienne at Bordeaux, partly under George Buchanan, and became a judge of the parlement there in 1554. He took no part in affairs, but was driven from his château for two years by the wars of the league, during which time he formed his friendship with Marie de Gournay. In 1588, he was chosen to negotiate a treaty between Guise and Navarre at Blois. His "Essais," of which Shakespeare and Ben Jonson possessed translations, were first published in 1580. Died, 1592.

Monroe, James, fifth President of the United States; was born in Westmoreland County, Va., 1758. After graduating at William and Mary College, he served with distinction in the army during the War of the Revolution, and in 1783, entered the general Congress as a delegate from his native State. In the Virginia convention, 1788, he opposed the adoption of the Federal Constitution, and allied himself with the Republican party, which party elected him a member of the United States Senate in 1790. Four years later he proceeded to France as minister-plenipotentiary, from which office he was recalled in 1796. During the years 1799-1802, he filled the office of governor of Virginia. In 1802, as the associate of Livingston, he was dispatched on a special mission to negotiate for the purchase of Louisiana. In 1803, in England, and in 1805, in Spain, he performed special diplomatic services for his country. In 1811, he accepted the governorship of Virginia, and in the same year became secretary of state under President Madison's administration, which position he occupied with credit till March, 1817. The year before he had been the elected Democratic candidate for the presidency. During his term of office, Florida was ceded to the United States, 1819. Re-elected in 1820, during his second term, the United States recognized the de facto independence of the Spanish-American colonies. In December, 1823,

he gave utterance in his message to the celebrated principle touching the foreign policy of the United States, since known as the "Monroe Doctrine." In 1825, Monroe retired from the presidential chair, and died in New York, 1831.

Montcalm de Saint Veran, Louis Joseph, Marquis de, born in 1712; French general; was named commander of the French forces in Canada in 1756, where he won several victories, and fortified Quebec, but was defeated by Wolfe in 1759, and mortally wounded. Died, 1759.

Montesquieu, Charles de Secondat, Baron de, born at the Castle of La Brède, near Bordeaux, January 18, 1689; an eminent political philosopher of France, best known as the author of a work on "The Spirit of Laws," which was published in 1748. In this work, which occupied its writer for more than twenty years, he discusses with great ability the principles of political science, as those principles were understood in his time. He was also the author of some "Persian Letters" (1721), in which, in the character of a Persian, he described and satirized the peculiarities of his countrymen; of a discourse on "The Causes of the Greatness and of the Decay of the Romans" (1734); and of numerous other works. Died in Paris, February 10, 1755.

Montezuma I., Emperor of Mexico; after having been the victorious general of his uncle, succeeded him in 1436. He defeated the people of Chalis, and embanked the lake of Texcoco. Died, 1471.

Montezuma II., born in 1466; his grandson; became emperor in 1502, and governed with great cruelty. His dominions having been attacked and conquered by Cortez, he was killed (1520) by his subjects while persuading them to submit to the Spaniards.

Montgomery, Richard, an American general; was born in Ireland in 1736. In 1772, he resigned his commission in the British service, and settled in Dutchess County, N. Y., representing it in the Continental Congress, 1775. As brigadier in the national army he took Montreal, and was killed in the assault on Quebec, December, 1775.

Montrose, James Graham, Marquis of, Royalist leader; was born in Edinburgh in 1612, and lived some time in France as an officer in the Scottish Guard. On his return he first joined the Covenanters, but afterwards became a zealous Royalist, gaining several battles for the king, but was defeated by Lesley at Philiphaugh in 1645, and four years later, having been captured in Orkney, was brought to Edinburgh and executed in 1650.

Moody, Dwight Lyman, American preacher; born in Massachusetts in 1837; renounced Unitarianism and became a Congregationalist, served during the Civil War on the Christian commission, and from 1865 entirely abandoned business. His church and school-house at Chicago having been burnt down in 1871, he went to England to raise funds for rebuilding them, and was successful in his object. Established a school for Christian workers at Northfield, Mass., and a Bible institute at Chicago. Died, 1899.

Moody, William Henry, associate justice United States Supreme Court; born in Newbury, Mass., December 23, 1853; graduated from Phillips Academy, Andover, Mass., 1872; Harvard University, 1876; lawyer by profession; district attorney for eastern district of Massachusetts, 1890-95; member 54th Congress from sixth Massachusetts district to fill vacancy; also member 55th, 56th, and 57th Congresses; secretary of the navy, 1902-04; attorney general United States, 1904-06; since 1906, associate justice United States Supreme Court.

Moore, Sir John, soldier; born in 1761, son of a doctor in Glasgow, who edited Smollett's works; served in the American war, in Corsica (1794), in the attack on St. Lucia, of which he became governor, and subsequently in Ireland, Holland, Egypt, and Sicily (1806). On his return from an expedition in aid of Sweden, he was sent to Portugal to command an army to cooperate with the Spaniards. He was obliged to retreat from Salamanca to the sea, and won the victory of Corunna (1809), but fell in the battle and died.

Moore, John Bassett, publicist; born in Smyrna, Del., December 3, 1860; graduate of University of Virginia, 1880; studied law, Wilmington, Del.; passed civil service examination, 1885, and appointed law clerk in state department at \$1,200 a year; in 1886, became third assistant secretary of state. Although a Democrat, was retained in that position by Mr. Blaine; resigned, 1891, to become professor international law and diplomacy at Columbia College; appointed, April, 1898, assistant secretary of state, resigning in September to become secretary and counsel to Peace Commission at Paris; member of Institut de Droit International, and the Institute Colonial International (LL. D., Yale,

1901). An authority on international law. Author: "Reports on Extraterritorial Crime," "Report on Extradition," "Extradition and Interstate Rendition" (two volumes), "American Notes on the Conflict of Laws," "History and Digest of International Arbitrations" (six volumes), "American Diplomacy, Its Spirit and Achievements." One of the editors of "Political Science Quarterly"; and of the "Journal du Droit International Privé."

More, Sir Thomas, statesman and writer; born in 1478, son of Sir J. More, a judge; was educated in the household of Archbishop Morton, who sent him to Oxford, where he made the acquaintance of Erasmus. He entered parliament in 1504, where he took an independent course, refusing a pension from the king, whose favor, however, and that of Wolsey, he enjoyed; was knighted in 1522, became speaker in 1523, and, on the fall of Wolsey, chancellor, but resigned in 1532, and was committed to the Tower two years later for refusing to take the oath of supremacy. He was then condemned by attainder, and executed on a charge of treason. He wrote "Utopia" and several other works, most of them in Latin. Died, 1535.

Morgan, John Pierpont, banker, financier; born in Hartford, Conn., April 17, 1837; son of Junius Spencer and Juliet (Pierpont) Morgan; graduate of English high school, Boston; student of University of Göttingen, Germany. Entered bank of Duncan, Sherman & Co., 1857; became agent and attorney in United States, 1860, for George Peabody & Co., bankers, London, in which his father was partner; member of Dabney, Morgan & Co., investment securities, 1864-71; became member, 1871, of firm of Drexel, Morgan & Co., now J. P. Morgan & Co., leading private bankers of United States; also has important branch house in London. Largely occupied as financier in largest reorganizations of railways and consolidation of industrial properties; floated United States bond issue of \$62,000,000 during Cleveland administration; organized and floated securities of United States Steel Corporation, 1901 (capital, \$1,100,000,000); secured American subscriptions of \$50,000,000 to British war loan of April, 1901; organized existing agreement of anthracite operators of Pennsylvania, also of soft coal interests in Ohio, Indiana, and Pennsylvania; controls over 50,000 miles of railways, large American and British ocean transportation lines, and English traction railways. Gave site, buildings, and funds, amounting to about \$1,500,000 to lying-in hospital, New York, and large donations to the New York trade schools, the cathedral of St. John the Divine, and many other institutions. Has made valuable gifts to American Museum of Natural History, Metropolitan Museum of Art, and New York Public Library. Owns famous collections of pictures (including famous Gainsborough painting), books, manuscripts, curios, etc. President of Metropolitan Museum of Art; member of many societies, clubs, etc., in United States and abroad.

Morgan, John Tyler, United States senator from Alabama, 1877-1907; born in Athens, Tenn., June 20, 1824; emigrated to Alabama when 9 years old; academic education; admitted to bar, 1845; practiced until elected to the senate. Presidential elector, 1860; delegate to Alabama secession convention, 1861; joined Confederate States Army, May, 1861, as private; promoted through all grades to colonel of 51st Alabama Regiment, which he raised; was brigadier-general, 1863-65. After war, resumed practice at Selma, Ala.; presidential elector, 1876; Democrat. Appointed by President Harrison as arbitrator on Bering Sea fisheries, 1892; appointed by President McKinley, July, 1898, one of the commissioners to organize government in Hawaii, after passage of annexation bill. Died, 1907.

Morley, Right Hon. John, statesman and writer; born in Blackburn in 1838, and educated at Cheltenham and Oxford; was called to the bar in 1859, but devoted his time to writing. He edited, among other publications, the "Fortnightly Review" from 1867 to 1882, the "Pall Mall Gazette" from 1880 to 1883, and "Macmillan" in 1883-85, and after two unsuccessful candidatures (in 1869 and 1880) entered parliament in 1883, as member for Newcastle. He, from the first, adopted Home Rule, and, in 1886, became chief secretary for Ireland, and again in 1892. His chief works are "Edmund Burke: an Historical Study," "Voltaire," "Rousseau," "Diderot," "On Compromise," "Life of Cobden," "Walpole," and "Chatham" in the "Statesmen" series; and he edited the "English Men of Letters" series.

Morris, Clara, actress; born in Toronto, Canada, in 1849; lived there until three months old, then went to Cleveland and grew up there; became member of ballet in Academy of Music, Cleveland, 1861, rapidly advancing to leading lady; in 1869, became leading

lady at Wood's Theater, Cincinnati; became member Daly's Fifth Avenue Company, New York, 1870; soon became prominent in emotional rôles and has appeared as star in principal American theaters. Leading rôles: Camille, Alix, Miss Multon, Mercy Merrick in "The New Magdalene," Cora in "L'Article 47," etc.; married in 1874, to Frederick C. Harriott. Contributor to "St. Nicholas," "Century Magazine," "Pearson's," "Leslie's Woman's Companion," "North American Review," "Ladies' Home Journal," etc. Author: "A Silent Singer," "My Little Jim Crow," "Life on the Stage," "A Paste-Board Crown" (novel), "Stage Confidences," "The Trouble Woman."

Morris, Gouverneur, American statesman; born in 1752; became a member of the Provincial Congress of New York, and was one of those who drew up the State Constitution in 1776; was a prominent member of the Continental Congress in 1777-80, being the colleague of R. Morris as superintendent of finance. He was one of the draughts of the Federal Constitution in 1787, after which he passed many years in Europe, being minister to France during the Revolution, and became United States senator on his return. He wrote "Observations on the American Revolution," and his "Correspondence" throws much light on the French Revolution. Died, 1816.

Morris, Robert, American financier; born in Liverpool in 1734; emigrated at an early age and settled in Philadelphia, becoming a partner in the counting-house of C. Willing; opposed the Stamp Act, and signed the Non-importation Agreement (1765). Having become a member of the Continental Congress, he signed the Declaration of Independence, and greatly helped the American cause from his own purse, both during the war and afterwards. He founded the Bank of North America, was superintendent of finance from 1781 to 1784, but declined the secretaryship of the treasury; was finally ruined by his speculations, and died in prison for debt in 1806.

Morris, William, English poet and socialist; born in 1834, son of a London merchant; was educated at Marlborough and Oxford, and, in 1863, with D. G. Rossetti, Burne-Jones, and others, engaged in the manufacture of artistic wall-paper and household decorations. During his leisure hours he gave socialist lectures, and wrote poetry, his chief productions having been "The Life and Death of Jason," "The Earthly Paradise," "The Story of Sigurd the Volsung," besides translations of the "Æneid" and the "Odyssey," and some prose works, of which the chief is "A Tale of the House of the Wolfings." Died, 1896.

Morse, Samuel Finley Breese, born in 1791; American electrician; son of a Congregationalist minister in Massachusetts; having graduated at Yale, went to England in 1810, and, becoming a pupil of West, exhibited "The Dying Hercules" at the academy in 1813. He afterwards abandoned art for science, and, in 1837, took out a patent for his electric telegraph, the first overhead message being sent from Washington to Baltimore in 1844. It was afterwards generally adopted, the inventor receiving an international testimonial in 1858. Disputes subsequently arose as to priority of invention with Professor Henry, and on account of the infringement of Morse's patent. Died, 1872.

Morton, Levi Parsons, Vice-President of the United States, 1889-93; born in Shoreham, Vt., May 16, 1824; graduated from Shoreham Academy (I.L.D.), Dartmouth College, 1891, Middlebury College, 1893; founded banking houses of L. P. Morton & Company and Morton, Bliss & Company, New York; Morton, Rose & Company, Morton, Chaplin & Company, London, and Morton Trust Company, New York; member Congress from New York, 1879-81; United States minister to France, 1881-85; vice-president of United States, 1889-93; governor of New York, 1895-96.

Motley, John Lothrop, an American historian; born in Massachusetts in 1814, and graduated at Harvard College in 1831, after which he traveled for some years in Europe. In 1840, he became secretary of legislation at St. Petersburg; was minister-plenipotentiary at Vienna from 1861 till 1867; and in 1869 was appointed American minister to the court of St. James, a post from which he was removed in 1871. The three great works upon which Motley has built up one of the foremost literary reputations of the age, are "The Rise of the Dutch Republic—a History," its sequel, "The History of the United Netherlands from the Death of William the Silent to the Synod of Dort," and "John of Barneveldt"; all of which have been translated into the French, Dutch, and German languages. Died in England in 1877.

Moses, a great Hebrew prophet and legislator, and son of Amram of the Levitical tribe, was born in Egypt,

about 1570 B. C. In pursuance of a royal command that all male infants of Hebrew birth should be destroyed, Moses, to escape this fate, was laid in a basket among a clump of bulrushes on the banks of the Nile, and there discovered by the daughter of Pharaoh, who adopted him as her son. When arrived at a ripe manhood, Moses began to form plans for the deliverance of his race from bondage, and incurring, by so doing, Egyptian mistrust, he fled to Midian, where he served as a shepherd till his 80th year. Then he is said to have been the recipient of the Lord's commands to guide the children of Israel out of captivity into the Land of Canaan. He accordingly conducted them through the Red Sea into the wilderness, and became their apostolic chief and lawyer, composing for them the code since known as the "Mosaic Dispensation." After appointing Joshua as his successor, Moses died on Mount Pisgah, at the patriarchal age of 120.

Moulton, Louise Chandler, novelist and poet; born in Pomfret, Conn., April 10, 1835; daughter of Lucius L. and Louisa R. (Clark) Chandler. Author: "This That, and the Other," "June Clifford," "My Third Book," "Bed-Time Stories," "More Bed-Time Stories," "Some Women's Hearts," "Swallow Flights," poems; "New Bed-Time Stories," "Random Rambles," "Fire-light Stories," "Ourselves and Our Neighbors," "Miss Eyre From Boston, and Other Stories," "In the Garden of Dreams," "Stories Told at Twilight," "Lazy Tours in Spain and Elsewhere," "In Childhood's Country," "At the Wind's Will," Edited: (with biographies) "Garden Secrets," "A Last Harvest," by Philip Bourke Marston; "Collected Poems of Philip Bourke Marston," "Selections from Poems of Arthur O'Shaughnessy."

Moulton, Richard Green, educator, author; born in Preston, Eng., May 5, 1849; graduated from London University, 1869; Cambridge, Eng., University, 1874 (Ph. D., University of Pennsylvania, 1891); university extension lecturer since 1874, with English and American universities. Now professor of literary theory and interpretation, University of Chicago. Author: "Shakespeare as a Dramatic Artist, a Study of Inductive Literary Criticism," "The Ancient Classical Drama, a Study of Literary Evolution," "Four Years of Novel Reading," "Account of an Experiment in the Study of Fiction," "The Literary Study of the Bible," "A Short Introduction to the Literature of the Bible," "The Moral System of Shakespeare." Editor: "The Modern Reader's Bible," twenty-one volumes, 1895-98.

Moultrie, William, an American Revolutionary general, born in South Carolina in 1731; was the recipient of the thanks of Congress for his heroic defense of the fort on Sullivan's Island, Charleston Harbor, since called by his name. In 1785, he became governor of his native State, and died in 1805.

Moxom, Philip Stafford, clergyman; born in Markham, Canada, August 10, 1848; educated in Kalamazoo College, Mich., 1866-68; Shurtleff College, Ill., 1868-70; graduate of University of Rochester, A. B., 1879; A. M., 1882 (D. D., Brown, 1892); studied in Rochester Theological Seminary, 1875-78; ordained to ministry, September 19, 1871. Served with Army of the Cumberland at Ft. Donelson as "captain's boy," 1862; enlisted in the 17th Illinois Cavalry, October 3, 1863, serving until November 30, 1865. Pastor of First Baptist Church, Cleveland, O., 1879-85; First Baptist Church, Boston, 1885-93; South Congregational Church, Springfield, Mass., since March, 1894; University preacher, Harvard, 1894-97; preacher at Yale, Cornell, Vassar, Wellesley, Amherst, Williams, Dartmouth, Bowdoin, etc. Author: "The Aim of Life," "From Jerusalem to Niema: The Church in the First Three Centuries," "The Religion of Hope," also numerous articles in religious and secular periodicals.

Mozart, Johann Chrysostom Wolfgang Amadeus, German composer, was born in Salzburg in 1756; composed some pieces at the age of five, when he was taken to Munich, and performed with his sister before the elector of Bavaria. In 1763, the children went on a tour to all the principal German towns, as well as Brussels and Paris, and in April, 1764, gave concerts in London. On his return to Salzburg in 1769, Mozart became director of the archbishop's concerts, and soon after made a tour in Italy, after his return from which, at the end of 1778, he settled in Vienna. Here, in his 25th year, he wrote "Idomeneo" on the occasion of the first rejection of his suit to Constance Weber, whom he married in 1782. "L'Enlèvement du Sérail" was composed in 1782. "Nozze di Figaro" in 1786, "Don Giovanni" in 1787, "Die Zauberflöte" and "La Clemenza di Tito" in 1791, and the "Requiem" on his death-bed, in addition to which he produced many masses, symphonies, concertos, etc. Died, 1791.

Muller, Friedrich Max, philologist; born in Dessau in 1823; son of a German poet, Wilhelm Müller; educated at Leipzig; studied at Paris, and came to England in 1846; was appointed Taylorian professor at Oxford in 1854, and in 1868, professor of comparative philology there, a science to which he has made large contributions; besides editing the "Rig-Veda," he has published "Lectures on the Science of Language," and "Chips from a German Workshop," dealing therein not merely with the origin of languages, but that of the early religious and social systems of the East. Died in 1900.

Munsey, Frank Andrew, publisher; born in Mercer, Me., August 21, 1854; educated in public schools in Maine; unmarried; started business career in country store; became manager Western Union Telegraph office, Augusta, Me.; went to New York, 1882, and started "The Golden Argosy," juvenile weekly (now the adult monthly, "The Argosy"); in February, 1889, launched "Munsey's Weekly," converted October, 1891, into "Munsey's Magazine"; now also owns "The All-Story Magazine," the "Washington Times," and "Boston Journal." Author: "Afloat in a Great City," "The Boy Broker," "A Tragedy of Errors," "Under Fire," "Derring-forth."

Munsterberg, Hugo, professor of psychology, Harvard, since 1892; born in Danzig, Germany, June 1, 1863; graduated from Danzig Gymnasium, 1882; post-graduate studies in philosophy, natural sciences, and medicine in Leipzig and Heidelberg, 1882-87 (Ph. D., Leipzig, 1885, M. D., Heidelberg, 1887; LL. D., Washington University, 1904); instructor University of Freiburg, Germany, 1887; assistant professor same, 1891. Author: "Psychology and Life," "Grundzuge der Psychologie," also other works in German, "American Traits," "The Americans," "Principles of Art Education," "Eternal Life."

Murfree, Mary Noailles ("Charles Egbert Craddock"), author; born in Murfreesboro, Tenn., January 24, 1850; for years concealed her identity and sex under her pen-name. Author: "In the Tennessee Mountains," "Where the Battle was Fought," "Down the Ravine," "The Prophet of the Great Smoky Mountain," "In the Clouds," "The Story of Keodon Bluffs," "The Despot of Broomsedge Cove," "In the 'Stranger's People' Country," "His Vanished Star," "The Phantoms of the Foot-bridge," "The Mystery of Witchface Mountain," "The Juggler," "The Young Mountaineers," "The Story of Old Fort Loudon," "The Bushwhackers and Other Stories," "The Champion," "A Spectre of Power," "Storm Centre," "The Frontiersman."

Murillo, Bartolome Esteban, born in 1618; Spanish painter, pupil of Juan del Castillo; after living in great poverty, made the acquaintance of Velasquez, who introduced him to the Escorial. He made a reputation by his pictures in the "Claustro Chico" of the Seville Franciscan Convent, and afterwards painted Madonnas and holy families, his "chef-d'œuvre" being "The Immaculate Conception," now in the Louvre. Murillo died (1682), from the effects of a fall from scaffolding when engaged on a picture of "The Espousals of St. Catherine."

Murray, James Stuart, Earl of, regent of Scotland; born in 1533; was a natural son of King James V. During the early part of the reign of his half-sister, Mary Queen of Scots, he became her chief minister, and after her deposition was appointed to the regency. Assassinated, January, 1570.

Nansen, Fridtjof, born at Lysaker, near Christiania, Norway, about 1846; made his first Arctic exploration in 1882, followed by a second in 1889, when he crossed Greenland; from 1893, to 1896, was engaged in his famous expedition in the "Fram," when he penetrated farther north than any of his predecessors. Professor of zoölogy at Christiania University; took an active part, 1905, in effecting separation of Norway from Sweden, and is the first Norwegian ambassador to England.

Napoleon I. was born in 1769, in Ajaccio, being the second son of Charles Bonaparte, a Corsican advocate. He was educated at Brienne, entered the French Army in 1785, and first became notable for his conduct at the siege of Toulon in 1793, when he commanded the artillery. Two years later he led the troops of the Convention against the Sections, and in 1796, soon after his first marriage, received the command of the army of Italy. After his great successes in this war, he in May, 1798, set out for Egypt, where he defeated the Mamelukes and invaded Syria, but was checked at Acre. Having left Egypt secretly he reached France in October, 1799, overthrew the Directory, and became first consul. He now again invaded Italy, and made peace with Austria and England in 1801, and 1802, reconstructing the German Empire in the interests of France, while he also concluded a concordat with the pope, and remodeled the French con-

stitution and legal system. War broke out again with England in 1803, and Austria in 1805. He crushed the latter at Ulm and Austerlitz, but failed in his designs on the former. Next year Prussia was conquered at Jena and Auerstadt, and in 1807, after an indecisive campaign, the Peace of Tilsit was made with Russia. The continental system was now organized against England, and the crown of Spain given to Joseph Bonaparte. The second great attempt of Austria ended with the defeat of Wagram (1809); after which Napoleon divorced Josephine Beauharnais, and married Maria Louisa, daughter of the emperor. Meanwhile, however, in the Iberian Peninsula, the French arms had been held in check, and a breach with Russia occurred in 1812, the results of which were the invasion of that country, the disastrous retreat of the Grand Army and the rising of Germany. After the battle of Leipzig, France was invaded from east and south, and on April 11, 1814, Napoleon abdicated, and was banished to Elba. Next year he escaped, held France at his feet, but after a hundred days met his final defeat at Waterloo (June 18, 1815). He passed the rest of his life in exile at St. Helena, where he dictated his "Memoirs." Died, 1821.

Napoleon III., born in 1808; the third son of Louis Bonaparte, King of Holland, and Hortense de Beauharnais; became head of the house after the death of his elder brothers and of the King of Rome, and in 1836, made a first attempt to assert his claims, the result of which was exile to the United States. In 1840, he made another attempt, for which he was imprisoned in the castle of Ham, whence he escaped to England in May, 1846. He was elected to the Assembly in 1848, and soon after became president of the republic. After the coup d'état of December, 1851, his term of office was prolonged to ten years, and less than a year later a plebiscite was held, and Louis Napoleon became Emperor of the French. He joined England in the Crimean War, and in 1859 (in which year his life was attempted by Orsini), helped Sardinia against the Austrians, and also took part in the operations against China (1858-60), and Mehemet Ali (1860-61), but he failed in Mexico in 1861, and his government becoming increasingly unpopular in France, he sought a remedy in the quarrel with Prussia. The result was his defeat and capture at Sedan (September 1, 1870), after which he was deposed, and on his release lived in England till his death. Napoleon III. was the author of several works, the chief of which were "La Vie de César," and "Des Idées Napoléoniennes." Died, 1873.

Neander, Johann August Wilhelm, born in 1789 (David Mendel); German theologian of Jewish parentage, professor of theology at Berlin. Many of his works have been translated, the chief of them being "History of the Christian Religion and Church," "Life of Jesus Christ," and "The Emperor Julian and his Age." Died, 1850.

Nebuchadnezzar succeeded his father, Nabopolassar, as King of Babylon, and after taking Jerusalem, in 606 B. C., carried off to Babylon numerous captives, among them the prophet Daniel. He afterwards conquered Tyre and Egypt. Died, 562 B. C.

Necho, one of the Pharaoh Dynasty of Egyptian kings, succeeded his father, Psammetichus, in 617 B. C., defeated Josiah, King of Judah, and was himself defeated by Nebuchadnezzar, King of Babylon, in 606.

Newdham, Charles Willis, educator; born in Castile, N. Y., September 30, 1848; graduate of Albany Law School, 1869-80 (LL. D., University of Rochester, Georgetown College, Kentucky); practiced law in Chicago, 1874-90, Washington since 1890; assisted in organizing Chicago University and was one of board of trustees; elected professor of law, 1897; organized, and elected dean, school of comparative jurisprudence and diplomacy; 1898, professor of transportation and interstate commerce in school of comparative jurisprudence and diplomacy; president The George Washington University (formerly Columbian) since 1902. Lecturer upon legal ethics, trusts and trades unions. Member of American Economic Association, and many other learned and educational societies. Delegate to Congrès International de Droit Comparé, 1900; delegate to Congrès International des Chemins de Fer; delegate Congrès International D'Assistance Publique at de Bienfaisance Privée, Paris; speaker upon jurisprudence, congress of arts and sciences, St. Louis Exposition, 1904. Author of several pamphlets on education, law, and jurisprudence; contributor to periodicals.

Nellson, Adelaide, an English actress; born in Leeds, Yorkshire, England, March 3, 1848. Her real name was Elizabeth Ann Brown, though she was sometimes called Lizzie Bland (Bland being the name of her step-father). She made her début as Juliet when only 17 years old. She appeared as Amy Robarts in 1870, in London, with immense success, and by 1878, stood at the head of her

profession. In 1872, she came to the United States, playing in Booth's theater, New York, and in Boston, where she was equally successful. She made four visits to the United States, her last one being in 1880. She died in Paris, France, August 15, 1880.

Nelson, Horatio, Viscount, born in 1758; English admiral, son of a Norfolk clergyman; entered the navy in 1770, served in the American War, and under Lord Hood in the war with revolutionary France, becoming commodore in 1796, and rear-admiral after the battle of Cape St. Vincent, 1797. In the following year he won the battle of the Nile, for which he was made baron, and in 1801, brilliantly disobeyed Sir Hyde Parker, by attacking Copenhagen. After this he commanded in the Mediterranean, and on October 21, 1805, saved England from invasion by his defeat of the combined French and Spanish fleets at Trafalgar, but fell in the action.

Nepos, Cornelius, a Roman historian who flourished during the time of Julius Caesar and the first six years of the reign of Augustus. He enjoyed the friendship of Cicero, and his only extant work "Vitæ Excellentium Imperatorum," is held in high esteem as an educational textbook.

Nero, Lucius Domitilus, born in 37; Emperor of Rome, grandson of Germanicus; was adopted by Claudius in the year 50, and succeeded him in 54. He caused his mother, Agrippina, to be murdered for opposing his divorce from Octavia and marriage with Poppæa Sabina, this being accomplished by the murder of the former. He persecuted the Christians, whom he charged with the burning of Rome in 64, and married Messalina after the death of his second wife. The conspiracy of Piso was discovered, but on the success of that of Galba Nero, put an end to his life.

Nerva, Marcus Cocceius, a Roman Emperor, born in Umbria, A. D. 32, after being twice consul, was proclaimed emperor on the death of Domitian, 96. He ruled with mildness and justice, and, after adopting Trajan as his son and successor, died, 98.

Newcomb, Simon, astronomer; born in Wallace, N. S., March 12, 1835; came to United States, 1853; graduate of Lawrence Scientific School, Harvard, B. S., 1858. Appointed, 1861, professor of mathematics, United States Navy; assigned to duty at United States Naval Observatory; professor in mathematics and astronomy, Johns Hopkins, 1884-94, and editor "American Journal Mathematics." Since 1874, correspondent, and since 1893, one of the eight foreign associates, institute of France; made officer of Legion of Honor of France, 1893. Author: "Secular Variations and Mutual Revelations of the Orbits of the Asteroids," "Investigation of the Orbit of Neptune," "Researches on the Motion of the Moon," "Popular Astronomy," "Calculus," "A Plain Man's Talk on the Labor Question," "Principles of Political Economy," "Elements of Astronomy," "His Wisdom the Defender," "The Stars," "Astronomy for Everybody," "Reminiscences of an Astronomer," also various other books on astronomy and economic topics, magazine articles, etc.

Newman, John Henry, Cardinal, born in 1801; theologian, son of a London banker; graduated from Trinity College, Oxford, in 1820, and was elected Fellow of Oriel. He took orders in 1824, when he became vice-principal of St. Alban's Hall, and in 1828, became vicar of St. Mary's. He took a leading part in the Tractarian movement, and in 1841, wrote "Tract XC.," which was severely condemned. After living at Littlemore for some years in seclusion, he was received into the Roman Church, in 1845; founded the Brompton oratory in 1850, and directed the Edgbaston oratory for the greater part of his remaining years. He took part in controversies with Kingsley in 1864, and Mr. Gladstone in 1874, and accepted the Infallibility dogma with some reservations. He was created cardinal in 1879. Chief among his works were "Apologia pro Vita Sua, An Essay in Aid of a Grammar of Assent," and "The Dream of Gerontius." Died, 1890.

Newton, Sir Isaac, the greatest of philosophers, was born, December 25, 1642, at Colsterworth, in Lincolnshire, and early displayed a talent for mechanics and drawing. He was educated at Grantham School, and at Trinity College, Cambridge, and studied mathematics with the utmost assiduity. In 1667, he obtained a fellowship; in 1669, the mathematical professorship; and in 1671, he became a member of the Royal Society. It was during his abode at Cambridge that he made his three great discoveries, of fluxions, the nature of light and colors, and the laws of gravitation. To the latter of these his attention was first turned by his seeing an apple fall from a tree. The "Principia," which unfolded to the world the theory of the universe, was not published till 1687. In that year also Newton was chosen one of the delegates to defend the privileges of the

university against James II.; and in 1688, and 1701, he was elected one of the members of the university. He was appointed warden of the mint in 1696; was made master of it in 1699; was chosen president of the Royal Society in 1703; and was knighted in 1705. He died, March 20, 1727. Among his works are: "Arithmetica Universalis," "A New Method of Infinite Series and Fluxions," "Optics," "The Chronology of Ancient Kingdoms," amended; and "Observations on the Prophecies of Daniel," and the "Apocalypse."

Ney, Michel, peer and marshal of France; born in Sarrelouis, 1769, son of a cooper; entered the army as a private hussar in 1797; distinguished himself by his bravery in the wars of the Revolution and the Empire, and earned for himself from the army under Napoleon, and from Napoleon himself, the title of the "Brave of the braves"; on Napoleon's abdication in 1814 he attached himself to Louis XVIII., but on his return from Elba he joined his old master, and stood by him during the hundred days; on the second Restoration he was arrested, tried by his peers, and shot. Died, 1815.

Nicholas II., who on November 1, 1894, succeeded Alexander III. as "Emperor of All the Russias," was born in St. Petersburg on May 18, 1868, his mother being the Princess Dagmar, a daughter of the late King Christian IX. of Denmark, and sister to Queen Alexandra, the Duchess of Cumberland, and the King of Greece. During the famine of 1891, he was, at his own request, made president of the committee of succor, and worked hard in the organization of relief. As Czarevitch he held several military commands in his own country—in the famous Probrajensky regiment among others—and in England he had conferred upon him in 1893, the order of the garter. He married the Princess Alix of Hesse-Darmstadt in November, 1894. Four daughters came first, but a son was born on August 12, 1904, and was named Alexis. The coronation of the czar took place with impressive ceremonial at Moscow in May, 1896, and in August of the same year he commenced a tour which included visits to the Emperor of Austria and Germany, to the King of Denmark, to Queen Victoria, and to the President of France. The famous peace proposals which he made to the powers during 1898, led to the first peace conference at The Hague in 1899, the establishment of the Permanent Court of Arbitration there, and indirectly to the second conference in 1907. He is gifted with the linguistic facility of most of his countrymen, and fluently speaks French, German, Italian, and especially English, of whose literature he has a thorough knowledge. The czar must belong to the Orthodox Greek Church, and his consent is necessary to the marriage of any prince or princess of the Imperial family.

Nicholas V., "Da Sarzana" born in 1389, was elected in 1447 (the abdication of the anti-pope, two years later, bringing to an end the "Great Schism"), and defeated the conspiracy of Porcari in 1452. He was a great scholar, was chief founder of the Vatican library, and of several Italian universities, and offered an asylum to the Greeks driven out of Constantinople. Died, 1455.

Niebuhr, Barthold Georg, born in 1776, his son, historian and philologist, was born in Copenhagen, but in 1805, entered the Prussian service, and became privy councillor. He was several years minister at Rome, and negotiated the concordat of 1821. In 1823, he obtained a chair at Bonn, and his "Römische Geschichte" appeared in enlarged form in 1827. It was translated by Hare and Thirlwall. He was also author of "Corpus Scriptorum Historie Byzantine" and other works, and discovered at Verona the fragments of Gaius. Died, 1831.

Niehaus, Charles Henry, sculptor; born in Cincinnati, January 24, 1855; educated at Cincinnati schools; art education at Royal Academy, Munich, Germany; took degree and won first medal ever given to American, and prizes at different times. Made Garfield statue, Cincinnati; Ingalls, Allen, Garfield, and Morton, in rotunda of Capitol, Washington; statues of Gibbon and Moses, Congressional Library, Hahnemann at Scott Circle, Washington; Astor historical doors, Trinity Church, New York; pediment to appellate courthouse, New York; statues of Hooker and Davenport, Conn. State House; statue to Drake, erected by Standard Oil Company, at Titusville, Pa.; two large groups, "Mineral Wealth," Pan-American Exposition, 1901; statues of Lincoln, Farragut, and McKinley, Muskegon, Mich.; Lincoln, Buffalo; Apotheosis of St. Louis for St. Louis Exposition; equestrian, General Forrest, Memphis, Tenn.

Nielsen, Alice, opera singer; born in Naahville, Tenn.; daughter of Erasmus Ivarius and Sarah A. Nielsen; musical education in San Francisco, under Mlle. Ida Valerga; first stage appearance with opera company at Oakland, Cal., 1893, as Yum Yum in "Mikado"; after Tivoli engagement, joined the Bos-

tonians, 1896, and took the rôle of Annabel in "Robin Hood," the following season played leading part of Maid Marion; also principal soprano rôle in "The Serenade." Stellar début at Grand Opera House, Toronto, Canada, September 14, 1898, in "The Fortune Teller."

Nightingale, Florence, was born in Florence in 1829, and, in 1851, entered an institution of sisters of mercy at Kaiserswerth. On November 4, 1854, she arrived with ninety-two women at Scutari, and brought the hospital there to a high state of efficiency. A testimonial was offered her but declined. She wrote "Notes on Hospitals," "Notes on Nursing," and other works.

Nilsson, Christine, an operatic singer, born in Sweden, 1843; daughter of a peasant, and one of the foremost sopranos of her day; distinguished for her dramatic talent no less than by her powers as a vocalist. Died, 1882.

Nimrod, a grandson of Ham, is supposed to have been the founder of Babylon, and also the first king and the first conqueror. In the Scripture he is called "a mighty hunter before the Lord."

Ninus, the supposed founder of the Assyrian monarchy, and builder of the city of Nineveh, flourished about 248 B. C., and was husband of the famous Semiramis.

Nixon, Lewis, shipbuilder; born in Leesburg, Va., April 7, 1801; early education in Leesburg; appointed midshipman, United States Navy, 1878; graduate of United States Naval Academy, 1882, at head of class, and sent to Royal Naval College, Greenwich, England, by navy department; transferred to construction corps of navy, 1884; in 1890, designed battle-ships "Oregon," "Indiana," and "Massachusetts," and then resigned from navy to become superintending constructor of Cramp shipyard, Philadelphia; resigned, 1895, and started Crescent shipyard, Elizabeth, N. J., on his own account, where he has built 100 vessels in six years, among others the sub-marine torpedo-boat, "Holland," monitor "Florida," torpedo-boat "O'Brien," and cruiser "Chattanooga." Appointed by Mayor Van Wyck president of East River Bridge Commission, January, 1895; appointed, 1902, New York commissioner to Louisiana Purchase Exposition, St. Louis; trustee of Webb's Academy and home for shipbuilders; Democrat (Tammany Hall); succeeded Richard Croker as leader of Tammany Hall, November, 1901, to May, 1902; chairman of finance committee, Democratic congressional campaign committee. President and director of United States Shipbuilding Company, which includes Bethlehem Steel Company, Union Iron Works, Cal., Bath Iron Works, Crescent Shipyard, Eastern Shipbuilding Company, and Harlan & Hollingsworth Company, Wilmington, Del. Director: Guardian Trust Company, Trust Company of the Republic, United States Long Distance Auto Company, International Smokeless Powder Company.

Noah, an eminent patriarch, the ninth in descent after Adam, was born about 2950 B. C. He was 600 years old when the grand deluge destroyed all the human race except himself and his family, who were saved in the ark, and entered into a new and everlasting covenant. Died at the age of 950 years.

Nordica, Lillian (Mme. Zoltan Döme), prima donna; born (Lillian Norton) in Farmington, Me., in 1859; musical education in New England Conservatory, by John O'Neill, and with San Giovanni, Milan, Italy; married, first, to Mr. Gower; second, to Herr Döme. Operatic début, Brescia, Italy, in "La Traviata"; appeared in London, 1887, and in Paris, St. Petersburg, and other European capitals. Repertoire embraces forty operas and all the standard oratorios; best known in Wagnerian parts.

North, Frederick, Earl of Guilford, commonly known as Lord North; statesman; born in 1732, of the same family as first earl; became chancellor of the exchequer in 1769, and from 1770 to 1782, was prime minister, after which he formed a coalition with Fox, and was joint secretary with him for a few months. He was the favorite minister of George III., but towards the end of his administration wished to conclude peace with the colonies. Died, 1792.

North, Simon Newton Dexter, journalist, statistician; born in Clinton, N. Y., November 29, 1849; graduate of Hamilton College, 1869. Managing editor "Utica Morning Herald," 1869-80; president of New York State Associated Press, 1885-86; editor and joint proprietor of "Albany Express," 1886-88. Secretary of National Association of Wool Manufacturers, 1888-1903. Appointed member of United States Industrial Commission by President McKinley, 1898; resigned, 1899, to accept position of chief statistician for manufactures, twelfth census; appointed, April, 1903, di-

rector United States census. Author: "An American Textile Glossary," "A History of the American Wool Manufacture," "Old Greek, an Old Time Professor in an Old-Fashioned College" (memoir of Dr. Edward North); also numerous pamphlets and lectures on economical, industrial, and educational subjects.

Norton, Charles Elliot, professor of history of art, Harvard, 1874-98; professor emeritus since 1898; born in Cambridge, Mass., November 16, 1827; graduate of Harvard, 1846 (Litt. D., Cambridge, England, 1884; L. H. D., Columbia, 1885; LL. D., Harvard, 1887, Yale, 1901; hon. D. C. L., Oxford University, England, 1900). Entered commercial office in Boston, 1846; went as supercargo on East Indian voyage, 1849; later made several trips to Europe. Known as a Dante scholar and an authority on art. Author: "Considerations on Some Recent Social Theories," "Historical Studies of Church Building in the Middle Ages," "Notes of Travel and Study in Italy." Editor: "North American Review," 1862-68; "Letters of James Russell Lowell," "Writings of George William Curtis," "Correspondence of Carlyle and Emerson, and of Goethe and Carlyle," "Reminiscences and Letters of Thomas Carlyle," "Letters of John Ruskin." Translator of Dante's "Vita Nuova" and "Divina Commedia."

O'Connell, Daniel, born in Kerry in 1775; educated at St. Omer and Douay, and was called to the bar in 1798. His agitation for removing the political disabilities of the Roman Catholics culminated in 1828, when he was elected for Clare, but not allowed to take his seat. Amidst great excitement the Catholic Emancipation Bill was passed in 1829. He first demanded the repeal of the Union in 1841. After holding several monster meetings in Ireland, he was arrested, fined, and imprisoned, but this judgment was reversed by the House of Lords. O'Connell was opposed to the use of physical force, and discountenanced the Chartists and the "Young Ireland" party. He died in Genoa in 1847.

Odell, Benjamin B., Jr., governor of New York, 1901-05; born in Newburgh, N. Y., January 14, 1854; educated in public schools, Bethany (W. Va.) College, and three years at Columbia College; since 1875, in commercial pursuits; now president of ice and electric lighting companies. Member of Republican State Committee since 1887; chairman of executive committee, 1896. Member of Congress, 1895-1901. Chairman of Committee on Accounts, 55th Congress. Now chairman of Republican State Committee, New York.

Odoacer, a Herule or Rugian chieftain, after attacking and slaying the patrician Orestes, and deposing his son, the Emperor Romulus Augustulus (476), ruled Italy as patrician under the Eastern Emperor Zeno, but was practically an independent sovereign. He was overthrown by Theodoric, King of the Ostrogoths, who put him to death in 493.

Oglethorpe, James Edward, born in 1698; English general, served under Marlborough, and Eugene; in 1733, founded the colony of Georgia, which he named after George II.; returned to England in 1743, and held a command against the Jacobites (1745). Died, 1785.

Ohm, Georg Simon, born in 1787; German man of science; discovered "Ohm's law" of electricity, by which the intensity of a current is stated in terms of the electro-motive force and the resistance of the circuit. Died, 1854.

Oku, General Count, was born in 1847, and has seen thirty-six years' service with the Japanese army. In 1877, when he had attained the rank of major, he greatly distinguished himself at the siege of Kumamoto Castle by the Satsuma insurgents, cutting his way out and opening communication with the relieving army. When the war broke out with China in 1894, he was given the command of a division in the Manchurian campaign, and received his title of nobility in recognition of his great services. His knowledge of the ground, and his capacity, marked him out for service in the war with Russia, and he commanded the second army, which landed on the east coast of the Liao-tung Peninsula in May, 1904, won the brilliant victory at Kinchau, and did splendid service in the subsequent fighting in Manchuria. Count, 1907.

Olaf, St., a Norwegian king; wrested the throne from Eric, and set himself to propagate Christianity by fire and sword, excited disaffection among his people, who rebelled and overpowered him with the assistance of Cnut of Denmark, so that he fled to his brother-in-law, Jaroslav of Russia; by his help he tried to recover the throne, but was defeated and slain, his body being buried in Trondhjem; he was canonized in 1164, and is patron saint of Norway.

Olcott, "Chauncey" (Chancellor John Olcott), singer and actor; born in Buffalo, July 21, 1860; educated in Buffalo common schools; brought out as singer

by late R. M. Hooley, 1880. With Hooley's company two years, then consecutively with Haverly's company, Carncross Minstrels, Denman Thompson, Duff's Opera Company for several seasons; sang two years in England in comic opera, then succeeded W. J. Scaulan as star in Irish musical dramas; has since appeared in various leading rôles in United States and England.

Olney, Richard, ex-United States attorney-general, ex-United States secretary of state; born in Oxford, Mass., September 15, 1835; graduate of Brown, 1856; Harvard Law School, 1858; (LL. D., Harvard, Brown, Yale). Admitted to bar, 1859; practiced law in Boston (serving in Massachusetts Legislature, 1874) till appointed United States attorney-general by President Cleveland, serving from March 6, 1893, to June 8, 1895, and from June 10, 1895, until March 4, 1897, as secretary of state, United States. Resumed practice of law.

Omar Khayyam (*ô'mur ky-yâ'm*), astronomer-poet of Persia, born in Naishapur, in Khorassan; lived in the latter half of the Eleventh Century, and died in the first quarter of the Twelfth. He wrote a collection of poems which breathe an Epicurean spirit, and while they occupy themselves with serious problems of life, do so with careless sportiveness, intent on the enjoyment of the sensuous pleasures of life, like an easy-going Epicurean. The great problems of destiny do not trouble the author, they are no concern of his, and the burden of his songs assuredly is, as his translator says, "If not, 'let us eat, let us drink, for to-morrow we die.'"

Oppenheim, Nathan, physician, medical author; born in Albany, N. Y., October 17, 1865; graduate of Harvard, 1888; College of Physicians and Surgeons (Columbia), 1891. Attending physician, children's department, Sydenham Hospital, and New York City Children's Hospital and schools; specialty in diseases of children. Author: "The Development of the Child," "The Medical Diseases of Childhood," "The Care of the Child in Health," "Mental Growth and Control." Also various scientific essays.

Oppen, Frederick Burr, artist; born in Madison, Lake County, O., January 2, 1857; left school at 14; worked a year or more in the village newspaper office; went to New York and worked in a store for a short time and then, having sold some humorous sketches to "Wild Oats" and other comic papers, went to drawing as a profession; on art staff of "Frank Leslie's" three years; an artist of "Puck" eighteen years; severed connection with "Puck" to accept offer from Hearst's New York Journal, May, 1899; stockholder in the "Puck" company. Illustrator for Bill Nye, Mark Twain, Hobart (Dinkelspiel), Dunne (Dooley), etc. Author: "The Folks in Funnyville" (with his own verses and pictures), "Our Antediluvian Ancestors," "Happy Hooligan," "Alphonse and Gaston," "John Bull."

Orange, Princes of, (1) William I., "the Silent" born in 1533, son of William, Count of Nassau; inherited large domains in Brabant, Flanders, and Holland; was sent as a boy to the court of Charles V.; enjoyed the confidence of that emperor, but was distrusted by his son, Philip II. On learning the designs of Philip and Henri II. of France against the Protestants (1559), he determined to espouse their cause. When the Duke of Alva arrived in the Low Countries (1567), he put himself at the head of the insurgents, and, after a protracted struggle, founded the republic of the Netherlands (1579) of which he was elected the first stadtholder. He was assassinated at Delft. Died, 1584. (2) Maurice of Nassau born in 1567, second son of the preceding; was one of the most skillful strategists of the age. Was appointed stadtholder of Holland in 1587, and soon afterwards of Utrecht, Overysel, and Gueldres. The war with Spain was continued till 1609, after which the Dutch were able to maintain their independence. In 1618, Barneveldt, who accused Maurice of ambitious projects, was put to death. Maurice succeeded his elder brother as Prince of Orange (1618). Died, 1625.

Oscar I., King of Sweden and Norway, son of Bernadotte, born in Paris, reigned from 1844 to 1857.

Oscar II., King of Sweden and Norway, son of preceding, succeeded his brother Charles XV. in 1872; has distinguished himself in literature by translating Goethe's "Faust" into Swedish, and by a volume of minor poems under his "nom de plume" Oscar Frederick; born in 1829; died, 1907.

Osler, William, physician, educator, author; born in Tecumseh, Ont., 1849; graduate of McGill Montreal, 1872; (LL. D., McGill, Toronto, University of Edinburgh, University of Aberdeen, Harvard, Yale; D. Sc., Oxford); professor of institutes of medicine, McGill University, 1874-84; professor of clinical medicine, University of Pennsylvania, 1884; professor of

medicine, Johns Hopkins University, 1889-1905; Regius professor of medicine, Oxford University, since 1905. Author: "The Cerebral Palsies of Children," "Chorea and Choreiform affections," "Lectures on Abdominal Tumors," "Angina Pectoris and Allied States," "The Principles and Practice of Medicine," "Cancer of the Stomach," "Science and Immortality" (Ingersoll lecture, Harvard University), "Æquanimitas," and "Other Addresses."

Ossian (*osh'e-an*), a Celtic bard, supposed to have lived in Scotland or Ireland about fifteen hundred years ago. He was the son of Fingal, King of Morven, a famous hero, and was blind. Ossian's poems are remarkable for their grandeur and wild beauty, and are very different from all other poetry. They have been published in nearly all European languages.

Otto I., "the Great," Emperor of the West, born in 912, son of Henry the Fowler, was chosen King of Germany in 936; in 951 was summoned to aid the Italians against Berengar, and married Adelheid, widow of King Lothair; routed the Hungarians near Augsburg, in 955; in 962 was crowned Emperor at Rome by Pope John XI. He subsequently deposed John, and set up Leo VIII. in his stead. He extended his dominion over nearly the whole of Italy, reestablished the Western Empire, and made many reforms in church and state. Died, 973.

Owen, Robert, the founder of socialism in England, was born of poor parents in Newtown, Montgomeryshire, 1771. In 1800 he became owner of the New Lanark Cotton Factory, where he proceeded to put in practice his theories of a new system of society. He afterwards made unsuccessful attempts to establish communistic settlements at New Harmony in America (1825), and Harmony Hall in Hampshire (1844). To his efforts may be traced the first factory legislation, the co-operative movement, and the establishment of infant schools. Died, 1858.

Oxenstierna, Axel, Count, born in 1583, Swedish statesman, was made chancellor by Gustavus Adolphus in 1611; succeeded him as leader of the Protestant party in Germany (1632-35); acted as regent throughout the minority of Christina, and became her chief minister when she assumed the government (1644). Died, 1654.

Oyama, Field-Marshal Prince, was born in Kagoshima, in 1844. Entered the Japanese Army, was appointed colonel in 1871, promoted major-general in the same year, lieutenant-general in 1877, general in 1891, and in 1898, was raised to the rank of field-marshal. Having served as military attaché on the French side during the Franco-Prussian War, upon his return to Japan he entered the ministry of war, and assisted in the work of reorganising the army. In the Satsuma rebellion (1877) he took command of a brigade, and played a conspicuous part in subduing the revolt. Afterwards he was appointed under-secretary, and subsequently minister of war. When war broke out between Japan and China he was minister of war, but he took the field as commander of the second army, and captured Kinchow, Talienwan, Port Arthur, and Wei-hai-wei. In 1904, Oyama was chief of the general staff, and when war broke out with Russia he was appointed commander-in-chief in Manchuria, defeating the Russians at the three great battles of Liau-Yang, the Shaho, and Mukden. He received the order of merit, February 21, 1906, and resigned his post as chief of the general staff in April. Received the first class of the order of the golden kite, December, 1906, Prince, 1907. His wife was educated in America, and took a degree.

Paderewski, Ignace Jan, famous pianist and composer, was born in November 6, 1860, in Padolia, a province of Russia Poland. He began to play the piano at the age of 3, and, when 7 years old, was placed under Pierre Sovinski, a local tutor. In 1872, he went to Warsaw, learning harmony and counterpoints from Roguski, and subsequently from Frederic Kiel. He toured through Russia, Siberia, and Roumania, playing only his own compositions. In 1878, he became professor of music in Warsaw Conservatoire, and for a while, in 1884, he was a professor at Strassburg Conservatoire, but then definitely decided to try his fortune as a virtuoso. After three years' study with Leschetizky, in Vienna, he made his debut in 1887 with instant success. He has toured Germany, Paris, London, and America.

Page, Thomas Nelson, author; born in Oakland Plantation, Hanover County, Va., April 23, 1853; educated at Washington and Lee (Litt. D.); graduate of law department of University of Virginia; D. Litt., Yale; practiced law in Richmond, Va., 1875-93; lecturer. Author: "In Old Virginia," "Two Little Confederates," "On Newfound River," "The Old South," "Among the Camps," "Elsket and Other Stories," "Befo' de War" (with Armistead C. Gordon); "Pastime Stories," "The Burial of the Guns," "Unc' Edinburg," "Meh Lady,"

"Mars Chan," "Polly," "Social Life," in Old Virginia "The Old Gentleman of the Black Stock," "Two Prisoners," "Red Rock," "Santa Claus's Partner," "A Captured Santa Claus," "Gordon Keith," "The Negro—The Southerner's Problem."

Palme, John Knowles, professor of music, Harvard, since 1875; born in Portland, Me., January 9, 1839; studied music under Hermann Kotschmar there; made first appearance as organist, 1857; studied in Germany under Haupt and others, 1858-61; made artistic tour there, 1866-67; instructor of music, Harvard, 1862-73; (A. M., Mus. D.). Composer of music to "Edipus Tyrannus" of Sophocles as performed in Greek at Cambridge, 1881; spring symphony; symphony in C minor; symphonic poems; Shakespeare's "Tempest"; "Island Fantasy," overture to "As You Like It"; cantatas, Nativity and Song of Promise, choruses to birds of Aristophanes; etc.; opera of Azara; "Centennial Hymn" to Whittier's words, sung at opening of Philadelphia Exposition, 1876; Columbus march and hymn for World's Columbian Exposition, 1892; Hymn of the West, words by Steedman, sung at the opening of the St. Louis Exposition, 1904; also mass, oratorio of St. Peter; cantatas, Realm of Fancy and Phoebus Arise, etc.

Palme, Thomas, a political writer; born in England, 1737. In 1774 came to the United States, became editor of the "Pennsylvania Magazine"; issued his pamphlet, "Common Sense," in which he advocated the independence of the colonies. He went to Paris in 1789, and issued there his "Rights of Man"; in 1792, elected a member of the French National Assembly, acting with the Girondists, and narrowly escaped the guillotine. In 1796, appeared his deistical work, "The Age of Reason." Returned to the United States in 1802. Died in New York, 1809.

Paley, William, born in 1743, English theologian, professor of divinity at Cambridge, and archdeacon of Carlisle; wrote "Horæ Pauline," "Natural Theology," "Evidences of Christianity," etc. Died, 1805.

Pallissy, Bernard (*pah-le-ae*), a famous French potter, chemist and enameler, was born near Agen, 1506. The pottery made by Pallissy, known as the Pallissy ware, is much prized by collectors, and is distinguished for the high relief of the figures and ornaments. Died, 1589.

Palma, Tomas Estrada, Cuban patriot; born in Bayamo, Cuba; studied law at University of Seville, but never practiced. Took part in the Cuban revolution of 1868-78, in the early part of which his mother had been captured and starved to death by the Spaniards. Her death made him heir to a vast estate, which the Spaniards confiscated. He became President of Cuban Republic, but was captured, 1877, and imprisoned until hostilities ceased, 1878; then went to Honduras; became teacher and later postmaster-general; married a daughter of President Guardiola. Came to the United States; settled in Central Valley, Orange County, N. Y. During last revolution delegate-at-large and minister plenipotentiary for Cuban Republic. President of Cuba, 1902-06.

Palmer, George Herbert, Alford professor of natural religion, moral philosophy, and civil polity, Harvard, since 1889; born in Boston, March 19, 1842; graduate of Harvard, 1864; studied at University of Tübingen, 1867-69; Andover Theological Seminary, 1870 (LL. D., University of Michigan, 1894, Union, 1895; Litt. D., Western Reserve, 1897); tutor of Greek, Harvard, 1870; assistant professor 1873-83, professor philosophy, 1883-89. Author: "The Odyssey," (English translation in rhythmic prose); "The New Education," "The Glory of the Imperfect," "Self Cultivation in English," "The Antigone of Sophocles" (translation), "The Field of Ethics," "The Nature of Goodness."

Papin, Denis, born in Blois, in France, A. D. 1647; a celebrated mathematician and physicist; at the time of his death professor of mathematics in the University of Marburg. He was one of the early inventors of the steam engine, and made many other discoveries in physical science. A statue to his memory was erected at Blois in 1880. Died, at Marburg, in Hesse-Cassel, 1714.

Park, Roswell, physician, born in Pomfret, Conn., May 4, 1852; graduate of Racine College, M. D., medical department Northwestern University, 1876 (honorary M. D., Lake Forest University; LL. D., Yale, 1902); instructor in anatomy, Woman's Medical College, Chicago 1877-79; adjunct professor of anatomy, medical department, Northwestern University, 1879-82; lecturer on surgery, Rush Medical College, Chicago, 1882; since 1883, professor of surgery, medical department, University of Buffalo, and surgeon to Buffalo General Hospital. Attended President McKinley after he was shot, 1901. Author "Lectures on Surgical Pathology," "History of Medicine," "Text-book of Surgery" (two volumes).

Parker, Alton Brooks, jurist, lawyer; born in Cortland, N. Y., May 14, 1852; educated at public schools, Cortland Academy, Cortland Normal School; graduate of Albany Law School; (LL. D., Union); admitted to bar; practiced in Kingston; surrogate Ulster County, 1877-85; delegate to Democratic National Convention, 1884; tendered office of first assistant postmaster-general, 1885; chairman of Democratic State Committee, 1885; appointed justice of Supreme Court, N. Y., 1885, elected, 1886; member Court of Appeals, 2d division, 1889-92; member of general term, 1893-96, of appellate division, 1896-97; chief justice Court of Appeals, N. Y., January 1, 1898, to August 5, 1904; resigned to accept Democratic nomination for the presidency made on first ballot, July 9, 1904; now practicing law.

Parker, Theodore, born in 1810, American minister, son of a farmer at Lexington; ejected by the Unitarians for his writings, became leader of a society of freethinkers; was also an active abolitionist. A collected edition of his works appeared in 1863. Died, 1860.

Parkhurst, Charles Henry, Presbyterian clergyman; born in Farmingham, Mass., April 17, 1842; graduated from Amherst, 1866 (D. D., LL. D.); studied theology at Halle, 1839-70; Leipzig, 1872-73; taught in Williston Seminary, Easthampton, Mass., 1870-71; pastor Congregational Church, Lenox, Mass., 1874-80; since 1880 pastor Madison Square Presbyterian Church, New York. Became president, 1891, Society for Prevention of Crime, and his assertion of partnership of police with criminals led to an investigation of the New York police by the New York Legislature. Author "Forms of the Latin Verb Illustrated by the Sanskrit," "The Blind Man's Creed," "The Pattern on the Mount," "Three Gates on a Side," "What Would the World Be Without Religion?" "The Swiss Guide," "Our Fight with Tammany," "The Sunny Side of Christianity."

Parkman, Francis, American historical writer; born in Boston in 1823; lived some time among the Indians of the Rocky Mountains, and wrote "The Conspiracy of Pontiac," "The Old Régime in Canada," "Count Frontenac and New France under Louis XIV.," and "Montcalm and Wolfe," etc. Died in 1893.

Parnell, Charles Stewart, Irish politician; was born in 1846, in Avondale, County Wicklow, and educated at Cambridge. He entered public life as member for Meath in 1875, and two years later became conspicuous by the "obstruction" with which he met the prisons bill. He gradually ousted Mr. Butt from the leadership of the home rule party, and, in 1880, became leader of the Irish party and entered upon the land agitation. At the general election he was elected for three constituencies, but chose Cork, and as the head of the Land League was prosecuted in 1880, by the Gladstone government, the result being a disagreement of the jury. In the following session he, with the majority of his followers, was removed by the sergeant-at-arms for obstruction, and in October was imprisoned in Kilmainham under the coercion bill. He was released in April, 1882, but the "no rent" manifesto had meanwhile been issued, and in 1883, the National League took the place of the suppressed Land League. At the general election of 1885, he nominated every home rule candidate, and subsequently entered into an alliance with the followers of Mr. Gladstone. In the next parliament he proposed a bill to suspend evictions and reduce rent, after the rejection of which the agitation continued. In 1888, a special commission was appointed to examine the charges made against Mr. Parnell and others by the "Times," the result being his acquittal on the greatest, but condemnation on many others. In consequence of the result of the O'Shea divorce case in 1890, he was deposed by the majority of his party, but continued to lead the minority and to carry on an active campaign until his death in 1891.

Parsons, Frank, lawyer, educator, author; born in Mt. Holly, N. J., November 14, 1854; graduated in mathematics and engineering course, Cornell, 1873; admitted to Boston bar; chief clerk for law firm for a time; then opened offices of his own; text writer for Little, Brown & Company, publishers; public lecturer on economics and sociology; professor of history and political science, Kansas Agricultural College, 1897-1900; lecturer on law, Boston University since 1892. Author: "The World's Best Books," "Our Country's Need," "The Drift of Our Time," "Rational Money," "The New Political Economy," "The Power of the Ideal," "The City for the People," "Direct Legislation," "The Bondage of Cities," "The Story of New Zealand."

Parton, James, American writer; born in Canterbury in 1822, but was brought to America when a child, and wrote many works, the chief of which were "Life of Horace Greeley," "General Butler in New Orleans,"

"Life and Times of Benjamin Franklin," and "Life of Jefferson." Died in 1891.

Partridge, William Ordway, sculptor, author; born in Paris, France, April 11, 1861; student Columbia College; art education in Rome, Florence, and Paris; works include statue of Shakespeare, Lincoln Park, Chicago; bronze statue, Alexander Hamilton, Brooklyn; Kauffmann Memorial, Washington; bust of Edward E. Hale, Union League Club, Chicago; Whittier, Boston Public Library; equestrian statue General Grant for Union League Club, Brooklyn; Schermerhorn Memorial, Columbia University; baptismal font St. Peter and Paul Cathedral, Washington; group Christ and St. John, Brooklyn Museum Fine Arts, etc. Author: "Art for America," "The Song Life of a Sculptor," "The Technique of Sculpture," "The Angel of Clay" (novel), "Nathan Hale, the Ideal Patriot."

Pasteur (päs-tör), Louis, an eminent French chemist, was born in Dôle, in department of Jura in 1822. Pasteur was celebrated for his studies and discoveries in fermentation, and also for his researches in hydrophobia, and his suggestion of inoculation as a cure. The Pasteur Institute in Paris was the scene of his researches from 1886. Died, 1895.

Patmore, Coventry, English poet; born in Essex, 1823; best known as the author of "The Angel in the House," a poem in praise of domestic bliss, succeeded by others, superior in some respects, of which "The Unknown Eros" is by many much admired. Died, 1896.

Patti, Mme. Adelina, Craig-y-Nos Castle, Brecon, the greatest operatic prima donna the world has ever seen; of late years heard once a year, at the annual concert she has given at the Albert Hall, London; was born at Madrid in 1843, but was brought to America when only a few years old, and in this country she appeared as a prodigy vocalist. She is said to have earned nearly two millions during the course of her brilliant operatic career all over the world. Mme. Patti has been married three times—first to the Marquis de Caux, then to Signor Nicolini, the famous tenor, and is now Baroness Cederstrom.

Pattison, Mark, born in 1813; scholar and divine; became Fellow of Lincoln College, Oxford, in 1839, and rector in 1861. He was at first a follower of Newman, but afterwards contributed to "Essays and Reviews," and became an active university reformer. His chief works were "Life of Casaubon," "Milton in 'The Men of Letters'" series, and an edition of Pope's works. Died, 1884.

Patton, Francis Landey, educator, theologian; born in Warwick Parish, Bermuda, January 22, 1843; educated at Knox College, Toronto, University of Toronto; graduated from Princeton Theological Seminary, 1865 (LL. D., Wooster University, 1878, Harvard, 1889, Toronto, 1894, Yale, 1901, Johns Hopkins, 1902); ordained to Presbyterian ministry June 1, 1865; pastor 84th Street Presbyterian Church, New York, 1865-67; Presbyterian Church, Nyack, 1867-70; South Church, Brooklyn, 1871. Professor in Cyrus H. McCormick Theological Seminary of the Northwest (now McCormick Seminary), Chicago, 1872-81; also, 1874-81; pastor Jefferson Park Presbyterian Church, Chicago; moderator general assembly, 1878; professor of Relations of Philosophy and Science to the Christian Religion, Princeton Theological Seminary, 1881-88, this chair being founded and endowed for Dr. Patton by late Robert L. Stewart, and, 1886-88, also professor of ethics, Princeton University; president Princeton University, 1888-1902, resigned; since 1888 professor of ethics, Princeton University, and lecturer on theism, Princeton Theological Seminary, which positions he still holds; president of Princeton Theological Seminary since 1902. Author: "The Inspiration of the Scriptures," "Summary of Christian Doctrine."

Paul, St., this eminent apostle, originally named Saul, was a Jew of pure Hebrew descent, of the tribe of Benjamin. He was born at Tarsus in Cilicia, and was by birth a free Roman citizen. The mysterious circumstances that led to and attended his conversion, and his apostolic travels, are, doubtless, familiar to our readers, and need not be given here. Much diversity of opinion, however, prevails among the learned about the dates of the principal events of his life. About the year 59, having visited Jerusalem for the fifth time since his conversion, the populace there assailed him, and would have killed him, but an officer took him into custody and sent him to the Roman Governor Felix, at Cæsarea, where he was unjustly detained a prisoner for two years. Having finally appealed to the Roman Emperor, according to the privilege of a Roman citizen, he was sent to Rome. On the voyage thither, he suffered shipwreck at Melita (probably Malta), in the spring of A. D. 61.

At Rome, he was treated with respect, being allowed to dwell "for two whole years in his own hired house." Whether he ever left the city or not cannot be positively demonstrated, but it is believed by many critics, from a variety of considerations, that he did obtain his liberty about A. D. 64, and that he made journeys both to the East and to the West, revisiting Asia Minor, and carrying out his long-cherished wish of preaching the gospel in Spain, then thought to be the western limit of the world. Meanwhile occurred the great and mysterious burning of Rome, generally attributed to Nero. The latter threw the blame on the Christians, who were, in consequence, subjected to a severe persecution. Among the victims was Paul, who, according to tradition, suffered A. D. 67.

Payne, John Howard, born in 1792; American actor and dramatist; wrote for the press at 13, and appeared on the stage at 16; made his debut at Drury Lane in 1812, when 20, and composed a number of pieces, in one of which the air "Home, Sweet Home" was first heard. He died as consul at Tunis in 1852.

Payne, Sereno E., congressman, lawyer; born in Hamilton, N. Y., June 26, 1843; graduate of University of Rochester, 1864; admitted to bar, 1866; practiced at Auburn (LL. D., Colgate, 1902, University of Rochester, 1903); married, 1873, to Gertrude Knapp. City clerk, Auburn, 1868-71; supervisor, 1871-72; district attorney, Cayuga County, 1873-79; president of board of education, 1879-82; member of Congress, 1883-87; and, since 1889, 31st New York district. Chairman of Committee on Ways and Means; was active in framing McKinley and Dingley Tariff laws. Member of High Joint Commission to negotiate treaty with Canada, 1898.

Peabody, Francis Greenwood, Plummer professor of Christian morals, Harvard, since 1886; born in Boston, 1847; graduate of Harvard, 1869; Harvard Divinity School, 1872 (D. D., Yale); pastor of First Parish Church, Cambridge, 1874-80; Parkman professor of theology in Harvard Divinity School, 1880-86. Author: "Mornings in the College Chapel," "Short Addresses to Young Men on Personal Religion," "Founder's Day at Hampton," "Afternoons in the College Chapel," "Jesus Christ and the Social Question," "Happiness," "Religion of an Educated Man."

Peabody, George, born in 1795; philanthropist; having made a fortune as a drygoodsman in America, went to England and established a banking business in London in 1843. Besides giving half a million to be invested for the London poor, he assisted with funds Dr. Kane's Arctic expedition, and founded and endowed many institutions at Baltimore and other places in the United States. Died, 1869.

Peary, Josephine Diebitsch, arctic traveler, author; born (Diebitsch) and educated in Washington, D. C.; married Lieutenant R. E. Peary, United States Navy, explorer, 1888; accompanied him on his 1891-92 and 1893-94 expeditions as far as winter quarters in Greenland; was the first white woman to winter with an arctic expedition; gave birth to a daughter (Marie Ahnighito), the most northerly born white child in the world; accompanied her husband on his arctic trip in 1897. Went north to meet her husband in 1900. Ship caught in ice and she wintered with her little daughter at Cape Saline, 78° 42' north latitude; went north again in 1902, returning with her husband. Author: "My Arctic Journal," "The Snow Baby."

Peary, Robert Edwin, arctic explorer, officer in United States Navy; born in Cresson, Pa., May 6, 1856. Entered United States Navy as civil engineer, October 26, 1881; assistant engineer on Nicaragua ship canal under government orders, 1884-85; engineer in charge of Nicaragua canal surveys, 1887-88; invented rolling-lock gates for canal; now commander and civil engineer in United States Navy. Made reconnaissance, 1886, of the Greenland inland ice-cap, east of Disco Bay, 70° north latitude; chief of arctic expedition of Academy of Natural Sciences of Philadelphia, June, 1891, to September, 1892, to northeast angle of Greenland (Independence Bay 81° 37' north latitude); discovered and named Melville Land and Heilprin Land, lying beyond Greenland. Made another arctic voyage, 1893-95; made thorough study of little tribe of Arctic Highlanders; discovered, 1894, famous Iron Mountain (first heard of by Ross, 1818), which proved to be three meteorites, one of them weighing ninety tons (the largest known to exist); failed to reach the northern end of Greenland on third trip. Fitted out another ship, and sailed on another Polar expedition in 1905. Made summer voyages, 1896, 1897, bringing the Cape York meteorites to United States; commander of Arctic expedition under auspices of Peary Arctic Club of New York City, 1898-1902; rounded northern extremity of

Greenland Archipelago, the last of the great Arctic land groups; named the northern cape, the most northerly land in the world (83° 39' north latitude), Cape Morris K. Jesup; attained highest north in Western Hemisphere (84° 17' north latitude). Author: "Northward Over the Great Ice."

Peck, Harry Thurston, professor of Latin, Columbia University, editor of the "Bookman" since 1895; born in Stamford, Conn., November 24, 1856; graduate of Columbia, 1881 (A. M., Ph. D., L. H. D., LL. D.); studied in Berlin, Paris, and Rome. Author: "The Personal Equation," "The Semitic Theory of Creation," "Latin Pronunciation," "The Adventures of Mabel," "What is Good English?" "Greystone and Porphyry" (poems), "Twenty Years of the Republic," "The Life of Prescott." Editor: "Harper's Classical Dictionary," "The International Cyclopaedia" (15 vols.), "The New International Encyclopaedia" (20 vols.), "American Atlas of the World," "The Library of the World's Literature," "Masterpieces of Literature." Consulting editor of International Year Book, etc. Translator of "Trimalchio's Dinner," etc.

Peckham, Rufus William, associate justice of United States Supreme Court since December, 1895; born in Albany, N. Y., November 8, 1833; educated at Albany Academy and in Philadelphia; studied law; admitted to bar, December, 1859. District attorney of Albany County, 1868; later corporation counsel, city of Albany; justice of Supreme Court of New York, 1883-86; associate justice of Court of Appeals, New York, 1886-95.

Peel, Sir Robert, Bart., statesman; born in 1788, eldest son of the first baronet; was named under-secretary for the Colonies immediately on his entering parliament in 1811, and was Irish secretary from 1812 to 1818. In the following year he was chairman of the bank committee, and, in 1822, was appointed to the home office, becoming leader in the Commons on the death of Canning (1827). As such, he introduced the Catholic emancipation and police bills, and lost his seat for Oxford University in consequence of the former. After the reform bill he reconstructed his party, modern Conservatism dating from his Tamworth manifesto (1834). He now held office a few months, and was finally prime minister from 1841 to 1846, when his desertion of protection cost him the support of the majority of his followers. He died in 1850, from the consequences of a fall from his horse on Constitution Hill.

Pelz, Paul Johannes, architect; born in Seitendorf, County of Waldenburg, Silesia, Germany, November 18, 1841; educated in College of St. Elizabeth and College of the Holy Spirit, Breslau; did not graduate, but left at 16 to join his father, who settled in the United States, 1851, for political reasons; studied architecture, 1859-66, in New York, under Detlef Lienau. In practice as architect; was connected with United States Light-house Board as architect and civil engineer, and designed many lighthouses. Architect of New Congressional library building, Georgetown college academic building, Carnegie library, and music hall building, Allegheny, Pa. United States Government army and navy hospital, Hot Springs, Ark.; Chamberlin hotel, Old Point Comfort, Va.; clinic hospital, University of Virginia; Aula Christi, Chautauqua, N. Y.; machinery hall, Louisiana Purchase Exposition, and many others.

Penn, William, founder of Pennsylvania; was born in 1644, son of Sir W. Penn, who, with Venables, took Jamaica. He became a Quaker while at Oxford, and was several times imprisoned for his writings. In 1682, he embarked for the colony of the New Netherlands, which had been granted him by Charles II., and founded Philadelphia, but died in England, in 1718, having been in great favor at court under James II.

Pennell, Joseph, artist, illustrator, author; born in Philadelphia, July 4, 1860; pupil of Pennsylvania Academy of Fine Arts and Pennsylvania School of Industrial Art; represented in national collections of France (Cabinet des Estampes), Dresden, Buda Pesth, Melbourne, Perth, Adelaide, and in many State and municipal collections in Europe and America. Chairman of International Jury of Awards, St. Louis Exposition, 1904. Author: "A Canterbury Pilgrimage," "An Italian Pilgrimage," "Two Pilgrims' Progress," "Our Sentimental Journey Through France and Italy," "Pen Drawing and Pen Draughtsmen," "Our Journey to the Hebrides," "The Stream of Pleasure," "The Jew at Home," "Play in Provence," "To Gypsyland," "Modern Illustration," "The Illustration of Books," "The Alhambra," "The Work of Charles Keene." Lithography and Lithographers. Has illustrated a large number of books.

Pennypacker, Samuel Whitaker, jurist, ex-governor; born in Phoenixville, Pa., April 9, 1843; educated there and at West Philadelphia Institute; private of 26th "Emergency" regiment, 1863, at Gettysburg; graduated in law from University of Pennsylvania, 1866; has a notable library of early Pennsylvania imprints; presiding judge of Court of Common Pleas, Philadelphia, until 1902; governor of Pennsylvania, 1903-06. Author: "Pennsylvania Colonial Cases," "Annals of Phoenixville and Vicinity," "Historical and Biographical Sketches," "Index to the English Common Law Reports," "The Settlement of Germantown," "Congress Hall," "Capture of Stony Point," "Gen. Weedon's Orderly Book at Valley Forge," "Pennypacker's Supreme Court Reports" (4 vols.); and fifty other books and papers.

Pepin le Bref, born in 714; King of the Franks and father of Charlemagne, deposed Childeric III., and founded the Carolingian Dynasty (752), and afterwards, by helping Stephen III., against the Lombards, founded the temporal power of the popes. Died, 768.

Perry, Bliss, editor of "The Atlantic Monthly" since 1899; born in Williamstown, Mass., November 25, 1860; graduate of Williams, 1881 (A. M., L. H. D., Princeton, 1900, Williams, 1902; Litt. D., Bowdoin, 1904); studied in Berlin and Strassburg universities. Professor of English, Williams, 1886-93; Princeton, 1893-99. Editor: "Selections from Burke," Scott's "Woodstock" and "Ivanhoe," and "Little Masterpieces." Author: "The Broughton House," "Salem Kittredge, and Other Stories," "The Plated City," "The Powers at Play," "Chapter on Poetry in Counsel Upon the Reading of Books," "A Study of Prose Fiction," "The Amateur Spirit."

Pestalozzi, Johann Heinrich, born in 1745; Swiss educationist; established an institution for deserted children at Neuhof in 1798, and afterwards as a schoolmaster at Burgdorf and Yverdon, practiced his "intuitive" system. His chief works were "How Gertrude Instructs Her Children" and his "Mother's Book." Died, 1827.

Peter, St., one of the foremost of the twelve apostles; originally called Simon, he was the son of Jona, and a resident at Bethsaida; his brother Andrew, being a disciple of John the Baptist, was by John directed to Jesus; and speedily he prevailed on Simon to accompany him to one who he felt convinced was the predicted Messias. Our Lord kindly received the newcomer, and gave him the name of Cephas, the Aramaic equivalent to the Greek Peter (John I. 35-42). Peter was a man of ardent temperament, affectionate and generous. He was favored with special manifestations of his Master's confidence, and performed a more prominent part in the sacred history than any other of the twelve disciples. He was crucified with his head downwards in the persecution under Nero, about A. D. 66.

Peter I., Tsar of Russia (Peter the Great); born in 1672; was joint ruler with Ivan V. from 1682 till 1689, when he became sole sovereign; visited Holland and England to learn ship-building, and on his return suppressed the conspiracy of the Strelitz (1698); founded St. Petersburg in 1703, and, after a defeat at Narva, won the victory of Pultowa over Charles XII. of Sweden in 1709. He added to his dominions Esthonia, Livonia, and part of Finland, and again visited western Europe in 1716-17. Died, 1725.

Peters, John Punnett, clergyman; born in New York, December 16, 1852; graduated from Yale, 1873; studied philology and theology, Yale (Ph. D., 1876; D. D., 1895); studied in Berlin and Leipzig, 1879-83 (honorary scholar of divinity, University of Pennsylvania, 1895); professor of Old Testament languages and literature Protestant Episcopal Divinity School, Philadelphia, 1884; professor of Hebrew, University of Pennsylvania, 1885; in charge of expedition of University of Pennsylvania to Babylonia, conducting excavations at Nippur, 1888-95; rector of St. Michael's Church, New York, 1893-1904; canon residentiary, Cathedral St. John the Divine since 1904. Author: "Scriptures, Hebrew and Christian" (Volumes I and II), "The Bible as Literature" (part author); "In Lauda Zion," "Nippur, or Explorations and Adventures on the Euphrates," two volumes, "The Old Testament and the New Scholarship," Translator: "Political History of Recent Times" (with appendix covering period 1876-81). Edited: "Diary of David McClure," "Early Hebrew Story," "Some Tombs in the Necropolis of Marissa" (with Dr. Hermann Thiersch).

Petrarca, Francesco, Italian poet; born in Arezzo in 1304; lived chiefly at Avignon, but passed his later years at Milan, Venice, and Padua; with Boccaccio took an active part in the revival of learning, and was crowned as laureate in the capitol by King Robert of Anjou in

1341. His chief works are "Sonnetti," "Canzoni et Trionfi" (in praise of Laura, a married lady whom he met at Avignon in 1327), and some Latin treatises. Died in Arquà in 1374.

Phidias, one of the greatest of sculptors, an Athenian; is supposed to have been born about 497 or 498 B. C. Little, however, is known respecting his life. Hippas is stated by some to have been his master, and Eladus by others. He executed several statues of Minerva, particularly that in the Parthenon (the works of which temple he superintended); a statue of Jupiter Olympius; and various other admirable productions. Died, 431 B. C.

Phillip, one of the twelve apostles, according to John's Gospel, "of Bethsaida, the city of Andrew and Peter," and who was called to follow Jesus at Bethany. After the resurrection he was present at the election of Matthias to the apostleship, but is not again mentioned. Phillip the Evangelist, often confounded with the above, is first mentioned in Acts vi: 5. He preached at Smyrna, where Simon Magus was one of his converts; baptized the Ethiopian eunuch; and entertained Paul and his companion on their way to Jerusalem.

Phillip, an Indian chief, whose father had been a staunch friend of the Pilgrim settlers, was himself friendly to the colonists, till in 1671 their encroachments provoked him to retaliation; after six years' fighting, in which many colonists perished and great massacres of Indians took place, he was defeated and slain in 1676.

Phillip II., King of Macedonia; born B. C. 382; ascended the throne in 360 B. C.; instituted the phalanx, made Thrace and Thessaly tributary, defeated the Athenians at Chæronea (338), but was assassinated at Egea two years later. Died, 336 B. C.

Phillip II. of Spain, born in 1527; succeeded upon the abdication of Charles V. in 1555. He married (1) Isabella of Portugal, (2) Mary of England, (3) Anne of Austria. His reign was marked by the revolt of the Netherlands, the annexation of Portugal (1580), the defeat of the Turks at Lepanto (1571), and the loss of the Armada (1588). Died, 1598.

Phillips, Wendell, an American orator and abolitionist; born in Boston, Mass., November 29, 1811. He was graduated at Harvard in 1831, studied law there, and was called to the bar in 1834. But before clients came he had been drawn away from his profession to the real work of his life. A timely speech in Faneuil Hall in 1837, made him at once the principal orator of the anti-slavery party; and henceforth, till the president's proclamation of January 1, 1863, he was Garrison's loyal and valued ally, his lectures and addresses doing more for their cause than can well be estimated. He also championed the cause of temperance, and that of women, and advocated the rights of the Indians. In 1870, he was nominated governor by the Prohibitionists and the Labor party. His speeches and letters were collected in 1863 (new edition 1884). He died in Boston, Mass., February 28, 1884.

Phipps, Henry, manufacturer; born in Philadelphia, September 27, 1839; worked in stores in Pittsburgh, 1852-56; office boy and bookkeeper for Dilworth & Bidwell, spike manufacturers, 1856-61; partner in Bidwell & Phipps, agents for Dupont Powder Company, 1861; also partner in small iron mill, Klonam & Phipps; later associated with Thomas M. and Andrew Carnegie in iron and steel manufacture, building up large fortune, and having, next to Mr. Carnegie, largest interest in United States Steel Corporation; director of United States Steel Corporation, Carnegie Company, Van Norden Trust Company, Mellon National Bank (Pittsburg).

Pickering, Edward Charles, professor of astronomy and director Harvard College observatory since 1877; born in Boston, Mass., July 19, 1846; graduated Lawrence Scientific School, Harvard, 1865 (A. M., 1880, LL. D., universities of California, 1886, of Michigan, 1887, of Chicago, 1901, of Harvard, 1903, of Heidelberg, 1903; divinity scholar, Victoria University, England, 1900); instructor of mathematics, Lawrence Scientific School, 1865-67; Thayer professor of physics, Massachusetts Institution of Technology, 1867-77; established first physical laboratory in United States; under his direction invested capital and income of the observatory has increased fourfold; study of light and spectra of the stars have been special features of his work; by establishing an auxiliary station in Arequipa, Peru, southern stars are also observed, extending the work from pole to pole. Author: "Elements of Physical Manipulation," and various volumes of annals and other publications of Harvard College Observatory.

Pilate, Pontius, Roman procurator of Judea and Samaria in the days of Christ, from A. D. 26 to 36; persuaded of the innocence of Christ when arraigned before his tribunal, would fain have saved Him, but yielded

to the clamor of His enemies, who crucified Him; he protested before they led Him away by washing his hands in their presence that he was guiltless of His blood.

Pinchot, Gifford, forester; born in Simsbury, Conn., August 11, 1865; graduated from Yale, 1889; studied forestry in France, Germany, Switzerland, and Austria; began first systematic forest work in United States at Biltmore, N. C., January, 1892 (M. A., Yale, 1901, Princeton, 1904); member National Forest Commission; chief division, afterward Bureau of Forestry, and now The Forest Service, United States Department of Agriculture, since July 1, 1898; member committee on organization of government scientific work since March 13, 1903, and commission on public lands since October 22, 1903. Author; "The White Pine" (with H. S. Graves), "The Adirondack Spruce," "A Primer of Forestry."

Pinero, Arthur Wing, dramatic author; was born in London in 1855; commencing a legal career, he afterwards became connected with the stage, and acted at the Lyceum and Haymarket theaters. Devoting himself to play-writing, he produced his first piece, which was entitled "Two can Play at that Game," at the Lyceum. Other plays from his pen include "£200 a Year," "The Money Spinner," "The Squire," "Lords and Commons," "The Rocket," "The Magistrate," "Sweet Lavender," "The Profligate," "In Chancery," "Lady Bountiful," "The Times," "The Second Mrs. Tanqueray," "The Notorious Mrs. Ebbsmith," and "The Benefit of the Doubt," "The Princess and the Butterfly," "Trelawny of the Wells," "The Gay Lord Quex," "Iris," "Letty," "A Wife without a Smile," and "His House in Order." He also collaborated with Sir Arthur Sullivan and Mr. Comyns Carr in "The Beauty Stone," a romantic musical drama produced in May, 1898.

Pitt, William, born in 1759; statesman; second son of Lord Chatham; was returned for Appleby in 1780, as a follower of Shelburne, whose chancellor of the exchequer he became two years later. After the defeat of the Coalition ministry, Pitt became prime minister, at first in a minority. After the dissolution of 1786, however, he had a majority, with which he passed his India Bill, and carried on the war with revolutionary France. In 1801, he resigned on account of the king's opposition to the removal of Catholic disabilities, with which Pitt had hoped to accompany the Act of Union. From 1804, till his death (1806), Pitt was again in office, and continued to direct the struggle against France.

Plus V., Ghisléri, born in 1504; elected in 1566, having previously been inquisitor-general; excommunicated Queen Elizabeth and suppressed heresy, but also carried out reforms, and encouraged Spain and Venice in their war against the Turks. Died, 1572.

Plus IX., Giovanni Mastai-Ferretti, born in 1792; was elected in 1846, and immediately granted a constitution, but refused to declare war against Austria. After the insurrection at Rome (1848), he fled to Gaeta, but was restored by French aid two years later. The same year he established a Catholic hierarchy in England, and in 1854, defined the doctrine of the Immaculate Conception. In 1859-60 he lost the greater part of his dominions, but was maintained in Rome by a French garrison. In 1870, the Infallibility dogma was promulgated by the oecumenical council held at Rome. In that year, when the French left the city, it was declared the capital of Italy, and occupied by the troops of Victor Emmanuel. Died, 1878.

Plus X., is the 25th Roman Pontiff. His name is Giuseppe (Joseph) Sarto, and he was born in June 2, 1835, at Riese, in the diocese of Treviso, his father being a minor municipal official. His relatives are still shopkeepers and people of humble position. He was educated at Castelfranco and the diocesan seminary of Padua, and ordained priest September 18, 1858. He officiated nine years as curate at Tombolo, nine years as parish priest of Salzano; and was made canon and chancellor of the diocese of Treviso in 1875. In 1884, he was appointed Bishop of Mantua, and Leo XIII. made him a cardinal and patriarch of Venice, in 1903. His charity and tact brought him unbounded popularity, and he was more than once instrumental in settling serious strikes and labor disputes. He came into direct personal contact with the King and Queen of Italy while he was cardinal, but he is credited with an inflexible resolve to maintain the rights and liberty of the Church. On the death of Leo XIII., July 20, 1903, the conclave met, July 31st, and on August 4th, at the seventh scrutiny, elected Cardinal Sarto as pope, and he chose to be known as Pope Pius X. As priest and bishop his life was spent in the pastoral and episcopal service of the Church rather than in the paths of diplomatic and official service. He has always displayed deep interest in social questions and in bettering the life of the poor, to whom his charity at Venice was proverbial. He has shown himself zealous

in the reform of Church music and in other matters of ecclesiastical discipline. In May, 1907, he issued a decree entrusting the revision of the vulgate to the Benedictine Order, and in September issued an encyclical against the modernist movement in the Church.

Pizarro, Francisco, born in 1505; Spanish conqueror of Peru; embarked for America in 1510, and, in 1530, first visited Peru. The next year he returned, and, taking advantage of a civil war, got possession of the country, founding Lima in 1535. Six years later he was assassinated by the friends of Almagro, a rival whom he had caused to be executed. His brother, Gonzalo, who had accompanied him, was put to death in 1548, for a revolt against the Spanish viceroy. Died, 1541.

Plato, a Greek philosopher; born in Athens or in Egina, in May 429 B. C., the year in which Pericles died. He was a disciple of Socrates, and after the death of that philosopher, Plato himself became a teacher in the plane tree grove of the Academia. He had a great number of disciples, many of whom became eminent teachers. Among them was Aristotle, distinguished as the "Mind of the School," and perhaps Demosthenes. Women are said to have attended. In his 40th year, Plato visited Sicily, but he offended the tyrant Dionysius by the political opinions he uttered, and only escaped death through the influence of his friend, Dion. Two later visits to the court of the younger Dionysius were the only interruptions to his calm life as a teacher and writer at Athens. He died in the act of writing, it is said, in May, 347 B. C.

Platt, Thomas Collier, United States senator; born in Owego, N. Y., July 15, 1833; educated at Owego Academy; member of class of 1853, Yale, but compelled to give up course because of ill health (A. M., 1876); entered mercantile life; was president of Tioga National Bank at its organization; became largely interested in lumbering in Michigan; clerk of Tioga County, 1859-61; member of Congress, 1873-77; elected United States senator, January 18, 1881, and resigned, May 16th, same year, with Roscoe Conklin. Secretary and director of United States Express Co., 1879, and its president since 1880. President of board of quarantine commissioners, N. Y., 1880-88; has been president of Southern Central R. R. and of Addison & Northern Pennsylvania R. R. Has been recognized leader in New York Republican politics for years; United States senator since 1897; present term expires 1909.

Plutarch (ploot'ark), the most distinguished biographer of antiquity, was born in Boetia, about A. D. 50. After studying under Ammonius at Delphi, he taught philosophy at Rome during the reign of Vespasian, as is supposed. He belonged to the platonic school, and was a most prolific writer. His "Lives" of eminent Greeks and Romans, arranged in parallels, ranks as a standard classic.

Pocahontas (po-ka-hön'täs), the daughter of Powhatan, a powerful Indian chief of Virginia, was born about 1595. She was seized by the English, 1612, and held by them as a safeguard against the hostility of her tribe. She married an Englishman, John Rolfe, who took her to England, where she died, 1617.

Poe, Edgar Allan, an American poet, born in Boston, Mass., 1809, was a youth of wonderful genius, but of reckless habits, who came to an unhappy and untimely end. He left behind him tales and poems, which, though they were not appreciated when he lived, have received the recognition they deserve since his death. His poetical masterpiece, "The Raven," is well-known. Poe died, 1849, at Baltimore of inflammation of the brain, inseparable from which he was picked up in a street one evening.

Polk, James Knox, born in 1795; eleventh President of the United States; was speaker of the House of Representatives (1835-38) and governor of Tennessee (1839-41), and was elected as a Democrat to the presidency in 1844. He obtained the annexation of Texas and the cession of Upper California and New Mexico by Mexico, as well as the settlement of the Oregon boundary. Died, 1849.

Pollock, Sir Frederick, Bart., born in 1845; grandson of Sir F. Pollock; educated at Eton and Trinity College, Cambridge, of which he was Fellow; was called to the bar in 1871, became professor of jurisprudence at University College, London, in 1882, and at Oxford, in 1883. His works include "The Land Laws" (English Citizen series), "Essays in Jurisprudence and Ethics," and "Introduction to Political Science," "Spinoza," etc.

Ponce de Leon, Juan, a Spanish explorer, the discoverer of Florida; born in San Servas, Spain, in 1460; was a court page, served against the Moors, and in 1502, sailed with Ovando to Hispaniola, and became governor of the east part of the island. In 1510, he obtained the government of Porto Rico, and had conquered the whole

island by 1512. He then set out on a quest for the fountain of perpetual youth, and on March 27, 1512, found Florida. He secured the appointment of adelantado of the country, and returned in 1521, to conquer his new subjects; in this, however, he failed. He retired to Cuba, and died there in July from the wound of a poisoned arrow.

Pope, Alexander, English poet; son of a linendraper; was born in London in 1688, and began as a child to write verses. He made his reputation by the "Essay on Criticism," and soon became the friend of Swift and other leading writers, and produced "The Rape of the Lock," verse translations of the "Iliad" and "Odyssey," "The Dunciad," and the "Essay on Man," besides taking part in "Miscellanies" with Swift, Arbuthnot, and others. Died, 1744.

Porter, Horace, soldier, diplomat; born in Huntington, Pa., April 15, 1837; educated at Lawrence Scientific School, Harvard; graduated at West Point, 1860 (LL. D., Union, 1894). Served in field through the Civil War, every commissioned grade up to brigadier-general; received Congressional medal of honor for gallantry at Chickamauga; private secretary of President U. S. Grant, 1869-77; since then prominent in business; president of several railway corporations, clubs, and patriotic societies. Orator at inauguration of Washington Arch, New York, May 4, 1895, and dedication of Grant's Tomb, New York, April 27, 1897; at inauguration of Rochambeau Statue, Washington, May 24, 1902; at Centennial of foundation of West Point Military Academy, June 11, 1902, etc. Decorated with Grand Cross of Legion of Honor by French Government, 1904; ambassador to France, 1897-1905. Author: "Campaigning with Grant," "West Point Life," etc.

Porter, Jane, born in 1776, English writer; author of "Thaddeus of Warsaw," and "The Scottish Chiefs." Died, 1850. Her sister, Anna Maria, died, 1832, wrote "The Hungarian Brother," and other tales.

Porter, Noah, D. D., LL. D., born in 1811; American philosopher; became professor of metaphysics and moral philosophy at Yale, in 1846, and president in 1871, resigning in 1886. Among his works are "The Human Intellect," "Elements of Intellectual Philosophy," "Elements of Moral Science," etc., and he edited the reissues of "Webster's Dictionary" in 1864 and 1880. Died, 1892.

Potter, Cora Urquhart (Mrs. James Brown Potter), actress; born in New Orleans; daughter of Colonel David Urquhart. Gained fame as an amateur in New York; professional debut Haymarket Theater, London, as Anne Sylvester in "Man and Wife," March, 1887; appeared at 5th Avenue Theater, New York, in Mlle. de Bremer, October, 1887; since then has appeared in varied repertory and played during three tours around the world. Was instrumental in obtaining many thousands of pounds for the various funds in aid of the troops at the front in South Africa; also one of the prominent ladies on committee of the "Maine" hospital ship presented by America to British Government. A number of years past has appeared continually in London in various theaters. Author: "My Recitations," also magazine articles.

Potter, Henry Codman, Protestant Episcopal bishop of New York since 1887; born in Schenectady, N. Y., May 25, 1835; educated at Episcopal Academy, Philadelphia; theological seminary of Virginia, 1857 (A. M., 1863, D. D., 1865, LL. D., 1878, Union; LL. D., Yale, 1901; D. D., Harvard and Trinity; also Oxford and Cambridge, England). Ordered deacon, 1857; ordained priest, 1858; pastorates: Christ's Church, Greensburg, Pa., 1857-58; St. John's, Troy, 1859-66; assistant at Trinity Church, Boston; rector at Grace Church, New York; secretary at House of Bishops, 1863-83; condjutor to his uncle, Horatio Potter, bishop of New York, 1883-87. Author: "Thirty Years Reviewed," "Our Threefold Victory," "Young Men's Christian Associations and Their Work," "The Church and Her Children," "Sisterhood and Deaconesses," "The Religion for To-day," "The Gates of the East," "Sermons of the City," "Waymarks," "The Scholar and the State," "The East of To-day and To-morrow," "The Industrial Situation," "Law and Loyalty."

Powell, Major John Wesley, Ph. D., LL. D., born 1834; American geologist and ethnologist; lost an arm in the Civil War, became president of the American Association for the Advancement of Science in 1887, and is the author of several geological monographs, and "Introduction to the Study of Indian Languages." Died, 1902.

Powers, Hiram, born in 1805; American sculptor, son of a farmer at Vermont; lived at Florence from 1837 till his death, his chief productions being "The Greek Slave," "The Fisher Boy," "Proserpine," and "The Indian Girl."

Praxiteles, a famous Grecian sculptor, is believed to have been a native of Athens, to have flourished early in the Fourth Century B. C., and to have died at the age of eighty. He was long attached to the celebrated Phryne, of whom he executed two statues, one of which was placed in the temple of Delphi, the other in the temple of Love at Thespia. His Venus at Cnidus was considered as one of the most finished productions of Greece.

Prescott, William Hickling, born in Salem, 1796; American historian; in spite of very bad eyesight, devoted himself to literature, and wrote "History of Ferdinand and Isabella," "The Conquest of Mexico," "Conquest of Peru," and "History of Philip II." (unfinished). He was made D. C. L. at Oxford in 1850. Died, 1859.

Priestley, Joseph, F. R. S., born in 1733; Unitarian natural philosopher; gained the Copley medal in 1772, for his discoveries concerning the properties of fixed air, and was librarian to Lord Shelburne for seven years. He also made important observations on respiration. In 1791, his house at Birmingham was wrecked by a mob who disapproved his sympathy with the French revolution, and three years after he went to the United States, where he died (1804). Besides his scientific works, he wrote a "History of Early Opinions Concerning the Person of Christ," and several similar books.

Pritchard, Jeter Connelly, jurist, United States senator from North Carolina, 1894-1903; born in Jonesboro, Tenn., July 12, 1857; common school education; apprenticed in Jonesboro "Tribune-Herald" office; removed to Bakersville, N. C., 1873; joint editor and owner of "Roan Mountain Republican" until 1887, when he removed to Marshall, N. C. Was a Garfield elector, 1880; legislator, 1884, 1886, and 1890. Licensed to practice law, 1887. Appointed associate justice of Supreme Court, District of Columbia, 1903; judge of United States Circuit Court since 1904.

Prouty, Charles Azro, lawyer, government official; born in Newport, Vt., October 9, 1853; graduate of Dartmouth, 1875. Assistant to Professor S. P. Langley at Allegheny Observatory, 1875-76; taught several years; admitted to Vermont bar, 1882; practiced at Newport, Vt., 1882-96; member of House of Representatives, Vermont, 1888; reporter on decisions of Supreme Court of Vermont, 1888-96; since December, 1896, member of United States Interstate Commerce Commission.

Ptolemaeus Claudius, flourished about 139; Alexandrian writer, author of the "Almagest" or "Syntax of Astronomy," the theories of which were accepted till the discoveries of Copernicus. He also wrote a "Geography," which was for thirteen centuries the leading authority.

Ptolemaeus Soter, King of Egypt; obtained Egypt as his share of the dominions of Alexander the Great in 323 B. C.; was engaged in continual wars with Perdiccas and Antigonus (q. v.), and gained his surname by saving Rhodes when besieged by Demetrius. Died, 283 B. C.

Puffendorf, Samuel, Baron von, born in 1632; German jurist and historian, author of "De Jure Nature et Gentium," "Life of Gustavus of Sweden," etc. Died, 1694.

Pulitzer, Joseph, proprietor of "New York World" since 1883; born in Buda-Pesth, Hungary, April 10, 1847; educated by private tutor; came to the United States, 1864; served until end of Civil War in cavalry regiment; went to St. Louis; became reporter on "Westliche Post" (German newspaper), 1868; later its managing editor and part proprietor. In 1878, bought the "St. Louis Dispatch," and united it with "The Evening Post" as the "Post-Dispatch," which he still owns; member of Missouri Legislature, 1869; Missouri State Constitutional Convention, 1874; was elected to Congress in New York for term, 1885-87, but resigned after a few months' service; delegate to Cincinnati Liberal Republican Convention, which nominated Horace Greeley for president, after that a Democrat; advocated the "National" (gold-standard) Democratic ticket, 1896. In 1903, endowed with \$1,000,000 Columbia College School of Journalism.

Purdy, Milton Dwight, lawyer, government official; born in Mogadore, O., November 3, 1866; graduate of University of Minnesota, 1891, law department of same, 1892. Admitted to bar, 1892; assistant city attorney, Minneapolis, 1893-97; assistant county attorney, Hennepin County, Minn., 1897-98; assistant United States attorney, 1899-1901; United States attorney, 1901-02, for Minnesota; assistant attorney-general of United States since April 1, 1903, to July 27, 1905; assistant to the attorney-general of United States since July 28, 1905, and prominent as a trust prosecutor.

Putnam, Herbert, librarian of Congress; born in New York, September 20, 1861; graduate of Harvard, 1883 (Litt. D., Bowdoin, 1898; LL. D., Columbian, 1903; University of Illinois, 1903; University of Wisconsin, 1904); partial course at Columbia Law School; admitted to Minnesota bar, 1886; bar of Suffolk County, Mass., 1892; practiced law, Boston, 1892-95. Librarian of Minneapolis Athenæum, 1884-87; Minneapolis Public Library, 1887-91; Boston Public Library, 1895-99; appointed librarian of Congress, 1899; president of American Library Association, 1898, 1904; overseer, Harvard College, 1902. Has published numerous articles in reviews and professional journals.

Putnam, Israel, an American patriot and Revolutionary general, was born in Salem, Mass., in 1718. He early served in the frontier war, fought against the French, and, on the outbreak of the Revolution, fought with distinguished valor at Bunker Hill. In 1778, he was appointed major-general, and, in 1777, commanded the army of the New York Highlands, and supervised the erection of the fortifications at West Point. Died, 1790.

Pupin, Michael Idvorsky, professor of electromechanics, Columbia, since 1889; born in Idvor, Banat, Hungary, October 4, 1858; graduate of Columbia, 1883; studied physics and mathematics under von Helmholtz, University of Berlin (Ph. D., Berlin). Wrote: "Osmotic Pressure and Free Energy," "Electrical Oscillation of Low Frequency and Their Resonance," "Resonance Analysis of Alternating Currents," "Electromagnetic Theory," "Propagation of Long Electrical Waves," "Wave Propagation Over Non-uniform Conductors."

Pyle, Howard, artist, author; born in Wilmington, Del., in 1853; educated in private schools and Art Students' League, New York; contributes as artist and author to leading New York periodicals. Author and illustrator: "The Merry Adventures of Robin Hood," "Pepper and Salt, or, Seasoning for Young Folks," "Within the Capes," "The Wonder Clock," "The Rose of Paradise," "Otto of the Silver Hand," "A Modern Aladdin," "Men of Iron," "Jack Ballister's Fortunes," "Twilight Land," "The Garden Behind the Moon," "Semper Idem," "Rejected of Men." Also many magazine stories and articles.

Pyrrhus, King of Epirus; born about 318 B. C.; came to the throne in 306 B. C.; was expelled a few years later, but restored by the help of Ptolemy Soter in 296; held the kingdom of Macedonia for a short time, and, in 281, went to Italy to help Tarentum against the Romans. He was at first successful (through his elephants and the phalanx), but was finally defeated in 275. After this he again mastered Macedonia, but was killed by a tile in a night attack on Argos, in 272.

Pythagoras, Greek philosopher, born in Samos, which he left for Crotona, in Southern Italy, where he exercised so much influence as an opponent of democracy that his followers were exposed to persecution and exile. He left no writings, but his doctrines of the "Kosmos," "Metempsychosis," and the "Music of the Spheres" are well known, the first being the beginning of physical science. Died, about 470 B. C.

Quesnay, François, born in A. D. 1694; an eminent French physician, at the time of his death first physician to Louis XVI. He is now remembered, however, as a writer on political economy, to which science he is said to have given its name. Although he wrote in the infancy of the science, and many of his opinions are not now maintained, his system is described by Adam Smith as being, "with all its imperfections, the nearest approximation to the truth that has yet been published on the subject of political economy." Died, 1774.

Quincy, Josiah, American statesman, born in Boston; was bred to the bar, and entered Congress in 1804, where he distinguished himself by his oratory as leader of the Federal party, as the sworn foe of slave-holding, and as an opponent of the admission of the Western States into the Union; in 1812, he retired from Congress, gave himself for a time to purely local affairs in Massachusetts, and at length to literary labors, editing his speeches for one thing, without ceasing to interest himself in the anti-slavery movement (1772-1864).

Rachel (Eliza Rachel Félix), actress, of Jewish descent; born in Munt, in Switzerland, in 1820. As a child she sang for bread in the streets of Lyons. In 1838, she appeared in Paris as Canille in Corneille's "Les Horaces," and was henceforward the unrivaled exponent of the classical school, her great part being Phèdre. Died, 1858.

Racine, Jean, the greatest French dramatist of the classical school, was born in La Fort-de-Milon in 1639, and educated at Port Royal. His ode on the marriage of Louis XIV. (1660) was rewarded by a pension from

the king. He first exhibited his genius in "Andromaque," which was followed by a brilliant series of tragedies, closing with "Phèdre." His single comedy, "Les Plaideurs," appeared in 1668. In 1677, he was led by religious motives to cease writing for the stage, but, in 1691, he published a sacred drama, "Athalie," which is by many considered his masterpiece. Died, 1699.

Ragozin, Zenaide Alexeievna, author; born in Russia; she traveled extensively in Europe; came to United States, 1874, and became naturalized citizen. Author: "Story of Chaldea," "Story of Assyria," "Story of Media, Babylon, and Persia," "Story of Vedic India" (in the "Stories of the Nations" series), "History of the World" (first and second parts: "Earliest Peoples and Early Egypt"), "Siegfried, the Hero of the Netherlands," "Beowulf, the Hero of the Anglo-Saxons," "Frithjof, the Viking of Norway," "Roland, the Paladin of France," "Salammbô, the Maid of Carthage" (in "Tales of Heroic Ages" series). Translated from French, Anatole Leroy Beaulieu's "The Empire of the Tsars and the Russians."

Raleigh, or Ralegh, Sir Walter, statesman, navigator, and author; born near Budleigh in 1552; studied at Oriel College, Oxford; fought in support of the Protestants in France (1569); distinguished himself against the rebels in Ireland, 1580-81; rose rapidly in Elizabeth's favor; in 1585, despatched an expedition to America, which discovered Virginia, so named in honor of the queen; took part in the repulse of the Spanish Armada (1588); in 1595, went to Guiana in search of gold, and sailed some distance up the Orinoco; held a command in the attack on Cadiz (1596). After the accession of James I. he was accused of complicity in the plot to raise Arabella Stuart to the throne, and imprisoned in the Tower for thirteen years (1603-16), during which he wrote his "History of the World." In 1616, he was permitted to lead an expedition to Guiana against the Spaniards, but his pardon was made dependent on his success, and, as the attempt was a failure, he was executed on his return (1618).

Ranke, Leopold von, German historian; born in Thuringia in 1795; educated at Leipzig, was appointed extraordinary professor at Berlin in 1825, ordinary professor in 1834, and in 1841, became royal historiographer. Among his chief works are the "History of the Popes," the "History of Germany during the Reformation," and the "History of England: Chiefly in the Seventeenth Century." Died in 1886.

Raphael, Raffaello Santi, or Sanzio, born in 1483; son of Giovanni Santi; a painter; studied under Pietro Perugino; in 1504, went to Florence, where he attached himself to Fra Bartolomeo, and was much influenced by the works of the Florentine school; in 1508, was summoned to Rome by Julius II. to adorn with frescoes the walls of the Vatican, which occupied him till 1514. He was much employed by Leo X., who succeeded Julius in 1513. To this period belong the cartoons at Hampton Court. Raphael also displayed genius as an architect, and after the death of Bramante (1514), superintended the building of the new cathedral of St. Peter's. Died in 1520.

Rawlinson, George, born in 1815; canon of Canterbury, historian, and Orientalist; was educated at Oxford, where he was appointed Camden professor of ancient history in 1861. Among his chief works are his version of Herodotus (1858-62), and histories of "The Five Great Monarchies of the Ancient Eastern World," and "Ancient Egypt."

Rayner, Isidor, United States senator, lawyer; born in Baltimore, April 11, 1850; educated at University of Virginia; admitted to bar, 1871; elected to Maryland legislature, 1878, State Senate, 1886; member of Congress, 1886-92; attorney-general, Maryland, 1899; counsel for Rear-Admiral Schley before investigation commission, 1901; United States senator, Maryland, since 1904.

Reade, Charles, novelist and dramatist; born in Oxfordshire in 1814; was educated at Magdalen College, Oxford, of which he became Fellow. Among his novels, most of which were intended to expose some social abuse, were "Peg Woffington," "It is Never Too Late to Mend," "The Cloister and the Hearth," and "Griffith Gaunt." Died, 1884.

Reclus, Jean Jacques Ellsee, a French geographer; born in Sainte-Foix la Grande, France, March 15, 1830. In consequence of his extreme democratic views he left France after the coup d'état of 1851, and spent the next seven years in England, Ireland, North and Central America, and Colombia. He returned to Paris in 1858, and published an introduction to the "Dictionary of the Communes of France" (1864). While living in exile in Switzerland he began his masterpiece, "New General

Geography." Reclus has also written another great work, a physical geography entitled "The Earth."

Reed, Thomas B., a prominent legislator; born in Portland, Me., October 18, 1839; educated at Bowdoin College; studied law, and began practice in 1865. During the war was acting assistant paymaster in the Western River Navy. He entered the Maine House in 1868, and the Senate in 1870; was sent to Congress in 1876, where he remained until 1899. He gradually became a leader of the Republican members, and was chosen speaker of the 51st Congress, in which he made the famous new rule that all members present should be counted to make a quorum, whether voting or not. Retired from Congress in 1899, and died in 1902.

Rehan, Ada, actress; born in (Crehan) Limerick, Ireland, April 22, 1860; came to United States in childhood; made first appearance on stage at 14, in Newark, N. J.; played in Philadelphia, Baltimore, Albany, and Louisville stock companies. Engaged by Augustin Daly in 1879, filling leading positions in Daly's Theater until his death, in 1899, playing such characters in Shakespearean and old comedies as Rosalind, Katherine, Viola, Beatrice, Portia, Lady Teazle, Peggy in the Country Girl, and many high-class modern comedy parts.

Reld, Whitelaw, born in 1837; American journalist; became editor of the "New York Tribune" in 1872; from 1889-92, was United States minister to France; ambassador to Great Britain since 1905. Author: "After the War, a Southern Tour," "Ohio in the War," "Schools of Journalism," "Newspaper Tendencies," "Town Hall Suggestions," "Two Speeches at the Queen's Jubilee," "Some Consequences of the Last Treaty of Paris," "Our New Duties," "Later Aspects of Our New Duties," "A Continental Union," "Our New Interests," "Problems of Expansion."

Rembrandt van Ryn, born in 1607; an eminent painter and engraver; was the son of a miller near Leyden. He studied for three years under Jacob von Zwanenburg, and was afterwards the pupil of Peter Lastman at Amsterdam, and of Jacob Pinas at Haarlem. In 1630, he settled in Amsterdam, where he died in 1669. Among his chief works are "The Anatomical Lesson," and "The Night Watch."

Remington, Frederic, artist, author, sculptor; born in Canton, N. Y., October 4, 1861; educated at Yale Art School and Art Students' League, New York; was clerk in store, then cowboy and stockman on ranch in the West; subsequently illustrator for magazines, treating military and western American subjects, and, during 1897-98, Cuban scenes; well known as a painter; among his leading works in sculpture are "The Broncho Buster" and "The Wounded Punkie." Author: "Pony Tracks," "Crooked Trails," "Frontier Sketches," "John Ermine of the Yellowstone" (novel).

Remsen, Ira, president since September, 1901, and professor of chemistry since 1876, Johns Hopkins; born in New York, February 10, 1846; graduated from college of city of New York, 1865; M. D., College of Physicians and Surgeons, New York; Ph. D., University of Göttingen, Germany (LL. D., Columbia, 1893, Princeton, 1896, Yale, 1901, Toronto, 1902); professor of chemistry, Williams, 1872-76; founder, 1879, and editor, "American Chemical Journal." Author: "The Principles of Theoretical Chemistry," "An Introduction to the Study of the Compounds of Carbon, or Organic Chemistry," "The Elements of Chemistry," "Inorganic Chemistry," "Introduction to the Study of Chemistry," "A Laboratory Manual," "Chemical Experiments," and many scientific articles and addresses.

Renan, Joseph Ernest, Orientalist, historian, and essayist; born in 1823 in Tréguier, in Brittany; in 1842, he entered the seminary of St. Sulpice, but three years later gave up the idea of becoming a priest. His first important work, "Averroès et l'Averroïsme," appeared in 1852. He was professor of Hebrew in the Institute of France, 1861-62, and was reappointed in 1870. The "Vie de Jésus," which gave rise to much discussion, was afterwards expanded into "Histoire des Origines du Christianisme." He also published "Le Judaïsme," and numerous other works. Died, 1892.

Rennie, John, civil engineer; born in East Linton, East Lothian in 1761; employed by the firm of Messrs. Boulton & Watt, at Soho, Birmingham, and entrusted by them to direct in the construction of the Albion Mills, London, he became at once famous for his engineering ability, and was in general request for other works, such as the construction of docks, canals, and bridges, distinguishing himself most in connection with the latter, of which Waterloo, Southwark, and London over the Thames, are perhaps the finest. Died, 1821.

Reuter, Baron Paul Julius, born in Cassel in 1821; in 1849, established an office at Aix-la-Chapelle for supplying news by telegraph, and thereby revolutionized

the press of Europe. In 1851, he transferred his business to London. He laid several important telegraphic cables. Died, 1899.

Revere, Paul, an American patriot; was born in Boston, Mass., in 1735, and bred a goldsmith. He was conspicuous for his zeal against the mother country, and one of the first actors in the revolt. Died, 1818.

Reynolds, Sir Joshua, painter; born in Plympton, in Devonshire, in 1723; studied under the portrait-painter Hudson; removed to London in 1746; traveled in Italy, 1749-52; on his return to London was immediately recognized as the greatest portrait painter of the day. He was the first president of the Royal Academy (1768-92), and in 1784, was appointed painter to the king. Among his intimate friends were Johnson, Burke, Goldsmith, and other eminent literary men. His fifteen "Discourses on Painting" were delivered before the Royal Academy between 1769 and 1790. Died, 1792.

Rhees, Rush, president of University of Rochester since July 1, 1900; born in Chicago, February 8, 1860; graduated from Amherst, 1883, A. M., 1897, LL. D., 1900; graduated from Hartford Theological Seminary, 1888; (D. D., Colgate University, 1901); Walker, instructor of mathematics, Amherst, 1883-85; ordained, 1889; pastor Middle Street Baptist Church, Portsmouth, N. H., 1889-92; associate professor New Testament interpretation, Newton Theological Institution, Newton Centre, Mass., 1892-94; professor of same, 1894-1900. Author: "The Life of Jesus of Nazareth, a Study," "St. Paul's Experience as a Factor in His Theology," and other articles in several journals and periodicals.

Rhodes, Cecil, statesman; born in Hertfordshire in 1853; son of a vicar; went to South Africa; became director of the diamond mines at Kimberley, and amassed a large fortune; entered the Cape Parliament, and became prime minister in 1890; he was active and successful in extending the British territories in South Africa, aiming at destroying the race prejudices that prevail in it, and at establishing among the different colonies a federated union; founded the Rhodes scholarship at Oxford University. Died, 1902.

Rhodes, James Ford, author; born in Cleveland, O., May 1, 1848; educated at public schools, University of New York, University of Chicago; was not graduated (LL. D., Adelbert College, Western Reserve University, 1893; Harvard, 1901; Yale, 1901; University of Wisconsin, 1904; Litt. D., Kenyon, 1903); Loubat prize, Berlin Academy of Science, 1901. Author: "History of the United States from the Compromise of 1850" (volumes I to V, 1850-66, published).

Ricardo, David, born in 1772; political economist, son of a Jewish broker; entered parliament in 1819. His "Principles of Political Economy and Taxation," containing his famous theory of rent, was published in 1817. Died, 1823.

Richard. The name of three kings of England. Richard I. (Cœur de Lion) was born 1157, second son of Henry II.; succeeded his father, 1189. He led the English contingent in the first crusade to the Holy Land, and while on his return, 1192, was imprisoned by the Emperor of Germany, being ransomed after two years. He was killed at the siege of Limoges, 1199. Richard II., son of the Black Prince, was born at Bordeaux, 1366; succeeded his grandfather, Edward III., 1377, and was deposed in favor of Henry IV. He is believed to have died in prison about 1400. Richard III., son of Richard, Duke of York, born, 1452, was the last of the Plantagenet line. He usurped the throne on the death of his brother, Edward IV., 1483, imprisoning, and it is believed ordering the murder of his two young nephews. Defeated by Henry, Earl of Richmond, at Bosworth, Richard was killed on the field and was succeeded by the victor, as Henry VII.

Richelieu, Armand Jean du Plessis, Duc de, born in Paris, 1585, French cardinal and statesman, became bishop of Luçon in 1607; in 1615, entered the service of the Queen-mother, Marie de Medici, and in 1616, became secretary of state for war and foreign affairs. He followed Marie de Medici to Blois (1616), and was exiled to Avignon (1618), but was soon afterwards recalled, and effected a reconciliation between the king and queen, receiving as his reward a cardinal's hat. In 1624, he became chief minister, an office which he retained till his death (1642). During this period he established the absolute power of the king, and crushed the Calvinistic party, although he was led by political motives to support the Protestants in Germany.

Ridley, Nicholas, English reformer; born in Northumberland, about 1500, studied at Cambridge, Paris, and Louvain; returned to Cambridge in 1529; became chaplain to Cranmer, in 1537, and, about 1540, master of Pembroke Hall; was appointed Bishop of Rochester, in 1547, and of London, in 1550; took a leading part in

composing the liturgy and drawing up the forty-two articles; favored the attempt to place Lady Jane Grey on the throne, and was imprisoned in the Tower; was condemned to death for heresy, and burnt, with Latimer, at Oxford, in October, 1555.

Rienzi, Nicholas Gabrino de, an Italian reformer of the Fourteenth Century, was the son of an innkeeper, but received an excellent education, and was endowed with great genius and eloquence. In 1347, he succeeded in overthrowing the tyranny of the nobles at Rome, and obtaining the supreme authority, with the title of tribune and liberator. He was, however, soon expelled, and was imprisoned for three years by Clement VI. He was released by Innocent VI., who sent him to the Roman capital as senator and tribune, but he was murdered by the people in 1354.

Riley, James Whitcomb, author; born in Greenfield, Ind., in 1853; educated at the public schools; began contributing poems to Indiana papers, 1873, and has long been known as "the Hoosier poet"; much of his verse is in the Middle-Western or Hoosier dialect; his earlier Hoosier dialect verse, and his first book, appeared under the pen-name "Benj. F. Johnson, of Boone" (M. A., Yale, 1902; Litt. D., University of Pennsylvania, 1904). Author: "The Old Swimm'n' Hole and 'Leven More Poems,'" "The Boss Girl and Other Sketches," "Afterwhiles," "Old-Fashioned Roses" (published in England); "Pipes o' Pan at Zekesbury," "Rhymes of Childhood," "Flying Islands of the Night," "Green Fields and Running Brooks," "Armazindy," "A Child-World," "Neighborly Poems," "Home Folks," "Poems Here at Home," "Rubiayat of Doc. Sifters," "The Book of Joyous Children," "An Old Sweetheart of Mine," "Out to Old Aunt Mary's," "A Defective Santa Claus."

Ristori, Adelaide, born in 1822; Italian actress, the child of strolling players; married, in 1847, the Marquis Capranica del Grillo, but afterwards returned to the stage. Having established her reputation in Italy, she visited Paris, 1855, London, 1858, and other European capitals, as well as the United States and South America. During her American tour she played with Edwin Booth.

Robbia, Luca della, born about 1399, an Italian sculptor; famous for his work in enameled terra-cotta. Died, 1463. His nephew, Andrea, born 1444, excelled in the same art. Died, 1527.

Robert Bruce, King of Scotland; born in 1274, was the grandson of Balliol's rival in 1292. In 1306, he murdered the regent, Comyn, and was crowned at Scone, but was defeated by Edward I. the same year. After many years of hardship and ill-fortune, he gained a final victory over Edward II. at Bannockburn, in 1314. By the Treaty of Northampton (1328), the complete independence of Scotland was recognized. Died, 1329.

Roberts, Frederick, Lord, an English military officer; born in Cawnpur, India, September 30, 1832. He was taken to England when two years old, educated at Clifton, Eton, Sandhurst, and Addiscombe, and entered the Bengal Artillery in 1851. His first taste of actual warfare was in the hot time of the siege of Delhi, during the mutiny, and he took an active part in the subsequent operations down to the relief of Lucknow. He discharged the duties of assistant quartermaster-general in the Abyssinian expedition of 1868, and in the Lushai expedition of 1871-1872. On the outbreak of the Afghan War in 1878, Roberts, now major-general, was appointed to command the Kurram division of the army. He forced in brilliant fashion the Afghan position on the peak of Peiwar Kotul (8,500 feet above sea-level). After the murder of Sir Louis Cavagnari and the escort of the British mission at Kabul, he was given command of the force sent to avenge them. He defeated the Afghans at Charasia on October 6th, took possession of Kabul on the 12th, and assumed the government of the country. On August 9th, Sir F. Roberts set out on his memorable march through the heart of Afghanistan to the relief of Kandahar, which he reached three weeks later. He immediately gave battle to Ayub Khan and routed him completely, capturing all his artillery and his camp; was appointed commander-in-chief of the Madras army (1881), and held the rank of commander-in-chief in India (1885-1893). He was appointed commander-in-chief of the forces in Ireland in 1895; and in 1899 took command of the English forces in South Africa; capturing Cronje, relieving Kimberly, and annexing the two republics. He returned to England and was made commander-in-chief to succeed Lord Wolseley.

Robespierre, Maximilien Marie Isidore (rob'ais-peere), a French revolutionist, was born at Arras, 1758. After studying law and gaining some distinction as an advocate, he entered the States-General in 1789, as one of the representatives of Artois. In that assembly he soon made his mark as a rabid Democrat, and attached

himself to the Jacobin body. In 1792, the City of Paris, elected him one of its deputies to the convention, where he speedily became the leader of the Mountain party, in its struggles with the Girondins. Over the latter, with the help of the Commune of Paris and the mob, he achieved a decisive triumph in June, 1793. After this he inaugurated the Reign of Terror, by constituting himself president of the committee of public safety, and associating along with him Couthon and St. Just. In 1794, being by this time in possession of almost unlimited power, Robespierre opened the régime of the guillotine by first sacrificing his Girondist rivals, and then sending indiscriminately to their death thousands of innocent persons of both sexes. The excesses of this monster at last raised against him a strong combination of opponents, and the convention declaring him an outlaw, Robespierre perished under the guillotine, July 28, 1794.

Rochambeau, Jean Baptiste Donatien de Vimeur Comte de, born in 1725, marshal of France; distinguished himself in the Seven Years' War and the American War of Independence; in 1790, became commander of the army of the north, but resigned in 1792, and narrowly escaped execution during the Reign of Terror. Died, 1807.

Rockefeller, John Davison, capitalist; born in Richford, N. Y., July 8, 1839; moved to Cleveland, Ohio, 1853; public school education; married in Cleveland, Ohio, September 8, 1864, Laura C. Spelman. Was clerk in forwarding and commission house; at 19, partner in firm, of Clark & Rockefeller, commission merchants; firm became Andrews, Clark & Co., and engaged in oil business; in 1865, the firm, then William Rockefeller & Co., built Standard Oil Works, Cleveland; this was consolidated with others in Standard Oil Company, 1870; other interests were later acquired and the Standard Oil Trust was formed, 1882, but dissolved, 1892; the various Standard Oil companies now being operated separately, with Mr. Rockefeller at the head of the entire business. He has given over \$10,000,000 to the University of Chicago; a \$100,000 building, 3,000 volumes on Greek art and literature, and money donations to Vassar; \$25,000 to Barnard College; \$50,000 to Tarrytown, N. Y., for a high-service water tower; \$250,000 to American Baptist Missionary Union and Home Missionary Society; \$10,000,000 to General Education Board, 1905; \$1,000,000 to Yale, 1905; endowed Rockefeller Institute for Medical Research, New York, etc.

Rockefeller, John Davison, Jr., capitalist; born in 1877; son of John Davison and Laura C. (Spelman) Rockefeller; graduate of Brown University; married, in 1901, Abby Green Aldrich. Associated with his father in business enterprises; member of board of managers of Delaware, Lackawanna & Western Railroad Company; director of Standard Oil Co.; United States Steel Corporation, Missouri Pacific Railway Company, Colorado Fuel and Iron Company, Federal Mining and Smelting Company, American Linseed Company, trustee of University of Chicago.

Rockefeller, William, capitalist; born in Richford, Tioga County, N. Y., May 31, 1841; educated at Owego, N. Y., and Cleveland, Ohio; was bookkeeper and later partner in produce commission trade; soon after joined his brother, John D. Rockefeller, in oil business; since 1865 at head of the business in New York; now president of the Standard Oil Co. of New York; vice-president and director of Standard Oil Co. of New Jersey; trustee of Anaconda Copper Mining Company, Consolidated Gas Company, Mutual Life Insurance Company, United States Trust Company; director of Amalgamated Copper Company, Chicago, Milwaukee & St. Paul Railway Company, Lake Shore & Michigan Southern Railway Company, New York Central & Hudson River Railroad Company, New York, New Haven & Hartford Railroad Company, Northern Pacific Railway Company, Central New England Railway Company, Delaware, Lackawanna & Western Railroad Company, Hartford & Connecticut Western Railroad Company, Harlem River & Portchester Railroad Company, New York & Harlem Railroad Company, Poughkeepsie Bridge Railroad Company, National City Bank, Columbia Bank, Hanover National Bank, Leather Manufacturers National Bank, Lincoln National Bank, 2d National Bank, Mutual Alliance Trust Company, National Transit Company, United Metals Selling Company, New York Mutual Gas Light Company, New York Carbide and Acetylene Company, Brooklyn Union Gas Company, etc.

Roebling, John A. (rob'ling), an American civil engineer, was born in Muhlhausen, Prussia, 1806. He emigrated to the United States in 1831, and in course of years became the designer and constructor of many great public works; among them the canal aqueduct across the Allegheny River, and the Monongahela Sus-

pension bridge, both at Pittsburg; the Suspension bridge at Niagara, the Ohio bridge at Cincinnati, etc. Roebling died in 1869, having just before projected the bridge over the East River, to connect the cities of New York and Brooklyn, completed by his son and opened to travel in 1883.

Roebling, Washington Augustus, engineer; born in Saxenburg, Pa., May 26, 1837; graduate of Rensselaer Polytechnic Institute, 1857; joined his father in construction of Pittsburg suspension bridge across Allegheny River; served, 1861-65, in Union Army, private to brevet colonel; resigned January, 1865, to assist his father in building Cincinnati and Covington suspension bridge. The Brooklyn bridge was undertaken by his father, but his death, July 22, 1869, before the work had been begun, left the entire construction in his hands, and he directed it to completion. He is vice-president of The John A. Roebling and Sons Company, manufacturers of iron and steel wire and wire rope, Trenton, N. J. Author: "Military Suspension Bridge," etc.

Roentgen, Wilhelm Conrad, the discoverer of the X-Rays, is of Dutch origin, and was born in 1846. He began his university studies at Zurich, and from there followed Professor Kundt to Würzburg, and afterwards to Strasburg, in whose university he acted as Kundt's assistant in 1873. In 1875, he became professor of physics and mathematics at the Agricultural Academy in Würtemberg; in 1876, he returned to Strasburg; in 1879, became professor at Giessen, and since 1888 has held a professorship at Würzburg University. He has written several works on scientific subjects, and of late years has studied the effects of electricity when passed through various gases; also the absorption of heat rays by steam and gases. His discovery of the rays which he has named X-Rays came by chance when he was experimenting with vacuum tubes. He studied them thoroughly, however, before making his discovery public.

Roger II., King of Sicily; born in 1097. He gained some territory from his cousin, William of Apulia, after whose death, in 1127, he was acknowledged as Duke of Apulia, Calabria, and Naples, receiving his investiture from Pope Honorius II. (1128). Soon afterwards the Prince of Capua did homage to him as his over-lord. In 1129, he received from the anti-pope, Anacletus, the title of King of Sicily. Died, 1154.

Rogers, Henry H., capitalist; born in Fairhaven, Mass.; one of large stockholders and vice-president and director of Standard Oil Company; president and director of Amalgamated Copper Company, National Transit Company, Natural Fuel Gas Company, New York Transit Company, Richmond Light & Railroad Company; vice-president and trustee of Anaconda Copper Mining Company; vice-president and director of Brooklyn Union Gas Company, United Metals Selling Company; trustee of Mutual Life Insurance Company of New York; director of United States Steel Corporation, Atchison, Topeka & Santa Fé Railroad Company, Chicago, Milwaukee & St. Paul Railway Company, Union Pacific Railroad Company, New Jersey & Staten Island Ferry Company, Rapid Transit Ferry Company, Staten Island Ferry Company, Atlas Tack Company, Farmers' Loan and Trust Company, Guaranty Trust Company, Mutual Alliance Trust Company, National Bank of Fairhaven, New York, Carbide and Acetylene Company, Richmond Borough Company, Tennessee Copper Company, etc. Has made many gifts to his native town, including a library, town hall, schools, churches, etc.

Rogers, Henry Wade, dean law department of Yale from January, 1904; born in Holland Patent, N. Y., October 10, 1853; graduate of University of Michigan, 1874 (A. M., LL. D., Wesleyan University, Conn.). Admitted to bar, 1877; professor law in law school, University of Michigan, 1882; dean of same, 1885-90; president of Northwestern University, 1890-1901; professor of law, Yale, 1901-03. Author: "Illinois Citations," "Expert Testimony," also numerous articles for law journals and reviews.

Roland, Marie Jeanne Philpon, born in 1754; was daughter of an engraver at Paris, and married Roland in 1780. She sympathized with his revolutionary ideas, and exercised much influence over the policy of the Girondist party. On the proscription of the Girondists she was confined in the Abbaye, and, after five months' imprisonment, put to death. Her "Memoirs" were written during her confinement. Died, 1793.

Romanes, George John, naturalist; born in Kingston, Canada, in 1848; took an honors degree in science at Cambridge; came under the influence of Darwin, whose theory of evolution he advocated and developed in lectures and various works, e. g., "Scientific Evidences of Organic Evolution," "Mental Evolution in Animals," "Mental Evolution in Man"; his posthumous "Thoughts on Religion" reveal a marked advance from his early

agnosticism towards a belief in Christianity; founded the Romanes Lectures at Oxford. Died, 1894.

Romanzoff, Peter Alexandrovitch (*ro-man'itsof*), Count de, a Russian general, was born, about 1730, and entered the army at a very early period. After having acquired reputation in subordinate ranks, he was, in 1769, appointed to command the army against the Turks. In four campaigns he obtained several victories, and conquered several fortresses; and he crowned his labors by compelling the grand vizier to sign, in 1774, the treaty of Kainardgi. In 1788 he was again placed at the head of an army against the Ottomans; but he was thwarted by Potemkin, and resigned in disgust. He died in 1796.

Romney, George, painter, born at Dalton, in Lancashire, 1734; after receiving some lessons from a country artist, came to London in 1762; visited France in 1764, and Italy, 1773-5; on his return became the rival of Reynolds as a portrait painter; also gained distinction as a painter of historical pictures. Died, 1802.

Roosevelt, Theodore, twenty-sixth President, was born in New York City, October 27, 1858, the son of Theodore and Martha (Bullock) Roosevelt. Though physically delicate in youth, he entered Harvard University at eighteen, and was graduated in 1880. The year following he began the study of law, but in the same year was elected to the New York Legislature. He was twice reelected, and became the candidate of the minority party for speaker in his second term. In 1884 he was chosen a delegate to the Republican National Convention, and later in the year went to North Dakota, where he spent several years on a ranch, raising cattle. In 1886 he was the unsuccessful candidate for Mayor of New York. President Harrison appointed him a member of the United States Civil Service Commission in 1889, in which capacity he served until 1895, when he resigned to accept the presidency of the Police Commission of New York City, under Mayor Strong. President McKinley appointed him Assistant Secretary of the Navy in April, 1897, and upon the outbreak of the Spanish-American War, in 1898, he resigned the post to assist in organizing the First U. S. Volunteer Cavalry (afterwards known as Roosevelt's Rough Riders), of which he became lieutenant-colonel, and later colonel, for gallantry in the battles of Las Guasimas and San Juan, Cuba. In September, 1898, he was mustered out, with his regiment, at Montauk, Long Island. Shortly following he was nominated for governor of New York, and elected, November, 1898. Two years later he was unanimously nominated for vice-president of the United States by the Republican National Convention, at Philadelphia, and elected. He succeeded to the presidency September 14, 1901, upon the death of President McKinley, and at the close of the term was unanimously nominated by his party to succeed himself, and elected November, 1904. He has long been an advocate of administrative, political, and social reforms, and has contributed widely to periodical and general literature. Among his important publications are: "Winning of the West," "History of the Naval War of 1812," "Hunting Trips of a Ranchman," "Life of Thomas Hart Benton," "Life of Gouverneur Morris," "Ranch Life and Hunting Trail," "History of New York," "American Ideals and Other Essays," "The Wilderness Hunter," "The Rough Riders," "Life of Oliver Cromwell," and "The Strenuous Life." His efforts in bringing about the treaty of peace between Japan and Russia in 1905 were important and effective. Many academic degrees have been conferred upon him by Harvard, Columbia, Yale, and other universities. He has been twice married; first, to Alice Lee, in 1883, who died the following year; second, to Edith Kermit Carow, in 1886.

Root, Elihu, an American statesman and lawyer; born in Clinton, N. Y., Feb. 15, 1845; was graduated at Hamilton College in 1864, and after teaching for a while entered the New York University Law School and was graduated in 1867. On August 1, 1899, he was appointed secretary of war by President McKinley, and on March 5, 1901, was reappointed. After the Spanish-American War, Secretary Root represented the United States Government in all official communications with Cuba, Porto Rico, and the Philippine Islands. In August, 1903, he resigned the office of secretary of war, his resignation to take effect in January, 1904. In 1905, President Roosevelt appointed him secretary of state, and while discharging the duties of that office he did much to unify the Pan-American countries. In 1907, he visited Mexico in the interest of a closer relationship between that country and the United States.

Rosebery, Archibald Philip Primrose, fifth earl of; born in 1847; was first commissioner of works in 1884, and was chairman of the first London County Council; became foreign secretary under Mr. Gladstone

in 1886 and 1892; succeeded to the premiership in 1894, resigned in 1895, and retired from the leadership of the Liberal party, October, 1896; since then he has been prominent on several important occasions, notably during the Fashoda crisis and the Transvaal negotiations, in both of which he supported Lord Salisbury. has delivered many notable speeches on literary and social subjects. In 1900, published an interesting study of Napoleon—"The Last Phase." In December, 1901, returned to political life, with a speech at Chesterfield, and became president of the Liberal League. Has been a vigorous critic of Mr. Chamberlain's policy, especially on imperial grounds.

Rosecrans, William Starke, American general, born at Kingston, Ohio, 1819; trained as an engineer, had settled down to coal-mining when the Civil War broke out; joined the army in 1861, and rapidly came to the front; highly distinguished himself during the campaigns of 1862-63, winning battles at luka, Corinth, and Stone River; but defeated at Chickamauga he lost his command; reinstated in 1864 he drove Price out of Missouri; has been minister to Mexico, a member of Congress, and 1885-1893 registrar of the United States Treasury; died near Los Angeles, Cal., 1898.

Rossetti, Gabriele (*ros-sel'te*), born at Vasto, in the province of Chieti, Italy, 1783, an eminent Italian author, chiefly celebrated as a commentator on Dante, and as the author of several volumes of poems, which are popular in Italy. He went to England as a political refugee in 1824, and was for several years (till 1845) professor of Italian Literature in King's College, London. Died in London, 1854. His son, Gabriel Charles Dante Rossetti born in London, 1828; died at Birchington-on-the-Sea (April 9, 1882), attained considerable eminence as an artist, and also as a poet. His poems are contained in two volumes—"Poems" (1870), and "Ballads and Sonnets" (1881). He also wrote "Dante and his Circle" (1861 and 1873). Christina Rossetti, daughter and sister of the two above, died December 29, 1894, at the age of sixty-five. She wrote "The Prince's Progress," etc., and many well-known religious poems and books, children's stories, etc.

Rossini, Gioachino Antonio (*ros-sē'nē*), the greatest of the Italian opera composers, was born 1792. He was the son of a strolling horn-player. He studied music under Mattei at the Lyceum of Bologna. Among his chief operas are "Tancredi" (1813), "Il Barbiere di Siviglia" (1816), and "Guglielmo Tell" (1829). He also composed a "Stabat Mater" (1842), and other Church music. From 1824 onwards he lived chiefly in Paris. Died, 1868.

Rothschild (*Ger. pron. rōt'shilt*), the name of a celebrated Jewish family of bankers and financiers. Meyer Anselm Rothschild, was born at Frankfurt, 1743, died, 1812. Was designed for the priesthood, but showed more aptitude for commercial pursuits, and laid the foundations of his family's fortune by his success as the banker of the Elector of Hesse-Cassel. His son, Nathan, born 1777, died 1836, went to England in 1800 as agent for his father, after whose death he greatly extended his business, acting in co-partnership with his brothers, who resided in various European capitals. His eldest son, Lionel de Rothschild, was born 1808, died 1879, was elected Whig member for the City of London in 1847, but did not take his seat until the passing of the Jewish Disabilities Bill (1858). Nathaniel Meyer, was born 1840, eldest son of Lionel, was raised to the peerage in 1885.

Rousseau, Jean Jacques (*Rō-sō'*), French philosopher, was born 1712, son of a watchmaker at Geneva; was apprenticed to an engraver, but made his escape into Savoy (1728), where he was found by a priest, who entrusted him to the care of Madame de Warens at Annecy. During the ensuing years the greater part of his time was spent in her house, but he finally quarreled with her and went to Paris (1741), whence in 1742 he accompanied the French ambassador to Venice as secretary. In 1750 he gained a prize, offered by the Academy of Dijon, by an essay attacking the influence of the arts and sciences on society. Of his subsequent writings the following are the most famous—"Julie, ou la Nouvelle Héloïse," a romance (1759), "Du Contrat Social" (1762), and "Emile," a philosophical romance treating of education (1762). The years 1766-77 he spent in England as the guest of Hume, but quarreled with him, and returned to France. Died, 1778.

Royce, Josiah, professor of history and philosophy, Harvard; born in Grass Valley, Nevada County, Cal., November 20, 1835; graduate of University of California, 1875 (Ph. D., Johns Hopkins, 1878; LL. D., University of Aberdeen, Scotland, 1900; LL. D., Johns Hopkins, 1902). Instructor in English literature and logic, University of California, 1878-82; instructor and assistant professor, Harvard, 1882-92; professor since

1892. Author: "Religious Aspect of Philosophy," "History of California" (in "American Commonwealth" series), "The Feud of Oakfield Creek" (novel), "The Spirit of Modern Philosophy," "The Conception of God" (joint author), "The World and the Individual" (2 vols.), "The Conception of Immortality," "Studies of Good and Evil," "Outlines of Psychology," "Herbert Spencer," "An Estimate and a Review," etc.

Rubens, Peter Paul, a distinguished Flemish painter; born in Siegen, Westphalia, June 29, 1577. He went to Antwerp in 1608, and was soon after made court painter to the Archduke Albert, Spanish governor of the Low Countries. In 1620 he was employed by the Princess Mary de Medici to adorn the gallery of the Luxembourg with a series of paintings illustrative of the principal scenes of her life. While thus engaged he became known to the Duke of Buckingham, who purchased his museum. He was afterward employed by the Infanta Isabella and the King of Spain in some important negotiations which he executed with such credit as to be appointed secretary of the Privy Council. He acquired immense wealth, and was twice married, the second time, in 1631, to a girl of sixteen. Rubens, beyond all comparison, was the most rapid in execution of all the great masters, and was incontestably the greatest perfecter of the mechanical part of his art that ever existed. His works are very numerous, and very diversified in subject. There are nearly 100 in the picture gallery at Munich. "The Descent from the Cross," at Antwerp, is perhaps his masterpiece. He died in Antwerp, May 30, 1640.

Rudolf, or Rodolf I., King of Germany, founder of the Habsburg Dynasty, was born 1218; was elected emperor in 1273, and, by his concessions to Gregory XI. at his coronation, ended the feud with the pope. A war with Ottocar, King of Bohemia, was terminated by the defeat and death of the latter in 1278. His son, Wenceslaus, did homage to Rudolf for Bohemia and Moravia. Rudolf curbed the power of the nobles, and granted charters to many towns. Died, 1291.

Rudolf II., German emperor, son of Maximilian II., born in Vienna in 1552; became King of Hungary in 1573, and of Bohemia three years later; ascended the imperial throne in 1576; indolent and incapable, he left the empire to the care of worthless ministers; disorder and foreign invasion speedily followed; persecution inflamed the Protestants; by 1611, his brother, Matthias, supported by other kinsmen, had wrested Hungary and Bohemia from him; had a taste for astrology and alchemy, and patronized Kepler and Tycho Brahe. Died, 1612.

Rumford, Benjamin Thompson, Count, was born in Woburn, Massachusetts, March 26, 1753. He was an American scientist, noted especially for his successful endeavors to apply the principles of natural philosophy to practical uses. He was originally a teacher at Rumford, near Concord, in his native State; but, having taken part in the political movements of the time, he was sent to England by General Washington as the bearer of despatches. There he occupied for a time the position of under-secretary of state in the colonial office; and then returned to America, where he fought on the royal side. Afterwards he entered the service of the King of Bavaria, and effected many reforms in that kingdom, in return for which he was created Count of the Holy Roman Empire, choosing Rumford for his titular designation. In 1795 he was once more in London, where he assisted in founding the Royal Institution. In 1802 he took up his residence in Paris, where he married the widow of the celebrated chemist, Lavoisier; but, having separated from that lady, he removed to Auteuil, where he remained until his death. His only literary works of importance are: "Essays, Political Economical, and Philosophical" (1798-1802), and a volume of "Papers on Natural Philosophy and Mechanics" (1802). Died, 1814.

Runeberg, Johan Ludvig, born in 1804; Swedish poet; studied at the University of Abo; was rector of the College of Borga, 1847-50; published idylls, lyrics, and other poems. Died, 1877.

Ruoff, Henry Waldmar, journalist, author; was born in Germantown, Pa., 1867; was educated at Indiana, Harvard, and Columbia (now George Washington) Universities, and in Europe (B. A., Indiana, 1890, D. C. L., Columbia 1901; George Washington, 1907); lecturer in philosophy and history, Pennsylvania State College, 1892-93; literary work, 1895-1904; editorial staff of the "American Spectator," "Ridgway's," and the "Nashville Tennessean," 1904-08; has traveled extensively in Europe, Asia, and Africa. Author and editor: "The Century Book of Facts"; "Leaders of Men"; "The Capitals of the World"; "Syllabus of American Politics"; "The Standard Dictionary of Facts," etc.

Rupert, Prince Robert, of Bavaria, was born 1619. He was a son of Frederick V., Elector Palatine, by Elizabeth, eldest daughter of James I., of England, and whose sister is known in English history as the Electress Sophia of Hanover. He took a prominent part in the civil wars of England under his uncle, Charles I., and was distinguished for his rash courage and impetuosity. In the reign of Charles II. he served in the fleet, and was afterwards appointed Governor of Windsor. In his last years he amused himself with scientific pursuits; and is said to have invented pinchbeck, sometimes called prince's metal, and the curious scientific toys called Prince Rupert's drops. He is buried in Henry the Seventh's Chapel, Westminster. Died, 1682.

Rush, Benjamin, American physician and politician, born at Philadelphia, 1745. He studied at Edinburgh; was returned to Congress in 1776, and signed the Declaration of Independence; became professor in the Institute of Medicine at Philadelphia in 1791. Among his works are, "Essays, Literary, Moral, and Philosophical"; "Medical Inquiries and Observations"; and "A History of the Yellow Fever." Died, 1813.

Ruskin, John, was born in London, 1819, and educated at Oxford. In 1843 appeared the first volume of "Modern Painters," which created a revolution in modern art and the estimation of artistic qualities. The remaining volumes were published in 1846, 1856, and 1860. Of Ruskin's other works on art, the chief are the "Seven Lamps of Architecture," and "Stones of Venice." About 1860 he became deeply interested in the social problems of the age, and published "Unto this Last," and "Munera Pulveris." Among his later works are "Sesame and Lilies," "The Ethics of the Dust," and "The Crown of Wild Olives," and "Præterita," a charming autobiography, completed in 1888. Mr. Ruskin was appointed Rede Lecturer, at Cambridge, in April, 1867, and the senate conferred the degree of LL. D. upon him, May 15th. He was also selected Slade Professor of Fine Arts at Oxford, being thrice reelected. He was obliged to resign the post in 1884 on account of failing health. For several years prior to his death he lived in retirement at Brantwood, Coniston. Died, 1900.

Russell, Annie (Miss), actress; born in Liverpool, England, in 1869; first stage appearance in Montreal when 7; afterward at New York in juvenile "Pinafore" company; went to South America and West Indies in varied repertory; returned to United States and joined Madison Square Theater Company; became famous in "Esmeralda" and George Parsons Lathrop's "Elaine"; retired for several years on account of ill health; since 1895, has appeared in several leading rôles; first appearance in London, 1898.

Russell, John, Earl, statesman, third son of the sixth Duke of Bedford, was born 1792. He was educated at Westminster and Edinburgh; entered parliament as a Whig in 1813; became an advocate of parliamentary reform; was instrumental in the repeal of the Test and Corporation Acts (1828), and the passing of the Catholic Relief Act (1829); was paymaster-general under Lord Grey, 1830-34, and drew up the Government Reform Bill (1832); was home secretary (1835-39), and colonial secretary (1839-41) under Lord Melbourne; led the Opposition (1841-46); was prime minister (1846-52); went as British plenipotentiary to the Vienna Conference (1855); was foreign secretary under Lord Palmerston (1859-65); again became prime minister in (1865), but resigned on the defeat of his Reform Bill in (1866). Earl Russell published an "Essay on the History of the English Government and Constitution," and numerous other works. Died, 1878.

Russell, Lillian, opera singer; born (Helen Louise Leonard) in Iowa in 1861; educated in Convent Sacred Heart, Chicago; sang in church choir, and, in 1879, was engaged by E. E. Rice to play in "Pinafore." Later, sang ballads at Tony Pastor's Theater, New York; joined McCaull Opera Company, of which she was prima donna until her own company was organized; has since starred in various operatic rôles in United States and England; married, first, David Braham, composer; second, Edward Solomon, composer; third, Sig. Perugini, operatic tenor.

Ruysdaal (*rois dal*), or **Ruysdael, Jacob van**, one of the most distinguished Dutch landscape painters, born at Haarlem, probably about 1625, died in the poorhouse of his native place 1682. His paintings, but little appreciated during his lifetime, now bring great prices. Fine examples of his works are to be seen in the National Gallery at London, and in the Louvre at Paris. Landscapes with dark clouds hanging over them, lakes and rivulets surrounded by overhanging trees, etc., are his subjects, and are represented with true poetic feeling and admirable technique. It is said that the figures in

his paintings were executed by A. van de Velde, Philip and Pieter Wouwerman, C. Berghem, and others.

Ruyter (*roi'ler*), **Michiel Adriaanszoon** de, a celebrated Dutch Admiral, born at Flushing in 1607, died, 1676, in the port of Syracuse from a wound received in an engagement with the French. He rose to his rank from the situation of cabin-boy, and distinguished himself for remarkable seamanship and bravery in many naval battles, but more especially in 1653, in 1666, and in 1672, against the British fleet.

Ryan, Patrick John, Roman Archbishop, was born near Thurles, Ireland, in 1831. He was ordained deacon in 1853, completing his studies in St. Louis, Mo., and raised to the priesthood in 1854. In 1872 was elected coadjutor archbishop of St. Louis. His administration was energetic and successful. He was nominated archbishop of Philadelphia in 1884. He is distinguished as a graceful and eloquent speaker. Author of "What Catholics Do Not Believe"; "The Causes of Modern Skepticism," etc.

Ryan, Thomas Fortune, financier; born in Nelson County, Va., October 17, 1851. Began business life, 1868, Baltimore dry goods house; entered Wall Street, 1870; member of New York Stock Exchange, 1874; afterwards interested in consolidation and extension of street railway and lighting systems, New York, Chicago, and other cities, and in reorganization of various railways in the South, coal properties in Ohio and West Virginia, and railways in Ohio. Vice-president of Morton Trust Company; trustee of American Surety Company; director of Pere Marquette Railroad, Hocking Valley Railway, Consolidated Gas Company of New York, Seaboard Air Line Railway, Metropolitan Securities Company, Consolidated Gas, Electric Light and Power Company of Baltimore, American Tobacco Company, National Bank of Commerce, Union Exchange Bank, and many other corporations; purchased controlling interest of the stock of Equitable Life Assurance Society of United States, 1905. Delegate from Virginia, National Democratic Convention, 1904.

Sagasta, Praxedes Mateo, born in 1827; Spanish statesman, was obliged to leave the country for his share in the rising of 1856, and again, ten years later, to seek refuge in France. On his return he changed his views and joined General Prim, and held the portfolio of the interior for several years. After the accession of Alfonso XII., he formed a Liberal-constitutional party, and having, in 1880, joined a new Liberal combination, formed a coalition with Campos, which lasted till 1883. In 1887, Sagasta again became head of a ministry, and continued almost uninterruptedly down to 1902. Died, 1903.

Sage, Margaret Olivia Slocum (Mrs.), born in Syracuse, N. Y., September 8, 1828; daughter of Joseph and Margaret Pierson (Jermain) Slocum; educated in schools of Syracuse; graduate of Troy Female Seminary, 1847 (degree, Mistress of Letters, New York University, 1904); married in Watervliet, N. Y., November 24, 1869, to Russell Sage. President of Emma Willard Association; member of Society of Mayflower Descendants. Has added large sums to the endowment of Troy Female Seminary, Rensselaer Polytechnic Institute, and other institutions.

Sainte-Beuve, Charles Augustin, born in 1804; French critic; after having been a surgeon, wrote verses for the "Revue des Deux Mondes" and other periodicals, and, in 1840, became Mazarin librarian. In 1850, he joined the "Constitutionnel," in which appeared his "Causeries du Lundi." He was one of the editors of the "Dictionnaire Historique de la Langue Française." Died, 1869.

Saint Clair, Arthur, an American general, was born in Scotland, in 1735. He emigrated to America, became a citizen of Pennsylvania, and a brigadier-general in the Revolutionary army, serving with distinction at the battles of Trenton and Princeton. In 1777, he became major-general, and entered Congress in 1785, of which body he was elected president two years later. In 1789, he was made governor of Ohio, and two years afterwards suffered a defeat with heavy loss, at the hands of the Miami Indians. Died, 1818.

Saint Gaudens, Augustus, sculptor; born in Dublin, Ireland, in 1848; came to United States in infancy; learned trade of cameo cutter; studied drawing at Cooper Institute, 1861; student at National Academy of Design, 1865-66 (hon. LL. D., Harvard; L. H. D., Princeton); at Ecole des Beaux Arts, Paris, 1867-70. In Rome, 1870-72, producing there, 1871, his first figure, "Hiawatha"; settled in New York, 1872. Among his works are "Adoration of the Cross" (in St. Thomas' Church, New York), "The Puritan," "Diana" (on tower of Madison Square Garden, New York); statues of Abraham Lincoln and John A. Logan, Chi-

cago; Admiral Farragut, New York; Peter Cooper, New York; Colonel R. G. Shaw, Boston; monument to General Sherman, New York, and numerous other statues, busts, etc. Died, 1907.

Salonji, Marquis, Japanese premier, belongs to an illustrious family which, in the past, has had marriage connections with the imperial family. Born in Kioto in 1849, as a youth of 18, he gathered volunteers and fought for the emperor in the revolution. He then went to Paris, was a student in the Latin Quarter, and returned to Japan in his 33d year. He at once started a daily paper at Tokio, and proclaimed himself a Liberal of the European type. Subsequently, the marquis became minister to Austria-Hungary and then to Germany. On his return to Japan he joined the first Ito cabinet as minister of education, a post which he again occupied in the second Ito cabinet, having been minister of foreign affairs in the interval. A great friend of Marquis Ito, Marquis Salonji assisted him to form the Constitutional Association (1900), and became its leader in 1903. At three difficult crises the mikado has called Marquis Salonji to be prime minister pro tem.

Sallsbury, Marquis of, an eminent British statesman; was born at Hatfield in 1830. He was graduated from Christ Church College, Oxford, in 1853, and sat in parliament for Stamford, 1853-68. He was secretary for India, 1866-67, and again 1874-76. In the latter year he was special ambassador to the Porte, and was practically the leader of the Conference of Constantinople. In 1878 he was appointed foreign secretary, and, with Lord Beaconsfield, took a prominent part in the congress of Berlin. After the latter's death he became the principal leader of the Conservatives in the House of Lords, and later rose to the rank of premier. His death occurred in 1903.

Sallust, Roman historian; born at Amiternum, in the territory of the Sabines, and attained the quaestorship and the tribunate, though a plebeian; for a misdemeanor was expelled the senate; joined Caesar's party in the civil war, and became governor of Numidia; enriched himself by extortions, and returned to Rome a rich man, and gave himself to literature; wrote the "Catiline Conspiracy," and the "War with Jugurtha," among other works, in a terse and forcible style, and was the precursor of Livy and Tacitus; as a writer he affects the moralist, though he lived in vice, 86-35 B. C.

Samuel, a Jewish prophet, born of the tribe of Levi, about 1155 B. C.; consecrated by his mother from earliest years to the service of the Lord; who became a judge when he was 40, anointed first Saul and then David to be king over the till then disunited tribes of Israel, and thus became the founder of the Jewish monarchy.

Sand, George, nom de guerre of Madame Dudevant; born in 1804; French novelist; separated from her husband in 1831, in which year was published, under the pseudonym "Jules Sand," a novel written in collaboration with Sandeau. Next year she began to write under the well-known signature, her chief works being "Consuelo," "La Comtesse de Rudolstadt," "Les Sept Cordes de la Lyre," "La Petite Fadette," "Elle et Lui," "Le Marquis de Villemer," and other plays, and "Impressions et Souvenirs." Died, 1876.

Santa Ana or Anna, Antonio Lopez de, born in 1795; Mexican general; fought at first for the Spaniards, but in 1829, defeated their expedition, and became president in 1833. He recognized the independence of Texas, and defused Vera Cruz against the French in 1839, but, after having been dictator from 1841 to 1844, was banished. He returned to conduct the war against the United States, and in 1853-55 was again dictator. He was afterwards banished once more for intriguing against Juarez. Died, 1876.

Santos-Dumont, M., a Brazilian of means and leisure, whose ambition it is to establish that an airship for aerial navigation "is not a mere plaything but a practical invention, capable of being applied in a thoroughly useful fashion." He won the Deutsch prize, offered to the first aeronaut who should go to and return from the Eiffel Tower, the Aérostat Park, in Paris, being the starting-point, on October 19, 1901. In November, 1901, the Brazilian Congress voted him £5,000 in recognition of his great services to aërostatic science. Chevalier of the Legion of Honor, 1904. He is now devoting himself to flying machines.

Sardou, Victorien, born in 1831; French dramatist, whose first comedy, produced at the Odéon in 1854, was a failure; won a reputation by "M. Garat," and other pieces, produced at the Déjazet Theater, and was admitted to the Academy in 1877. Among his best-known plays are "Les Pattes du Mouche," the original of "A Scrap of Paper," "Nos Intimes," of "Peril," "Dora," of

"Diplomacy," "Odette," "Fédora," "La Tosca," and "Rabagas," a satire on Gambetta.

Sargent, John Singer, artist; born in Florence, Italy, 1856; educated in Italy and Germany; studied painting at Academy of Fine Arts, Florence, Italy, and in Paris under Carolus Duran. Exhibited portrait of Carolus Duran in Paris Salon of 1877; traveled in Spain, 1879, and on return opened studio in Paris; removed to London, 1884, and has since resided there. Has painted many portraits, English and American, one of recent note being that of President Roosevelt, painted in 1903; also various other pictures, of which his Japanese dancing girl was awarded a grand medal at Paris Exposition, 1889.

Saul, the son of Kish, of the tribe of Benjamin, the first King of the Israelites, was anointed by Samuel, B. C., 1091, and after a reign of forty years, filled with various events, was slain with three of his sons on Mount Gilboa. He was succeeded by David, who was his son-in-law, and whom he had endeavored to put to death. His history is contained in I Samuel, x to xxxi.

Savage, Minot Judson, Unitarian clergyman; born in Norridgewock, Me., June 10, 1841; graduated from Bangor Theological Seminary, 1864 (D. D., Harvard, 1896); Congregational home missionary in California, 1864-67; pastor at Framingham, Mass., 1867-69; Hannibal, Mo., 1869-73; became Unitarian; pastor of Third Unitarian Church, Chicago, 1873-74; Church of the Unity, Boston, 1874-96; since 1896, minister of Church of the Messiah, New York. Author: "Christianity, the Science of Manhood," "The Religion of Evolution," "Light on the Cloud," "Bluffton, a Story of To-day," "Life Questions," "The Morals of Evolution," "Talks About Jesus," "Poems," "Belief in God," "Beliefs About Man," "Beliefs About the Bible," "The Modern Sphinx," "Man, Woman, and Child," "The Religious Life," "Sacred Problems," "These Degenerate Days," "My Creed," "Religious Reconstruction," "Signs of the Times," "Helps for Daily Living," "Life," "Four Great Questions Concerning God," "The Irrepressible Conflict Between Two World-Theories," "The Evolution of Christianity," "Is this a Good World?" "Jesus and Modern Life," "A Man," "Religion for To-day," "Our Unitarian Gospel," "Hymns," "The Minister's Hand-book," "Physics, Facts, and Theories," "Life Beyond Death," "Life's Dark Problems," Editor: "Sacred Songs for Public Worship" (with Howard M. Dow), "Unitarian Catechism," "Life Beyond Death," "The Passing and the Permanent in Religion," "Living by the Day," "Men and Women," "Can Telepathy Explain?"

Savonarola, Fra Girolamo, Italian preacher; born in Ferrara in 1452; acquired great political influence in Florence, where he denounced abuses of all kinds. He was twice sent as envoy to Charles VIII. of France, and after the expulsion of Piero de' Medici was real ruler of the state, but, having been prohibited preaching and excommunicated by Alexander VI., he was attacked in his priory of San Marco, with his friends, and burnt, after being put to the torture. Died, 1498.

Saxe, Maurice, Comte de, born in 1696; marshal of France; was a natural son of Augustus II. of Saxony and Poland. His greatest achievements were the victories of Fontenoy, Lawfeldt, and Rancourt, and the capture of Maestricht. He left a work entitled "Mes Réveries," which was published in 1757, and subsequently translated. Died, 1750.

Schaeberle, John Martin, astronomer; born in Germany, 1853; removed to Ann Arbor, Mich., 1854; apprentice in Chicago machine shop, 1868-71; became interested in astronomy; studied at Ann Arbor High School; constructed a number of telescopes; graduated from University of Michigan, C. E., 1876 (LL. D., University of California, 1898); private assistant to Professor Watson, 1876-78; assistant in Ann Arbor Observatory, instructor in astronomy and acting professor of astronomy in University of Michigan, 1878-88; astronomer Lick Observatory, Mt. Hamilton, 1888-97, acting director, 1897-98; had charge of eclipse expeditions of Lick Observatory, 1889, 1893, Cayenne and Chile, and in 1896 to Japan; has discovered three comets, and has done much original work; extensive contributor to astronomy journals.

Schliff, Jacob Henry, banker; born in Frankfort-on-the-Main, Germany, 1847; educated in schools of Frankfort; came to the United States, 1865; settled in New York; member of firm of Kuhn, Loeb & Co., bankers; director of National City Bank, Western National Bank, Columbia Bank, Morton Trust Co., Bond and Mortgage Guarantee Co., Industrial Trust Co., Providence, Equitable Life Assurance Society of United States, Chicago, Burlington & Quincy Railroad Company, Union Pacific Railroad, Baltimore & Ohio Railroad Company, Western Union Telegraph Company, Woodbine

Land Improvement Company, Northern Securities Company, Fidelity Bank, National Bank of Commerce, Newport Trust Company, President Montefiore Home for Chronic Invalids; vice-president and trustee of Baron De Hirsch Fund; ex-vice-president of New York Chamber of Commerce; founded Jewish Theological Seminary, the Semitic Museum, Harvard, Nurses' Settlement, New York.

Schiller, Johann Christoph Friedrich von, one of the greatest of German national poets, was born in Marbach, 1759. After completing his studies he early adopted the medical profession, and while serving as an army surgeon, produced, in 1777, his tragedy of "The Robbers," a work which established his reputation as a dramatist. After quitting the army, he, in 1783, assumed literature for a means of livelihood, and became writer to the theater at Mannheim, in which capacity he produced his tragedy of "Fiesco." Two years afterwards, he took up his residence in Leipzig, and wrote his "Ode to Joy." In 1789, upon the recommendation of his friend Goethe, Schiller entered upon the professorship of history at Jena University; and, two years later, published his "History of the Thirty Years' War"; and, in 1789, his masterpiece, the tragedy of "Wallenstein." In 1799, he took up his abode in Weimar, where he composed his dramas of "Mary Stuart," "The Maid of Orleans," and "The Bride of Messina," as well as his exquisite poem "The Song of the Bell." Finally, in 1804, appeared one of the most popular of his dramas, "William Tell." Died, 1805. The ballads of Schiller are the finest things of the kind in the German language.

Schley, Winfield Scott, rear-admiral of United States Navy; born near Frederick, Md., October 9, 1839; served in West Gulf blockading squadron from 1861; was in engagements leading to capture of Port Hudson, La., 1863; remained in Southern waters until 1864. Then, until 1866, in Pacific station as executive officer of gunboat "Wateree"; suppressed insurrection among Chinese colonies on Chichi Islands, 1864, and in 1865, landed 100 men on San Salvador to protect United States consulate and custom house during revolution. In 1872, was placed at head of department of modern languages at Annapolis; served in Europe, west coast of Africa and the South Atlantic States and, 1884, took command of Greeley Relief Expedition and rescued Lieutenant Greeley and six survivors at Cape Sabine. Commanded "Baltimore" and settled trouble at Valparaiso, Chile, 1891, when several American sailors were stoned by a mob. Carried Ericsson's body to Sweden, August, 1891, for which he received gold medal from King of Sweden. Placed in command of the "Flying Squadron" on duty in Cuban waters in war with Spain. Was in immediate command at the destruction of Cervera's fleet off Santiago, July 3, 1898. Promoted to rear-admiral, August, 1898; was presented with a gold sword by people of Pennsylvania; a silver sword by the Royal Arcanum; a gold and jeweled medal, with the thanks of the Maryland Legislature; a silver service, etc., for services at battle of Santiago. Retired at age limit, 1901. Author: "Rescue of Greeley," "Forty-five Years Under the Flag."

Schofield, John McAllister, lieutenant-general in United States Army; born in Gerry, N. Y., 1831; served West Point, 1849; graduated, 1853 (LL. D., Chicago University). Served in garrison in South Carolina and Florida until 1855; assistant professor of natural philosophy, West Point, 1855-60; under leave of absence, professor of physics, Washington University, St. Louis, until April, 1861; in the Civil War became brigadier-general, November, 1861, and major-general, November, 1862, of volunteers; commanded a department and army in the field; was in the Atlanta campaign and later commanded at the battle of Franklin, Tenn., for which he was made brigadier-general and brevetted major-general in regular army. After war became division commander; was secretary of war, 1868-69, commanded the army of the United States, 1888-95; was made lieutenant-general, 1895; retired from active service by operation of law, September 29, 1895. Author: "Forty-six Years in the Army."

Schurman, Jacob Gould, president of Cornell University since 1892; born in Freetown, Prince Edward Island, May 22, 1854; graduate of University of London, A. B. and A. M., in course, 1877 and 1878, and 1877-78 studied at Paris and University of Edinburgh, D. Se. in course. Studied two years at Heidelberg, Berlin and Göttingen, and in Italy (LL. D., Columbia University, 1892; Yale University, 1901; University of Edinburgh, 1902). Was 1880-82, professor of English literature, political economy and psychology, Acadia College; 1882-86, professor of metaphysics and English literature, Dalhousie College; 1886-92, Sage professor of philosophy and latter part of time dean of Sage School of Philosophy, Cornell; appointed, January, 1899, by the president,

chairman of United States Philippine Commission, and spent most of 1899 in the Philippines. Author: "Kantian Ethics and the Ethics of Evolution," "The Ethical Import of Darwinism," "Belief in God," "Agnosticism and Religion," "A Generation of Cornell," "Report (to Congress) of the Philippine Commission" (joint author), two volumes, 1900; "Philippine Affairs—A Retrospect and Outlook."

Schurz, Carl, publicist; born in Liblar, near Cologne, 1829; educated at gymnasium, Cologne, University of Bonn (LL. D., Harvard, and of University of Missouri; LL. D., Columbia University, 1899). Published a liberal newspaper at Bonn; took part in revolutionary movements in 1848-49, and was compelled to leave Bonn 1849; joined revolutionary army, but finally had to flee to Switzerland. Newspaper correspondent, Paris, 1851; teacher in London. Came to the United States, 1852; settled in Watertown, Wis.; was defeated as Republican candidate for lieutenant-governor of Wisconsin, 1857; member of National Republican Convention, 1860; United States minister to Spain, 1861; resigned to enter army; appointed brigadier-general, April, 1862; major-general, March 14, 1863; commanded division at Second Bull Run and at Chancellorsville, and a corps at Gettysburg. Washington correspondent to "New York Tribune," 1865-66; founded "Detroit Post," 1866; editor of "St. Louis Westliche Post," 1867; temporary chairman of Republican National Convention, Chicago, 1868; United States senator from Missouri, 1869-75; one of the organizers of Liberal party, 1872; presided over convention at Cincinnati which nominated Greeley for president; supported Hayes, 1876; secretary of the interior, 1877-81; editor "New York Evening Post," 1881-84. One of leaders of Independent movement, 1884; supported Cleveland for president; contributor to "Harper's Weekly," 1892-98; Author: "Speeches," "Life of Henry Clay," "Abraham Lincoln, an Essay," Died, 1906.

Schwab, Charles M., capitalist, ex-president of United States Steel Corporation; born in Williamsburg, Pa., April 18, 1862; childhood from 5th year at Loretto, Pa.; educated in village school and St. Francis College; as a boy drove stage from Loretto to Cresson, Pa., five miles; entered service of Carnegie Co., as stake-driver in engineering corps of Edgar Thompson steel works; rose steadily; became superintendent of Homestead works and finally president of Carnegie Steel Co., Ltd.; president, 1901-03, and now director and member of finance committee of United States Steel Corporation; built new Catholic church costing \$150,000, at Loretto, Pa.; established Homestead, Pa., Industrial School, etc.

Scipio, Africanus, Publius Cornelius, born in 234 B. C.; Roman general; took Carthago Nova and conquered Spain, became consul in 206 B. C., and brought to a conclusion the second Punic War by the defeat of Hannibal at Zama (202 B. C.). He became a second time consul, but his popularity passed away on account of the arrogance of his later years. Died, 183.

Scott, Sir Walter, Bart., born in 1771; novelist; was the son of a writer to the signet in Edinburgh, and practiced for a few years as an advocate, being appointed clerk of the Court of Session in 1805. After some translations from the German, he began to write ballads, the "Lay of the Last Minstrel," being followed by "Marmion," "The Lady of the Lake," and other poems. In 1814, he published "Waverley," anonymously, and in succeeding years appeared the series called by that name. In 1820, Scott was made a baronet, but six years after he was ruined by the bankruptcy of Messrs. Constable, and he spent his later years in an honorable and successful attempt to meet his liabilities by means of his "Life of Napoleon," "Tales of a Grandfather," and contributions to the "Quarterly Review." His life was written by his son-in-law, Lockhart, and his "Journal" was published in 1890. Died, 1832.

Scott, Winfield, born in 1786; American general; was made prisoner and wounded in the War of 1812-15, and, after further services, became commander-in-chief, in 1842. Having conducted the war against Mexico, he was Republican candidate for the presidency in 1852, but was not elected. He retired from the army in 1861, and died at West Point, 1866.

Seawell, Molly Elliot, author; born in Gloucester County, Va., October 23, 1860; daughter of John Tyler Seawell (a nephew of President Tyler); educated at home. Her father died and she and her mother removed to Washington, D. C. Began writing sketches and stories in 1886. Published first novel in 1890. In 1890, her "Little Jarvis" took a prize of \$500 offered by "Youth's Companion" for the best story for boys, and, in 1895, her "Sprightly Romance of Marsac" took a prize of \$3,000 offered by the "New York Herald." Author: "Little Jarvis," "Midshipman Paulding,"

"Paul Jones," "Maid Marion," "Decatur and Somers," "A Strange, Sad Comedy," "The Sprightly Romance of Marsac," "A Virginia Cavalier," "The Rock of the Lion," "Gavin Hamilton," "The House of Egremont," "Papa Bouchard," "Francelka," "Children of Destiny," "Fifi," "The Great Scoop." Plays: "Maid Marion," "Sprightly Romance of Marsac."

Seeley, John Robert, historian; born in 1834. In 1863, he was appointed professor of Latin at University College, London, and, in 1869, became Regius professor of modern history at Cambridge. In 1865, he published anonymously "Ecce Homo," and he also wrote "Life and Times of Stein," "The Expansion of England," and "Greater Greece and Greater Britain." Died, 1895.

Sembrich, Marcella, born in 1858; Austrian singer; made her debut at Athens in 1877, in "I Puritani," and afterwards sang at Vienna, Dresden, London, and New York, her favorite parts being Susanna, Martha, and Zerlina.

Seneca, Lucius Annaeus, born about 4 B. C.; stoic philosopher; was banished from Rome on a false charge, but, returning after eight years, became tutor to Nero. Being accused of conspiracy, he died, 65 B. C., by opening his veins and suffocating himself in a warm bath. His works consist of treatises and epistles, but the tragedies ascribed to him are of doubtful authenticity.

Servetus, Michel, born in 1511; Spanish theologian; escaped from the Inquisition at Vienna to Geneva, where he was burnt to death for his Arianism by the orders of Calvin, in 1553.

Seward, William Henry, born in 1801; American statesman; was elected governor of New York in 1838, and, in 1849, became United States senator. He now headed the Republican party, and, having been an unsuccessful candidate for the presidency, became secretary of state under Lincoln, in 1861. He was attacked at the same time as the latter, but recovered. He wrote a "Life of John Quincy Adams," and other works. Died, 1872.

Shaffer, William Rufus, major-general in United States Army, retired; born in Galesburg, Mich., October 16, 1835. Entered Union army as first lieutenant. Brevetted brigadier-general, March 13, 1865, for gallant and meritorious services during the war; mustered out of volunteer service, November 2, 1865; entered regular army as lieutenant-colonel, January 26, 1867; brevetted colonel, United States Army, March 2, 1867, and given Congressional medal of honor for gallant and meritorious services at battle of Fair Oaks, Va. Major-general of volunteers, May, 1898; went to Tampa, Fla.; thence to Cuba, where he commanded the military operations ending in capitulation of General Linares' army and surrender of Santiago de Cuba, July, 1898. Retired, June 30, 1901, as major-general.

Shah-Jehan ("King of the World"), fifth of the Mogul emperors of Delhi; succeeded his father in 1627; a man of great administrative ability and a skilled warrior; conquered the Deccan and the kingdom of Golconda, and generally raised the Mogul Empire to its zenith; his court was truly Eastern in its sumptuous magnificence; the "Peacock Throne" alone cost \$35,000,000. Died in prison in 1666, a victim to the perfidy of his usurping son, Aurunzebe.

Shakespeare, or Shakspeare, William, the greatest of the English dramatic poets, was born in Stratford-on-Avon, Warwickshire, in 1564. Of the incidents of his youth almost nothing is known, excepting that he married in his 19th year, and soon afterwards resorted to London, where he became an actor of repute at the Globe and Blackfriars' theaters. In 1594, he inaugurated his literary career by the publication of his poem "Venus and Adonis"; and, in the following year, his first published play appeared, the precursor of a succession of works which constitute the crowning glory of English dramatic literature. Shakespeare enjoyed the favor of Queen Elizabeth and James I., and the friendship of Southampton, Raleigh, Ben Jonson, and other of the principal of his contemporaries. After realizing an easy fortune by his contributions to the stage, he retired to his native town, and there died in 1616. Shakespeare's tragedies of "Hamlet," "Macbeth," "Othello," "Romeo and Juliet," and "King Lear" are wonderful examples of his power of expressing the strongest passions of the human soul; while, on the other hand, his comedies, particularly "The Merry Wives of Windsor," "Much Ado About Nothing," "Twelfth Night," "The Taming of the Shrew," etc., are unsurpassed in the English language. Of his dramas, strictly so called, perhaps the finest are "As You Like It," "The Merchant of Venice," and "The Tempest."

Shaler, Nathaniel Southgate, scientist; born in Newport, Ky., in 1841; graduate of Lawrence Scientific School, Harvard, 1862; S. C. D., 1865; served two years

as artillery officer in Union army during the Civil War; instructor in zoology and geology, Lawrence Scientific School, 1868-72; professor of paleontology, 1868-87, and afterward professor of geology, Harvard; director of Kentucky geological survey, 1873-80, devoting part of each year to that work; from 1884 to 1906, geologist in charge of Atlantic division of United States geological survey. Author: "A First Book in Geology," "Kentucky, a Pioneer Commonwealth," "The Nature of Intellectual Property," "The Story of Our Continent," "The Interpretation of Nature," "Illustrations of the Earth's Surface," "Sea and Land," "The United States of America: a Study of the American Commonwealth," "Fossil Brachiopods of the Ohio Valley," "American Highways," "Features of Coasts and Oceans," "Domesticated Animals: Their Relation to Man," "The Individual: Study of Life and Death," "The Neighbor," "The Citizen," etc. Died, 1906.

Shaw, Albert, editor of "American Monthly Review of Reviews"; born in Shandon, Butler County, O., July 23, 1857; graduate of Iowa College, 1879; took course in history and political science, Johns Hopkins (Ph. D., 1884; LL. D., University of Wisconsin, 1904). Editorial writer with "Minneapolis Tribune," 1883-88, 1889-90; studied in Europe, 1888-89. Established, 1891, and has ever since conducted, "American Review of Reviews." Member of numerous learned societies; has lectured in many universities and colleges. Author: "Icaria—A Chapter in the History of Communism," "Local Government in Illinois," "Coöperation in the Northwest," "Municipal Government in Great Britain," "Municipal Government in Continental Europe." Editor: "The National Revenues"; also many articles on political science and economics, and particularly on municipal governments, in magazines, etc.

Shaw, George Bernard, was born in Dublin, July 26, 1856, and went to London in 1876. He published a few novels, "Cashel Byron's Profession," etc., which attracted little attention; joined the Fabian Society in 1884; wrote musical critiques in the "London Star," 1888-90, and the "World," 1890-94; edited Fabian essays in 1889, and, in 1895, began his work as a dramatic critic, writing in the "Saturday Review." In 1898, he published "Plays Pleasant and Unpleasant," and since then his chief literary work has been writing for the stage. His plays include "Man and Superman," "John Bull's Other Island," "Major Barbara," "The Doctor's Dilemma," "Cæsar and Cleopatra."

Shaw, Henry Wheeler, an American humorist; born in Lanesborough, Mass., April 21, 1818. In 1859, he began to write, and, in 1860, sent "An Essay on the Mull, bi Josh Billings" to a New York paper. It was reprinted in several comic journals, and extensively copied. His most successful literary venture, however, was a travesty on the "Old Farmer's Almanac," 127,000 copies of which were sold in its second year. He began to lecture in 1863, and for twenty years previous to his death, contributed regularly to the New York "World." He died in Monterey, Cal., October 14, 1885.

Shays, Daniel, an American insurgent; born in Hopkinton, Mass., in 1747; served as ensign at the battle of Bunker Hill, and attained the rank of captain in the Continental army. He took a leading part in the popular movement in Western Massachusetts for the redress of alleged grievances, appearing before Springfield, Mass., at the head of 1,000 men, to prevent the session of the Supreme Court at that place, and commanding the rebel party at Pellham and at the engagement with the militia at Petersham. After the rebellion was put down, however, he was pardoned by the government, and later, in his old age, was allowed a pension for his services during the Revolutionary War. He died in Sparta, N. Y., September 29, 1825.

Shelley, Percy Bysshe, one of the most eminent of English poets, was born of a noble family, in County Sussex, in 1792. He was early distinguished by his original turn of mind for speculative inquiry, and was expelled from Oxford University on an alleged charge of atheism. Refusing to recant certain philosophical opinions he had formed, and which had given rise to his expulsion, he incurred the displeasure of his father and family. Retiring to London, he there entered upon authorship by the production of his fine poem of "Queen Mab," and contracted an unfortunate marriage with a person of humble rank, from whom he soon separated. In 1816, after the death of his first wife, he married the daughter of William Godwin, so celebrated as the authoress of "Frankenstein"; and, in the following year, gave to the world his principal work, "The Revolt of Islam." In 1818, he quitted England never to return, and took up his residence in Italy, where he became the associate of Lord Byron and Leigh Hunt, and where he wrote his tragedy of "The Cenci"; the

"Prometheus Unbound," together with many of his minor and most exquisite poems. In 1822, he perished by the capsizing of his boat, while sailing in the Gulf of Leghorn.

Shepard, Edward Morse, lawyer; born in New York, in 1850; graduate of College of City of New York, A. B., 1869. Civil service commissioner, Brooklyn, 1883-85, chairman, 1888-90; New York State forestry commissioner, 1884-85; Democratic candidate for mayor of Greater New York, 1901; since proposed for gubernatorial and other nominations of his party. Director in numerous railway and other corporations. Author: "Martin Van Buren" (American Statesmen" series), "Memoirs of Dugdale," and many reviews, magazine and other articles and addresses on political, industrial, and educational topics.

Sheridan, Philip Henry, born in 1831; American general; distinguished himself during the Civil War at Stone River, and by his victory of Cedar Creek (October 19, 1864), and afterwards under Grant at Five Forks (April 1, 1865), and Sailor's Creek. In 1867, he quarreled with President Johnson, and was dismissed from his command. Died, 1888.

Sherman, James Schoolcraft, was born in Utica, N. Y., October 24, 1855; received an academic and collegiate education, graduating from Hamont College in the class of 1878; was admitted to the bar in 1880; is a practicing lawyer; also president of the Utica Trust and Deposit Company, and president of the New Hartford Canning Company; has served in these public positions: Mayor of Utica, 1884; delegate to the Republican National Convention in 1892; chairman of New York State Republican convention in 1895 and again in 1900; chairman of the National Republican Congressional committee since 1906; was elected to the Fiftieth, Fifty-first, Fifty-third, Fifty-fourth, Fifty-fifth, Fifty-sixth, Fifty-seventh, Fifty-eighth, Fifty-ninth, and Sixtieth Congresses, and, in June, 1908, received the Republican nomination for Vice-President of the United States.

Sherman, William Tecumseh, born in 1820; American general; served with distinction in California, and, having in the interval been occupied in various pursuits, commanded a brigade at Bull's Run (July 21, 1861), was wounded at Shiloh (April 6-7, 1862), and having led the expedition against Vicksburg, took Arkansas Post at the head of the 15th Corps. He commanded the left wing at Chattanooga (November 23-25, 1863), and was soon after made head of the army of the Tennessee. He was repulsed by Johnston at Kennesaw Mountain (June 27, 1864), but defeated his successor, Hood. After further victories he became lieutenant-general, and, in 1869, became commander-in-chief, a position which he held till 1884. Died, 1891.

Siddons, Sarah, born in 1755; English actress, *nee* Kemble; joined Garrick in 1775, and acquired a rapid reputation. In 1812 she retired with a fortune, having given unrivaled renderings of the greatest characters in the tragedies of Shakespere and other writers. Died, 1831.

Siegel, Henry, merchant; born in Eubigheim, Germany, March 17, 1852; educated in Germany, and in night school, Washington; came to United States, 1867; obtained place in clothing store, Washington, at \$3.50 per week, worked there four years until he received \$15 per week; went to work for his brothers who had a store at Parkersburg, Pa.; later partner in store established by brothers at Lawrenceburg, Pa.; moved to Chicago, 1876, establishing cloak manufacturing firm of Siegel, Hartsfeld & Company, later Siegel Brothers; with Frank H. Cooper, Peoria merchant, established Siegel, Cooper & Company, department store, Chicago; moving finally, 1893, into the "Big Store," State and Van Buren streets; in 1896, established store of Siegel-Cooper Company, New York; purchased Simpson-Crawford Company store, New York, January, 1902, and in August, 1902, a half interest in Schlesinger & Mayer, Chicago.

Sigsbee, Charles Dwight, naval officer; born in Albany, N. Y., January 16, 1845; Naval Academy, 1859-63; promoted ensign, October 1, 1863; served in West Gulf squadron, 1863-64, and was present at battle of Mobile Bay; in North Atlantic squadron, 1865, and at both attacks on Fort Fisher and final assault on same; after Civil War, 1874-78, sounded and explored the Gulf of Mexico; introduced numerous inventions and new methods in deep sea exploration, for which he later received decoration of Red Eagle of Prussia from Emperor William I., and received gold medal from abroad. Took command, April 10, 1897, of battleship "Maine," which was blown up and destroyed in Havana harbor, February 15, 1898; commanded battleship "Texas," September, 1898, to January, 1900; rear-admiral, 1904; member Naval Construction Board and Naval General Board. Author: "Deep Sea

Sounding and Dredging," "United States Coast Survey," "Personal Narrative of the Battleship 'Maine.'"

Silliman, Benjamin, an American naturalist; born in Connecticut in 1779; graduated at Yale College in 1796, and entered upon the professorship of chemistry there in 1804, in which position he gained great celebrity, both as an experimentalist and as a popular lecturer. In 1818, he founded "The American Journal of Science and Arts," the first of its kind in the United States. Died in 1864. His son Benjamin succeeded his father at Yale. Born, 1816; died, 1885.

Simpson, Sir James Young, Bart., M. D., born in 1811; physician; made a speciality of obstetrics. He discovered the anæsthetic properties of chloroform. Besides several medical works he was author of "Archæological Essays." Died, 1870.

Sismondi, Jean Charles Simonde de, historian and economist; was born in Geneva in 1773; was imprisoned there in 1794, as an aristocrat, and fled to Tuscany, but in 1800 returned to his native place. His chief works were, "History of the Italian Republics of the Middle Ages," "History of the French," "History of the Literature of the South of Europe," and some economical works. Died, 1842.

Sitting Bull, a chief of the Sioux Indians; born about 1837; was regarded as a great "medicine man" by his tribe; and was an obdurate foe of the whites. He was conspicuous in the Sioux massacre of 1862; was constantly on the war path for fourteen years; was a leader in the Indian outbreaks of 1876; and was in command at the battle of the Little Big Horn in which General Custer and his entire force were killed. With his band he escaped into Canada, but continued even there to incite rebellion among the Sioux. In 1880, receiving the promise of pardon, he returned to Dakota and surrendered to General Miles. He again incited the Indians to renewed outbreaks. His arrest was ordered and the Indian police were detailed on this duty. In attempting to resist them, he was killed December 15, 1890.

Sixtus IV. born in 1414; was elected in 1471; equipped a fleet against the Turks, supported the Pazzi against the Medici, and Venice against Ferrara, but excommunicated the former for not agreeing to a peace. He built the Sistine chapel. Died, 1484.

Sixtus V. born in 1521; was originally a shepherd boy near Ancona, by name Felice Peretti, but became successively general of the Cordeliers at Bologna, confessor to Pius V., and cardinal, being elected successor to Gregory XIII. in 1585. He excommunicated Henry of Navarre, Condé, and Henri III. of France, and approved the expedition of Philip II. against England; and at Rome rebuilt the Vatican library, established the press, spent large sums in improving and adorning the city, and put down brigandage in his dominions. He also fixed the number of cardinals at seventy. Died, 1590.

Smalley, George Washburn, American correspondent to London "Times" since July, 1895; born in Franklin, Norfolk County, Mass., 1833; graduated from Yale, 1853 (A. M.); Harvard Law School, 1855; practiced law in Boston, 1856-61; in Civil War, 1861-62, war correspondent to "New York Tribune"; organized European Bureau, "New York Tribune," 1866-67; in charge of its European correspondence until 1895; special United States commissioner at Paris Exposition, 1878. Author: "London Letters," "Studies of Men."

Smith, Goldwin, author; born in Reading, England, August 23, 1823; graduated from Magdalen College, Oxford University, 1845; M. A. (D. C. L., Oxford, 1882; L. L. D., Princeton, 1896); called to English bar, 1847; Regius professor of modern history, Oxford, 1858-66; active champion of North during American Civil War; visited United States, 1864; came to United States, 1868; lecturer, 1868-71, and later honorary professor of English and constitutional history, Cornell; has lived in Toronto since 1871. Author: "Irish History and Irish Character," "Lectures on Modern History," "Rational Religion and the Rationalistic Objections of the Bampton Lectures for 1858," "Does the Bible Sanction American Slavery?" "The Empire," "On the Morality of the Emancipation Proclamation," "A Letter to a Whig Member of the Southern Independence Association," "England and America," "The Civil War in America," "Three English Statesmen," "Essays on Reform," "The Reorganization of the University of Oxford," "The Irish Question," "The Relations Between America and England," "William Cowper," "Jane Austen," "Lectures and Essays," "The Conduct of England to Ireland," "False Hopes," "Loyalty, Aristocracy, and Jingoism," "The Political Destiny of Canada," "Canada and the Canadian Question," "William Lloyd Garrison: a Biographical Essay," "A Trip to England," "History of the United States," "Oxford and Her Colleges," "Bay

Leaves: Translations from the Latin Poets." "Specimens of Greek Tragedy." "Essays of Questions of the Day." "Guesses at the Riddle of Existence." "The United Kingdom." "Shakespeare: The Man," "Commonwealth or Empire." "In the Court of History." "The Founder of Christendom." "Lines of Religious Inquiry." "My Memory of Gladstone," and numerous articles in magazines.

Smith, Herbert Knox, lawyer, government official; born in Chester, Mass., November 17, 1869; graduated from Yale, A. B., 1891, post-graduate department, 1891-93, Yale Law School, B. L., 1895; practiced law, Hartford, Conn., 1895-1903; served two terms, Hartford common council, 1900-02, chairman Hartford Republican town committee, January to December, 1903; member Connecticut legislature, 1903-05; commissioner of corporations, department of commerce and labor, since 1906.

Smith, John, Captain, born in 1580; colonist; was taken prisoner by the Turks when in the Hungarian service, but after his escape from the Crimea went out to colonize Virginia in 1606. He was captured by the Indians, and only saved from death by Pocahontas, the Indian girl, and after his release and explorations in Chesapeake Bay, was made president of the Colonial Council. He fell into the hands of the French in 1615, and on his return to England met Pocahontas, and presented her to the queen. His "History of Virginia, New England, and the Summer Isles" appeared in 1624, and various autobiographical works. Died, 1631.

Smith, Joseph, born in 1805; founder of Mormonism; was the son of a farmer in Vermont State, built Nauvoo on the Mississippi, where he was arrested for treason and murdered by the mob (1844). The "Book of Mormon" was, according to his account, a translation of records written on thin plates of metal, to the discovery of which he was supernaturally guided.

Smollett, Tobias George, born in 1721; novelist and historian; was several years in the navy, but afterwards became an author, his chief novels being "Roderick Random" and "Peregrine Pickle." He also continued Hume's "History of England," translated "Don Quixote" and "Gil Blas," and was employed as a writer against the Whigs. Died, 1771.

Socrates (born about 469 B. C.), Athenian philosopher; worked at first as a sculptor, but afterwards devoted himself to gratuitous teaching. He served as a soldier in the Peloponnesian War, saving the lives of his pupils, Alcibiades and Xenophon, at Potidea and Delium; was finally condemned to drink hemlock on a charge of impiety and the corruption of youth. Died, 399.

Solomon, king of Israel from 1015 to 977 B. C.; second son of David and Bathsheba, and David's successor; in high repute far and wide for his love of wisdom and the glory of his reign; he had a truly Oriental passion for magnificence, and the buildings he erected in Jerusalem, including the Temple and a palace on Mount Zion, he raised regardless of an expense which the nation resented after he was gone; the burden of which it would seem had fallen upon them, for when his successor, following in his courses, ascended the throne, ten of the tribes revolted, to the final rupture of the community, and the fall of first the one section and then the other under alien sway.

Solyman II, surnamed "The Magnificent" born in A. D. 1496; Sultan of Turkey, from 1520 to 1566. He was the greatest of the Turkish sultans, and was scarcely less remarkable for the wisdom and justice of his internal administration than for the extent of his conquests. He encouraged literature, and was himself a poet of no mean rank. He died, September 5, 1566, of fever while besieging the town of Szigeth, in Hungary, two days before the capture of the town.

Sophocles (*ᾠφ-ο-κλῆς*), a famous Athenian tragic poet, was born in 495 B. C. He succeeded *Æschylus* in his improvement of the drama, and raised it to its highest pitch of excellence in Greece. We possess but seven of his plays, two of which belong to the trilogy of *Œdipus*. Died, 406 B. C.

Sothern, Edward H., actor; born in London, England; son of Edward A. S., famous comedian; first appeared in small parts with his father, Abbey's Park Theater, New York; later played with Helen Dauvray in "One of Our Girls." First took leading rôle, Lyceum Theater, New York, May 23, 1887, as Jack Hammerstein in "The Highest Bidder," and since has starred with his own company in "Lord Chumley," "The Master of Woodbarrow," "The Prisoner of Zenda," "Under the Red Robe," etc.; married Virginia Harned, his leading woman.

Sousa, John Philip, musician; born in Washington, November 6, 1856; studied music; teacher at 15 and conductor at 17; was one of the first violins of Jacques

Offenbach's orchestra when the latter was in the United States; band leader of United States Marine Corps, 1880-92; since 1892, director of Sousa's Band; has composed and published many marches, orchestral suites, "Te Deums," songs, waltzes and the light operas "El Capitan," "Bride Elect" (libretto and music), "The Charlatan," and "Chris, or the Wonderful Lamp." Author; "The Fifth String," "Pipetown Sandy."

Southey, Robert, born in 1774, poet and biographer, son of a linen draper at Bristol; settled at Keswick in 1803, and there wrote "The Curse of Kehama," and all his chief poems, except "Thalaba," as well as his lives of Nelson and of Wesley, "The Doctor," and contributions to the "Quarterly." He became poet laureate in 1813 and received a pension in 1835. He was twice married, first to Edith Fricker, sister of his friend Coleridge's wife, and secondly to Caroline Bowles, romance-writer and poet, who died in 1854. Died, 1843.

Sparks, Edwin Erie, educator, historian; was born in Licking County, O., 1860; was graduated from the Ohio State University, 1884; A. M., 1891; Ph. D., University of Chicago, 1900; was instructor in the Ohio State University, 1884-5; professor Pennsylvania State College, 1890-5; lecturer American Society for University Extension, 1893-5; professor American History, University of Chicago, and dean of University College, 1895-1908; president Pennsylvania State College, 1908; member American Historical Association, Illinois Historical Association (director); and councilor American Institution of Civics. Author: "Expansion of the American People"; "The Men Who Made the Nation"; "Formative Incidents in American Diplomacy"; "The United States of America"; "Foundations of National Development," etc.

Sparks, Jared, born in 1789; American writer; became professor of history at Harvard in 1839, and president of the college in 1840. His chief work was "Life and Writings of Washington." Died, 1866.

Spartacus, died, 72 B. C.; a Thracian, who headed the revolt of the gladiators at Capua. After some successes he was defeated by Crassus and slain.

Spencer, Herbert, born in 1820; utilitarian philosopher; was for some years a civil engineer before engaging in literature. Going to London he became intimate with George Eliot and G. H. Lewes, and in 1851, published "Social Statics." He undertook a lecturing tour in America, in 1882, previous to which had appeared "Principles of Psychology," "First Principles," "Education," "Principles of Biology," "The Study of Sociology," "The Data of Ethics," "The Man v. The State," and other works followed. Died, 1903.

Spenser, Edmund, born in 1552; English poet; went to Ireland in 1580, as secretary to Lord Grey de Wilton, and lived in Cork County in the intervals till the rebellion of Tyrone. The "Faery Queen" was partly printed in 1590, his other chief works being "The Shepherd's Calendar," "Colin Clout's Come Home Again," and "View of the State of Ireland."

Speyer, James, banker; born in New York, 1861; educated at Frankfurt-on-the-Main, Germany. Entered family's banking house in Frankfurt-on-the-Main at age of 22; later transferred to Paris and London branches to receive thorough business education before returning to take charge of New York house; he is now senior of the Speyer houses. One of founders and treasurer of The Provident Loan Society, which loans money to needy people on personal property at legal rates of interest. Trustee of Union Trust Co., Central Trust Co., Girard Trust Co. (Philadelphia), German Savings Bank, Guarantee Trust Co., Mutual Life Insurance Co.; director of Southern Pacific Co., Pacific Mail Steamship Co., B. & O. Railroad Company, North British Mercantile Insurance Company, Bank of Manhattan Co., Underground Electric Railways Company of London, Limited, Rock Island Co., General Chemical Co., Lackawanna Steel Co., New York Chamber of Commerce.

Spofford, Alnsworth Rand, chief assistant librarian of Congress; born in Gilmanton, N. H., September 12, 1825; classical education from private tutors (L. D., Amherst, 1882). Bookseller and publisher, Cincinnati; associate editor of "Cincinnati Daily Commercial," 1859-61; first assistant librarian of Congress, 1861-64; librarian-in-chief, 1864-07; since then chief assistant librarian. Editor: "Catalogues of the Congressional Library," "Annual American Almanac, 1878-80," edited, with others, "Library of Choice Literature" (ten volumes), "Library of Historic Characters and Famous Events" (ten volumes), "Library of Wit and Humor" (five volumes). Author: "Practical Manual of Parliamentary Rules," "A Book for all Readers—an aid to collection, use, and preservation of books, and the formation of libraries," numerous articles in reviews and encyclopedias, lectures, etc.

Spooner, John Colt, lawyer; United States senator; born in Lawrenceburg, Ind., January 6, 1843; removed to Madison, Wis., 1859; graduate of University of Wisconsin, 1864; served private, Co. A, 40th Wisconsin infantry volunteers; captain and brevet-major of 50th Wisconsin infantry; later private and military secretary to Governor Lucius Fairchild, of Wisconsin. Admitted to bar, 1867; assistant attorney-general, Wisconsin, 1867-70; practiced law at Hudson, Wisconsin, 1870-84; member of Wisconsin Assembly, 1872. United States senator, 1885-91, and again in 1897-1906. Resigned on latter date and entered upon the practice of law in New York.

Spreckels, Claus, sugar refiner; born in Lamstedt, Hanover, 1828; came to the United States in 1846; was employed at Charleston, S. C., and New York; went to San Francisco, 1856; conducted a store, and later a brewery. Established Bay Sugar Refinery, 1863, procuring raw material from Hawaii; invented new refining processes; acquired sugar properties in Hawaii; built new refineries; has a beet-sugar farm of 1,500 acres and factory at Watsonville, Cal.; large owner in Oceanic Steamship Company, plying between San Francisco and Honolulu.

Spurgeon, Charles Haddon born in 1834; Baptist preacher; was born in Essex, and came to London in 1853, the Metropolitan Tabernacle being opened in 1861. His sermons were published weekly almost from the beginning, and had a large sale. In 1887, he withdrew from the Baptist Union. Died, 1892.

Standish, Miles, one of the Puritan fathers, of Lancashire birth, and a cadet of a family of knightly rank in the country, served in the Netherlands as a soldier, and came to America in the "Mayflower," in 1620, and was helpful to the colony in its relations both with the Indians and the mother country. Standish is the hero of a poem of Longfellow's.

Stanley, Arthur Penrhyn, born in 1815; divine, son of Edward, Bishop of Norwich (died, 1849); author of "Familiar History of Birds"; was educated at Rugby and Balliol, and became professor of ecclesiastical history at Oxford in 1858. He visited the East in 1853 and 1862, and was appointed dean of Westminster in 1863. Among his works were "Life of Dr. Arnold," "Sinai and Palestine," and "Essays on Church and State." Died, 1881.

Stanley, Henry Morton, D. C. L., African explorer; born in Wales in 1841; took the name of his adopted father in place of that of Rowlands, and having served in the American Civil War, and been a war correspondent in Turkey and Abyssinia, was, in 1870, sent to find Livingstone, whom he met at Ujiji (November 10, 1871), and having explored with him, came home in 1872. In 1874, he again went to Africa, and in the course of four years explored Victoria and Albert Nyanza, and the Congo. In 1879-82, he once more visited the latter, and, in 1887, went to relieve Emin Pasha. "How I Found Livingstone," "Through the Dark Continent," and "In Darkest Africa" describe his expeditions. Died, 1904.

Stanton, Edwin M., an American statesman, was born in Steubenville, O., in 1814. He practiced law with success in his native town until 1847, when he settled in Pittsburgh, Pa., and there became leader of the bar. In 1857, he took up his abode in Washington, and, in 1860, was made attorney-general of the United States, and, in 1862, secretary of war. This arduous post he filled throughout the Civil War with conspicuous energy, industry, and ability. He retained office after the death of President Lincoln, until 1867, when he was suspended by President Johnson, who appointed General Grant in his place *ad interim*. The latter, however, only held the appointment a few months, that is to say, till Stanton's reinstatement by the senate in January, 1868. In May, he definitely retired from the secretaryship, and, in December, 1869, was appointed an associate justice of the Supreme Court of the United States, and died during the same month.

Stedman, Edmund Clarence, poet, critic; born in Hartford, Conn., in 1833; educated at Yale, class of 1853, A. M. (L. H. D., Columbia, LL. D., Yale). Editor of Norwich (Conn.) "Tribune," 1852-53; Winsted (Conn.) "Herald," 1854-55; on staff of New York "Tribune," 1859-61; war correspondent for "World," 1861-63; filled a position under United States Attorney-General Bates; member of New York Stock Exchange, 1869-1900. Delivered initiatory course of lectures of Turnbull Chair of Poetry, Johns Hopkins, later repeated at Columbia and University of Pennsylvania. Author: "Poems, Lyric and Idyllic," "Alice of Monmouth—an Idyl of the Great War," "The Blameless Prince," "Poetical Works," "Hawthorne, and Other Poems," "Lyrics and Idyls, with Other Poems," "Poems

Now First Collected," "Mater Coronata," also volumes of poems. Critical works: "Victorian Poets," "Poets of America," "The Nature and Elements of Poetry." Editor: "Cameos from the Poems of Walter Savage Landor" (with T. B. Aldrich), "Poems of Austin Dobson," "A Library of American Literature" (eleven volumes, with Ellen M. Hutchinson), 1888-89; "The Works of Edgar Allan Poe" (ten volumes, with Professor G. E. Woodbury), "A Victorian Anthology," "An American Anthology," "History of New York Stock Exchange." Died in New York in 1908.

Stephen, Leslie, born in 1832, son of Sir James; was for several years fellow and tutor of Trinity College, Cambridge; edited the "Cornhill" for eleven years, and, in 1882, undertook the editorship of the "Dictionary of National Biography," which he resigned in 1891. Among his works are "History of English Thought in the Eighteenth Century," "The Science of Ethics"; lives of Johnson, Pope, and Swift in the "Men of Letters" series, and a "Life of Henry Fawcett." Died, 1904.

Stephens, Alexander Hamilton, an American statesman, was born in Georgia in 1812. Sent to Congress by the Whig party in 1843, he retained his seat in that body till 1859, during which period he supported the annexation of Texas, promoted the passage of the Kansas and Nebraska Act of 1854, and joined the Democratic party in upholding the measures of President Buchanan. In 1860, he opposed the secession of his State, but in the following year, gave in his adhesion to sectional views, and was elected vice-president of the so-called Southern Confederacy. After the collapse of the latter, Stephens suffered a brief imprisonment in Fort Warren, and in 1865, after being reelected senator to Congress, was not allowed to take his seat. In 1869, he published "A History of the War of Secession," and, in 1870, "A Constitutional View of the War Between the States." Died, 1883.

Stephenson, George, engineer; was born in Wylam in 1781; worked as a collier and brakesman, and, in 1815, was presented with 1,000 guineas, and publicly entertained for his invention of a safety lamp. His first engine had been constructed before this, and, in 1829, he won a prize of £500 for the best engine, his locomotive, the "Rocket," being fitted with the "blast-pipe." Died, 1848.

Stephenson, Robert, born in 1803; son of the above; won the mathematical prize in a six-months' course at Edinburgh University, and returned to help his father. He constructed the "Planet," the model of the modern locomotive, and won world-wide reputation as a constructor of bridges, and in connection with railways. He entered parliament for Whitby as a Conservative in 1847. Died, 1859.

Stepniak, Sergius Dragomanoff, born in 1841; Russian writer; was removed from his professorship of Kieff and exiled in 1876, for his political opinions, and then settled in Geneva. Among his works are "His made," ("Common Things"), "Tyrannicide in Russia," and "The Turks Within and Without," "Underground Russia," etc. Died, 1895.

Sterne, Laurence, born in 1713; Irish divine and writer, author of "Tristram Shandy" (1759-67), "The Sentimental Journey," and "Letters to His Friends" (posthumous), etc. Died, 1768.

Stevenson, Adlai Ewing, Vice-President of the United States, 1893-97; born in Christian County, Ky., October 23, 1835; educated in common schools and Center College, Danville, Ky.; was not graduated; family removed to Bloomington, Ill., when he was 17 years old; admitted to bar, May, 1857; master in chancery, 1860-64; member of Congress, 1875-77; delegate to National Democratic Convention, 1884 and 1892; first assistant postmaster-general, 1885-89; after term as vice-president, appointed in 1897, as member of the commission to Europe to try to secure international bimetalism. Democratic nominee for vice-president of the United States, 1900.

Stevenson, Robert Louis, born in 1850; novelist, poet, and essayist, grandson of the above; gave up the family profession and traveled, afterwards writing the following works, among others: "An Inland Voyage," "Virginibus Puerisque," "New Arabian Nights," "Treasure Island," "A Child's Garden of Verse," "Prince Otto," "Strange Case of Dr. Jekyll and Mr. Hyde," "Kidnapped," "The Master of Ballantrae," "The Wrecker," "A Footnote to History." In 1890, he went to live in Samoa, where he died in 1895.

Steyn, Martinus Theunis, a Boer statesman; born in Winburg, Orange Free State, October 2, 1857; worked on his father's farm till 1876, when he went to England to study. He returned to Africa in 1882, and practiced law in Bloemfontein till 1889, when he was made second puisne judge and state attorney. Later, he became

first puisne judge, and in 1896, was chosen last President of the Orange Free State.

Stimson, Frederic Jesup ("J. S. of Dale"), lawyer, author; born in Dedham, Mass., July 20, 1855; graduate of Harvard, 1876; Harvard Law School, 1878. Member of New York and Boston bars; assistant attorney-general, Massachusetts, 1884-85; general counsel to the United States Industrial Commission, 1898-1902. Professor of comparative legislation, Harvard. Besides writing law books, he has written several novels (the earlier ones under the pen-name, "J. S. of Dale"), essays, etc. Author: "Rollo's Journey to Cambridge," "Guernedale," "The Crime of Henry Vane," "American Statute Law" (two volumes), "The Sentimental Calendar," "First Harvests," "Stimson's Law Glossary," "In the Three Zones," "Government by Injunction," "Labor in Its Relation to Law," "Mrs. Knollys and Other Stories," "Handbook to the Labor Law of the United States," "Uniform State Legislation," "Pirate Gold," "King Noanett," "Jethro Bacon of Sandwich," also a series of magazine articles on "The Ethics of Democracy," etc.

Stillman, James, president of National City Bank; born in Brownsville, Tex., June 9, 1850; youth spent in Hartford, Conn., and in private school at Sing Sing, N. Y.; partner, 1871-73, in Smith, Woodman & Stillman, and since 1873, in their successors, Woodman & Stillman, cotton commission merchants; now senior partner; director New York Central & Hudson River Railroad Company, Northern Pacific Railway Company, Union Pacific Railroad Company, Chicago & Alton Railroad Company, Chicago & Alton Railway Company, Chicago & North-Western Railway Company, Chicago, Burlington & Quincy Railway Company, Baltimore & Ohio Railroad, Delaware, Lackawanna & Western Railroad Company (member board of managers), Western Union Telegraph Company, Northern Securities Company, Allis-Chalmers Company, Hanover National Bank, National Citizens Bank, Second National Bank, Riggs National Bank (Washington), Southern Pacific Company, United States Trust Company, Lincoln National Bank, Bank of The Metropolis, Amalgamated Copper, American Surety Company, George A. Fuller Company, New York Life Insurance Company, Northern British & Mercantile Insurance Company, Queen Insurance Company, and many railway, financial, insurance, and other corporations, etc.

Stolypin, Peter Arkazhevich, Russian prime minister; born in 1863; the son of a popular general, he had a brilliant career at the University of St. Petersburg, and, after graduating in 1884, obtained an appointment at the Ministry of the Interior. After two years he was transferred to the Ministry of Agriculture, where he remained another two years, then retiring for a time into private life, and devoting himself to the management of his estate in Kovno Government. He served as marshal of the district nobility, president of the arbitration board and justice of the peace, and in 1899 became marshal of the provincial nobility. He was appointed vice-governor of Grodno in 1902, governor of Saratoff in 1903, and from Saratoff he was called to St. Petersburg to take up the portfolio of the interior. He was one of the few ministers to whom the Duma was ready to listen. When M. Goremykin resigned in 1906, M. Stolypin succeeded him as premier, and was thanked by the czar for his services and appointed a member of the Council of the Empire, January 13, 1907. His integrity and equity are recognized on all hands.

Storey, Moorfield, lawyer; born in Roxbury, Mass., March 19, 1845; graduated from Harvard, 1866 (A. M.); studied Harvard Law School; admitted to bar, September, 1869; private secretary to Charles Sumner, 1867-69; editor, "American Law Review," 1873-79; overseer, Harvard College, 1877-78, and since 1892; president of American Bar Association, 1896; president of Massachusetts Reform Club; independent in politics. Author: "Life of Charles Sumner" (statesman series), pamphlet "Politics as a Duty and as a Career." Also wrote: "The American Legislature, Proctor of American Bar Association," 1894, "A Year's Legislation," "The Government of Cities," also various other pamphlets and occasional addresses. President of New England Anti-Imperialist League, 1905.

Story, Emma Eames, operatic prima donna; born in Shanghai, China, 1867, of American parentage, her father being a lawyer in the international courts of Shanghai; childhood spent in Boston; studied music; sang in choirs and concerts; studied in Paris; debut in Paris Grand Opera, March 13, 1889, in "Juliette"; Covent Garden, London, 1891; New York, 1891; has sung in regular opera seasons in London and United States since. Officier d'Académie (French); English Jubilee medal; married, 1891, to Julian Story, painter, from whom she is now divorced.

Story, Joseph, a distinguished American jurist; born in Marblehead, Mass., in 1779; graduated at Harvard College in 1798, and after being called to the bar rapidly rose to eminence as a special pleader. In 1809, he entered Congress, and in 1811, became one of the justices of the United States Supreme Court. As a jurist, and an exponent of international law, Judge Story stands in the front rank, not only in his own country, but also in Europe. His published works embrace the masterly "Commentaries on the Conflict of Laws," "Commentaries on the Constitution of the United States," "Commentaries on Equity Jurisprudence," "A Treatise on the Law of Agency," etc. Died, 1845.

Story, William Wetmore, born in 1819; son of the above; published "Contracts not under Seal," and other legal works, but afterwards devoted himself to literature and sculpture. Among his publications are several poems, "Origin of the Italian Language and Literature," "Conversations in a Studio," etc., and he has executed numerous monuments, statues, and busts. Died, 1895.

Stowe, Harriet Beecher, an American novelist; was born in Litchfield, Conn., in 1814; a daughter of Dr. Lyman Beecher, and married, in 1835, Professor C. E. Stowe of Andover. In 1850, she made a sensation in the literary world by the publication of "Uncle Tom's Cabin," a work of fiction which had quite an astonishing success, and was translated into almost every language of Europe. To this book she added a "Key" in 1852. Her later productions comprise "Dred, a Tale of the Great Dismal Swamp," "The Minister's Wooing," "Agnes of Sorrento," and "Oldtown Folks." In 1869, she brought out a brochure entitled "The True Story of Lady Byron's Life," in which she accused Lord Byron of incest. This article evoked a storm of literary criticism, which was by no means allayed by the publication, in 1870, of Mrs. Stowe's work, entitled "Lady Byron Vindicated." In 1871, appeared "Oldtown Fireside Stories," "Pink and White Tyranny," and "My Wife and I," or "Harry Henderson's History." Died, 1896.

Strathcona, Baron, Canadian statesman; born in 1821; joined the Hudson Bay Company at an early age, and acted as special commissioner in Red River Rebellion; became governor of the company and director of Canadian Pacific and other Canadian railways; honorary president, Bank of Montreal; chancellor of Aberdeen University and McGill University; represented Selkirk and Montreal in the Dominion House, and in 1896, became high commissioner for Canada. Raised Strathcona's Horse for service in South African War; has been a munificent benefactor to Canada. With Lord Mount-Stephen, gave an endowment of £10,000 a year to the king's hospital fund.

Straus, Oscar S., secretary of commerce and labor since 1906; was born December 23, 1850; graduated from Columbia College (now Columbia University), New York City, and Columbia Law School; practiced law 1873-81; engaged in mercantile pursuits as a member of the New York firm of L. Straus & Sons; minister to Turkey, 1887-89, 1897-1900; appointed by President Roosevelt, in 1902, as a member of the permanent court of arbitration at The Hague in the place of ex-President Harrison, deceased. Author of numerous publications dealing with history and international law: "The Origin of Republican Form of Government in the United States," "Roger Williams, the Pioneer of Religious Liberty," "The Development of Religious Liberty in the United States," "United States Doctrine of Citizenship and Expatriation," "Reform in the Consular Service," etc.; L. H. D., Brown University, and L. L. D., University of Pennsylvania, Washington and Lee, and Columbia universities.

Strauss, Richard, musical composer; was born June 11, 1864, in Munich, where his early studies began, his father being first horn player in the orchestra of the Court Opera-house. Appointed conductor at Meiningen in 1885, from 1889 to 1894, he was Hofkapellmeister (with Eduard Lassen) at Weimar, and later conductor at the Munich Opera-house. He has written many charming songs, but his distinctiveness as a modern composer is chiefly due to extraordinarily elaborate instrumental works. A Richard Strauss festival was held at St. James's Hall in June, 1903, when "Ein Heldenleben," "Also Sprach Zarathustra," and other symphonic poems from his pen were performed. His opera "Salome," based on Oscar Wilde's work, has provoked much discussion.

Stuart, James E. B., born in 1835; American general; celebrated for his services to the Confederates, his chief exploits being the night attack of August, 1862, when General Pope's papers were captured, and the raid across the Potomac in the same year. He was mortally wounded at Ashland, and died (1864), at Richmond.

Stuart, Gilbert Charles, "American Stuart"; born in 1756; portrait-painter; went to England when young, and lived there till 1793. He was a pupil of West, and executed portraits of George III., George IV., Louis XVI., Washington, Reynolds, and other contemporaries. Died, 1828.

Stubbs, William, D. D., born in 1825; historian and divine; became Regius professor of modern history at Oxford in 1866, Bishop of Chester in 1884, and of Oxford in 1889. His chief works are "Select Charters," "Constitutional History of England to 1485," and editions of the "Chronicles" of Benedict of Peterborough and Roger Hoveden.

Sudermann, Herman, German dramatist and novelist, was born in Mazisken, in East Prussia, September 30, 1857; studied in the universities of Königsberg and Berlin, and became a teacher and journalist. He published a series of tales, of which "Frau Sorge," "Der Katzensteg," and "Es War," are the most impressive. The drama "Sodom's Ende," which, translated and was followed by "Die Heimat," was produced in 1890, and "Magda," has been represented by Duse, Sarah Bernhardt, and Mrs. Patrick Campbell. His later works include "Das Glück im Winkel," "Reiherfedern," "Morituri," "Johannes," and "Das Johannisfeuer." In October, 1906, "Das Blumberboot" was produced in Berlin, and "Rosen" at Vienna in October, 1907.

Sue, Eugene, an eminent French novelist, was born in Paris, 1804. His most popular works are, "The Mysteries of Paris," and "The Wandering Jew." Died, 1857.

Sully, Thomas, an eminent American painter, was born in County of Lincoln, England, in 1783. While a boy he emigrated to America, and studied his art at Charleston, afterwards successively taking up his residence in Richmond, Va., New York, and Philadelphia. As a portrait painter, he enjoyed great reputation, many of the most illustrious personages of the time being among his sitters. His chief historical work is "Washington Crossing the Delaware," now in the Boston Museum. Died, 1872.

Sumner, Charles, born in 1811; American statesman and jurist; delivered a powerful speech against war in 1845, "The True Grandeur of Nations," and in 1850 was elected United States senator. In 1856, he made a speech, "The Crime Against Kansas," which caused a personal attack upon him by a Southern delegate. In 1859, he made his oration, "The Barbarism of Slavery," was chairman of Committee on Foreign Relations, 1861-71; and was a strong supporter of the American claims in the "Alabama" case. Died, 1874.

Svedenborg, Emanuel, founder of the "New Church," was born in Stockholm, 1668, and occupied himself as a scientific engineer till 1743, from which time he began to write, when living in Sweden or England, among his numerous works being "Arcana Coelestia," "De Cultu et Amore Dei," "The True Christian Religion," and several scientific treatises. Died, 1772.

Swift, Jonathan, The greatest of English satirists; born in Dublin, Ireland, 1667. He was the posthumous son of Jonathan Swift, an Englishman; and was educated at Kilkenny and at Trinity College, Dublin. In 1701, he took his doctor's degree, and in 1704, he published anonymously his famous "Tale of a Tub," to which was appended the "Battle of the Books." In 1710, Swift began his "Journal to Stella," which constitutes a splendid commentary on his own history. He wrote many political pamphlets supporting the Tory policy of his day, the most powerful of which was "The Conduct of the Allies." His celebrated "Drapier's Letters" made him the idol of the Irish people. His famous "Gulliver's Travels," appeared in 1726. Swift did much to make public opinion a governing power in English politics. He died in Dublin (1745), bequeathing the greatest part of his fortune to a hospital for lunatics and idiots.

Swinburne, Algernon Charles, son of Admiral Swinburne, was born in London, 1837. Educated at Balliol College, Oxford. Visited Florence, and passed some time there. His first productions were two plays "Queen Mother," and "Rosamond." These were followed by two tragedies, "Atalanta in Calydon," and "Chastelard," and "Poems and Ballads," which met with severe criticism. His later works are "A Song of Italy," "William Blake, a critical essay," "Songs Before Sunrise," in which he glorifies Pantheism and Republicanism; "Studies in Song," "A Century of Rondels," "Life of Victor Hugo," a poem on "The Armada," "A Study of Ben Jonson," "Astrophel, and other Poems," "Studies in Prose and Poetry," "The Tale of Balen," "Rosamund, Queen of the Lombards," "A Channel Passage, and other Poems," and "Love's Cross-Currents."

Sybel, Heinrich von, born in 1817; German historian and politician, held chairs at Marburg, Munich, and Bonn successively, and in 1875, became director of state archives. He opposed Bismarck's Polish policy in the "Prussian Landtag," and entered the Reichstag, in 1875. His chief work is "History of the French Revolution." Died, 1895.

Sylvester, James Joseph, D. C. L., F. R. S., etc., born in 1814; mathematician, after holding chairs at University College, in the University of Virginia, at Woolwich, and at the Johns Hopkins University, Baltimore, became Savilian professor of geometry at Oxford, in 1883. He discovered the "theory of reciprocants," invented the plagiograph and other instruments, and published "Laws of Verse" and other works.

Tacitus, Caius Cornelius, born in 55; Roman historian; married the daughter of the consul Agricola, was questor under Vespasian, ædile under Titus, prætor under Domitian, and consul under Nerva. His chief works are the "Life of Agricola" and the "Germania," both written about 98, the "Histories" extending from 68 to 96, and the "Annals," extending from 14 to 68. Died, circa 130.

Taft, William Howard, secretary of war of United States; born in Cincinnati, September 15, 1857; graduate of Yale, B. A., 1878; Law School, Cincinnati College, LL. B., 1880 (LL. D., University of Pennsylvania, 1902, Yale, 1903); admitted to Ohio bar, 1880; law reporter Cincinnati Times, and later of Cincinnati Commercial, 1880-81; assistant prosecuting attorney, Hamilton County, Ohio, 1881-82; collector internal revenue, first district, Ohio, 1882-83; practiced law, Cincinnati, 1883-87; assistant county solicitor, Hamilton County, 1885-87; judge Superior Court of Ohio, 1887-90; solicitor-general of United States, 1890-92; dean and professor in law department, University of Cincinnati, 1896-1900; United States circuit judge, sixth circuit, 1892-1900; president of United States Philippine Commission, 1904; first civil governor of Philippine Islands, 1901 to 1904; secretary of war, United States, since 1904. Sent by President Roosevelt to Rome, 1902, to confer with Pope Leo XIII. concerning purchase of agricultural lands of religious orders in the Philippines.

Taft, Lorado, sculptor; born in Elmwood, Ill., April 29, 1860; graduate of University of Illinois, 1879; studied at Ecole des Beaux Arts, Paris, 1880-83. Instructor in Chicago Art Institute since 1886; lecturer on art University Extension Department of University of Chicago, 1892-1902. Author: "The History of American Sculpture."

Taine, Hippolyte Adolphe, born in 1828; French writer; became professor at the School of Fine Arts in Paris, in 1864. He has published a "History of English Literature," "The Origin of Contemporary France," etc. Died, 1893.

Tait, Peter Guthrie, born in 1831; a man of science, educated at Cambridge, became professor of natural philosophy at Edinburgh, in 1860. He has published works on "Quaternions," "Heat and Light," a "Treatise on Natural Philosophy," written in conjunction with Sir William Thomson, and other works. Died, 1901.

Takahira, Kogoro, Japanese diplomat; born in Japan, 1854; educated in Tokio; entered foreign office as student attaché, 1876; appointed attaché, 1879, secretary 1881, chargé d'affaires, 1882, legation at Washington; secretary of foreign office, 1883, chargé d'affaires in Korea, 1885-87, acting consul-general, 1888-89; chief political bureau, foreign office, 1890-91; consul-general at New York, 1892; minister resident to Holland and Denmark, 1893-94; envoy extraordinary and minister plenipotentiary to Italy, 1894-95, to Austria and Switzerland, 1896-99; vice-minister for foreign affairs, 1899-1900; envoy extraordinary and minister plenipotentiary to United States since August, 1900.

Talfourd, Sir Thomas Noon, born in Reading, in Berkshire, 1795; an English judge, distinguished also as a graceful novelist. He was the author of a tragedy, "Letters of Charles Lamb, with a Sketch of his Life," "Final Memorials of Charles Lamb," and several other works. Died, 1854.

Talma, François Joseph, born in 1763; French actor; made his début at the Comédie Française, in 1787. He confined himself to tragedy in his later years. Among his finest impersonations were Mauguy in "Les Templiers," and Charles IX. Died, 1826.

Tamerlane, or Timour, surnamed The Great, an Asiatic conqueror, was born of Mongol race, at Kesh in Independent Tartary, 1336. After subjecting to his arms Khorasán, Armenia, and the greater part of Persia, he defeated the Bashkirs, took Bagdad and Damascus, subjugated Georgia, and advanced into Russia as far as Moscow. In 1398, he invaded India, where he defeated the army of the Grand Mogul near Delhi. After gaining

in 1402, a decisive and sanguinary battle in Angora, over the Ottoman Turks commanded by their sultan Bajazet, Tamerlane died on his march towards China, which country he next intended to invade, 1405.

Tarquinus, Lucius Priscus (*tar-ku'n'e-us*), the fifth King of Rome, according to the legends, succeeded Ancus Martius, 614, and died 576 B. C. Tarquinus Lucius Superbus was a grandson of the preceding. He had married one of the daughters of Servius Sullius, but her sister, whose ambition resembled his own, by a series of horrid crimes, secured him as her husband, and urged him to the murder of her father to secure the throne, 534 B. C. He reigned as a tyrant; but in the end it was the rape of Lucretia, by his son Sextus, which overthrew at once both him and the kingly rule in Rome. The date of the Refuge or expulsion of the Tarquins was said to be 510 B. C.

Tasso, Torquato, Italian poet, was born in Sorrento, 1544, and studied law at the university of Padua, where he published his earliest poem, "Rinaldo," in 1562. In 1565, he entered the service of Cardinal Luigi d'Este, and was invited to the court of his brother, Alfonso, Duke of Ferrara. Whilst there he wrote his pastoral drama "Aminta," and in 1575, finished his great epic, "La Gerusalemme Liberata," describing the first Crusade, which was published in 1580. In 1577 he was imprisoned by Alfonso in a convent, from which he escaped. In 1579, he returned to Ferrara, but was confined in a madhouse, where he remained till 1586, when he was released at the intercession of the Duke of Mantua and other princes. In 1594, Clement VIII. summoned him to Rome to receive a laurel crown, but he died soon after his arrival (1595).

Taussig, Frank William, professor of political economy, Harvard; born in St. Louis, December 28, 1859; graduate of Harvard, 1879 (Ph. D., 1883; LL. B., 1886). Author: "Tariff History of United States," "Silver Situation in United States," "Wages and Capital," etc. Editor of "Quarterly Journal of Economics."

Taylor, Bayard, an American author and traveler, was born in Chester County, Pa., 1825. In 1849, he became one of the editors of the "New York Tribune," and later traveled extensively, giving the results of his observation in numerous works, prominent among which are "El Dorado, or Adventures in the Path of Empire," or "Mexico and California," "Central Africa," "Greece and Russia," "India, China, and Japan," and "Lands of the Saracen." He is also the author of several novels, volumes of poetry, etc. Some of his works have been translated into French, German, and Russian. Taylor was appointed United States minister at Berlin, in 1878, and died the same year.

Taylor, Hannis, lawyer, born in New Berne, N. C., September 12, 1851; educated in University of North Carolina (LL. D., Edinburgh, Dublin); minister to Spain, 1893-97. Professor of constitutional and international law, George Washington (formerly Columbian) University, since 1892. Special counsel for Government of United States before Spanish Treaty Claims Commission. Author: "The Origin and Growth of the English Constitution," "International Public Law," "Jurisdiction and Procedure of the Supreme Court of the United States."

Taylor, Jeremy, divine; born in Cambridge in 1613; after studying in the university of that town, attracted the attention of Archbishop Laud, who presented him to a fellowship at Oxford (1636). He soon afterwards became chaplain to Charles I., was rector of Uppingham, 1638-42, and accompanied the king to Oxford. About 1645, he withdrew into Wales, where he kept a school at Newton, in Caermarthenshire, and afterwards found a shelter in the house of the Earl of Carbery. He removed to Ireland in 1657, and, after the Restoration, was made bishop of Down and Connor. His chief works are "Rules and Exercises of Holy Living and Dying," the "Liberty of Prophecy," "Doctor Dubitantium," and his "Sermons." Died, 1667.

Taylor, Robert Love, lawyer, United States senator; born in Happy Valley, Carter County, Tenn., in 1850; educated in Pennington, N. J.; admitted to Tennessee bar, 1878; member of Congress, 1879-81; elector at large on Cleveland ticket, 1884; pension agent at Knoxville, 1885-87; elected governor, 1886, as Democrat, his opponent being his brother, Alfred A. Taylor; was governor, 1887-91; practiced law at Chattanooga, 1891-96; presidential elector on Cleveland ticket, 1892; again governor, 1897-99; United States senator since 1907. Editor-in-chief of "Bob Taylor's Magazine."

Taylor, Zachary, American general, and twelfth President of the United States; born in Orange County, Va., in 1784; was educated in Kentucky, and, after entering the army in 1808, obtained the rank of colonel

in 1832, and fought in the Black Hawk War. After defeating the Seminoles at Okechobee in 1837, he was given the chief command in Florida in the following year. In 1846, he was entrusted with the command of the army which entered Mexico; there he gained the battles of Palo Alto, Resaca de la Palma, and Buena Vista, and brought the campaign to a successful conclusion in 1847. In the following year he was returned as Whig candidate for the presidency. His tenure of office was chiefly signalized by the passing of Mr. Clay's Compromise Bill with regard to the admission of California into the Union. Died, 1850.

Tecumseh, a famous Shawnee chief, was born on the Scioto River, Ohio, in 1770. He headed an Indian alliance against the whites in the Northwest, and was defeated by the American General Harrison at Tippecanoe, in 1811. In the War of 1812, he became an ally of the English, obtained the rank of brigadier-general in their service, and commanded the right wing in the battle of the Thames, in 1813, where he fell mortally wounded.

Tempest, Marie Susan (Mrs. Cosmo Stuart), opera singer; born in London, July 15, 1866; daughter of Edwin and Sarah Etherington; musical education in Convent des Ursulines, Thildonck, Belgium, and Royal Academy of Music, London; first sang in concert, but soon went into light opera in leading rôles; came to United States as prima donna in New York Casino Company; has appeared in comic opera in principal American cities; more recently in England; received numerous medals for Italian and declamatory English singing; married, 1898, to Cosmo Charles Gordon-Lennox (Cosmo Stuart), son of the late Lord Alexander Gordon-Lennox. Created Nell Gwyn in "English Nell," and Becky Sharp.

Tennyson, Alfred, Lord, was the son of the Rev. George Tennyson, rector of Somersby in Lincolnshire, where he was born in 1809. He was educated at Louth grammar school, and, in 1827, published "Poems by Two Brothers," partly the work of his brother Charles. In 1828, he matriculated at Cambridge, where he gained the chancellor's medal. Poems: "Chiefly Lyrical" was followed in 1833, by a volume containing "The Palace of Art," "Enone," and other of his best known pieces. "The Gardener's Daughter," "Locksley Hall," and other poems were added in 1842, and, in 1847, appeared "The Princess, a Medley," in blank verse. "In Memoriam," a tribute to the memory of Arthur Hallam, was published in 1850. In the same year, Tennyson succeeded Wordsworth as poet-laureate. Among his subsequent poems were "Maud," "The Idylls of the King," "Enoch Arden," "Becket," a drama, and "Demeter," "The Foresters," etc. In 1884, he was created a peer. Died, 1892.

Terry, Ellen (Mrs. Carew), English actress; born in February 27, 1848; first appearance, April, 1856, at Princess Theater, London, under Charles Kean's management; in 1867, first acted with Henry Irving in "The Taming of the Shrew," at Queen's Theater, then acted at Haymarket Theater; retired for seven years; reappeared at Queen's Theater in "The Wandering Heir"; played Olivia, amongst others, at Court Theater (John Hare's management), and Portia, amongst others, at Prince of Wales Theater (Bancroft's management); played Ophelia, December 30, 1878, for first time at Lyceum with Henry Irving; visited America with him, 1883, and many times subsequently; remained at Lyceum until its dissolution in 1901; produced Ibsen's "The Vikings," 1903, and Shakespearean plays with her own company at Imperial Theater; in 1905, played at Duke of York's Theater in J. M. Barrie's "Alice-sit-by-the-fire." Celebrated her stage jubilee in 1906.

Tesla, Nikola, an American electrical inventor; born in Smiljan, Austria-Hungary, in 1857; studied engineering in Paris; and, in 1884, came to the United States, and for several years was employed at Edison's laboratory, near Orange, N. J. He then opened a laboratory of his own. In 1888, he completed his discovery of the rotating magnetic fluid by the invention of the rotary field-motor, the multi-phase system of which is used in the 50,000 horse power plant built to transmit the water power of Niagara Falls to Buffalo and other cities. He invented many methods and appliances for the use of electricity, among them the production of efficient light from lamps without filaments, and the production and transmission of power and intelligence without wires. In November, 1898, Tesla announced the discovery of, and, on May 1, 1900, patented, a method of transmitting electrical energy without wires. Working along the same line, William Marconi invented his wireless-telegraphy. In 1901, Tesla discovered that the capacity of the electrical conductor is variable. Since 1903, has been engaged

in developing his system of world telegraphy and telephony.

Thackeray, William Makepeace, novelist; born in Calcutta in 1811; was educated at the Charterhouse and Cambridge; studied art in Paris, but determined to devote himself to literature, and, in 1837, became connected with "Fraser's Magazine," to which he contributed the "Great Hoggarty Diamond." In 1840, he published the "Paris Sketch-book," and, in 1842, began to write for "Punch," in which appeared his "Book of Snobs." His first great novel, "Vanity Fair," was followed by "Pendennis," "Esmond," "The Newcomes," and others. He delivered a series of lectures in England and America on the "English Humorists of the Eighteenth Century," and "The Four Georges," and edited the "Cornhill Magazine." Died, 1863.

Thales (*tha'lez*), a celebrated Grecian philosopher, flourished in the Seventh and Sixth Centuries B. C. He was one of the seven wise men of Greece; and he also predicted the famous eclipse of the sun, which happened in 585 B. C.

Theodoric, "the Great," originally chieftain of a tribe of Ostrogoths; was educated at Constantinople; after overthrowing Odoacer (493), established the Ostrogoth kingdom in Italy, which he sought to consolidate by effecting a union of Goths and Italians. He fixed his capital at Ravenna, where he erected many beautiful buildings. His "Edictum" was a body of law for Romans and barbarians alike. Died, 526.

Thierry, Jacques Nicholas Augustin, born in Blois, May 10, 1795; an eminent French historian, best known as the author of "The History of the Conquest of England by the Normans." He was the author of numerous other historical works, his last being "An Essay on the Formation and Progress of the Third Estate." For the last twenty-five years of his life he was afflicted with total blindness. Died, May 22, 1856.

Thiers, Louis Adolphe (*te-air'*), an eminent statesman and historian, and president of the French Republic; born of humble parentage in Marseilles in 1797; was educated for the law, but discarding the idea of following that profession, he, at an early age, entered the field of journalism as a contributor to the columns of the "Constitutionnel." Between the years 1823-27, appeared his "History of the French Revolution," a work which stamped him an historian of the first order. He largely contributed to the Revolution of 1830. In 1832, he was made minister of the interior; in 1834, he was admitted into the French Academy; and from February to August, 1836, filled the post of president of the council and minister for foreign affairs. In March, 1840, he was recalled to power, but being unable to prevail upon Louis Philippe to support his Eastern policy, he resigned office in October and employed his leisure in writing his "History of the Consulate and Empire" (twenty volumes, 8vo.), one of the greatest historical works of the age. In July, 1870, he resolutely opposed the impending war against Germany. In 1871, he succeeded in effecting peace on the best terms possible under the circumstances, and, in the same year, was elected president of the new republic. In 1873, after an adverse vote of the legislative body, he resigned, and was succeeded by Marshal MacMahon. Died, 1877.

Thomas, M. Carey (Miss), president of Bryn Mawr College; born in Baltimore, January 2, 1857; daughter of Dr. James Carey and Mary (Whitall) Thomas; graduate of Cornell, 1877; studied in Johns Hopkins, 1877-78; Leipzig University, Germany, 1879-83 (Ph. D., University of Zurich, 1883; LL. D., Western University of Pennsylvania, 1896). Since 1885, professor of English, 1885-95, dean, and since 1894, president of Bryn Mawr College; first woman trustee of Cornell, 1895-99; trustee of Bryn Mawr College since 1903. Author: "Sir Gawayne and the Green Knight," "Education of Women." Also "Should the Higher Education of Women Differ from That of Men?" and "The College," in "Educational Review"; also various educational addresses.

Thompson, William Oxley, president of Ohio State University; born in Cambridge, O., November 5, 1855; graduated from Muskingum College, 1878; Western Theological Seminary, Allegheny City, Pa., 1882 (A. M., 1881; D. D., 1891, Muskingum College; LL. D., Western University of Pennsylvania, 1897); ordained to Presbyterian ministry, 1882; president of Miami University, 1891-99; president of Ohio State University since 1899.

Thomson, Elihu, electrician; born in Manchester, England, March 29, 1853; graduated from Central High School, Philadelphia, 1870 (A. M.; honorary A. M., Yale; Ph. D., Tufts College); professor of chemistry and mechanics, Philadelphia Central High School, 1870-80; since 1880 electrician for Thomson-Houston and

General Electric companies, which operate under his inventions, more than 500 patents having been obtained; inventor of electric welding, which bears his name, and many other important inventions in electric lighting, power, etc.

Thomson, Sir William (Lord Kelvin), born in Belfast in 1824; was educated at Glasgow and Cambridge; became professor of natural philosophy at Glasgow in 1846. From 1846 to 1851, he edited the "Cambridge and Dublin Mathematical Journal," to which he contributed several important papers. Some of his chief discoveries are announced in the "Secular Coating of the Earth," and the Bakerian lecture, the "Electrodynamics of Qualities of Metals." He invented the quadrant, portable, and absolute electrometers, and other scientific instruments. To the general public he is best known by his work in connection with submarine telegraphy. In January, 1892, he was raised to the peerage as Lord Kelvin. Died, 1907.

Thoreau, Henry David, born in 1817; American naturalist; was a friend of Emerson, and a member of the Transcendental school. In 1845, and the following years he lived a life of complete solitude, described in "Walden." He became acquainted with John Brown in 1859, and devoted the rest of his life to the Liberationist cause. Died, 1862.

Thorvaldsen, Albert Bertel, born in 1770; Danish sculptor, of Icelandic origin; studied at the free school of the Academy of Copenhagen, and was sent by that body to Rome in 1796. His first great work was his "Jason." Except for a visit to Denmark in 1819-20, when he executed the statues of "Christ and the Twelve Apostles" for the Frue Kirke at Copenhagen, he remained in Rome till 1837. After that date he, for the most part, lived in Denmark. His masterpieces include the "Entry of Alexander into Babylon," the statue of "Prince Poniatowski," and the "Dying Lion" at Lucerne. Died, 1844.

Thucydides, Greek historian; born at Athens, circa 471; is said to have been descended from Olorus, King of Thrace. At the outbreak of the Peloponnesian War he received a command, but failed to relieve Amphipolis when besieged by Brasidas, and was banished (423 B. C.). After twenty years of exile, during which he is supposed to have written his "History of the Peloponnesian War," he returned to Athens about 403. Died about 401 B. C.

Thwing, Charles Franklin, president of Western Reserve University and Adelbert College since 1890; born in New Sharon, Me., November 9, 1853; graduated from Harvard, 1876; Andover Theological Seminary, 1879 (D. D., LL. D.); pastor North Avenue Congregational Church, Cambridge, Mass., 1879-86; Plymouth Church, Minneapolis, 1886-90. Author: "American College, Their Students and Work," "The Reading of Books," "The Family" (with Mrs. Thwing); "The Working Church," "Within College Walls," "The College Woman," "The American College in American Life," "The Best Life," "College Administration," "The Youth's Dream of Life," "God in His World," "If I Were a College Student," "The Choice of a College," "A Liberal Education and a Liberal Faith," "College Training and the Business Man." Associate editor of "Bibliotheca Sacra," contributor to magazines and speaker on educational topics.

Ticknor, George, born in 1791; American author; traveled in Europe (1815-19); was professor of modern languages at Harvard (1819-34). He wrote a "History of Spanish Literature," and a "Life of Prescott." Died, 1871.

Tilden, Samuel Jones, born in 1814; American politician; was called to the bar in 1841; became chairman of the Democratic State Convention in 1866; took a leading part in exposing the "Tammany Ring"; was elected governor of New York in 1874, and was elected president of the United States in 1876, but failed to be seated on account of alleged irregularities in Louisiana. Died, 1886.

Tillman, Benjamin Ryan, United States senator, farmer; born in Edgefield County, S. C., August 11, 1847; academic education; joined Confederate States Army, July, 1864, but was stricken with severe illness which caused the loss of his left eye and kept him an invalid for two years, so that he saw no military service; followed farming as his sole pursuit until 1886, when he became prominent in an agitation for industrial and technical education and other reforms. Was elected governor of South Carolina in 1890 and 1892, and United States senator since 1895. Founded Clemson Agricultural and Mechanical College at Calhoun's old home, Fort Hill, and also Winthrop Normal and Industrial College at Rock Hill; the first for boys, the last for girls; they are the two largest schools of the kind in the South; author of the dispensary system of selling liquor under

State control; was central figure in the South Carolina constitutional convention, 1895, which instituted educational qualification for suffrage; one of the leaders in securing the insertion of advanced positions in Democratic platform of 1896. Prominent in Democratic National Conventions of 1900 and 1904, and in latter was active in work of harmonizing contending factions of Democracy.

Tilly, Johann Tserklaes, Count of, one of the great generals of the Thirty Years' War; born in Brabant in 1559; was designed for the priesthood and educated by Jesuits, but abandoned the church for the army. He was trained in the art of war by Parma and Alva, and proved himself a born soldier. He reorganized the Bavarian Army, and, devoted to the Catholic cause, was given command of the Catholic Army at the outbreak of the Thirty Years' War, during the course of which he won many notable battles, acting later on in conjunction with Wallenstein, whom, in 1630, he succeeded as commander-in-chief of the imperial forces, and in the following year sacked with merciless cruelty, the town of Magdeburg, a deed which Gustavus Adolphus was swift to avenge by crushing the Catholic forces in two successive battles — at Breitenfeld and at Rain — in the latter of which Tilly was mortally wounded (1632).

Titian, Tiziano Vecelli, born in 1477; Venetian painter; studied under Giovanni Bellini, and was much influenced by his fellow-pupil Giorgione; in 1511, was employed in decorating the ducal palace at Venice; in 1514, was invited to the court of Alphonso, Duke of Ferrara, for whom he executed several works; painted the portrait of Charles V. during his visit to Bologna in 1529; visited Rome 1545-46, and was afterwards several times summoned to Germany by Charles V. Among his masterpieces is the "Bacchus and Ariadne" in the National Gallery, London. Died, 1576.

Togo, Count Helihachiro, admiral in command of the Japanese fleet — the Nelson of Japan. After Nogi's guns from the land had completed the destruction of the Port Arthur fleet, Togo hid his ships for three months, pending the arrival of the Baltic fleet. Numerically the Russians were his superior, notably in battleships; but in speed, manœuvring, gun-fire, and discipline, the advantage was all with the Japanese. The battle of the Sea of Japan was fought May 27-28, when of the Baltic fleet twenty ships were sunk, six captured, two demolished and six disabled and interned. Admirals Rojestvensky and Nebogatoff were captured with some 8,000 men, while 4,000 Russians were killed. The Japanese losses were three torpedo boats sunk, 116 men killed, and 538 wounded. Made count, 1907.

Tolstol, Leo Nikolaevitch, born in 1828; Russian author and social reformer; studied at the University of Kazan; served in the Crimean War; has published "War and Peace," "Anna Karenina," "The Kreutzer Sonata," also several essays in moral philosophy, including "My Religion."

Torricelli (tor-re-chèl'le), Evangelista, a distinguished Italian philosopher; born in the Romagna in 1608; succeeded Galileo as professor of mathematics at Florence in 1641, and made for himself a title to celebrity as the inventor of the barometer. Died, 1647.

Toussaint L'Ouverture, François Dominique; born in 1743; son of African slaves, in San Domingo. He was, in 1796, appointed by the Directory chief of the army of San Domingo, and afterwards established his authority throughout the island, which he ruled with justice and vigor. When Bonaparte sought to restore slavery in San Domingo (1801), Toussaint resisted, but was forced to surrender, and was sent to France, where he died in prison in 1803.

Tree, Herbert Beerbohm, actor, is the son of a grain merchant named Beerbohm, and was born in London in 1853. Shortly after entering his father's office, in 1870, he became a member of the irrational amateur dramatic club, and joined the profession in 1877. His first hit was as the timid curate in "The Private Secretary," and immediately after he played the grim spy Macari in "Called Back." Taking the Comedy Theater (1887), he produced "The Red Lamp"; and in the autumn of the same year took the Haymarket Theater. In April, 1897, he opened his new theater, "His Majesty's," in the Haymarket. Here he has produced the greatest of his successes: "Julius Caesar," "King John," "A Midsummer Night's Dream," and "Herod," "Twelfth Night," "The Merry Wives of Windsor," with Miss Ellen Terry and Mrs. Kendal in the cast, "Ulysses," "The Eternal City," "King Richard II.," "The Darling of the Gods," "The Tempest," "Much Ado About Nothing," "Business is Business," "Oliver Twist," "Nero," and "Colonel Newcome." In 1905, he inaugurated a Shakespeare Festival, which is now one of the annual arrangements of the theater. During the Shakespeare celebrations in 1906, he

revived "Hamlet," "Julius Caesar," "Twelfth Night," "Much Ado About Nothing," "Henry IV." (Part I.), and "The Tempest." In April, 1907, he produced several of Shakespeare's plays in Berlin, and was received by the German Emperor. His wife, an admirable Greek scholar formerly connected with Queen's College, is a very refined actress.

Tripler, Charles E., physicist, inventor; born in New York, 1849; educated in New York; made special study of physical sciences and phenomena; established private physical laboratory; carried on various experiments in electricity and mechanics and later in the study of gases; greatest achievement is the manufacture of "liquid air," which he has experimentally applied to the operation of an engine with remarkable results, this product being obtained by compression of atmospheric air at a temperature of over 300 degrees below zero.

Trollope, Anthony, born in A. D. 1815, a popular English novelist, the author of a large number of works, all of which exhibited ingenuity, if not genius. He was the second son of Mrs. Frances Trollope, herself a novelist of some eminence; and received his education first at Winchester School, and subsequently at Harrow. For many years he held a position in the post-office. Besides his novels, he was the author of a "Life of Cicero," and of several other works. Died, December 6, 1882.

Troubetzkoy, Amelle, Princess (Amélie Rives), novelist; born in Richmond, Va., August 23, 1863; daughter of Alfred Landon Rives, engineer; educated by private tutors; married in 1888, John Armstrong Chanler of New York, from whom she was divorced; married 2d, the Prince Troubetzkoy (Russian). Author: "The Quick and the Dead," "A Brother to Dragons," "Virginia of Virginia," "Herod and Mariamne," "Witness of the Sun," "According to St. John," "Barbara Dering," "Athenwold," "Tanis," "Selené," magazine articles, etc.

Trumbull, John, a distinguished American painter, was born in Connecticut, 1756. After passing some time in the army, during which he acted as aide-de-camp to Washington, 1775, he became a pupil of Benjamin West, in London. His principal works are to be found in the rotunda of the Capitol at Washington, numbering among them "The Surrender of Cornwallis," "The Declaration of Independence," and "The Surrender of Burgoyne." Died, 1843.

Turenne, Henri de la Tour d'Auvergne, Vicomte de, born in 1611; French general, son of the Duc de Bouillon, and grandson of William I., Prince of Orange; entered the French army in 1630; became *maréchal de camp* in 1634; in 1643 was placed in command of the forces in Germany, where he remained till the close of the Thirty Years' War, distinguishing himself by his retreat from Marienthal and his victory at Nordlingen; opposed Condé with success in the war of the Fronde; was made *marshal-general* in 1660; became a Roman Catholic in 1668; greatly distinguished himself in the war with Holland, in the course of which he was killed by a cannon shot (1675).

Turgot, Anne Robert Jacques, born in Paris, May 10, 1727; a distinguished French statesman and economist, from 1774 to 1776, *comptroller-general* of France under Louis XVI. By his enlightened measures he did much during his brief period of office to ameliorate the condition of the people and to reform the revenue; but he was driven from power by a combination of the privileged classes, to whom his schemes were odious. The last years of his life were devoted chiefly to literary pursuits. His "Life" was written by Condorcet. Died, March 20, 1781.

Turgeneff, Ivan Sergueievitch, born in 1818; Russian novelist, studied at the University of Berlin; after the Franco-German War removed to Paris, where he mainly resided till his death. Among his novels are "A Nest of Nobles," "Fathers and Sons," and "Virgin Soil." Died, 1883.

Turner, Joseph Mallord William, born in 1775; landscape painter; son of a hairdresser in Covent Garden, studied at the schools of the Royal Academy; became A. R. A. in 1799, and R. A. in 1802, and soon won a reputation as a painter both in water-colors and in oils. In 1807, he began the "Liber Studiorum," a series of prints for the most part executed by himself. For "England and Wales," the "Southern Coast," and other series of engravings, he prepared drawings, which are now highly prized. Among the finest of his oil-paintings in the National Gallery, London, are "Dido Building Carthage," and "The Sun Rising in a Mist." Died, 1851.

Tupper, Sir Charles, a Canadian statesman; born in Amherst, Nova Scotia, July 2, 1821; studied medicine in Edinburgh University and practiced his profession in his native town. In 1855, he was made a member of the provincial legislature and was prime minister of Nova Scotia in 1864-1867. He warmly advocated the forma-

tion of the Dominion of Canada, which took place in 1867 and became a member of Sir John A. Macdonald's cabinet in 1870; became minister of public works in 1878; and in 1879-1884 was minister of railways and canals. While filling the latter office he promoted the construction of the great Canadian Pacific Railway. In 1884, he was appointed high commissioner for Canada in London. He was one of the negotiators of the fisheries treaty with the United States in 1887-1888, and was created a baronet in the latter year. In 1895, he represented Canada at the International Railway Conference in London. In 1896, was premier of Canada.

Tyndall, John, man of science; born in County Carlow, Ireland, 1820; joined the Irish Ordnance Survey in 1839; was a railway engineer 1844-47; studied at the Universities of Marburg and Berlin (1848-51); became professor of natural philosophy in the Royal Institution in 1853. After an expedition to Switzerland with Professor Huxley in 1856 wrote, in conjunction with him, a treatise "On the Structure and Motion of Glaciers," presided at the meeting of the British Association at Belfast, in 1874. Among his works are "Heat as a Mode of Motion," and "Fragments of Science." Died, 1893.

Tyler, John, American statesman; born in Virginia, 1790; entered Congress in 1816; became vice-president under Harrison in 1840, and president in 1841, upon the death of General Harrison. During his government Texas was annexed to the United States. On the outbreak of the war he espoused the side of the South. Died, 1863.

Untermeyer, Samuel, lawyer; born in Lynchburg, Va., March 2, 1858; educated in New York public schools, College of the City of New York and Columbia University Law School. Admitted to bar, 1879, and since practicing in New York; now member of law firm of Untermeyer, Guggenheimer & Marshall; organized and is counsel for many trade combinations. Director of American Lithographic Co., International Steam Pump Co., New England Brewing Co., New York Breweries Co., United States Brewing Co., Suffolk Brewing Co., United Fruit Co., member of Metropolitan Museum of Art, American Fine Arts Society.

Urban, H. (Eudes), elected in 1088, when Bishop of Ostia; continued the policy of Gregory VII., and opposed the Emperor Henry IV., who set up an anti-pope against him, and took Rome; convened the Council of Clermont in 1095, at which the first crusade was proclaimed, and Philip I. of France was excommunicated; in 1098 made the Norman counts of Sicily apostolic legates, and in the same year held the Council of Bari.

Ussher, James, born in 1580; Irish divine; became bishop of Meath in 1620, and four years later archbishop of Armagh. His chief work was "Annales Veteris et Novi Testamenti," the author, by Cromwell's order, being buried in Westminster Abbey. Died, 1656.

Van Buren, Martin, American statesman, and eighth President of the United States; was born of Knickerbocker stock, in Columbia County, N. Y., 1782. After studying law and becoming a member of the bar, he was elected by the Democratic party to the State Senate in 1812, and became attorney-general in 1815. In 1816, he largely contributed to the organization of the so-called Albany regency, a political body which maintained a political ascendancy for many years in the State. In 1821, Van Buren entered the National Senate, and was reelected in 1827. As a senator he supported the protective tariff of 1828, and in the same year was elected governor of New York. In 1830, he took office as secretary of state in President Jackson's cabinet, resigning the same in April of the following year. After the rejection by the senate of his nomination as minister to England, he was elected in the Jackson interest vice-president of the republic, and in 1836, became the successful Democratic candidate for the presidential chair. During his tenure of office occurred the financial crisis of 1837; and the suspension of specie payments by the banks; a state of things which induced the president to recommend to Congress the establishment of an independent treasury — a measure carried into effect in 1840. In the latter year, Van Buren's renomination for the presidency was defeated by General Harrison, and in 1841, he temporarily retired into private life. His third candidature for the presidency, in 1844, was frustrated by the Southern vote, and he subsequently seceded from the Democrats to become a Free-soiler, and the unsuccessful nominee of the latter party in the presidential election in 1848. Died, 1862.

Vanderbilt, Cornelius, American capitalist; born near Stapleton, Staten Island, N. Y., May 27, 1794; early engaged in steamboat transportation between Staten Island and New York and so enlarged his business that he soon gained the complete control of the New York and Staten Island lines. Later, he started steamboats

in various waters — the Hudson, the Delaware, Long Island Sound, and established steamboats and other connections between New York and California. In 1864, he withdrew his capital from shipping and invested it in railroads. He secured the management of one railroad after another and, in 1877, controlled stocks representing an aggregate capital of \$150,000,000, of which he owned fully one-half. In 1861, he presented the swift \$800,000 steamship "Vanderbilt" to the United States Government to be used for the capture of Confederate privateers, and in 1872 founded the Vanderbilt University in Nashville, Tenn., with \$500,000, afterward increased to \$700,000. At the time of his death in New York City, January 4, 1877, his fortune was estimated at nearly \$100,000,000, and he was supposed to be the richest man in the world.

Vanderbilt, William Kissam, capitalist; born in Staten Island, December 12, 1849; academic education; studied several years in Geneva, Switzerland. Was in the office of C. C. Clarke, treasurer of Hudson River Railroad; learned bookkeeping; second vice-president of New York Central & Hudson River Railroad, 1877-83. Chairman of board of directors of Lake Shore & Michigan Southern Railway, from 1883. Member of Colonia and Defender syndicates; united with his brothers in founding the Vanderbilt Clinic. One of the organizers of Metropolitan Club. Member of Union and other leading clubs of New York; has traveled extensively. Director of New York Central & Hudson River Railroad, New York, Chicago & St. Louis Railroad Company, Michigan Central Railroad Company, Lake Erie & Western Railroad Company, Chicago & Northwestern Railway Company, Chicago, St. Paul, Minneapolis & Omaha Railway Company, Cleveland, Cincinnati, Chicago & St. Louis Railway Company, Detroit & Chicago Railroad Company, New York & Harlem Railroad (president), Pittsburgh & Lake Erie Railroad Company, West Shore Railroad Company, The Pullman Company, Lincoln National Bank, and officer or director in numerous railway and financial corporations.

Van Dyck, or Vandyke, Sir Anthony (vân-dîk), a painter of the Flemish school, distinguished by his surpassing excellence in portraiture; was born in Antwerp, 1599, and became a pupil of Rubens. In 1633, he became court painter to Charles I. of England, was knighted by that monarch, married a daughter of the Earl of Gowrie, and lived in great magnificence. His "Crucifixion" (at Antwerp), is his greatest historical work, and his full-length picture of "Charles I. on Horseback" (now at Warwick Castle), his "chef d'œuvre" as a limner. Died in London, 1641.

Van Dyke, Henry Jackson, an American educator; born in Germantown, Pa., in 1852; was graduated at Princeton University in 1873, at the Princeton Theological Seminary in 1877, and at Berlin University in 1878; and soon afterward assumed the pastorate of the United Congregational Church in Newport, R. I. He was chosen pastor of the Brick Presbyterian Church in New York City in 1882, and continued in that charge till 1900, when he resigned to become professor of English Literature in Princeton University. His publications include: "The Reality of Religion," "The Poetry of Tennyson," "The Ruling Passion," "The Blue Flower," "School Life," etc.

Van Dyke, John Charles, author, educator; born in New Brunswick, N. J., April 21, 1856; privately educated; studied at Columbia (L. H. D., Rutgers, 1899). Admitted to New York bar, 1877, but turned attention to literature; since 1878, librarian of Sage Library, New Brunswick, N. J.; studied art many years in Europe; traveled much on both continents and has written extensively on both art and nature; professor of history of art, Rutgers College; lecturer in Columbia, Harvard, Princeton, etc. Editor "The Studio," 1883-84. "Art Review," 1887-88; "College Histories of Art," "History of American Art." Author: "Books and How to Use Them," "Principles of Art," "How to Judge of a Picture," "Notes on Sage Library," "Serious Art in America," "Art for Art's Sake," "History of Painting," "Old Dutch and Flemish Masters," "Modern French Masters," "Nature for Its Own Sake," "The Desert," "Italian Painting," "Old English Masters," with Cole's engravings, "The Meaning of Pictures."

Velasquez, Diego Rodriguez de Silva, born in Seville in 1599; a distinguished Spanish painter. He was principal painter to Philip IV., to whom he became also chamberlain. His works consist chiefly of portraits, and of historical and classical subjects. Died in Madrid, August 7, 1660.

Vesalius, Andreas, anatomist; born in Brussels in 1514; accompanied Charles V. in his campaigns as physician, and also attended Philip II. He died in 1564, in Zante, where he had been wrecked on his return from

Jerusalem. His great work was "De Corporis Humani Fabrica."

Vespasian, Titus Flavius Sabinus (vès-pa'zhe-àn), was Emperor of Rome from 70 to 90 A. D. He distinguished himself in many military commands before he became emperor, and was engaged in the war with the Jews when he was raised to the throne. His government was highly beneficial to the state.

Vespucci (vès-poo't'chee), **Amerigo** (ah-ma-ree'go), navigator; born in Florence, Italy, in 1451; made two voyages to America in 1497 and in 1501. He wrote a description of his exploration of South America and it was suggested that since he had first made the new continent known it should be named America. Died, 1512.

Victor Emmanuel II., first King of Italy, born in 1820; became King of Sardinia on the abdication of his father in 1849, and immediately began to reorganize the kingdom and to enforce toleration. He sent a contingent during the war with Russia to help the allies in the Crimea, and, in 1859, he secured the alliance of France in his struggle with Austria. The price agreed on was the cession of Savoy and Nice, but the result was the union of Italy under the ruler of Sardinia. By the help of Prussia the liberation of Venice was gained in 1866, and Rome was evacuated by the French in 1870. Victor Emmanuel was called by his people "Ré Galantuomo." Died, 1878.

Victoria Alexandra, Queen of Great Britain and Empress of India; born in 1819; daughter of Edward, Duke of Kent, fourth son of George III.; was crowned on June 28, 1837. She married, in 1840, Prince Albert of Saxe-Coburg-Gotha, who died in 1861, by whom she had nine children. The chief events of the reign have been the establishment of the penny post, the repeal of the corn laws, the annexation of the Punjab, the great exhibition, the Crimean War, the Indian mutiny, followed by the assumption of sovereignty over India, the second and third reform bills, wars in Afghanistan, China, South Africa, and Egypt, and the Fenian and home rule agitations in Ireland. The jubilee of the queen's accession was celebrated in 1887, and her diamond jubilee in 1897. Five attempts were made on her life, in 1840, 1842 (three), and 1882. She died at Osborne House, Isle of Wight, in 1901.

Vincent de Paul, St., a French philanthropist and ecclesiastic reformer; was born in Landes, in 1576. Captured by Tunisian pirates in 1605, he remained for two years in slavery. After his escape he repaired to Paris, where he became curate of Clichy, and preceptor to the celebrated Cardinal de Retz, and engaged himself in various works of benevolence and Church improvement. He established a founding hospital at Paris in 1638; organized the congregation of the Missions, and instituted the order of Sisters of Charity. Died in 1660, and was canonized by Pope Clement XII. in 1737.

Vincent, John Heyl, bishop of Methodist Episcopal Church and chancellor of Chautauqua system; born in Tuscaloosa, Ala., in 1832; educated in Lewisburg and Milton, Pa.; began to preach at 18; studied in Wesleyan Institute, Newark, N. J. (S. T. D., Ohio Wesleyan); LL. D., Washington and Jefferson; S. T. D., Harvard; joined New Jersey Conference, 1853; ordained deacon, 1855; elder, 1857; transferred to Rock River Conference; pastor at Galena, Chicago, etc., 1857-65; established "Northwest Sunday School Quarterly," 1865; "Sunday School Teacher," 1866; corresponding secretary of Sunday School Union and editor of Sunday School publications, 1868-84; one of founders, 1874, of Chautauqua Assembly; founder, 1878, of Chautauqua Literary and Scientific Circle, and its chancellor ever since. Preacher to Harvard, Yale, Cornell, Wellesley, and other colleges; in 1900, made resident bishop in charge of European work of Methodist Episcopal Church; retired from active episcopate in 1904. Author: "The Modern Sunday School," "Studies in Young Life," "Little Footprints in Bible Lands," "The Church School and Sunday School Institutes," "Earthly Footsteps of the Man of Galilee," "Better Not," "The Chautauqua Movement," "To Old Bethlehem," "Our Own Church," "Outline History of England," "Outline History of Greece," "The Church at Home," "Family Worship for Every Day in the Year," etc.

Vinci, Leonardo da (vin'che), one of the most eminent of Italian painters, was born in Vinci, near Florence, in 1452. He early became a sort of universal genius, exhibiting a talent for anatomy, astronomy, botany, mathematics, music, and engineering, and, in 1485, entered the service of Ludovico Sforza, Duke of Milan, who made him director of an academy of arts and sciences. In 1499, he painted at Milan his masterpiece, the picture of "The Last Supper," and, in 1516, entered the service of Francis I., accompanying that

monarch to France, in which country he died in 1519. Leonardo surpassed all his predecessors as a master of chiaroscuro, and was the author of "Trattato della Pittura," an excellent treatise on painting, which has been translated into English.

Virchow, Rudolf, born in 1821; German pathologist; after being involved in trouble on account of his share in the movement of 1848, obtained chairs of pathological anatomy at Würzburg and Berlin (1856), having recently published his "Cellular Pathology." Three years later he returned to politics, and ultimately became leader of the Liberal opposition in the Prussian Assembly, and was challenged to a duel in 1865, by Bismarck. In 1878, he retired from public life. He was much consulted during the illness of the Emperor Frederick. Died, 1902.

Virgil, Publius Virgilius Maro, Roman poet; born near Mantua in 70 B. C. Found patrons in Mæcenas and Augustus, who restored to him his estate. He died in Brundisium, on his return from a visit to Greece. His chief works were "The Eclogues" or "Bucolics," "The Georgics," and the "Æneid," the latter of which has been translated by, among others, Dryden, Conington, and William Morris. Died, 19 B. C.

Volta, Alessandro, born in 1745; natural philosopher; was for thirty years professor at Pavia, and became F. R. S. Besides making other discoveries, he invented the voltaic pile or electrical column. Died, 1826.

Voltaire, whose original name was François Marie Arouet; was born in Paris in 1694; educated by the Jesuits, and became a protégé of Ninon de l'Enclos. In 1716-17, he was imprisoned in the Bastille on suspicion of writing a libel on the king, and "Ædipe" was produced in 1718. After another imprisonment, he went to England, where, in 1728, the "Henriade" was published. He escaped prosecution by disavowing his writings, and, in 1736, began to correspond with Frederick the Great. After the rise of the Pompadour he secured a reception at court and at the Académie. In 1750, he went to the court of Berlin, where he stayed three years, the result being a historical quarrel. Soon after this he settled at Ferney, where the rest of his life was spent, but before his death he visited Paris, and was received as a popular hero. He wrote numerous plays and romances (Candide, Zadig), etc., "Histoire de Charles XII.," "Siècle de Louis XIV.," and other historical works, and "Essai sur les Mœurs et l'Esprit des Nations." Died, 1778.

Volterra, Daniele de, born in 1509; Italian artist, pupil of Michel Angelo. His masterpiece, "The Descent from the Cross," was torn by the French, who attempted to take it from the Trinità de Monti at Rome. Died, 1566.

Wagner, Richard, a popular German composer; born in Leipzig in 1813; became chapel master at Dresden in 1843, and later took up his residence at Munich, upon the invitation of his admirer and patron, the King of Bavaria. His well-known operas "Rienzi," "Tannhäuser" and "Lohengrin," have elicited great, but comparatively undeserved, praise. Wagner has written his own librettos, and his æsthetic theories on music and dramatic art involved him in much critical controversy. Died, 1883.

Wallace, Alfred Russel, F. R. S., born in 1822; scientific writer; visited South America and the Malay Archipelago, publishing the results of his observations on his return, among his other works being "Contributions to the Theory of Natural Selection," "On Miracles and Modern Spiritualism," "Laud Nationalization," and "Darwinism." The discovery of the evolution hypothesis was arrived at by him at the same time as by Darwin.

Wallace, Lewis, born in 1827; American general, diplomatist, lawyer, and author. He served as first lieutenant in the Mexican War; engaged in the practice of law in Indiana from 1848; became a brigadier-general in 1861; served through the Civil War. From 1881 to 1885, he was United States minister to Turkey. Author of "The Fair God," "Ben Hur," "The Boyhood of Christ," "The Prince of India." Died, 1905.

Wallace, Sir William, born about 1274; Scotch hero; headed the rising of 1297 against the English, and won a victory at Cambus Kenneth, after which he crossed the border, and was named guardian of Scotland on his return. Next year, however, he was defeated by Edward I. at Falkirk, after which, deserted by the nobles, he carried on a guerilla warfare for seven years. After being imprisoned in France, whose aid he had sought, he was declared an outlaw in 1304, and having been captured next year was sent to London and hanged. Died, 1305.

Wallenstein, Albrecht, Graf von Waldstein, born in 1583; Duke of Friedland, Imperialist general,

of noble Bohemian family; after serving against the Turks, the Venetians, and Bethlen Gabor, raised an army at his own expense, in 1626, for the emperor, and defeated Mansfeld and the Danes. In 1630, he was deprived of his command by the jealousy of the League, but was soon recalled to oppose Gustavus Adolphus. The Swedish king was repulsed at Breitenfeld (1632), but Wallenstein was defeated at Lützen, where Gustavus fell. After his defeat he negotiated with France, and having been outlawed by the emperor, was assassinated at Eger, 1634.

Waller, Thomas Ustick, an American architect; born in Philadelphia, Pa., September 4, 1804. In 1833, he made the designs for the Girard College building, which on its completion in 1847, was pronounced the finest specimen of classic architecture in the United States. His next great work was the breakwater at Laguayra for the Venezuelan Government. In 1851, his design for the extension of the National Capitol at Washington, D. C., was adopted. Having been appointed government architect, he removed to Washington, and remained there till the completion of the work in 1865. While in Washington he also designed the extensions of the patent office, treasury, and post-office buildings, the dome of the capitol, and the government hospital for the insane. He died in Philadelphia, Pa., October 30, 1887.

Ward, Elizabeth Stuart Phelps, author; born in Boston, Mass., August 31, 1844; daughter of Rev. Austin and Elizabeth Stuart Phelps; married October 20, 1888, Herbert D. Ward began to write for press when 13 years old. Author: "The Gipsy Series" (four volumes), "The Gates Ajar," "Men, Women, and Ghosts," "The Trotty Book," "Hedged In," "The Silent Partner," "What to Wear," "Trotty's Wedding-Tour and Story Book," "Poetic Studies," "The Story of Avis," "Sealed Orders," "Friends," "Doctor Zay," "Beyond the Gates," "Songs of the Silent World," "Old Maids, and Burglars in Paradise," "The Madonna of the Tubs," "The Gates Between," "Jack the Fisherman," "The Struggle for Immortality," "Come Forth" (with Herbert D. Ward), "The Master of the Magicians" (with Herbert D. Ward), "Fourteen to One," "Donald Marcy," "A Singular Life," "The Supply at St. Agatha's," "Chapters from a Life," "The Story of Jesus Christ," "Within the Gates," "Successors to Mary the First," "Avery," "Trixy," "A Lost Hero" (with Herbert D. Ward).

Warren, Samuel, born in 1807; English lawyer and writer, whose chief works were "Diary of a Late Physician," "Ten Thousand a Year," and "The Moral and Intellectual Development of the Age"; was appointed master in lunacy in 1859. Died, 1877.

Warwick, Richard Neville, Earl of, "the king-maker"; born about 1420; was created earl in 1449, and joined the Yorkists, getting Edward IV. crowned by his influence, and defeating his enemies at Towton (1461); quarreled with Edward, and restored Henry VI. in 1470, but was defeated and slain (1471), at Barnet next year.

Washington, Booker Tallaferro, principal of Tuskegee Normal and Industrial Institute since 1881; born near Hale's Ford, Va., about 1859; of African descent; graduated from Hampton Institute, Virginia, 1875 (A. M., Harvard, 1896; LL. D., Dartmouth, 1901); was teacher at Hampton Institute until elected by State authorities as head of Tuskegee Institute, which he organized and has made successful; is writer and speaker on racial and educational subjects. Author: "Sowing and Reaping," "Up From Slavery," "Future of the American Negro," "Character Building," "Story of My Life and Work," "Working With Hands," "Tuskegee and Its People."

Washington, George, illustrious American patriot, general, and statesman, and first President of the United States; was born in Westmoreland County, Va., February 22, 1732. He descended from an old family of Leicestershire, England, one of whose cadets, his great-grandfather John, emigrated to Virginia in 1657. Washington inherited a considerable farm on the banks of the Rappahannock, and after leaving school in 1747, passed much of his time with Lord Fairfax, and the latter's cousin, Sir William, both great feudal proprietors in the colony. Between 1748-1751, young Washington was employed by Lord Fairfax in surveying certain outlying properties of his beyond the Blue Ridge, and, at the age of 19, was appointed adjutant-general (holding the rank of major) of one of the military districts formed in Virginia at the outbreak of the war with France. In 1754, Washington, as lieutenant-colonel, defeated the French on the frontier, and afterwards accompanied General Braddock as aide-camp in his untoward expedition against Fort Duquesne. In the following year he was made commander-in-chief of the forces ordered to be raised by the Assembly

of Virginia for the defense of the provinces, and commanded a division of the force which took Fort Duquesne in 1758. Marrying in the next year, Washington resigned his commission, and settled down at Mount Vernon as a planter, and occupied himself for some years in the cultivation of his enlarged estate. Though long a member of the House of Burgesses, Washington does not appear to have taken any prominent part in its deliberations; although, in 1773, he became one of the delegates to the Williamsburg Convention, met to declare the right of the colonists to self-government, and in 1774, one of the five representatives of Virginia at the General Congress in Philadelphia.

On the breaking out of armed resistance to the home country, the Continental Congress at once conferred the chief command upon Washington. The latter found himself entrusted with a task of no ordinary weight and responsibility. In the face of well-appointed and successful British armies already on American soil, he had to oppose to them undisciplined and raw militia, ill-found in war material, and with a government to fall back upon almost destitute of both money and credit. He, however, proved himself equal to the exigency of the situation, and met the enemy at Long Island, N. Y., where he was defeated with heavy loss, and compelled to make a disastrous retreat through the Jerseys into Pennsylvania. In 1776-77, he gained advantage at Trenton and Princeton, only to be badly defeated at Brandywine, on September 11th of the latter year, thus allowing the British troops to occupy Philadelphia. The surrender of Burgoyne at Saratoga, in the following month, served to brighten the American cause, since it procured for the colonists the support of France. In 1778, Washington fought an indecisive battle at Monmouth courthouse with Sir Henry Clinton, after which he was compelled to remain in defensive inactivity, in consequence of the destitute condition of his army and the exhaustion of the public treasury, until July, 1780, when a French army of 6,000 men arrived to the assistance of the insurgents. In that year, too, occurred the treason of General Arnold, and the sad episode of the fate of André. In 1781, the Articles of Confederation between the States were ratified, and the war was transferred to the South with varying success. This state of things lasted until September of that year, when reinforcements having arrived from France, the combined American and French armies advanced upon Yorktown, where the British commander-in-chief, Lord Cornwallis, was forced to capitulate, surrendering his entire force of 7,000 men. This event closed the war; a definitive treaty of peace being signed at Paris, September 3, 1783, in which the English Government recognized the independence of the United States.

In the December following, General Washington resigned his commission and retired into private life, from which he was again called forth, in 1787, to preside over the National Convention assembled in Philadelphia to consolidate the National Constitution and place the federal system of government upon a firm and permanent basis. This accomplished, on February 4, 1789, General Washington was elected to the presidency of the newly constituted nation, and in 1792, reelected to the same high office. The chief events which signalized his administration were the rise of the two great political parties, the Federalists and the Democrats (or Republicans), to the former of which Washington naturally belonged, both by principal and policy; and a new treaty entered into with England, in 1795, which evoked great animosity against Washington and his government on the part of the Democratic party headed by Jefferson, on account of his hostile attitude against the Jacobinism of revolutionary France. Washington declined a third nomination to the presidency, in 1796, and, after a "Farewell Address to the People of the United States," the "Father of his Country" sought his well-won repose, passing the close of his days at Mount Vernon, where he died, December 14, 1799.

Watson, John ("Ian Maclaren"), born in 1850; till 1893, Dr. Watson was known as a popular preacher, and abtinent minister, and in that year he acquired additional distinction and wider fame by writing a series of Scotch idyls for the "British Weekly," under the title of "Beside the Bonnie Brier Bush," they became widely popular in the United States and Great Britain. "The Days of Auld Lang Syne," a second series of idyls, published in 1895, also reached a large circulation. A novel from Dr. Watson's pen, "Kate Carnegie and Those Ministers," was published in 1896. "The Upper Room" and "The Life of the Master" are perhaps his best known religious works. Died, 1907.

Watson, Thomas E., lawyer, ex-congressman; born in Georgia, in 1856; studied two years in Mercer College; taught school; admitted to bar, 1875; prac-

ted in Thomson, Ga.; member Georgia Legislature, 1882-83; Democratic elector-at-large, 1888; member Congress, 1891-93, as Populist; was candidate and claims election (on honest count), at elections in 1892 and 1894, but his opponent was given the certificate; resumed practice of law, 1895. While in Congress secured first appropriation for free delivery of mails in rural districts that Congress ever passed. Nominated for vice-president of United States at St. Louis Populist Convention which endorsed Bryan for president, 1896; for some time conducted Populist paper at Atlanta. Nominated for president by People's party, 1904, and made active campaign to revive the party; began publication of "Tom Watson's Magazine," in New York, 1905. Author: "The Story of France," "Life of Thomas Jefferson," "Life of Napoleon," "Life and Times of Thomas Jefferson," "Bethany, a Study and Story of the Old South."

Watt, James, an eminent British engineer and mechanical inventor; was born at Greenock in 1736. He early developed extraordinary talents in practical mechanics, and, in 1765, perfected his grand discovery of the condensation of steam by means of an air-tight cylinder, and likewise invented an apparatus to depress the piston of an engine by steam instead of atmospheric pressure. For some years he occupied himself in the surveying and engineering of various public works in Scotland, and in 1774, entered into partnership with the Messrs. Boulton of Soho, Birmingham, for the manufacture of steam engines, perfecting numerous and great improvements in their mechanism—among others the regulator by centrifugal force, the throttle valve, the machinery of parallel motion, and the steam barometer. In 1782, he invented the double-acting engine, and retired from business in 1800. Died, 1819.

Watterson, Henry, American journalist; born in Washington, D. C., February 16, 1840. His first work as journalist was with the "Democratic Review," and "The States," in Washington, D. C. He edited the "Republican Banner," Nashville, Tenn., before and after the Civil War, in the interim serving with distinction in the Confederate Army. He edited, in Louisville, Ky., the "Louisville Journal" (1867-1868); and the Louisville "Courier-Journal" since 1868. He published "History of the Spanish-American War," "Abraham Lincoln," etc., and continues to be one of America's most brilliant journalists.

Watts, George Frederick, R. A., born in 1820; painter, gained a reputation by his "Caractacus Led in Triumph through the Streets of Rome." Among his chief works are "Fata Morgana," "Love and Death," "Time, Death, and Judgment," and portraits of Joachim, Manning, William Morris, etc. Died, 1904.

Watts, Isaac, an English dissenting minister and poet, the "very father of English hymnology," was born in 1674, and died, 1748.

Wayne, Anthony, an American general of the Revolutionary epoch; was born in Chester County, Pa., in 1745. He entered the army as a colonel, in 1775, and after serving with distinction in the Canadian campaign, commanded a division at the battle of Brandywine, and the right wing at Germantown, 1777. After distinguishing himself at Monmouth in the following year, he captured by assault the fortified works at Stony Point on the Hudson, in 1779, and received the thanks of Congress therefor. After participating in the capture of Cornwallis' army at Yorktown, 1780, he put down the Indians in Georgia, and in 1794, gained a signal victory over the Miami Indians in Ohio. Died, 1796.

Webster, Daniel, an illustrious American statesman, jurist, and orator, was born in Salisbury, N. H., in 1782, of respectable but comparatively humble parentage. After receiving his rudimentary education at Exeter and Bosworth academies, he entered Dartmouth College, in 1797, as a freshman, and after graduating in 1801, entered upon the study of the law at Salisbury and Boston, in which latter city he was called to the bar in 1805. In 1807, he went into practice at Portsmouth, and, after earning a high legal reputation, was elected by the Federal party to the lower house of Congress in 1813, where he opposed the war with England, and at once rose into prominence as an able debater. Re-elected in 1815, he shared in the discussion of the United States Bank Charter and specie payment questions. Meanwhile he had risen to the highest rank in his profession as a constitutional lawyer, and as a consummate leader in criminal causes. In 1820, he served as a member of the Convention met to revise the Constitution of Massachusetts, and in 1822, was re-elected to Congress, where, as chairman of the Judiciary Committee, he rendered eminent assistance in the entire revision of the United States criminal code. In 1828, he became

senator, and in 1830, in opposing the Nullification doctrine advanced by South Carolina statesmen, delivered perhaps the most splendid outburst of patriotic oratory ever heard within the Congress of the American Union. In 1834, Webster became a prominent leader of the Whig party, and, in 1841, was appointed secretary of state under President Harrison, retaining the office during Tyler's chief magistracy, and again under Fillmore, in 1850. The most remarkable event of his official term was the so-called Ashburton Treaty with England, in the settlement of the northeastern boundary question. Re-elected to the senate in 1844, he opposed alike the admission of Texas into the Union and the prosecution of the war with Mexico, and supported Henry Clay's "Compromise Measures" of 1850, in relation to the extension of slavery to new territories. In 1850, he was unsuccessfully nominated for the presidency by the National Whig Convention of 1852. Died, October 24, in the latter year.

Webster, Noah, author and philologist; born in Hartford, Conn., in 1758, and educated at Yale College. He was admitted to the bar in 1781, but engaged in scholastic and literary occupations. Employed in teaching a school at Goshen, N. Y., he prepared his "Grammatical Institutes of the English Language," published in three parts, and edited "Governor Winthrop's Journal." In 1785, he wrote "Sketches of American Policy" advocating the formation of a new constitution, and gave public lectures on the English language, which were published 1789. In 1807, he published "A Philosophical and Practical Grammar of the English Language," and commenced his American "Dictionary of the English Language," but finding difficulties in etymology, he devoted ten years to its study, and prepared a "Synopsis of Words in Twenty Languages," then began his dictionary anew, and, in seven years, completed it. His "Elementary Spelling-Book" founded on his "Institutes," up to 1862, had been sold to the extent of 41,000,000 copies. A new and thoroughly revised and enlarged edition of his dictionary was finished in 1890, and it is now one of the most complete dictionaries of the English language published. Mr. Webster also published a popular "History of the United States," and a "Manual of Useful Studies." He was a judge and a member of the State Legislature, and one of the founders of Amherst College. Died in New Haven in 1843.

Welch, William Henry, professor of pathology at Johns Hopkins; born in Norfolk, Conn., April 8, 1850; graduate of Yale, A. B., 1870; M. D., College of Physicians and Surgeons, New York, 1875 (LL. D., Western Reserve, 1894; Yale, 1896; Harvard, 1900; Toronto, 1903; Columbia, 1904). Author: "General Pathology of Fever"; also numerous papers on pathological, and bacteriological subjects.

Wellington, Arthur Wellesley [Wesley], Duke of, was born 1769, was educated at Eton and the Military Academy of Angers, and entered the army in 1787. As lieutenant-colonel he served in Holland (1794), and in 1797 was sent to India. In 1799, under General Harris, he stormed Seringapatam, defeated the Mahrattas at Assaye in 1803, and returned home two years later. After serving at Copenhagen (1806), and sitting in parliament for two years (being Irish secretary in 1807), he was sent to Portugal in 1808. Having won the victories of Rolcia and Vimiera, he was superseded, but in 1809 was again in the Peninsula. He was made a peer for the victory of Talavera, and won the battle of Busaco in 1810, after which he constructed the lines of Torres Vedras. This was followed by Fuentes d' Oñoro (1811), the capture of Ciudad Rodrigo and Badajoz (1812), and the victory of Salamanca in the same year. He was now created marquis, and after the battle of Vittoria drove the French across the Pyrenees. After being made field-marshal and duke, he attended the Congress of Vienna, which he left to meet Napoleon at Waterloo. In 1827, he became commander-in-chief, and in 1828 was for the first time premier. After yielding on the Catholic question, he resigned in 1830 on that of Reform, incurring great unpopularity. In 1834, he again held office, but resigned next year, and in 1841 joined the cabinet of Sir R. Peel. He attended the House of Lords to the last, and received a state funeral at St. Paul's Cathedral. Died, 1852.

Wenceslas, or Wenzel (ven'-ael), a German emperor, of the house of Luxemburg, born in Nuremberg in 1361. He was the eldest son of Charles IV., was crowned King of Bohemia in his third year, and in 1378 succeeded his father as emperor. He annulled all debts due to Jews on the payment to himself of fifteen to thirty per cent. of the amount. The mob of Prague having slaughtered 3,000 Jews, he appropriated their property. In 1394, he was imprisoned at Prague by a conspiracy among the nobles,

headed by Jodocus of Moravia, but the German princes secured his release. He joined France in urging the abdication of Boniface IX., and Benedict XIII., in order that a new pope might take their place. Hereupon several German princes deposed him in 1400, electing Rupert of the Palatinate. He abdicated his claims to the imperial crown in favor of his brother Sigismund in 1410, and indulged in excesses till he died of apoplexy. Died, 1416.

Wesley, John, was born at Epworth, in Lincolnshire, June 17, 1703; an eminent evangelist and divine, the founder of "the people called Methodists." He was the son of a clergyman of the Church of England; and he became himself a clergyman, after having been educated at the Charterhouse School, and at Christ Church, Oxford. The year after he took orders (1725) he was chosen a Fellow of Lincoln College, and was appointed lecturer on Greek; but shortly afterwards he became curate to his father, and labored at Epworth and in the neighborhood, where his father was vicar, till he returned to Oxford in 1729. It was during his residence at Oxford that the first Methodist Society was formed, and his brother Charles (born, 1708; died, 1788), being accustomed to meet together, with a few others, for the purpose of mutual edification. Wesley continued to act as tutor at Oxford till 1735, when he was induced to visit Georgia, in North America. After about two years he returned to England, and soon after commenced preaching in association with his friend George Whitefield, from whom, however, he separated in 1740 on account of a difference in theological belief. His labors were incessant. During fifty years he traveled all over the country everywhere preaching the gospel, and founding societies; at the same time he administered the affairs of an organization which at the time of his death embraced no fewer than 80,000 members; and during the whole period he was a very copious writer—his works, when first collected, amounting to no fewer than thirty-two volumes. During the whole of his career he continued still, professedly, a minister of the Church of England. Wesley died in the house adjoining his chapel in the City Road, London, and in the adjoining graveyard he was buried. His brother Charles, who died three years before him, is chiefly celebrated as the author of numerous hymns, some of which are considered among the best in the language. Died, 1791.

West, Benjamin, was born at Springfield, Pennsylvania, October 10, 1738; an eminent painter, who settled in England in 1763, and in 1792 succeeded Sir Joshua Reynolds as President of the Royal Academy, an office which he held until his death. His works were formerly very highly esteemed, and he is still considered one of the greatest painters whom America has produced. He is buried in St. Paul's Cathedral. Died in London, 1820.

Westcott, Brooke Foss, D. D., was born near Birmingham, England, in January, 1825, and was educated at Trinity College, Cambridge. He obtained the Norrisian Prize in 1850, and was ordained deacon and priest in the following year. He was elected Fellow of his college in 1849, and proceeded M. A. in 1851. B. D. in 1865, and D. D. in 1870. Doctor Westcott received from Oxford University the honorary degree of D. C. L. in 1881 and that of D. D. from Edinburgh University at its tercentenary commemoration in 1883. He was elected regius professor of divinity at Cambridge, November 1, 1870, and, on the retirement of Doctor Jeremie, Doctor Westcott was nominated honorary chaplain to the queen in 1875, and a chaplain in ordinary in 1879. In May, 1881, was published, under the title "The New Testament in Greek," the result of the twenty-eight years' joint labor of Doctors Westcott and Hort upon the Greek text. In October, 1883, he was nominated to the canonry of Westminster, vacated by Canon Barry, bishop designate of Sydney, Australia. He was one of the company for the revision of the authorized version of the New Testament. Died, 1901.

Westinghouse, George, inventor and manufacturer; born in New York in 1846; educated in public and high schools; spent much time in his father's machine shop, inventing, at 15, a rotary engine. Served in United Army, 1863-64; assistant engineer in United States Navy, 1864-65; then attended Union College to sophomore year (Ph. D., 1890). Invented, 1865, a device for replacing railroad cars on the track; invented and successfully introduced, 1868, the Westinghouse air brake, which he has since greatly improved; has also made other inventions in railway signals, steam and gas engines, steam turbines, and electric machinery. Was pioneer, against great opposition, in introducing alternating current machinery in America, which has rendered possible the great development of water powers for long distance, electrical transmission; built the great generators at Niagara Falls and those for elevated railway and rapid transit system in New York; has estab-

lished large works in United States, England, France, and Germany for manufacturing air brakes, electrical and steam machinery; president of numerous corporations, employing over 20,000 people and with a capitalization of about \$75,000,000. His inventions of the air brake and of automatic railway signals have been largely instrumental in the possibility and safety of modern high-speed railroading.

Whately, Richard, was born in London, February 1, 1787; an eminent prelate, theologian, and mental and moral philosopher; from 1831 to his death archbishop of Dublin. In 1822, he was made Bampton lecturer, and in that capacity preached his sermons on "The Use and Abuse of Party Feeling in Religion." In 1825, he became principal of St. Alban's Hall, Oxford; and four years later was appointed professor of political economy, an office which he held till his appointment to the archbishopric. Whately's intellectual activity was remarkable. In 1821, he wrote "Historical Doubts Relative to Napoleon Bonaparte," a logical satire upon historical scepticism; in 1826 he published in a separate form his admirable treatises on "Logic and Rhetoric," both of which had already appeared in the "Encyclopædia Metropolitana"; and in 1856-59 he published his annotated editions of Bacon's "Essays" and Paley's "Moral Philosophy," both admirable specimens of criticism, and full of interesting original discourse. Died in Dublin, 1863.

Wheatstone, Sir Charles, was born at Gloucester, 1802; an eminent electrician and physicist, for many years professor of natural philosophy in King's College, London. He was the first to introduce and to give practical application to the electric telegraph in England, his experiments having been made, in conjunction with Mr. Cooke, when he was quite unaware of the experiments being made about the same time by Professor Morse in America. He was also the inventor of the stereoscope. He received his knighthood in 1858, and was for some years a vice-president of the Royal Society, of which he had been elected a Fellow in 1836. He twice received the Royal Medal at the Royal Society, and in 1848 won the Copley Medal. Died, 1875.

Wheeler, Joseph, an American military officer; born in Augusta, Ga., September 10, 1836; was graduated at the United States Military Academy in 1859; served in the cavalry till the outbreak of the Civil War, when he entered the Confederate army, in which he was commissioned major-general and senior commander of cavalry. He won great distinction during the Civil War as a raider. After the war he entered the law profession; held a seat in Congress in 1881-1899; and was made major-general of volunteers in May, 1898. During the Santiago campaign in Cuba he commanded the cavalry division; participated in the battles of Las Guasimas and San Juan Hill; was appointed senior member of the commission to make arrangements for the surrender of the Spanish army; served in the Philippines as commander of the 1st brigade, 2d division, from August, 1899, to January, 1900; was appointed a brigadier-general, U. S. A., June 16, 1900, and was retired on September 10, following. Died, 1906.

Whewell, William, (hu'el), was born at Lancaster, 1795; an eminent writer on many various subjects; from 1841 to his death Master of Trinity College, Cambridge. In 1833 he published his *Bridgewater Treatise*, on "Astronomy and General Physics Considered in Reference to Natural Theology"; and this was followed by a "History of the Inductive Sciences" (1837), and "The Philosophy of the Inductive Sciences" (1840), "Lectures on Political Economy" (1861), undoubtedly his three greatest works, displaying equal learning and independent power. His other writings are too numerous to mention. His death was caused by injuries which he sustained through a fall while riding. Died, 1866.

Whipple, Edwin Percy, author, born in Gloucester, Mass., March 8, 1819. He attended the public schools at Salem in 1837, and later was appointed superintendent of the newsroom of the Merchant's Exchange in Boston. Following this he wrote for the "Boston Miscellany" and other magazines, and lectured in Boston and other cities. In 1872, he became literary editor of the "Boston Globe," and in 1877, wrote for the "North American Review" and at the same time did considerable bookseller's jobwork. His publications are numerous and, were followed by several posthumous publications. Died, in Boston, Mass., 1886.

Whistler, James Abbott McNeill, painter, born in Lowell, Mass., in 1834; was educated at the United States Military Academy, studied drawing and painting in Paris, France, and in 1863 settled in London, England. He held original views concerning his art, and made interesting experiments with color, in quest of novel effects. He also gained celebrity as an etcher, and is the author of etchings and paintings of established reputation and

worth. His paintings include many portraits, among which are "The White Girl," "Portrait of my Mother," "Nocturne in Blue and Gold," "Harmony in Gray and Green," etc. In 1890, he wrote the "Gentle Art of Making Enemies." Died in London, 1903.

White, Andrew Dickson, American diplomatist and educator; born in Homer, N. Y., November 2, 1832. He was graduated at Yale in 1853; traveled in Europe; attache to legation of the United States, St. Petersburg, 1854-1855; studied in the University of Berlin; professor of history and English literature, University of Michigan, 1857-1863; returned to Syracuse and elected State Senator, 1863-1867; chosen first president of Cornell University, 1866; has in addition to the presidency filled the chair of modern history; was appointed by President Grant, commissioner to Santo Domingo to study and report on question of annexation, 1871; by President Hayes, minister to Berlin, 1879-1881; by President Harrison, minister to St. Petersburg, and continued under President Cleveland, 1892-1894; appointed member of the Venezuelan Commission, 1895-1896; ambassador to Berlin under President McKinley, 1897, resigned August 5, 1902; president of the American delegation to the International Peace Congress at The Hague in 1899. His best-known works are "Warfare of Science and Religion," "The New Germany," and "Studies in General History."

White, Edward Douglas, an American jurist; born in the parish of Lafourche, La., November 3, 1845; was educated at Mount St. Mary's College, Md., and at the Jesuit College in New Orleans. During the Civil War he served in the Confederate army. After the war he practised law. He was State Senator of Louisiana in 1874; associate justice of the Supreme Court of Louisiana in 1878; and United States Senator in 1889-1894. While still in the senate he was appointed an associate justice of the United States Supreme Court.

White, Horace, journalist; born in Colebrook, N. H., August 10, 1834; graduate of Beloit College, Wis., 1853; for many years with "Chicago Tribune" and was its editor and one of its chief proprietors, 1864-74; since 1883, connected with "New York Evening Post" as president of company, editorial writer, and editor-in-chief; retired January 1, 1903. Edited "Bastiat's *Sophismes Economiques*," and "Luigi Cossa's *Scienza delle Finanze*." Author: "Money and Banking Illustrated by American History," "The Roman History of Appian of Alexandria" (translated from Greek, two volumes).

White, James William, physician, surgeon; born in Philadelphia, November 2, 1850; graduate of University of Pennsylvania, M. D., 1871 (Ph. D., University of Pennsylvania). On staff of Professor Louis Agassiz, during Hassler expedition to West Indies, the Straits of Magellan, both coasts of South America, the Galapagos Islands, etc., 1871-72; resident physician of Philadelphia Hospital, 1873; surgeon to Eastern State Penitentiary, 1874-76; surgeon to first troop of Philadelphia city cavalry, 1878-88; has been teacher and writer in surgery during whole professional life; was first professor of genito-urinary surgery, then professor of clinical surgery; now John Rhea Barton professor of surgery—all in University of Pennsylvania. Joint author: "American Text-book of Surgery" (Keen and White), "Genito-Urinary Surgery" (White and Martin). Has written numerous articles on medical and surgical subjects in medical journals.

White, William Allen, owner and editor "Emporia Daily and Weekly Gazette"; born in Emporia, Kan., in 1868; educated in common schools, El Dorado, Kan., and State University, Lawrence, Kan. Contributor to magazines and newspapers. Author: "The Real Issue and Other Stories," "The Court of Boyville," "Stratagem and Spoils."

Whitney, Eli, inventor, born in Westborough, Mass., December 8, 1765. In 1792 he was graduated at Yale, went to Georgia, and for a time read law, while living on the plantation of the widow of General Nathaniel Greene. Here he invented the cotton gin, but owing to litigation growing out of the claims of fraudulent imitators, and despairing of obtaining his rights in the South, Whitney went to New Haven, Conn., in 1798, where he became engaged in the manufacture of firearms, introducing the extension of machinery in place of manual labor. Died at New Haven, Conn., 1825.

Whitney, William Dwight, a distinguished American philologist, born in 1827 at Northampton, Mass., studied at Williams' College, Williamstown, and at Yale College, giving special attention to Sanskrit. He also studied Sanskrit in Germany from 1850 to 1853, returning in the latter year to America. The first-fruits of his studies in Sanskrit was an edition of the *Atharva-Veda* in conjunction with Roth (1856). He had previously

(1854) been made professor of Sanskrit and of comparative philology at Yale College. Among his independent works may be mentioned: "Language and the Study of Language" (1867), "Oriental and Linguistic Studies" (1872-74), "Life and Growth of Language" (1875), "Sanskrit Grammar" (a highly important work), "German Grammar, etc. He was editor of the great "Century Dictionary of the English Language." He died in 1894.

Whittier, John Greenleaf, American poet, was born of Quaker parents in 1807 at Haverhill, Mass., and educated at the academy of his native place. In his younger days he worked on his father's farm and learned the shoe-making trade, but early began to write for the press, and in 1831 published his first work, "Legends of New England" in prose and verse. He carried on the farm himself for five years, and in 1835-36 he was a member of the Legislature of Massachusetts. After having edited several other papers he went to Philadelphia to edit the "Pennsylvania Freeman," an anti-slavery paper, the office of which was burned by the mob in 1839. In the following year he returned to his native State, settling at Amesbury, where (or at Danvers, Mass.) he chiefly resided until his death. Among the numerous volumes of poetry which he from time to time gave to the world the following may be mentioned: "Moll Pitcher," "Lays of my Home," "Miscellaneous Poems," "The Voices of Freedom," "Songs of Labor," "The Chapel of the Hermits," "Home Ballads," and poems "Snow Bound," "In War-time," "National Lyrics," "Ballads of New England," "Miriam," "Mabel Martin," "Hazel Blossoms," "The King's Missive," "Poems of Nature," etc. Died, 1892.

Wiggin, Kate Douglas, author; born in Philadelphia, September 28, 1857; graduate of Abbott Academy, Andover, Mass., 1878; married, March 30, 1895, George C. Kiggs. Organized the first free kindergartens for poor children on the Pacific coast; has been interested in that work ever since. Continues her name of "Kate Douglas Wiggin" in her literary work. Author: "The Birds' Christmas Carol," "The Story of Patsy," "A Summer in a Cañon," "Timothy's Quest," "The Story Hour" (with Nora A. Smith), "Children's Rights" (with same), "A Cathedral Courtship," "Penelope's English Experiences," "Polly Oliver's Problem," "The Village Watch Tower," "Froebel's Gifts" (with Nora A. Smith), "Froebel's Occupations" (with same), "Kindergarten Principles and Practice" (with same), "Nine Love Songs and a Carol," "Marm Lisa," "Penelope's Progress," "Penelope's Experiences in Ireland," "The Diary of a Goose Girl," "Rebecca," "The Affair at the Inn" (collaboration), "Rose o' the River," Editor (with Nora Archibald Smith): "Golden Numbers," "The Posy Ring."

Wilberforce, Samuel, D. D., was born in 1805, was third son of W. Wilberforce, and an active High Church leader, who became Bishop of Oxford in 1845, and of Winchester in 1869. He was an able speaker in the House of Lords, and had much social influence. Died, 1873.

Wilberforce, William, was born 1759; philanthropist, entered parliament in 1780, and seven years later entered upon the movement against the slave trade, his abolition motion in 1789 gaining the support of the leaders of every party in the House, though it was not carried for fifteen years. Just before his death slavery itself was abolished in the British dominions. Died, 1833.

Wilcox, Ella Wheeler, an American poet and writer, was born in 1855 near Madison, Wis., and educated at the State University in that city. She was for many years a contributor to the Milwaukee and Madison papers, of poems, sketches, etc., the demand for her productions steadily increasing, and extending to the leading journals and periodicals of the country. Author of "An Ambitious Man," "Sweet Danger," "Poems of Passion," "Poems of Pleasure," "Kingdom of Love," "Men, Women and Emotions," "A Woman of the World," etc.

Wiley, Harvey Washington, chemist, chief of bureau of chemistry, United States Department of Agriculture, since 1883; born in Kent, Ind., in 1844; graduate of Hanover College, 1867 (Ph. D., LL. D.); Harvard, 1873; professor of chemistry, Purdue University, 1874-83. State chemist of Indiana, 1881-83; professor of agricultural chemistry in graduate school, Columbian University, since 1895. Author: "Principles and Practice of Agricultural Chemistry" (three volumes), "Songs of Agricultural Chemists"; also sixty government bulletins and 225 scientific papers, etc.

Wilhelmina, Helene Pauline Marie (*Vilhelma*), Queen of the Netherlands, only child of William III., by his second wife, born at The Hague, August 31, 1880. Her mother was Regent until August 31, 1898,

the queen's majority; crowned September 6, 1898. Married Duke Henry of Mecklenburg-Schwerin, 1901.

Wilkes, Charles, American naval officer, was born in 1801; discovered several islands in Antarctic region, and in 1861 caused a dispute with Great Britain by his seizure of Confederate commissioners on the "Trent," a British vessel. Died, 1877.

Willard, Edward S., actor; born in England, in 1853; first appearance on the stage in Theater Royal, Weymouth, England, December, 1869, as second officer in "Lady of Lyons"; supported Sothorn at Glasgow and filled other engagements until he went to London, 1875; became famous as the Spider in "The Silver King"; managed Shaftesbury Theater, London, 1889; produced there "The Middleman," "Judah," and other plays; appeared at Palmer's Theater, New York, November, 1890, as "The Middleman," and toured the United States under A. M. Palmer's management for three seasons. Lensed the Comedy and Garrick theaters, London, 1894-96; since then has toured United States in "David Garrick," "Tom Pinch," "The Middleman," "Professor's Love Story," etc., under his own management.

William I., surnamed the Conqueror, King of England, founder of the Norman Dynasty, was born, 1027. He was the bastard son of Robert I. or II., Duke of Normandy, and a tanner's daughter of Falaise named Arletta, and succeeded to the dukedom when eight years old. He claimed the throne of England through Emma, sister of his grandfather and mother of Edward the Confessor. When Harold, son of Earl Godwin, visited the Norman court in 1065, he was compelled to swear fealty to William; but on Edward's death, in 1066, Harold procured his own elevation to the throne. William then prepared to enforce his pretension by arms, and on September 28, 1066, landed at Pevensey with 60,000 men. On October 14th was fought the battle of Senlac or Hastings, in which the Saxons were defeated and their king was slain. William was crowned in London, December 25th. At first his rule was mild and just, but after the sanguinary suppression of a league of the Saxon nobles he treated the Saxons as a conquered nation, distributed their estates among his Norman followers, and deposed the principal Saxon clergy. He was long at war for his continental possessions with his rebellious son Robert Courthose, and most of the latter part of his reign was passed in Normandy. His last dispute was with the King of France, some of whose vassals had plundered Norman territory. In retaliation he burned Nantes. While riding over the ruins, he was ruptured by the plunging of his horse, which caused his death several weeks after. Died, 1087.

William I., first German Emperor, and seventh King of Prussia, second son of Frederick William III., born March 22, 1797. At an early age he began the study of military affairs; took part in the campaign of 1813-14 under Blücher; married in 1829 Princess Augusta of Saxe-Weimar; became heir-presumptive to the throne of Prussia on his father's death in 1840; was commander of the forces which suppressed the revolutionary movement (1849) in Baden; created regent in 1858, and on the death of the king his brother in 1861 he succeeded to the throne of Prussia. During his reign Prussia defeated Denmark (1864), annexing the duchies of Schleswig-Holstein; quarreled with Austria, and engaged in a campaign which ended in the victory of Sadowa (1866); and went with the rest of Germany to war with France in 1870 (see Germany and France). In this war the operations of the Prussian generals were under the personal supervision of the king. It was at Versailles, during the siege of Paris (January 18, 1871), that he was proclaimed German Emperor. Died, 1888.

William II., or **Friedrich Wilhelm Victor Albrecht**, King of Prussia and German Emperor, eldest son of Frederick III. and Victoria, princess Royal of England, was born January 27, 1859; educated at Cassel and Bonn, married Augusta Victoria of Schleswig-Holstein-Augustenburg in 1881, and succeeded his father, June 15, 1888. Since his accession he has taken considerable interest in social questions, and the strong initiative which he had adopted in political affairs brought about the dismissal of Prince Bismarck in 1890. His independence, ability, and aggressiveness have placed Germany in the foremost rank of the enlightened world powers. In 1907, he spoke of the German nation as "the block of granite upon which the Lord our God can build up and complete His work of civilizing the world." Early in 1908, he established a winter residence on the Island of Corfu.

William III. of England, born in 1650, having married Mary, daughter of James II., was regarded as a Protestant reserve against the latter, and, in 1688, was called in to replace him. He defeated James at the

Boyne in 1690, obtained the acknowledgment of his title from Louis XIV. by the Peace of Ryswick (1697), but had prepared a grand alliance to renew the war with him just before he died, Louis having favored the claim of James Edward. Died, 1702.

Williams, George Fred, lawyer; born in Dedham, Mass., July 10, 1852; graduate of Dartmouth, 1872; studied at Heidelberg and Berlin; admitted to bar; practices in Boston. Edited "Williams' Citations of Massachusetts Cases"; edited volumes 10 to 17 "Annual Digest of the United States"; member of Massachusetts Legislature, 1889. Member of Congress, 1891-93.

Williams, John Sharp, congressman; born in Memphis, Tenn., July 30, 1854; educated in Kentucky Military Institute, University of the South, University of Virginia, and University of Heidelberg, Germany; studied law at University of Virginia and in Memphis, Tenn.; admitted to Tennessee bar, 1877; removed to Yazoo City, Miss., 1878; has since practiced law; is also a cotton planter; delegate to Democratic National Conventions, 1892, 1904; temporary chairman of St. Louis Convention, July 6-9, 1904; member of Congress from fifth Mississippi district, 1893-1903; from eighth Mississippi district, since 1903.

Williams, Roger, founder of the State of Rhode Island, United States, was born in Wales in 1600; being a Puritan, fled the country to escape persecution, and settled in New England, where he hoped to enjoy the religious freedom he was denied at home, but was received with disfavor by the earlier settlers as, from his extreme views, a "troubler of Israel," and obliged to separate himself and establish a colony of his own, which he did at Providence by favor of an Indian tribe he had made friends of, and under a charter from the Long Parliament of England, obtained through Sir Henry Vane, where he extended to others the toleration he desired for himself; he was characterized by Milton, who knew him, as "that noble champion of religious liberty." Died, 1683.

Wilson, Francis, actor; born in Philadelphia, Pa., February 7, 1854; first professional appearance in a minstrel company; engaged in legitimate comedy at Chestnut Street Theater, 1877-78, Philadelphia, as "Cool" in "London Assurance," 1878-79; with Annie Pixley in "M'liss," 1879; with "Mitchell's Pleasure Party," 1880-83; started in comic opera as Sir Joseph Porter in "Pinafore"; became leading comedian of McCaull Opera Company and of Casino, New York, 1885-89, where he created the character of "Cadeaux" in "Erminie." Subsequently organized his own company in which he has since taken leading comedy rôles in "The Oolah," "The Merry Monarch," "The Lion Tamer," "Erminie" (a revival), "The Chieftain," "Devil's Deputy," "Half a King," and more recently "The Little Corporal," "Cyrano de Bergerac," "The Monks of Malabar," "The Strollers," "The Toreador," and "Cousin Billy." Author: "The Eugene Field I Knew," "Recollections of a Player," "Going on the Stage."

Wilson, Henry, an American senator; born in Farmington, N. H., in 1812, of poor parents; received scanty education, and was taught the trade of shoemaker. Elected to the Massachusetts House of Representatives by the Whig party, in 1840, he there became a prominent anti-slavery advocate, and largely contributed to the formation of the Free-soil party in 1848. In 1855, he succeeded Edward Everett as United States senator, and became one of the leaders of the Republican party. In 1872, he was nominated by the Republican convention a candidate for the vice-presidency of the United States, on the same ticket with General Grant, and was elected. Died, 1876.

Wilson, James, United States secretary of Agriculture since March 5, 1897; born in Ayrshire, Scotland, 1835; came to United States, 1852, settling in Connecticut with parents; in 1855 went to Tama County, Ia. In 1861, engaged in farming; member 12th, 13th, and (speaker) 14th assemblies of Iowa; has been State railway commissioner; member Congress, 1873-77, and 1883-85; regent State University of Iowa, 1870-74; for six years director Agricultural Experiment Station and professor of agriculture, Iowa Agricultural College, Ames, Ia.; LL. D., University of Wisconsin, 1904.

Wilson, Woodrow, educator; born in Staunton, Va., December 28, 1856; graduated from Princeton, 1879; studied law, University of Virginia, 1879-80; post-graduate course, Johns Hopkins, 1883-85 (Ph. D., Johns Hopkins, 1886; LL. D., Wake Forest College, 1887, Tulane University, 1898, Johns Hopkins, 1901, Rutgers, 1902, University of Pennsylvania, 1903, Brown University, 1903; Litt. D., Yale, 1901); practiced law, Atlanta, Ga., 1882-83; professor of history and political economy, Bryn Mawr College, 1885-88, Wesleyan Uni-

versity, 1888-90; professor of jurisprudence and politics, Princeton, 1890-1902; president of Princeton University since August 1, 1902; contributes to leading magazines; public speaker, lecturer. Author: "Congressional Government, a Study in American Politics." "The State: Elements of Historical and Practical Politics." "Division and Reunion." "An Old Master and Other Political Essays." "Mere Literature and other Essays." "George Washington." "A History of the American People."

Winslow, Erving, commission merchant; born in Boston, 1839; educated at English High School, Boston, and Lawrence Scientific School, Harvard; was assistant United States Coast Survey; assistant in Dudley Observatory, Albany, N. Y.; since 1868, merchant, Boston. Translator: "Maeterlinck's Pelléas et Mélisande." the founder, and joint editor two years, "Time and the Hour." Wrote: "Memoir Benjamin Apthorp Gould." "Account of the Anti-Imperialist Movement." "The cause of the Philippine War—An Epitome of Historical Events." "Neutralization, Conditions in the Philippines," various literary contributions and reviews, weeklies, newspapers.

Wirt, William, an eminent American advocate and author; was born at Bladensburg, Md., 1772. He became a member of the bar of Virginia, was a leading counsel in the prosecution of Aaron Burr, and from 1817 to 1829, filled the position of attorney-general of the United States. In 1832, he was the unsuccessful nominee of the Anti-Masonic party for the presidency. His "Life of Patrick Henry" is held in much favor. Died, 1834.

Wiseman, Nicholas, Cardinal, born of Irish parents at Seville, 1802. He was educated at Waterford and the Roman Catholic College, Ushaw, near Durham; joined the English College then newly formed (1818) at Rome; became professor of oriental languages and (1828) rector of the English College; returned to England (1835), and was appointed successively rector of Ushaw, vicar apostolic of the central district of England, and Roman Catholic archbishop of Westminster (1850). He was the author of "Lectures on the Connection between Science and Revealed Religion," "Letters on Catholic Unity," "Papal Supremacy," "Fabiola," "Four Last Popes," and joint-editor for many years of the Dublin "Review." Died, 1865.

Wister, Owen, author; born in Philadelphia, July 14, 1860; graduated from Harvard, 1882, A. M., LL. B., 1888. Admitted to Philadelphia bar, 1889; engaged in literary work, 1891. Author: "The Dragon of Wantley: His Tail," "Red Men and White," "Lin McLean," "The Jimmy John Boss," "U. S. Grant, a Biography," "The Virginian," "Philosophy 4," "Journey in Search of Christmas"; also much prose and verse in magazines. Collaborator: "Musk-ox, Bison, Sheep and Goat" (Whitney's American Sportsmen's Library).

Witt, John de, born in 1625; Dutch statesman; became grand pensionary of Holland in 1653, and conducted the second war with England. He obtained the abolition of the office of stadtholder, which, however, was regained by the Orange family in 1672, when the French invaded the country, and De Witt and his brother Cornelius were murdered. Died, 1672.

Witte, Count Sergie Jullewitsh, Russian statesman; is of German origin, and was born in 1849, at Tiflis; educated at Odessa in mathematics and physics; entered the railway administration, and first gained distinction by his clever organization of the transport of troops in the war of 1877-78; was called to St. Petersburg for employment there in 1879, and appointed in 1886 director of Russian southwest railways. In 1888 he became head of the railway department in the ministry of finance, chairman of commission on tariffs; in 1892, minister of means of communications, and in 1893, minister of finance. In August, 1903, he was removed from the ministry of finance and made president of the committee of ministers. He was one of the Russian plenipotentiaries in the negotiations for peace with Japan in 1905, and was afterwards made a count and appointed president of the new ministry, although in May, 1906, he was superseded. He is author of a book on "The Principles of Railway Rates," and on "Friedrich List, the Economist."

Wolfe, James, a distinguished English general; was born in Kent, 1726. After serving with high distinction during the Seven Years' War, he was appointed commander-in-chief of the army sent against the French in Canada, 1759, and fell, mortally wounded, in the moment of victory, on the Heights of Abraham at Quebec, his opponent in command, the Marquis de Montcalm, also carried from the field in a dying condition. This battle terminated the French possession of Canada.

Wolseley, Garnet Joseph, Viscount, born in 1833; served in Burmah, in the Crimean War, the Indian Mutiny, and the China War of 1860; commanded the Red River expedition (1870); commanded on the Gold Coast during Ashanti War (1873); governor of Natal, and, later, Cyprus; gave up latter post to command in the South African War of 1879-80. Commanded Egyptian expedition (1882), and Gordon Relief expedition (1884). While commanding in Ireland was made field-marshal, and commander-in-chief after retirement of the Duke of Cambridge (1895); term expired November, 1900.

Wolsey, Thomas, born in 1471; ecclesiastical statesman; was employed diplomatically by Henry VII., and made Dean of Lincoln, becoming in the next reign successively Dean of York, Bishop of Lincoln, and Archbishop of York, while holding at the same time the sees of Bath and Wells, Durham and Winchester. He became also chancellor (1565), cardinal, and papal legate, and aimed at being pope. His overthrow, in 1529, was caused by the jealousy of the great nobles and his disagreement with the king on the divorce question. He founded Christ Church (Cardinal College), Oxford, where there is a portrait of him by Holbein, and built a palace at Hampton Court. Died, 1530.

Wood, Leonard, army officer; born in Winchester, N. H., October 9, 1860; graduated from Harvard Medical School, 1884; LL. D., Harvard, 1890, Williams, 1902, University of Pennsylvania, 1903; appointed first lieutenant and assistant surgeon, United States Army, 1886; recruited and commanded the "Rough Riders," 1898; brigadier-general United States Volunteers, 1898, for gallant service at battles of Las Guasimas and San Juan Hill; major-general volunteers, 1898; military governor Santiago, 1898 to 1899; military governor of Cuba, 1899 to 1902; honorary discharge as major-general United States Volunteers, 1899; appointed brigadier-general United States Army, 1901, major-general, 1903; assigned to command of department of Mindanao, 1903, and appointed governor of Moro Province, 1903.

Woolsey, Theodore Salisbury, professor of international law, Yale, since 1878; born in New Haven, Conn., October 22, 1852; graduated from Yale, 1872 (A. M., 1877), Yale Law School, 1876 (LL. D., Brown University, 1903); instructor of public law, Yale, 1877. Editor: "Woolsey's International Law" (sixth edition), "Pomeroy's International Law." Author: "America's Foreign Policy," also many articles in magazines, journals, etc.

Worcester, Joseph Emerson, born in 1784; American lexicographer; compiled a "Dictionary of the English Language," which appeared in 1860. Died, 1865.

Wordsworth, William, poet; was born in Cumberland, 1770; visited France in the early years of the revolution 1790-91, and in the following gained the friendship of Coleridge by the publication of his first poems, and went to live near him in Somersetshire. The friends went on a walking tour, the result of which was "Lyrical Ballads," published in 1798, at Bristol. After a tour in Germany, Wordsworth and his sister lived at Grasmere till 1808, the poet being married in 1802, and "The Prelude" (begun in 1799), being finished in 1805. In 1813, Wordsworth was named distributor of stamps for Westmoreland, and henceforth lived at Rydal Mount. "The Excursion" appeared next year, and in 1815 "The White Doe of Rylstone" was published. Other poems followed, but the whole fragment of "The Recluse" was not published till 1888. In 1843, Wordsworth became poet-laureate. Died, 1850.

Wren, Sir Christopher, born in East Knoyle, in Wiltshire, October 20, 1632; an eminent English architect, best known as the architect of St. Paul's cathedral. He was, however, the architect of numerous other churches, and of many public buildings. He received his knighthood in 1672. He is buried in the crypt of St. Paul's, with the appropriate inscription, "Si monumentum requiris, circumspice (If you seek a monument look around)." Died at Hampton Court, February 25, 1723.

Wright, Carroll Davidson, educator, economist, statistician; born in Dunbarton, N. H., July 25, 1840; academic education (A. M., LL. D., Tufts; Ph. D., Dartmouth; LL. D., Wesleyan, and Clark universities); served in Civil War, private to colonel, 14th New Hampshire Volunteers; member of Massachusetts Senate, 1872-73; chief of Massachusetts Bureau of Statistics of Labor, 1873-88; United States Commissioner of Labor, 1885-1902; also, 1893-97, completed eleventh United States Census. Honorary professor of social economics, Catholic University of America, 1895-1904; professor of statistics and social economics, school of comparative jurisprudence and diplomacy, Columbian University, 1900; university lecturer on wage statistics, Harvard University, 1900-01; president of Clark College, Worces-

ter, Mass., since 1902. Appointed by president member and recorder of United States anthracite strike commission 1902. Member of board of trustees of Carnegie Institute, Washington. Author: "The Factory System of the United States," "Relation of Political Economy to the Labor Question," "The Social, Commercial, and Manufacturing Statistics of the City of Boston," "History of Wages and Prices in Massachusetts, 1752-1883," "The Industrial Evolution of the United States," "The Public Records of Parishes, Towns, and Counties in Massachusetts," "Outline of Practical Sociology," "History and Growth of the United States Census."

Wycliffe, John, born in 1324; divine; actively opposed the Medicant Friars, and in 1361, was elected master of Balliol Hall; obtained the favor of John of Gaunt by his reply to the pope's claim for tribute, and, in 1374, obtained the living of Lutterworth. In 1377, he was summoned to St. Paul's to answer a charge from the pope of heretical opinions, but was protected by the court. Next year he was again accused but with no effect, and after this he was occupied with his translations of the Bible and attacks on transubstantiation, his opinions on which he was forced partially to withdraw, and was expelled from Oxford. Died, 1387.

Xavier, St. Francis (*zav-ē-d'*), a Jesuit missionary, styled usually the "Apostle of the Indies," was born in 1506, of a noble family, in the north of Spain. He was a student of Sanite Barbe in Paris, took to philosophy, became acquainted with Ignatius Loyola, and was associated with him in the formation of the Jesuit Society. He was sent, in 1541, under sanction of the pope, by John III. of Portugal, to Christianize India, and arrived at Goa in 1542, from whence he extended his missionary labors to the Eastern Archipelago, Ceylon, and Japan, in which enterprises they were attended with signal success. On his return to Goa, in 1552, he proceeded to organize a mission to China, in which he experienced such opposition and so many difficulties that on his way to carry on his work there he sickened and died, and was buried at Goa. Xavier was beatified by Paul V. in 1619, and canonized by Gregory XV. in 1622.

Xenophon, born in 430 B. C.; a Greek historian and philosopher; Xenophon played an important part in the adventurous retreat known in history as the "Retreat of the Ten Thousand," the description of which he wrote in "Anabasis." His other works are, "Memorabilia," or "Recollections of Socrates"; "Hellenica," a continuation of Thucydides's history of the Peloponnesian War; and the "Cyropædia," or Education of Cyrus. Died, 357 B. C.

Xerxes I., King of Persia; came to the throne in 485 B. C., invaded Greece in 480, but was defeated at Salamis. He was murdered in 465 B. C.

Yonge, Charlotte M., born in 1823; novelist and historical writer; author of "The Heir of Redclyffe," "The Dove in the Eagle's Nest," and other stories, besides "Landmarks of History," "Cameos from English History," etc. Died, 1901.

Young, Brigham, born in 1801; Mormon "prophet," son of a New England farmer; became president on the death of Smith, in 1844, and two years later led his followers to Salt Lake Valley, Salt Lake City being built soon after. In 1852, he proclaimed polygamy, which had been condemned by the Mormon Church, and in 1856, after having been United States governor for several

years, he was superseded, troops being sent to enforce the decision of the government. Died, 1877.

Zangwill, Israel, born in 1864; once elementary teacher in Spitalfields; he became famous by his stories of the Jews, of which "Children of the Ghetto," is best known. English art and politics are treated in "The Master" and "The Mantle of Elijah." President of the Jewish Territorial Organization. His play, "Merely Mary Ann," was one of the successes of 1904. "Ghetto Comedies," published in 1907, displayed throughout the hand of a master craftsman.

Zeller, Eduard, born in 1814; German philosopher; having held chairs at Marburg and Heidelberg, was appointed professor at Berlin, in 1872. His chief works are "History of Greek Philosophy" (of which an English version appeared in 1881), "History of German Philosophy since Leibnitz," "The Contents and Origin of the Acts of the Apostles," and studies of Strauss and Renan.

Ze'no, a Greek philosopher, of Elea (Velia), in Italy, who lived in the Fifth Century before Christ. He was one of the reputed founders of the Eleatic school of philosophy. Only fragments of his writings have come down to us.

Ze'no, a Greek philosopher, who flourished in the Third Century before Christ. He was a native of Citium, in the island of Cyprus, but most of his life was spent in Athens. He was the founder of the Stoic school of philosophy, a name derived from the Painted Porch (Stoa Poikile), in which he was accustomed to meet his disciples. He is said to have lived to the age of 98 years.

Zenobia, Queen of Palmyra (Third Century), married Odenathus, who was named "Augustus" by Gallienus in 204, and on his death, three years later, reigned alone; but in 272 Aurelian invaded her territories, defeated and captured her and took her to Rome in 274.

Zinzendorf, Nicolaus von Graf, born in 1700; founder of the Moravian settlement at Herrnhut; traveled much in America for religious purposes, and in 1737, met John Wesley in London. Died, 1760.

Zola, Emile, born in 1840; French novelist of the "naturalist" school, began life as an employé of the Hachette firm, but in 1863 published "Contes à Ninon." Among his chief works are "Thérèse Raquin," "Les Rougon Macquart," a series of which "L'Assommoir," and "Nana, Germinal La Terre," "La Bête Humaine," "La Débâcle," etc., are the most striking. Died, 1902.

Zoroaster, an ancient philosopher, of whose history little or nothing that is authentic is known. There are supposed to have been several of the name. The most celebrated, however, the Zerdusht of the Persians, is believed to have been the reformer of the Magian system of religion, and the author of the Zendavesta, which contains the doctrines that he taught. Irreconcilable differences exist among the learned as to the time in which he flourished. Volney fixes his birth 1250 B. C.

Zwingli, Ulrich, born in 1484; Swiss reformer; served in Italy as a soldier, visited Erasmus at Basel, in 1514, and two years later at the monastery of Einsiedlen began to preach freely. In 1519, he was appointed to the cathedral at Zürich, having previously opposed the sale of indulgences by Sanson. Attempts were made to prohibit his preaching, but the reformation grew at Zürich. In 1529, Zwingli met Luther and Melancthon at Marburg, but two years later he fell in the battle of Kappel in the war with Berne. Died, 1531.

FIFTH BOOK

GEOGRAPHY, TRAVEL, ARCHITECTURE

TAJ MAHAL—SHRINE OF NUR JEHAN, "LIGHT OF THE WORLD"

GEOGRAPHY, TRAVEL, ARCHITECTURE

Africa (*af're-kah*), the second largest of the continents of the Old World lies nearly due south of Europe and southwest of Asia. It is of a compact form, being nearly equal at its extreme points in length and breadth. The north section of the continent, however, has an average breadth of nearly double the south. This great change of form arises mostly from the greater projection of the upper part toward the west, and the transition on this side from the broad to the narrow section is effected suddenly by an inward turn of the west coast, which faces south for nearly 20° of longitude, forming the Gulf of Guinea, the greatest indentation of the coast. Africa is united to Asia at its northeast extremity by the Isthmus of Suez, now crossed by a great ship canal. From this point the coast runs in a westerly and somewhat northerly direction to the Strait of Gibraltar, the point of greatest proximity to Europe. This north coast forms the south shore of the Mediterranean Sea, and brings all the north countries of Africa into close proximity with the European and Asiatic countries lying contiguous to that great ocean highway, which formed the chief medium of communication between the principal divisions of the ancient world.

The center of Africa possesses an exuberant tropical vegetation. The open pastoral belt at the extremities of the tropics is distinguished by a rich and varied flora. A special characteristic of the vegetation of the south extremity of Africa is the remarkable variety, size, and beauty of the heaths, some of which grow to twelve or fifteen feet in the fertile parts of Nubia.

The fauna of Africa is extensive and varied, and numerous species of mammals are peculiar to the continent. According to a common view of the geographical distribution of animals, the north of Africa belongs to the Mediterranean sub-region, while the rest of the continent forms the Ethiopian region. Africa possesses numerous species of the order quadrumana (apes and monkeys), most of which are peculiar to it. They abound especially in the tropics. The most remarkable are the chimpanzee and the gorilla. The lion is the typical carnivore of Africa. Lately he has been driven from the coast settlements to the interior, where he still reigns king of the forest. There are three varieties, the Barbary, Senegal, and Cape lions. The leopard and panther rank next to the lion among carnivora. Hyenas of more than one species, and jackals, are found all over Africa. Elephants in large herds abound in the forests of the tropical regions, and their tusks form a principal article of commerce. These are larger and heavier than those of Asiatic elephants. The elephant is not a domestic animal in Africa as it is in Asia. The rhinoceros is found, like the elephant, in Middle and Southern Africa. Hippopotami abound in many of the large rivers and the lakes. The zebra and quagga used to abound in Central and Southern

Africa, but the latter is said to be now entirely extinct. Of antelopes, the most numerous and characteristic of the ruminating animals of Africa, at least fifty species are considered peculiar to this continent, of which twenty-three used to occur in Cape Colony. The giraffe is found in the interior, and is exclusively an African animal. Several species of wild buffaloes have been found in the interior, and the buffalo has been naturalized in the north. The camel, common in the north as a beast of burden, has no doubt been introduced from Asia. The horse and the ass are natives of Barbary. The cattle of Abyssinia and Bornu have horns of immense size, but extremely light. In Barbary and the Cape of Good Hope the sheep are broad-tailed; in Egypt and Nubia they are long-legged and short-tailed. Goats are in some parts more numerous than sheep. The ibex breed extends to Abyssinia. Dogs are numerous, but cats rare, in Egypt and Barbary.

There is a marked distinction between the races in the north and east of the great desert and those in the central Sudan and the rest of Africa and the south. The main elements of the population of North Africa, including Egypt and Abyssinia, are Hamitic and Semitic, but in the north the Hamite Berbers are mingled with peoples of the same race as those of prehistoric Southern Europe, and other types of various origins, and in the east and southeast with the peoples of the negro type. The Semitic Arabs are found all over the north region, and even in the Western Sahara and Central Sudan, and far down the east coast, as traders. The Somalis and Gallas are mainly Hamitic. In the Central Sudan and the whole of the country between the desert and the Gulf of Guinea the population is pure negro—people of the black, flat- or broad-nosed, thick-lipped type, with narrow heads, woolly hair, high cheek-bones, and prognathous jaws. Scattered among them are peoples of a probably Hamitic stock. Nearly the whole of the narrow south section of Africa is inhabited by what are known as the Bantu races, of which the Zulu or Kafir may be taken as the type. The languages of the Bantu peoples are all of the same structure, even though the physical type vary, some resembling the true negro, and others having prominent noses and comparatively thin lips. The Bushmen of South Africa are of a different type from the Bantu, probably the remains of an aboriginal population, while the Hottentots are apparently a mixture of Bushmen and Kafir. Scattered over Central Africa, mainly in the forest regions, are pigmy tribes, who are generally supposed to be the remains of an aboriginal population. The bulk of the inhabitants of Madagascar are of Malay affinities. The total population is estimated at about 150,000,000.

POLITICAL DIVISIONS. Only two independent governments exist in Africa, Abyssinia and Liberia. With these two exceptions, the whole

continent is subject to European domination. By recent arrangements, mainly since 1884, great areas in Africa have been allotted to Great Britain, France, Germany, Portugal, Belgium, and Italy, as coming within their respective spheres of influence, in addition to colonial possessions proper. The following table exhibits the present division of Africa among the European powers:

	AREA	POPULATION
BRITISH AFRICA: Basutoland, Bechuanaland Protectorate, Cape Colony, Central Africa, East Africa Protectorate, Uganda Protectorate, Zanzibar Protectorate, Mauritius, Natal, Niger Coast Protectorate, Territory of the Royal Niger Co., South Africa, West Africa, Zululand and Islands, and the Boer colonies,*	2,807,760	43,495,754
FRENCH AFRICA: Algeria, Senegal, French Soudan and the Niger, Gaboon and Guinea Coast, Congo Region, Somali Coast, Madagascar and Islands,	1,232,454	18,073,890
GERMAN AFRICA: Togoland, Cameroons, South West Africa, East Africa,	920,920	10,200,000
ITALIAN AFRICA: Eritrea, Somaliland,	278,500	850,000
PORTUGUESE AFRICA: Angola, the Congo, Guinea, East Africa, and Islands,	735,304	4,431,970
SPANISH AFRICA: Río de Oro, Adrar, Fernando Po, and Islands,	243,877	136,000
TURKISH AFRICA: Tripoli and the Mediterranean Coast, Egypt,*	798,738	8,117,265
CONGO INDEPENDENT STATE. (Under the sovereignty of the King of the Belgians),	900,000	30,000,000
Total,	8,087,553	117,104,871

* Egypt and the Egyptian Soudan, although nominally under the suzerainty of Turkey, are really controlled by Great Britain, and it is only a matter of time as to when they will be incorporated into the British Empire. Adding Egypt and the Soudan to the Empire would increase the figures above given to 3,207,700 square miles and 50,316,019 population.

The remaining territory of Africa unoccupied is a part of the Great Desert of Sahara and the Independent States of Abyssinia and Liberia. Even this territory, except the last, is destined to pass under the power of the Europeans.

Over a great part of the continent civilization is at a low ebb, and in the Kongo region cannibalism is extensively prevalent. Yet in various regions the natives who have not come in contact with a higher civilization show considerable skill in agriculture and various mechanical arts, as in weaving and metal working. Among articles exported from Africa are gold and diamonds, palm oil, ivory, wool, ostrich feathers, esparto, cotton, caoutchouc, etc. The total annual trade has been estimated at \$500,000,000.

Alaska is now an organized Territory in the Western Division of the North American Union, comprising the extreme northwestern part of the American continent; bounded by the Arctic and Pacific Oceans, Bering Sea, British Columbia, and the Northwest Territories of Canada; gross area, as far as determined, 581,107 square miles; purchased from Russia, in 1867, for \$7,200,000; given a territorial district government in 1884 and enlarged political powers in

1906. The population by latest census was 63,592, but owing to gold discoveries is probably much larger now.

Gold production, and business activities connected therewith, are hastening the development of the country, and in 1908 the yield of the precious metal promises to be larger than ever before.

The waters of Alaska contain over 100 species of food fish, but the principal fisheries are those confined to salmon, cod, and herring. In connection with the Alaska coast there are at least 125,000 square miles of cod fishing banks, the greater part of which still awaits development. Whales and halibut also abound, but as yet they do not support distinct industries.

When the United States acquired this region, and till gold mining set in, fur sealing was the only industry. So far there has been but little done in the line of systematic farming. Congress has continued its appropriation to investigate agricultural possibilities. Oats, wheat, rye, barley, and buckwheat, among cereals; potatoes, turnips, peas, onions, and many minor vegetables; a variety of fruit and excellent hay are grown to advantage.

Algiers the capital of Algeria, founded by the Arabs in 935, called the "silver city," from the glistening white of its buildings as seen sloping up from the sea, presenting a striking appearance, was for centuries under its Bey the headquarters of piracy in the Mediterranean, which only began to cease when Lord Exmouth bombarded the town and destroyed the fleet in the harbor. Since it fell into the hands of the French the city has been greatly improved, the fortifications strengthened, and its neighborhood has become a frequent resort of English people in winter. Population, 145,000.

Alps, the greatest European mountain system, forming the watershed between the Mediterranean and the Atlantic, and the North and Black seas, extending through 14° of longitude and 5° of latitude, with spurs to the Apennines, Pyrenees, Vosges, Hartz, Sudetes, Carpathians, and the Balkan. They are of crescent-like form, and average in height about 7,700 feet; over 400 peaks rise to the perpetual snow line, which averages from 8,000 to 9,000 feet. The central point of all the Alpine chains is the St. Gothard group, which is in a direct line 150 miles from the Mediterranean, 500 miles from the North Sea, and 550 miles from the Baltic. The principal Alpine divisions are: I. The Maritime Alps, consisting of two portions, the first (Ligurian Alps) extending from the vicinity of Nice to the Col de Lauzania in Piedmont; the second (upper Maritime Alps) terminating in Monte Viso, on the western frontier of Piedmont. II. The Cottian Alps, extending from Monte Viso to Mont Cenis, with Piedmontese and French territories on three sides. III. The Graian Alps, extending from Mont Cenis (11,457 feet) to the Col du Bonhomme, between Savoy on the west and Piedmont on the east. IV. The Pennine Alps, from the Col du Bonhomme to Monte Rosa, between Upper Savoy and the Swiss canton of Valais on one side, and Piedmont on the other, including Mont Blanc (15,810 feet), Monte Rosa (15,208), and the Matterhorn

(14,835). V. The Lepontine or Helvetian Alps, including the divergent chain known as the Bernese Alps. This division covers West Switzerland, extending on both sides of the Rhône, dividing Lombardy from Switzerland, one branch terminating at Monte Bernardino, the other extending to and uniting with the Jura, north of the lake of Geneva. This comprises the finest scenery, and includes the Finsteraarhorn (14,106 feet), Furca (14,037), Jungfrau (13,718), Mönch (13,498), Schreckhorn (13,386), and Monte Leon on the Simplon (11,541). VI. The Rhetian Alps, commencing at Monte Bernardino extending along the confines of Switzerland, Italy, and Germany, and terminating at the northeast end of Tyrol. VII. The Noric Alps, extending through Salzburg, North Carinthia, Styria, and Upper and Lower Austria; highest peak, Gross-Glockner (12,776 feet). VIII. The Carnic Alps, extending on the confines of Venetia and Carinthia, from Pellegrino to Terlgou. IX. From the last-named place this chain is prolonged through Görz and Carniola, to Mt. Kleck, under the name of the Julian or Pannonian Alps. X. A southern continuation, called Dinaric Alps, extends from Mt. Kleck through Croatia, Dalmatia, and Herzegovina, to the vicinity of the Balkan. Among the most celebrated passes are those of the Great and Little St. Bernard, St. Gothard, Simplon, and Splügen. Over the Simplon Pass (6,628 feet high), Napoleon constructed a road extending from Brieg to Domo d'Ossola, forty-six and one-half miles, connecting Geneva with Milan. Railway tunnels have been cut through Mont Cenis, St. Gothard, and the Simplon. Ascents, promoted by Alpine clubs, have greatly increased in numbers and daring, despite whirlwinds, avalanches, and glaciers. The vegetation diminishes in beauty, if not in abundance, at an elevation of 1,600 to 1,700 feet, and almost disappears at 6,500 feet, though pasturage, and peculiar genera of plants distinctively known as the "Alpine flora," flourish as high as 8,500 feet. Agassiz distinguished lichen even amid the eternal snows. The fauna includes the chamois, lammergeyer, eagle, wolf, fox, lynx, wild cat, and bear. The Alps are not only remarkable for wonderful mountain masses and freaks of nature, but also for their mineralogy, and for their dairies and cattle raising.

Amazon, Maranon, or Orellana, a river which traverses nearly the whole extent of the equatorial region of South America, running chiefly from west to east, and entering the Atlantic almost at the equator. It is one of the largest rivers in the world, running a course, including windings, of nearly 4,000 miles. The force of its current is so great that it overlays the ocean to a distance of more than 200 miles from the shore. With its enormous tributaries — the Rio Negro, the Madeira, the Japura, and many others — it is estimated that it affords an inland navigation of 50,000 miles. The area drained by its waters is probably not less than 2,500,000 square miles. The width of its mouth, or mouths, is nearly 200 miles.

Amiens (*âh'-me-ân*), an ancient city of France, in the department of Somme, about seventy miles north of Paris. Its cathedral,

commenced in 1220 and finished in 1288, is a magnificent specimen of Gothic architecture, and one of the finest cathedrals in Europe. Amiens was the birthplace of Peter the Hermit. It is chiefly celebrated for the Treaty of Peace, between Great Britain, France, Spain, and Holland, which was signed at Amiens, March 27, 1802. During the war between France and Germany, in 1870, Amiens was taken by the Germans under General Manteuffel, an event which contributed to the subsequent fall of Paris. Amiens has many important manufactures, including cotton-velvets, kerseymeres, etc. Population, 92,065.

Amsterdam, the metropolis of the Netherlands, in the province of North Holland, on the river Amstel, is divided into small islands, connected by bridges, and is almost wholly built upon piles. The site of Amsterdam was originally a peat-bog. About A. D. 1200 it was a small fishing village. It was formerly very strongly fortified, but now its only defense consists in its sluices, which can flood in a few hours the surrounding land. The approach to the city from the Zuyder Zee is intricate and dangerous, owing to the numerous shallows. In the Seventeenth Century Amsterdam was the center of the banking transactions of the world. It is still the chief commercial city of the Netherlands, and has a large trade with both the East and the West Indies. The diamond-cutters of Amsterdam are greatly celebrated. Population, 557,614.

Andes, the great mountain system of South America, extends along its west coast from Cape Horn to the Isthmus of Panama, with a breadth of from forty to four hundred miles, and covers with its offshoots, plateaux, and declivities, nearly a sixth part of that continent. The highest summit is Aconcagua, in Chile, 23,910 feet high. The Andes are composed partly of granite, gneiss, mica, and clay slate, but chiefly of greenstone, porphyry, and basalt, with limestone, red sandstone, and conglomerate. Volcanoes are numerous in the Chilean Andes, where there are no less than nineteen in a state of activity; and the mountains of Ecuador consist almost altogether of volcanic summits, either now or formerly in active ignition. Of these, the most dreaded is Cotopaxi. The Andes are celebrated for their mineral riches — producing gold and silver in large quantities, with platina, mercury, copper, lead, tin, and iron. The limit of perpetual snow in the Andes reaches the height of 18,300 feet in the West Cordillera of Chile; near the equator it is 15,000 feet. The potato is cultivated at an elevation of 9,800 to 13,000 feet; wheat grows luxuriantly at 10,000 feet, and oats ripen in the vicinity of Lake Titicaca at an elevation of 12,795 feet.

Antioch, a city of Syria, in the cyalet of Aleppo, on the left bank of the Asi, formerly the Orontes. It derived its name from Antiochus, a distinguished officer in the service of Philip of Macedon, and was one of the sixteen cities built by his son, Seleucus Nicator. Antioch was a city of great magnificence. It was the residence of the Syrian monarchs, and is said to have been then one of the largest cities in the world. In Roman times, it was the seat of

the Syrian governor, and the center of a widely-extended commerce. It now exhibits scarcely any traces of its former grandeur, except the ruins of the walls built by Justinian, and of a fortress erected by the Crusaders. The modern name is *Antakieh*. Population, about 6,000.

Antwerp (Dutch and German *Antwerpen*, French *Anvers*), the chief port of Belgium, and the capital of a province of the same name, on the Scheldt, about fifty miles from the open sea. It is strongly fortified, being completely surrounded on the land side by a semicircular inner line of fortifications, the defenses being completed by an outer line of forts and outworks. The cathedral, with a spire 400 feet high, one of the largest and most beautiful specimens of Gothic architecture in Belgium, contains Rubens's celebrated masterpieces, the Descent from the Cross, the Elevation of the Cross, and The Assumption. The other churches of note are St. James's, St. Andrew's, and St. Paul's, all enriched with paintings by Rubens, Vandyck, and other masters. Among the other edifices of note are the exchange, the town-hall, the palace, theater, academy of the fine arts, picture and sculpture galleries, etc. The harbor accommodation is extensive and excellent, new docks and quays having been built in the past few years. The shipping trade has greatly advanced in recent times, and is now very large, the goods being largely in transit. There are numerous and varied industries. Antwerp is mentioned as early as the Eighth Century, and in the Eleventh and Twelfth it had attained a high degree of prosperity. In the Sixteenth Century it is said to have had a population of 200,000. The wars between the Netherlands and Spain greatly injured its commerce, which was almost ruined by the closing of the navigation of the Scheldt in accordance with the peace of Westphalia (1648). It was only in the Nineteenth Century that its prosperity had revived, and it is now one of the important active seaports of Western Europe. Population, 304,951.

Aqueduct (Lat. *aqua*, water, *duco*, to lead), an artificial channel or conduit for the conveyance of water from one place, to another: more particularly applied to structures for conveying water from distant sources for the supply of large cities. Aqueducts were extensively used by the Romans, and many of them still remain in different places on the Continent of Europe.

The following are the names of the Roman aqueducts, chronologically arranged:

1. The *Aqua Appia*, begun by and named after the censor Appius Claudius about 313 B. C. It ran a course of between six and seven miles, its source being in the neighborhood of Palestrina. With the exception of a small portion near the Porta Capena, it was subterranean. No remains of it exist.

2. *Anio Vetus*, constructed about 273 B. C. by M. Curius Dentatus. It also was chiefly underground. Remains may be traced both at Tivoli and near the Porta Maggiore. From the point at which it quitted the river Anio, about twenty miles above Tivoli, to Rome, is about forty-three miles.

3. *Aqua Marcia*, named after the prætor Quin-

tus Marcius Rex, 145 B. C., had its source between Tivoli and Subiaco, and was consequently about sixty miles long. The noble arches which stretch across the Campagna for some six miles on the road to Frascati, are the portion of this aqueduct which was above ground.

4. *Aqua Tepula* (126 B. C.) had its source near Tusculum, and its channel was carried over the arches of the last-mentioned aqueduct.

5. *Aqua Julia*, constructed by Agrippa, and named after Augustus, 34 B. C. Like the Tepulan, it was carried along the Marcean arches, and its source was also near Tusculum. Remains of the three last-mentioned aqueducts still exist.

6. *Aqua Virgo*, also constructed by Agrippa, and said to have been named in consequence of the spring which supplied it having been pointed out by a girl to some of Agrippa's soldiers when in search of water. The Aqua Vergine, as it is now called, is still entire, having been restored by the popes Nicholas V. and Pius IV., 1568. The source of the Aqua Virgo is near the Anio, in the neighborhood of Torre Salona, on the Via Collatina, and about fourteen miles from Rome. The original object of this aqueduct was to supply the baths of Agrippa; its water now flows in the Fontana Trevi, that of the Piazza Navona, the Piazza Farnese, and the Barcaccia of the Piazza di Spagna. The water of the Aqua Virgo is the best in Rome.

7. *Aqua Alsietina*, constructed by Augustus, and afterwards restored by Trajan, and latterly by the popes. This aqueduct, now called the Aqua Paolo, is situated on the right bank of the Tiber, and supplies the fountains in front of St. Peter's and the Fontana Paola on the Montorio. Its original object was to supply the Naumachia of Augustus which was a sheet of water for the representation of sea fights.

8. *Aqua Claudia*, commenced by Caligula and completed by Claudius, 51 A. D. A line of magnificent arches which formerly belonged to this aqueduct still stretches across the Campagna, and forms one of the grandest of Roman ruins. It was used as a quarry by Sextus V. for the construction of the Aqua Felici, which now supplies the Fountain of Termini, and various others in different parts of the city.

9. *Anio Novus*, which was the most copious of all the Roman fountains, though inferior to the Marcia in the solidity of its structure; it was also the longest of the aqueducts, pursuing a course of no less than sixty-two miles. By the two last-mentioned aqueducts the former supply of water was doubled. In addition to the aqueducts already mentioned, there was the Aqua Trajana, which may, however, be regarded as a branch of the Anio Novus and several others of later construction, such as the Antoniana, Alexandrina, and Jovia, none of which were to be compared with the older ones in extent and magnificence.

Other great aqueducts were built in other parts of the Roman Empire. One of the most perfect was that of Nîmes, including the bridge spanning the valley of the river Gard, and now known as the Pont du Gard. In the reign of Louis XIV. a magnificent aqueduct was constructed for supplying Versailles. The bridge of Maintenon over which it is carried is seven-eighths

of a mile long, upward of 200 feet high, and contains three tiers of arches, 242 in each tier, with fifty feet span.

The new Croton aqueduct of New York is the finest of modern times. The old Croton was completed in 1842, having been five years in building. The whole expense, including \$1,800,000 for distributing pipes, right of way, and other outlays, was \$10,375,000; including commissions and interest, the cost was \$12,500,000. Its length, from its source at the Croton River to the distributing reservoir on Fifth Avenue and 40th Street, is forty and a half miles. It is carried through sixteen tunnels, having an aggregate length of 6,841 feet, cut mainly through gneiss rock. A large part of the open cutting is also rock work. A dam across the Croton River raised the water forty feet and formed the Croton Lake, which covers about 400 acres. From the dam to the Harlem River, nearly thirty-three miles, the aqueduct is of stone, brick, and cement arched over and under, except in the rock tunnels where the roofing arch is dispensed with. Its capacity is 115,000,000 gallons daily. The new Croton aqueduct was completed in 1890 at a cost of \$20,000,000, and, together with that of Vienna, is the most important of modern times.

Aquitania, the Roman name of a part of Gaul, originally including the country between the Pyrenees and Garonne, but afterwards enlarged by the Emperor Augustus, when he divided Gaul into four provinces, by the addition to it of the country between the Garonne and the Loire (A. D. 27). From 1152 to 1451 Aquitaine was, except for several brief periods, an English possession. It afterwards was named Guienne, and now forms the departments of Gironde and Lot-et-Garonne.

Architecture (*ar'-ke-tekt-yur*), the art of building, embracing every kind of structure except works of defense and ships. Throughout the globe remains of edifices proclaim an early possession of certain degrees of architectural knowledge. The most remarkable vestiges of these primitive structures, save the Celtic monuments, were once supposed to be the works of giants or Cyclops like those mentioned in the *Odyssey*. By whom they were erected, however, is unknown, though they have been attributed to the Pelasgians. The walls of the cities and of the sacred enclosures and tombs were composed of blocks of stone of a polygonal form well adjusted. No cement was used, the interstices being filled with small stones. At times they present horizontal layers whose upright joints are variously inclined. At Mycenæ and Tiryns several examples are to be found. No entire architectural monument has come down to us from Babylon or Nineveh, nor from the Phenicians, the Hebrews, the Syrians, the Philistines, and many other nations. Of the very ancient Chinese monuments, too, we have no trace. Japan, Siam, and the islands of the Indian Ocean abound in ancient ruins once sacred to the divinities of the Buddhist faith. The Hindoo structures are remarkable for their colossal size and their severe and grotesque appearance.—The architectural types of all other structures of antiquity sink into insignificance when compared with those of the Egyptians.

Their earliest works are the hypogæa or spea, wherein their dead were interred, and which served also as subterranean temples. These were the prototypes of the open-air temples, of which the most ancient example is perhaps that at Amada. The plan is very similar to that of the hypogæa, or caves. The walls, ceilings, and columns were decorated with figures in bas-relief and hieroglyphics richly colored, generally with yellow, red, green, and blue. The palaces were constructed upon a plan very similar to that of the temples. Besides their wonderful cities of the dead, the Egyptians reared their stupendous pyramids, the most gigantic monuments existing. The pyramidal shape pervades most of their works, the walls of their temples inclining inward. Columns were employed to form porticoes to their interior courts, and also to support the ceilings. The shafts, of different forms, being conical, or cylindrical, or bulging out at the base, sometimes presented a smooth surface; they were rarely fluted, and generally covered with hieroglyphics. The capitals resemble the lotus, either spreading out at the top or bound together, assuming the bulbous shape; above is a square tablet forming the abacus.—The Grecian monuments belonged to the states, and upon the public works the governments lavished fabulous sums. Hence the Grecian cities were adorned with temples, theaters, odeons, gymnasiums, choragic monuments, and the like.

The earliest architectural remains of Greece are of unknown antiquity, and consist of massive walls built of huge blocks of stone. In historic times the Greeks developed an architecture of noble simplicity and dignity. This style is of modern origin compared with that of Egypt, and the earliest remains give indications that it was in part derived from the Egyptians. It is considered to have attained its greatest perfection in the age of Pericles, or about 460–430 B. C. The great masters of this period were Phidias, Ictinus, Callicrates, etc. All the extant buildings are more or less in ruins. The style is characterized by beauty, harmony, and simplicity in the highest degree. Distinctive of it are what are called the *orders* of architecture, by which term are understood certain modes of proportioning and decorating the column and its superimposed entablature. The Greeks had three orders, called respectively the *Doric*, *Ionic*, and *Corinthian*. Greek buildings were abundantly adorned with sculptures, and painting was extensively used, the details of the structures being enriched by different colors or tints. Lowness of roofs and the absence of arches were distinctive features of Greek architecture, in which, as in that of Egypt, horizontality of line is another characteristic mark. The most remarkable public edifices of the Greeks were temples, of which the most famous is the Parthenon at Athens. Others exist in various parts of Greece as well as in Sicily, Southern Italy, Asia Minor, etc., where important Greek communities were early settled. Their theaters were semi-circular on one side and square on the other, the semi-circular part being usually excavated in the side of some convenient hill. This part, the auditorium, was filled with concentric seats, and

might be capable of containing 20,000 spectators. A number exist in Greece, Sicily, and Asia Minor, and elsewhere. No remains of private houses are known to exist. By the end of the Peloponnesian War (say 400 B. C.) the best period of Greek architecture was over; a noble simplicity had given place to excess of ornament. After the death of Alexander the Great (323) the decline was still more marked.

Among the Romans there was no original development of architecture as among the Greeks, though they early took the foremost place in the construction of such works as aqueducts and sewers, the arch being in early and extensive use among this people. As a fine art, however, Roman architecture had its origin in copies of the Greek models, all the Grecian orders being introduced into Rome, and variously modified. Their number, moreover, was augmented by the addition of two new orders—the *Tuscan* and the *Composite*. The Romans became acquainted with the architecture of the Greeks soon after 200 B. C., but it was not till about two centuries later that the architecture of Rome attained (under Augustus) its greatest perfection. Among the great works now erected were temples, aqueducts, amphitheaters, magnificent villas, triumphal arches, monumental pillars, etc. The amphitheater differed from the theater it being a completely circular or rather elliptical building, filled on all sides with ascending seats for spectators and leaving only the central space, called the *Arena*, for the combatants and public shows. The Coliseum is a stupendous structure of this kind. The *Thermæ*, or baths, were vast structures in which multitudes of people could bathe at once. Magnificent tombs were often built by the wealthy. Remains of private residences are numerous, and the excavations at Pompeii in particular have thrown great light on the internal arrangements of the Roman dwelling-house. Almost all the successors of Augustus embellished Rome more or less, erected splendid palaces and temples, and adorned, like Hadrian, even the conquered countries with them. But after the period of Hadrian (117–138 A. D.) Roman architecture is considered to have been on the decline. The refined and noble style of the Greeks was neglected, and there was an attempt to embellish the beautiful more and more. This decline was all the more rapid latterly from the disturbed state of the empire and the incursions of the barbarians.

In Constantinople, after its virtual separation from the Western Empire, arose a style of art and architecture which was practiced by the Greek Church during the whole of the Middle Ages. This is called the *Byzantine style*. Then appeared the dome, the glory of the Byzantine school, the requirements which led to the abandonment in the ground plan of churches of the Latin cross in favor of the Grecian cross, whose branches are of equal length. The dogmas of the iconoclasts obliged the architects to seek some other means than sculpture of enriching their temples; hence the profusion of Mosaic work. Their ornaments represented foliage in bass-relief and interlaced lines. Under Belisarius and Narses the dome was introduced into

Italy. The Byzantine style also became the basis of the new Persian, Russian, and Saracen schools. We find its peculiarities existing during the Middle Ages in Greece, Italy, Sicily, Spain, Arabia, and India. Among the chief edifices of this school are St. Sophia at Constantinople, St. Mark's at Venice, and San Vitale at Ravenna. The Saracens and Moors introduced into Europe certain forms of architecture founded on the remains of the Grecian school, blended with the Oriental elements of the Byzantine. Their chief peculiarity was in the form given to the arch. The Saracenic arch was of greater depth than width. The Moorish style was distinguished by arches in the shape of a horseshoe or a crescent. Their mural ornamentations, styled arabesque, presented more varied designs of graceful and ingenious combinations of geometrical and floral traceries than had before been known. The Lombards, who possessed themselves of North Italy after the middle of the Sixth Century, originated a complete and systematized style, which the people of each country where it was introduced modified to suit their climate, customs, and wants. Its branches are variously known as the Merovingian, Carolingian, Saxon, Norman, etc., which together were styled old Gothic, and out of which grew the pointed style, after the introduction into Europe of the pointed arch. During the Middle Ages the study of the arts, sciences, and literature took refuge in the monasteries. The influence of the clergy declined, however, as free institutions arose, and the pointed Gothic must be regarded as the work rather of secular than of clerical architects. This change was doubtless made more complete by the increasing importance of the fraternity of Freemasons, who became in time sole directors or supervisors of all the religious structures. Protected by the Church, architecture in their hands passed from the old Gothic through various phases of the pointed style. This style is customarily divided into three periods: the first, or primary, dating from the end of the Twelfth Century; the second, or decorated, or rayonnant, from the commencement of the Fourteenth Century; and the third, or perpendicular, or flamboyant, from the end of the Fourteenth to the Sixteenth Century. The essential element of this style is the pointed arch. It is during the first period that the spire surmounting the tower becomes of so great importance. Buttresses and flying buttresses also form a striking feature.

The windows gradually assume a less pointed form; the clustered columns composing the columnar piers are more elaborate; and the ribs, bosses, and carved ornaments throughout have more relief and are more elegant. The third period is remarkable for its profuse ornamentation. The panelled walls, with their niches, tabernacles, canopies, and screens, highly decorated, the flying buttresses enriched with pinnacles and tracery, the corbelled battlements and turrets, and the balustrades intricately carved and pierced, are characteristic of the epoch.

During the Fourteenth Century, or the *trecento* period, we discover in Italy, in the secular structures more especially, numerous examples exhibiting a return to the classic styles. At length, in

the Sixteenth Century, the classic taste prevailed throughout Europe, and hence the different names, *cinquecento*, *renaissance*, revival, given to that style which supplanted everywhere the so-called Gothic architecture. Brunelleschi of Florence (died 1444) was among the first to encourage and disseminate this taste for a return to the classic architecture. He had numerous distinguished followers, among whom were Alberti, Bramante, Peruzzi, Sangallo, San Micheli, Palladio, and Scamozzi. In their productions the different elements of the classic style are happily introduced. The application of these elements to ecclesiastical, and more especially to secular, structures, accounts for the liberties taken with them, among which are the following: the great variety given to the intercolumniation of columns; the superposition of different orders, with and without broken entablatures; the frequent use of engaged columns and pilasters; the various forms given to the pediments; the substitution of columns for piers supporting arcades; the decoration of blank walls with medallions, foliage, and scrolls of various sorts, together with designs of animals arranged in imitation of ancient arabesques. These and many other so-called liberties originated a style peculiarly adapted to the wants of modern civilization. Michael Angelo made many innovations. Instead of superimposing several orders, distinguishing as many stories, he employed one, comprising the whole height of the edifice.

The spirit of scientific inquiry of the last hundred years, having enlarged our knowledge of architectural forms and promoted a more exhaustive study of the principles of the art, has given rise to two movements directed either to improving the so-called classical style, or to supplanting it altogether. These movements are known as the Greek and the Gothic revival. Both took their origin in England. The Greek revival dates from 1762, when Messrs. Stuart and Revett published the results of their researches among the antiquities of Attica. The Gothic revival may be said to date from Horace Walpole's works at Strawberry Hill about 100 years ago, but its modern development did not begin till about 1820. In England and the United States the Greek revival was merely a reproduction of the Greek buildings or parts of buildings; but in France it showed enough vigor to throw aside the methods of the ancients, and to create a new style, which has been called the *néo-grecque*, or, to distinguish it from the Romanesque, founded upon Roman methods, the *romantique*. The column of July in Paris, parts of the Palais de Justice, the Bibliothèque Ste. Geneviève, and the Palais des Beaux-Arts, by MM. Duc, Labrousse, and Duban, are the typical monuments of this style. Meanwhile, in England, the Greek movement having failed, the ascendancy of the Gothic style was finally established, when in 1840 it was decided to adopt it for the new houses of parliament. This great undertaking gave an immense impulse to the Gothic movement. Subsequent works show not only greater knowledge and skill, but more freedom of mind, both in secular and ecclesiastical work; and the "Victorian Gothic," as it has

been called, differs as much from the various Gothic styles of the Middle Ages as they differ from each other. A similar movement has meanwhile been going on in France and Germany, but less successfully. In Germany the proper pointed Gothic has been taken up, stimulated by the great works for the completion of the Cologne cathedral. The Votive Church at Vienna is perhaps the most noteworthy example of this movement. The adherents of the Gothic revival in this country are as numerous and devoted as those of the Greek revival; but there is less partisanship here than abroad, and it is more common for architects to practice in both ways at once.

America can hardly claim to have produced a special school of architecture, but there are many public edifices that deserve to be mentioned as specimens of architectural beauty. Many of our best architects are now designing in what is termed the "colonial" style, which is an adaptation of the Dutch style so much in vogue in this country during the last two centuries. Comparatively little attention was paid to architecture before the Civil War, but the growing taste and prosperity of the country have enabled architects to erect many handsome dwelling-houses, which will in no way suffer by comparison with those of European cities. Brick, stone, and iron are now much used in this country, and the Gothic style has been widely adopted for church edifices. Trinity Church in New York, completed in 1846, one of the first great Gothic edifices of stone in the United States, Grace Church, and St. Patrick's Cathedral, in the same city, are fine specimens of that style. The Temple Emmanuel is a reproduction of Saracenic forms. The Roman Catholic Cathedral in Philadelphia is modeled after the Italian edifices of the time of Michael Angelo. Trinity Church, of Boston, is the best example of the Romanesque, influenced by the Byzantine, copied from edifices erected in France during the Twelfth Century. The new "Old South Church" in Boston, is a building of strong form and decoration. The museum of art in the same city inclines to the Venetian Gothic, and among the more prominent of the later renaissance buildings are the Boston and New York post-offices, built of granite, brick, and iron. The lofty "Tribune" building is a noticeable feature of the lower part of New York. The War, State, and Navy building, of Washington, D. C., The Grand Central railroad depot of New York, and the new Lowell and Providence depots in Boston, are splendid and well-appointed structures. The capitol at Washington, the corner stone of which was laid in 1793, is in the style of renaissance. Extensive additions have been made to both wings since 1850. The material used is a handsome marble, the original building being of sandstone. The treasury building and the patent office are in the Greek style, as are the sub-treasury and custom-house, at New York, Girard College, Philadelphia, and the Alabama State capitol. Of public buildings in Gothic form, a high rank must be given to the Connecticut State capitol at Hartford, the new capitol at Albany, N. Y., and the Ohio capitol at Columbus. In Florida

and California many examples of the Spanish type are to be found. Many fine buildings have been erected for commercial purposes in various cities of the United States, which justly deserve the title of "business palaces," and are well suited to accommodate our merchant princes. Although architects are somewhat fettered by the small lots of twenty-five feet in width, prevailing in most of our cities, many dwelling-houses present remarkably handsome exteriors and interiors. Fifth Avenue, in New York, is in this respect one of the finest thoroughfares in the world. The apartment houses, which have come into fashion since the late war, covering more than one lot, have fared better in an artistic point of view, of which the Stevens house of New York is one of the notable examples. Many beautiful country residences are to be found at Newport, Long Branch, and scattered throughout the country.

Arctic Exploration. Frobisher, Davis, Hudson, Bylot and Baffin successively, were the first to engage in an effort to reach the North Pole. Then after an lapse of nearly two centuries the record of Arctic research was taken up by such men as Ross and Parry (1818), who were followed by Sir John Franklin. Franklin set sail in command of the "Erebus" and "Terror," in May, 1845, and by the month of July reached Whalefish Islands in Davis' Strait. On the 26th of that month the ships were seen in latitude $74^{\circ} 48'$ north; longitude $66^{\circ} 13'$ west; after which no further intelligence concerning them was received. It was not, however, till the beginning of 1847 that serious apprehensions were entertained regarding the expedition. The most strenuous efforts were then made by both the English and the Americans to obtain tidings of Franklin. Among the numerous expeditions sent out by sea and land in search of the missing navigator and his company, were those of Richardson and Rae (by land, 1847), of Moore (1848-52), of Kellet (1848-50), of Sheddin (1848-50), of Sir James Ross (1848-49), of Saunders (1849-50), of Austin and Ommaney (1850-51), and of Penny (1850-51). In 1850 MacClure set out by Behring's Strait on a search expedition, and to him is due the honor of having ascertained the existence of the long-sought-for northwest passage. Other expeditions between 1850 and 1855 were: Collinson's, Rae's, Kennedy's, Maguire's, Belcher's, MacClintock's, and Ingfield's. In 1853, Rae, proceeding to the east side of King William Sound, obtained the first tidings of the destruction of Franklin's ships. In 1855, Anderson, proceeding up the Great Fish River, also discovered relics of the "Erebus" and "Terror." At length MacClintock (1857-59), set all doubts at rest regarding the fate of Sir John Franklin and his companions, by establishing the fact that they had died in 1847. Dr. Kane made some important observations during the progress of his Arctic explorations, 1853-55. Then followed the expeditions of Dr. Isaac Hayes in 1860 and 1869, and those of Captain Charles Hall in 1860 and 1864. Finally, Lieutenant Schwatka headed an overland expedition in 1879-80 in search of the journals of the Franklin expedition. Of later expeditions may be mentioned that of the unfortunate and ill-advised

"Jeannette" (1879), sent out under the command of Lieutenant DeLong, to explore the Arctic Sea through Behring's Strait; those of Mr. Leigh Smith in 1880 and 1881, in the latter of which he lost his vessel; and that of Sir C. Young for the relief of the former. An expedition sent out by the United States under Greely (1881-84), reached $83^{\circ} 24'$ north. In 1888 South Greenland was crossed by Nansen, and March 14, 1895, he attained $83^{\circ} 59'$. In 1892 Peary traced Greenland to 82° north.

In 1896, Dr. Fridtjof Nansen, of Norway, returned from an Arctic expedition, after an absence of more than three years. The most northerly point reached by him was $86^{\circ} 14'$ north latitude, or 200 miles nearer the Pole than ever reached before. He found no indications of land north of 82° north latitude, and in the higher latitudes no open sea, only narrow cracks in the ice.

The following are the farthest points of north latitude reached by Arctic explorers, up to the present date:

YEAR	EXPLORERS	NORTH LATITUDE
1607.	Hudson,	$80^{\circ} 23' 0''$
1773.	Phipps,	$80^{\circ} 48' 0''$
1806.	Scorsby,	$81^{\circ} 12' 42''$
1827.	Parry,	$82^{\circ} 50' 0''$
1874.	Meyer (on land),	$82^{\circ} 0' 0''$
1875.	Markham and Parr (Nares' expedition),	$83^{\circ} 20' 26''$
1876.	Payer,	$83^{\circ} 07' 0''$
1882.	Lockwood (Greely's party),	$83^{\circ} 24' 0''$
1896.	Nansen,	$86^{\circ} 14' 0''$
1900.	Abruzzi,	$86^{\circ} 33' 0''$

In 1902 Lieutenant Peary attained the farthest north in the western hemisphere, latitude $84^{\circ} 17'$, 156 statute miles short of Abruzzi's record, and 404 statute miles from the Pole. He pushed the advance on the American side thirty miles beyond his own best record established in 1901, and sixty miles beyond the point reached by Lockwood and Brainerd of the Greely expedition in 1882, which had stood as the American record for nineteen years. He encountered the greatest dangers in his efforts to reach the Pole, and showed ability and endurance which place him high in the rank of explorers. The Baldwin-Ziegler expedition, sent out under command of Evelyn Baldwin, by William Ziegler, a Brooklyn capitalist, and which proceeded by way of Franz Josef Land, proved a complete failure, and returned without important results, in August, 1902, after costing Mr. Ziegler \$350,000.

Arctic Ocean, or Northern Icy Sea, is that part of the ocean which extends from the Arctic circle, latitude $66^{\circ} 30'$ north, to the North Pole; it washes the whole of the northern coasts of Europe, Asia, and America, and communicates on the northwest of Europe with the Atlantic; and on the northeast of Asia with the Pacific by Behring Strait. It forms the White Sea in Europe, and the gulfs of Kara, Obi, and Yenesei, in Siberia; in North America, where it takes the name of the "Polar Sea," it forms Baffins' Bay. During winter ice extends in every direction round the Pole, covering a space of from 3,000 to 4,000 miles in diameter; and even during the four months of summer the surface of this sea is at the freezing-point. Icebergs and fields of ice are continually drifting

south into the Atlantic,—the former sometimes extending to 100 miles in length, and from twenty-five to thirty miles in diameter.

Argentine Republic, formerly called the United Provinces of La Plata, is a vast country of South America; extreme length, 2,300 miles; average breadth a little over 500 miles. It is bounded on the north by Bolivia; on the east by Paraguay, Brazil, Uruguay, and the Atlantic; on the south by the Antarctic Ocean; and on the west by the Andes. With the exception of the northwest, where lateral branches of the Andes run into the plain for 150 or 200 miles, and the province of Entre Rios, which is hilly, the characteristic feature of the country is the great monotonous and level plains called pampas. In the north, these plains are partly forest-covered, but all the central and south parts present vast treeless tracts, which afford pasture to immense herds of horses, oxen, and sheep, and are varied in some places by brackish swamps, in others by salt steppes. European grains and fruits, including the vine, have been successfully introduced, and are cultivated in most parts of the republic; countless herds of cattle and horses and flocks of sheep are pastured on the pampas, and multiply there very rapidly. Gold, silver, nickel, copper, tin, lead, and iron, besides marble, jasper, precious stones, and bitumen, are found in the mountainous districts of the northwest, while petroleum wells have been discovered on the Rio Verméjo; but the development of this mineral wealth has hitherto been greatly retarded by the want of proper means of transport. As a whole, there are not extensive forests in the country, except in the region of the Gran Chaco (which extends also into Bolivia), where there is known to be 60,000 square miles of timber. Thousands of square miles are covered with thistles, which grow to a great height in their season. Cacti also form great thickets. Peach and apple trees are abundant in some districts. The native fauna includes the puma, the jaguar, the tapir, the llama, the alpaca, the vicuña, armadillos, the rhea or nandu, a species of ostrich, etc. The climate is agreeable and healthful, 97° being about the highest temperature experienced. As a whole, this vast country is very thinly inhabited, some parts of it as yet being very little known. The native Indians were never very numerous, and have given little trouble to the European settlers. Tribes of them yet in the savage state still inhabit the less-known districts, and live by hunting and fishing. Some of the Gran Chaco tribes are said to be very fierce, and European travelers have been killed by them. The European element is strong in the republic, more than half of the population being Europeans or of pure European descent. Large numbers of immigrants arrive from Southern Europe, the Italians having the preponderance among those of foreign birth. The typical inhabitants of the pampas are the Gauchos, a race of half-breed cattle-rearers and horse-breakers; they are almost continually on horseback, galloping over the plains, collecting their herds and droves, taming wild horses, or catching and slaughtering cattle. In such occupations they acquire a

marvelous dexterity in the use of the lasso and bolas.

Armenia, a country of Western Asia, extending from the Caucasus on the north to the mountains of Kurdistan on the south, and from the Euphrates on the west, to near the Caspian on the east. It is subdivided among the Turkish pashalics of Erzeroum, Kars, and Van, and parts of the Persian province of Azerbaijan, and the Russian Government of Transcaucasia. The native Armenians, estimated at one-seventh of the whole population, are distinguished for their enterprise in commercial and banking transactions. The Armenian Christians mostly belong to an ecclesiastical establishment of their own, similar in many respects to the Greek Church; but many have adhered to the Roman Catholic faith. Chief towns, Kars and Erzeroum. Christian population about 1,000,000, with an equal number of Kurds, Turks, Tartars, etc. In 1878, after the Russo-Turkish War, Russia acquired the districts of Kars and Ardahan. The Armenians suffered severely in life and property from the invasion of Kurds in 1882, and in 1895, such frightful massacres took place that the great powers of Europe were moved to demand thorough measures of reform from the Sultan in the government of Armenia. The Sultan temporized and delayed until the powers sent armed ships to Constantinople.

Arles (*arl*), a city of France, in the department of Bouches du Rhône, about forty-six miles northwest of Marseilles. Arles was the Arelate of the Romans. It was an important town at the time of Cæsar's invasion, about 59 B. C., and afterwards received a Roman colony, of which there are many remains, including a magnificent amphitheater, and a palace built by the Emperor Constantine, about A. D. 306. Arles was the seat of the Merovingian kings in the Sixth Century. It now carries on a considerable trade, and has manufactures in silk, etc., besides furnishing a market for the products of the surrounding country. The population of the city in 1908 was about 24,567.

Athens, the capital of Greece, situated on a peninsula formed by the rivers Ilissus and Cephesis, about four miles from the eastern shore of the Gulf of Egina. It is built at the base of the hill on which stands the Acropolis, and has been greatly improved architecturally of late years, since the new kingdom of Greece was established. The royal palace, completed in 1843, is one of its most imposing modern structures; the city is the seat of a bishopric of the Greek Church; and it has a university, attended usually by upwards of 1,000 students. Athens is, however, chiefly interesting on account of its history, and through its possession of those monuments of antiquity which still attest its former greatness. All these are on or close around the Acropolis. Chief of these are the remains of Pelasgic walls and dwellings; the Propylæa, or Gate; the Pinacotheca; Temple of Wingless Victory, and, above all, the Parthenon, built by Pericles, much destroyed by an explosion in the Seventeenth Century. Athens is said to have been founded about 1550 B. C. In the time of Pericles (460–429 B. C.), it contained 10,000 houses, with a population estimated at from

120,000 to 180,000; and even after its occupation by the Romans it continued to be a great and flourishing city, and one of the chief seats of learning, till it was ravaged by the Goths, in the Fourth Century, falling ultimately, after many changes, into the hands of the Turks, in whose possession it remained from A. D. 1456 to 1832. Of the ancient city, the principal remains are the Parthenon, or Temple of Athena, and a Temple of Theseus, both built also in the Fifth Century before Christ. There are also the remains of a grand temple to Zeus (Jupiter), to the southeast of the Acropolis, and a short distance to the west is the Areopagus. As the capital of the modern kingdom of Greece, the trade of Athens has considerably revived, and a railway now connects the city with the port of the Piræus, or Porto Leone. Population, 111,486.

Athos, a mountain on the coast of Macedonia, at the extremity of the long peninsula which projects into the Ægean Sea, between the Gulfs of Contessa and Monte Santo. The mountain is now known as "Monte Santo," or Holy Mountain, from the large number of monasteries, convents, chapels, and other sacred spots, belonging to the Greek Church, that are scattered over its sides. These foundations are traced to the reign of the Emperor Constantine. The name "Athos" was, however, properly applied to the whole mountainous peninsula, which is joined to the mainland by a low flat isthmus, not more than a mile and a half across, and only about fifteen feet above the sea level. When Xerxes invaded Greece (480 B. C.) he cut a channel across this isthmus, traces of which are still visible.

Atlantic Ocean, one of the five great hydrographical divisions of the globe, occupies an immense longitudinal valley, and extends from the Arctic Circle on the north to the Antarctic Circle on the south; bounded west by the coast of America to Cape Horn, and thence by a line continued on the same meridian to the Antarctic Circle; and east by the shores of Europe and Africa to the Cape of Good Hope, and thence prolonged on the meridian of Cape Agulhas till it meets the Antarctic Circle. Its extreme breadth is about 5,000 miles, and its area 25,000,000 square miles. The North Sea, or German Ocean, the Caribbean Sea, and the Irish Sea, form portions of the Atlantic; but the Baltic and Mediterranean, which communicate with it by narrow channels, are properly considered separate seas. The chief islands are, in Europe, the British Isles and Iceland; in Africa, the Azores, Madeira, and Canary Islands, and the archipelago of the Gulf of Guinea; in America, the Antilles, Newfoundland, and the islands of the Gulf of St. Lawrence. The chief affluents are, in Europe, the Rhine, Loire, and Tagus; in Africa, the Senegal, Niger, and Congo; and in America, the St. Lawrence, Mississippi, Orinoco, Amazons, and La Plata. The bed of the Atlantic Ocean is very unequal in elevation, in some places rising in immense sand-banks to within a few fathoms of the surface, and in others sinking to unfathomable depths. The trade-winds blow regularly in the intertropical portion of the Atlantic; beyond these limits the winds are variable. From the prevalence of south-

west winds in the North Atlantic, the voyage from America to Europe, on an average of six years' sailing between New York and Liverpool, is performed in twenty-three days, while the return voyage requires forty days. Enormous numbers of fish are found in the Atlantic Ocean, and herring and cod fishing are important branches of industry in Northern Europe and America. In the higher latitudes of the North and South Atlantic, navigation is impeded by immense icebergs, which are floated from the polar regions; and although these are generally melted before reaching the frequented parts of the ocean, they have occasionally been met with as far south as latitude 40° 45' in the North Atlantic, and in the vicinity of the Cape of Good Hope in the South Atlantic Ocean.

Australasia, a division of the globe usually regarded as comprehending the islands of Australia, Tasmania, New Zealand, New Caledonia, the New Hebrides, the Solomon Islands, New Ireland, New Britain, the Admiralty Islands, New Guinea, and the Arru Islands, besides numerous other islands and island groups; area, 3,259,199 square miles, population about five millions. It forms one of three portions into which some geographers have divided Oceania, the other two being Malaysia and Polynesia.

Australia (older name, New Holland), the largest island in the world, a sea-girt continent, lying between the Indian and Pacific oceans, southeast of Asia; greatest length, from west to east, 2,400 miles; greatest breadth from north to south, 1,700 to 1,900 miles. It is separated from New Guinea on the north by Torres Strait, from Tasmania on the south by Bass Strait. It is divided into two unequal parts by the Tropic of Capricorn, and is occupied by what are known as the original states of the Commonwealth of Australia.

The area and the population (exclusive of aborigines) of the different states composing the Commonwealth of Australia in 1905 were as follows:

Original States	Area Sq. Mi.	Pop.
New South Wales,	310,367	1,496,050
Victoria,	87,884	1,218,571
Queensland,	668,497	528,048
South Australia,	903,690	374,398
Western Australia,	975,920	254,705
Tasmania,	26,215	181,106
Total,	2,972,573	4,052,878

Sydney, the capital of New South Wales, Melbourne, the capital of Victoria, Adelaide, the capital of South Australia, and Brisbane, the capital of Queensland, are the chief towns. Australia is a region containing a vast quantity of mineral wealth. Foremost come its rich and extensive deposits of gold, which, since the precious metal was first discovered, in 1851, have produced a total of more than \$1,350,000,000. The greatest quantity has been obtained in Victoria, but New South Wales and Queensland have also yielded a considerable amount. Probably there are rich stores of gold as yet undiscovered. Australia also possesses silver, cop-

per, tin, lead, zinc, antimony; mercury, plum-bago, etc., in abundance, besides coal (now worked to a considerable extent in New South Wales) and iron. Various precious stones are found, as the garnet, ruby, topaz, sapphire, and even the diamond. Of building stone there are granite, limestone, marble, and sandstone. The Australian flora presents peculiarities which mark it off by itself in a very decided manner. Many of its most striking features have an unmistakable relation to the general dryness of the climate. The trees and bushes have, for the most part, a scanty foliage, presenting little surface for evaporation, or thick leathery leaves well fitted to retain moisture. The Australian fauna is almost unique in its character. Its great feature is the nearly total absence of all the forms of mammalia which abound in the rest of the world.

Austria, or Austria-Hungary. is an extensive monarchy in Central Europe, inhabited by several distinct nationalities, and consisting of two semi-independent countries, each with its own parliament and government, but with one common sovereign, army, and system of diplomacy, and also with a parliament common to both. Its greatest length from east to west is about 860 miles; its greatest breadth from north to south, with the exclusion of Dalmatia and part of Croatia, is about 400 miles; bounded south by Turkey, the Adriatic Sea, and the kingdom of Italy; west by Switzerland, Bavaria, and Saxony; north by Prussia and Russian Poland; and east by Russia and Roumania. On the shores of the Adriatic, along the coasts of Dalmatia, Croatia, Istria, etc., lies its only sea frontage.

None of the European states, with the exception of Russia, exhibits such a diversity of race and language among their population as does the Austrian Empire. The Slavs, who amount to above 19,000,000 or 45 per cent. of the total population, are the chief of the component nationalities of the monarchy in point of numbers, forming the great mass of the population of Bohemia, Moravia, Carniola, Galicia, Dalmatia, the kingdom of Croatia and Slavonia, and Northern Hungary, and half the population of Silesia and Bukowina. This preponderance, however, is only apparent, as none of the other races are split up into so many branches, differing so greatly from each other in language, religion, civilization, manners, and customs. These branches are the North Slavic Czechs, Moravians, and Slovaks, the Ruthenians and Poles, and the South Slavic Slovenians, Croats, Serbs, and Bulgarians. The Germans, about 10,570,000 in number, are scattered over the whole monarchy, and form almost the sole population of the archduchy of Austria, Salzburg, the greatest portion of Styria and Carinthia, almost the whole of Tyrol and Vorarlberg, considerable portions of Bohemia and Moravia, the whole of the west of Silesia, etc.; and they are also numerous in Hungary and Transylvania. The Magyars or Hungarians (7,440,000 in number, or about 16 per cent. of the total population) form the great bulk of the inhabitants of the kingdom of Hungary and of the east portion of Transylvania. To the Italian or Western Ro-

manic stock belong the inhabitants of South Tyrol and parts of the coast lands and Dalmatia, numbering about 700,000 in all. A considerable portion of the southeast of the empire is occupied by members of the Roumanian (or Eastern Romanic) stock, who number altogether about 2,800,000, and form more than half the population of Transylvania, besides being spread over the southeast parts of Hungary, Bukowina, and part of Croatia and Slavonia. The number of Jews is also very considerable (above 1,000,000), especially in Galicia, Hungary, Bohemia, and Moravia. There are also several other races whose numbers are small, such as the Gypsies (95,000), who are most numerous in Hungary and Transylvania, and the Albanians in Dalmatia and neighboring regions. The population is thickest in Lower Austria, Bohemia, Silesia, and Moravia; thinnest in Salzburg. Generally speaking, it decreases in density from west to east. The principal cities are: Vienna, the capital; Budapest, Prague, Trieste, Reichenburg, and Fiume.

Baltic Sea is the great gulf or shut sea bordered by Denmark, Germany, Russia, and Sweden, communicating with the Kattegat and North Sea by the Sound and Great and Little Belts. Its length is from 850 to 900 miles, west from 100 to 200, and area, including Gulfs of Bothnia and Finland, 160,000 square miles. Its depth is, on an average, fifteen to twenty fathoms, in many places not half so much, seldom more than forty or fifty, and never exceeding 167.

Baltimore, one of the largest and most flourishing cities of the United States, on the Patapasco Bay, in Maryland thirty-seven miles northeast of Washington; and 100 miles southwest of Philadelphia. It was founded in 1729, and has been named the "monumental city," from the fine public monuments which adorn it. Among its many public buildings is the Peabody Institute, endowed by the late George Peabody, containing a library, art-gallery, etc., with a dome 115 feet high. It has also a city hall, built of white Maryland marble, with a dome 227 feet high. The manufactures and commerce of Baltimore are very various. In its vicinity is found the finest brick-clay in the world, of which more than 100,000,000 bricks are made annually. It has some of the largest ironworks in the United States. Oysters, taken in the Chesapeake Bay, are largely exported. The city is also one of the largest flour-markets in the United States, and tobacco is a principal export. The harbor is very extensive. From east to west the city is nearly five miles long, and four miles broad from north to south. It was visited by a destructive fire in 1904, entailing a loss of \$90,000,000. Population, 546,217.

Bangkok, the capital city of Siam, situated on both banks of the Menam, about twenty miles from its mouth. The population is about 600,000, nearly half of whom are Chinese, the others including Burmese, Annamese, Cambodians, Malays, Eurasians, and Europeans. The foreign trade of Siam centers in Bangkok, and is mainly in the hands of the Europeans and Chinese. The approach to Bangkok by the Menam, which can be navigated by ships of 350

tons burden (large sea-going ships anchor at Paknam, below the bar at the mouth of the river), is exceedingly beautiful. The internal traffic of Bangkok is chiefly carried on by means of canals, there being only a few passable streets in the whole city. Horses and carriages are rarely seen, except in the neighborhood of the palaces. The native houses on land — of bamboo or other wood, like the floating houses — are raised upon piles, six or eight feet from the ground, and are reached by ladders. The circumference of the walls of Bangkok, which are fifteen to thirty feet high, and twelve broad, is about six miles.

Barcelona, is the most important manufacturing city in Spain. The streets of the old town, forming the northwest division, are crooked, narrow, and ill-paved. Those of the new are much more spacious and regular. There is a large suburb east of the town where the seafaring portion of the population chiefly reside. It possesses the finest theater in Spain, and numerous ancient and elegant churches, with a cathedral which was begun in 1298. Barcelona manufactures silk, woolens, cottons, lace, hats, fire-arms, etc., which form its principal exports. It imports raw cotton, coffee, cocoa, sugar, and other colonial produce; also Baltic timber, salt-fish, hides, iron, wax, etc. Next to Cadiz, it is the most important port in Spain. Population, 533,090.

Bastille, formerly a general name for a fortress, or prison, in France; but applied more particularly to an old castle, originally the castle of Paris, which was built between A. D. 1369 and 1383, and was used as a state prison in the Seventeenth and Eighteenth Centuries. It was demolished by the enraged populace at the breaking-out of the French Revolution, July 15, 1789.

Belfast, a city and seaport of Ireland, principal town of Ulster, and county town of Antrim, is built on low, alluvial land on the left bank of the Lagan, at the head of Belfast Lough. Previous to about 1830 the cotton manufacture was the leading industry of Belfast, but nearly all the mills have been converted to flax spinning. The iron ship-building trade is also of importance, and there are breweries, distilleries, flour mills, oil mills, foundries, print works, tan yards, chemical works, rope works, etc. The commerce is large. An extensive direct trade is carried on with British North America, the Mediterranean, France, Belgium, Holland, and the Baltic, besides ports of the British Islands. Belfast is comparatively a modern town. Population, 349,180.

Belgium, a kingdom of Europe, bounded north by Holland, northwest by the North Sea, west and south by France, and east by the duchy of Luxembourg, Rhenish Prussia, and Dutch Limburg; greatest length, 165 miles; greatest breadth, 120 miles. For administrative purposes it is divided into nine provinces — Antwerp, South Brabant, East Flanders, West Flanders, Hainaut, Liege, Limburg, Luxembourg, and Namur. The greater part of the country is well adapted for agricultural operations, and the inhabitants have so happily availed themselves of their natural advantages

that they early began, and in some respects still deserve, to be regarded as the model farmers of Europe. The mineral riches of Belgium are great, and, after agriculture, form the most important of her national interests. They are almost entirely confined to the four provinces of Hainaut, Liege, Namur, and Luxembourg, and consist of lead, manganese, calamine or zinc, iron, and coal. All these minerals, however, are insignificant compared with those of iron and coal. The coal field has an area of above 500 square miles. The export is about 5,000,000 tons, forming one of the largest and most valuable of all the Belgium exports. Nearly the whole of the coal thus exported is taken by France. The industrial products of Belgium are very numerous, and the superiority of many of them to those of most other countries is confessed. The fine linens of Flanders, and lace of South Brabant are of European reputation. Scarcely less celebrated are the carpets and porcelain of Tournay, the cloth of Verviers, the extensive foundries, machine works, and other iron and steel establishments of Liege, Seraing, and other places. The cotton and woolen manufactures, confined chiefly to Flanders and the province of Antwerp, have advanced greatly. Other manufactures include silks, beet sugar, beer. Principal cities: Brussels, Antwerp, Liege, Ghent, and Bruges.

Bering Strait, the channel which separates Asia and America at their nearest approach to each other, and connects the Arctic with the Pacific Ocean (Bering Sea). It is thirty-six miles across. Shores rocky, bare, and greatly indented. It was discovered in 1728, by Vitus Bering, a Russian navigator, who perished during a second expedition, 1741, on Bering's Island.

Berlin, the capital of Prussia, and seat of the imperial government of Germany, one of the finest and most important cities of Europe, is situated on the Spree. Notwithstanding the natural disadvantages of its situation, the advance of the city, especially in late years, has been extraordinary. The center of the city is now devoted almost exclusively to commerce, and round this part, extending considerably beyond the city boundaries, are congregated the residences of the citizens. Berlin possesses a large number of very fine buildings. Of these may be mentioned the royal palace, the emperor's palace, and that of the crown prince; the royal library, which contains about 1,200,000 volumes and 15,000 MSS.; the museums, the arsenal, and the guard-house. The Berlin Museum of Fine Arts is rapidly becoming one of great importance. Its collection of casts from the antique and the renaissance is not surpassed by any in Europe. The city is adorned throughout with numerous statues of military heroes, the equestrian statue of Frederick the Great, by Rauch, being the most remarkable. The university established in 1810 possesses a very high reputation. Population, 2,040,148.

Birmingham, the chief town in Britain for metallic manufactures, and supplying much of the world with hardwares, stands near the center of England, in the northwest of Warwickshire. It is one of the best drained towns

in England, while the means which have been adopted for the prevention of smoke-contamination of the atmosphere are so far effectual that the air is unusually clear and salubrious. The older part of Birmingham is crowded with workshops and warehouses; but the modern is well built and possesses some architectural beauty. Its commercial importance dates from the Seventeenth Century, when the restoration of Charles II. brought from France a rage for metal ornaments, which Birmingham supplied. Population, 548,022.

Bombay City occupies the entire breadth of the southern end of the island of Bombay, bordering at once on the harbor inside and on Back Bay outside. Parsees or Persians, descendants of fire-worshippers, driven from their homes by Mohammedan bigotry, rank next to the English in respectability and influence. Besides the dock-yard, which covers about 200 acres, at the southeast of the European town, the objects most worthy of note are the town-hall, the library of the Asiatic Society, the mint, cathedral, and custom-house; the post-office and public works office; the missionary houses, the Elphinstone Institution, the Grant Medical College, the university, and Sassoon's High School; the Jamsetjee Hospital, and the Jamsetjee Obstetric Hospital.

Boston, capital of the State of Massachusetts; the commercial metropolis of New England; and the fifth city in population in the United States, according to the federal census of 1900, is built at the west end of Massachusetts Bay, and comprises Boston proper, East Boston, South Boston, Roxbury, Dorchester, Charlestown, Brighton, West Roxbury, and adjoining territory, giving it in 1900, an area of about forty square miles. Old Boston, or Boston proper, occupied a peninsula of about 700 acres, of uneven surface, and originally containing three hills, known as Beacon, Copp, and Fort. These hills caused the early settlers to call the place Trimountain, since changed to Tremont. Boston, East Boston, Charlestown, and South Boston contain the slips of the ocean steamers. Extending about two miles along the harbor, and separated from Boston proper by an arm of it, is South Boston, containing large railroad docks and warehouses. Several bridges across Charles River connect the city with Charlestown and Cambridge. The harbor is an indentation of Massachusetts Bay, embracing about seventy-five square miles, with numerous arms, and containing many islands presenting picturesque views. Boston is especially noted for its magnificent park system. Among the attractions of the system are the Common, a park of eighty-four acres in the heart of the city; the Public Garden, separated from it by Charles Street, and comprising twenty-two acres; the Back Bay Fens; the Jamaica Pond, Bussey Park, the Arnold Arboretum; Marine Park at City Point; and the Charles River Embankment. In the Common is a Soldiers' and Sailors' Monument, erected near the site of the famous Old Elm, which was destroyed in a gale in 1876. In the Public Garden are an equestrian statue of Washington, a bronze statue of Edward Everett, a statue

of Charles Sumner, one representing "Venus Rising from the Sea," and a monument commemorating the discovery of ether as an anæsthetic. The State House stands on Beacon Hill, and is a structure 490 feet long and 211 feet wide, with a colonnade in front and an imposing gilded dome. Statues of Daniel Webster and Horace Mann ornament the terrace in front of the building, and within it are statues and busts of a number of the eminent men of Boston and Massachusetts, a collection of battle flags, and a variety of interesting historical articles. The new building of the Public Library, which was occupied in 1895, is, next to the Library of Congress, the largest one in the country. The Old State-house, erected in 1748, at the head of State Street, contains an historical museum in its upper floors, and business establishments in its lower. The City Hall, one of the most striking buildings of the city, on School Street, is built of white Concord granite in the Italian Renaissance style, and is surmounted by a dome over 100 feet high. What is considered the most interesting building, historically, in the United States, next to Independence Hall in Philadelphia, is Faneuil Hall, known as "The Cradle of Liberty," erected in 1742, destroyed by fire in 1761, rebuilt in 1768, and remodeled to its present size in 1805. The basement of the building is now used as a market, and the second floor for large public gatherings. Occupying the site of the Old Redoubt on Breed's Hill, in the Charlestown district, is the famous Bunker Hill monument. In the Charlestown district also is located the United States Navy Yard, which, among other objects of interest, contains the largest rope walk in the country, and an immense dry dock. Boston is widely noted for the number and high character of its educational institutions. The institutions for higher education include Boston College, Massachusetts Institute of Technology, Boston Normal School, Massachusetts Normal Art School, Kindergarten Training School, and Training Schools for Nurses at the Almshouse and Hospital, City Hospital, Children's Hospital, Massachusetts General Hospital, Massachusetts Homœopathic Hospital, New England Baptist Hospital, New England Deaconess's Home and Hospital, New England Hospital for Women and Children, St. Elizabeth's Hospital, Somerville Hospital, and Women's Charity Club Hospital. Boston was settled in 1630 by a party of Puritans from Salem. It was named after a town in Lincolnshire, England, from which most of the colonists had come. In 1632 the first meeting house was erected, and in 1635, a public school was built. In the same year, the first grand jury in the country met here. A memorable massacre occurred here in 1770, and in 1773, several cargoes of English tea were thrown overboard in the harbor, by citizens exasperated by the imposition of taxes. During the early part of the Revolution the British were quartered in the town. The battle of Bunker Hill was fought on Breed's Hill, within the present city limits, June 17, 1775. Washington forced the British to evacuate in 1776. The city charter was granted in 1822, and, in 1872, a great fire broke out in the business portion of the city

and destroyed about sixty-five acres of buildings. This part of the city was soon rebuilt, and, since then, Boston has been one of the most prosperous cities in the United States. Population, 595,380.

Brazil (*brah-zeel'*), the largest State of South America, lying to the northeast of that continent, and bounded north and east by the Atlantic Ocean. It constitutes nearly one-half of South America, and occupies an area nearly equal to the whole of Europe. It is remarkable for its rivers and its forests, the former being unsurpassed both in number and in size in any other part of the globe, and the latter being of vast extent, some of them covering many thousands of miles of surface. Towards the coastline, and near the banks of the rivers, the land is low, but in the interior it rises, by gentle gradations, to the height of from two to three thousand feet above the level of the sea, and is crossed by hill ranges, which rise to a considerably greater elevation. In these regions, European fruits and grains are produced in large quantities, while the intermediate valleys are found extremely favorable for the raising of sugar, coffee, cotton, cocoa, india rubber, and tropical plants. The forests abound in the greatest variety of useful and beautiful woods, as mahogany, logwood, rosewood, and brazil wood. Minerals are exceedingly abundant, comprising gold, silver, iron, and topazes, and most of the diamonds of commerce come from Brazil. These, with hides, agricultural produce, and the other products above mentioned, are the chief exports. The population of Brazil is about 18,000,000, of whom about 2,000,000 are negroes, 1,250,000 native Indians, and the remainder descendants of the Portuguese, or of mixed races. Slavery formerly prevailed largely in Brazil, but in 1871, a law was passed for its gradual abolition. Its greatest river is the Amazon, and the chief cities are Rio de Janeiro, Bahia, and Pernambuco.

British Museum, the great national museum in London, owes its foundation to Sir Hans Sloane, who, in 1753, bequeathed his various collections, including 50,000 books and manuscripts, to the nation, on the condition of \$100,000 being paid to his heirs. This offer was agreed to by parliament. The British Museum is under the management of forty-eight trustees, among the chief being the archbishop of Canterbury, the lord-chancellor, and the speaker of the House of Commons. In all, the staff of the institution numbers over 320 persons. The museum is open daily, free of charge. Admission to the reading-room as a regular reader is by ticket, procurable on application to the chief librarian, there being certain simple conditions attached. The institution contains something like 2,000,000 volumes in the department of printed books. A copy of every book, pamphlet, newspaper, piece of music, etc., published anywhere in British territory, must be conveyed, free of charge, to the British Museum.

Brussels, the capital of the kingdom of Belgium, and of the province of South Brabant in that kingdom. It is a large and important city, often described as a miniature Paris. It is built partly on the slope of a hill, and partly

on the plain at the foot. The upper town, on the hillside, is the newer and the more fashionable, and there the royal palace and the mansions of the foreign ministers are situated. The lower town is less healthful, but it contains most of the older buildings, and many churches and public edifices of architectural and historical interest. The town has extensive suburbs, and squares and promenades of great beauty and elegance. Its Church of St. Gudule dates from the Twelfth Century; and the Palace of Fine Arts, which was formerly the residence of the governors of Brabant, includes a picture gallery which contains many fine specimens of the Flemish school of painting, and a library with 240,000 volumes, and upwards of 20,000 manuscripts. There is also an observatory, one of the finest in Europe, and the imposing Palace of Justice. In the great market-place is the Hotel de Ville, a splendid Gothic edifice of the Fourteenth Century, with a lofty turret, surmounted by a huge figure of St. Michael, in copper. Brussels is remarkable for its statues and fountains. Its most important manufactures are lace and carpets. Ten miles to the south of the city is the Field of Waterloo, and a few miles beyond lie Quatre Bras and Ligny. Population, 612,401.

Buda-Pesth (*bū'da-pěst*), a city of the Austro-Hungarian Empire, the capital of Hungary since 1873. It is situated on both sides of the River Danube, 130 miles southeast of Vienna. Buda, on the west side of the Danube, is built at the extremity of a spur from the Bakony forest range. It is an old-fashioned place, and carries on a considerable trade, chiefly in wines. A fine suspension bridge connects it with Pesth, one of the handsomest cities in Austria. Pesth is the seat of a university, and has manufactures of silk, woolen, leather, tobacco, and meerschaum pipes. Four great fairs are held in the city annually. The Diet assembles in a handsome building, and new boulevards and squares have been recently formed. During the Hungarian wars of the Nineteenth Century, Buda played a distinguished part. In January, 1849, the fortress was seized by the Austrian General Windischgrätz; but in the following May it was taken by storm by the Hungarians under Görgey. On their departure, the Russians took possession, but shortly afterwards handed the place over to the forces of the Austrians. Population, 732,322.

Buenos Ayres, the capital of Argentine Republic, South America, stands on the west bank of the estuary of the Plata, about 150 miles from the open sea. It is compactly and substantially built, having been greatly improved since its independence. It has a large number of public and private buildings that would honor any city, notably the cathedral, the provincial bank, the post-office, the national penitentiary, several of the theaters, etc. Four lines of railroads connect it with the interior. Telegraphic cables extend to Montevideo, the Brazilian ports, and Europe, and overland wives cross the Andes to Chile, and so connect with the northern hemisphere by the Pacific coast lines. Buenos Ayres has a university, a national college, a normal school for ladies, with numer-

ous other literary and scientific institutions, a museum of natural history, a public library, and a score of newspapers. Population, 1,000,-250.

Buffalo, a city of New York, capital of Erie County, is at the east end of Lake Erie, and at the head of Niagara River, and 410 miles by shortest railroad line northwest of New York. It has a capacious harbor, protected by an outer breakwater, besides other breakwaters, piers, basins, and canals. The city is guarded by Fort Porter, which stands on a bluff overlooking the river. The International iron railway bridge spans Niagara River at Black Rock. The commercial importance of Buffalo dates from the completion of the Erie Canal, in 1825. The chief marine business is the receiving, storing, and transferring of grain. The livestock trade is enormous, and the lumber trade (including the suburb of Tonawanda) is the largest in the world. Manufactories are numerous, embracing extensive machine-shops, automobile shops, car shops, stove foundries, breweries, flour mills, printing and lithographic establishments, etc. Twenty-six railroads enter the city, with over 660 miles of trackage in the city limits—more than in any other city in the world. Buffalo has wide streets, well paved and lighted, and generally lined with shade trees. Natural gas, piped from Pennsylvania and Canada, is much used. It has excellent sewerage, and extensive water-works, the supply coming from Niagara River. Its healthfulness is attested by a low death-rate. A magnificent park system consists of three sections connected by boulevards which encircle the city. There are churches of all denominations, numerous public schools, the high-schools, and a State normal school; various hospitals, dispensaries, orphan asylums, and the State hospital for the insane. Buffalo was founded in 1801, by the Holland Land Company. It was burned in 1813, by the British and the Indians. It was incorporated as a city in 1832. Population (1905), 376,914.

Cairo, the modern capital of Egypt, and the largest town in Africa, situated on the eastern bank of the Nile, twelve miles above the apex of the Delta. On the opposite bank of the river is the small town of Ghizeh, in the neighborhood of which are the three largest of the Egyptian pyramids. To the south of the city is the site of the ancient city of Memphis. It is the official residence of the Khedive. Its inhabitants are Turks, Arabs, Copts, Jews, Armenians, Syrians, etc., the ruling class being almost all Turks. Population, 570,062.

Calcutta, the capital and metropolis of British India, was founded by Governor Charnock in the year 1686. In 1707, it had acquired some importance as a town, and was made the seat of a presidency. In 1756, however, a great misfortune befell the rising town; it was unexpectedly attacked by Surnjah Dowlah, the Nawab of Bengal, and, being abandoned by a number of those whose duty it was to defend the place, it was compelled to yield after undergoing a two days' siege. Only 146 men, however, fell into the enemy's hands; but these were treated with the most heartless cruelty.

Cast at night into a confined cell, twenty feet square—the notorious "Black Hole"—they endured the most unheard-of sufferings, and in the morning it was found that only twenty-three out of 146 had survived the horrors of that night. The city remained in the hands of the enemy until eight months afterward, when Clive arrived from England. In conjunction with Admiral Watson, Clive succeeded in recapturing Calcutta, and afterward concluded a peace with the nawab. During the last century the city has grown greatly in importance, and in its public institutions and architecture it now rivals the leading capitals of Europe. Calcutta is the headquarters of the governor-general of India, and the seat of the government, the supreme courts of justice, and of the court of appeal for the province of Bengal. Population, 1,026,987.

Campanile (*kām-pā-nē'le*), a tower for the reception of bells, principally used for church purposes, but now sometimes for domestic edifices. The most remarkable of the campaniles is that at Pisa, commonly called the "Leaning Tower." It is cylindrical in form, and surrounded by eight stories of columns, placed over one another, each having its entablature. The height is about 150 feet to the platform, whence a plumb-line lowered falls on the leaning side nearly thirteen feet outside the base of the building.

The campanile of St. Mark, dominating all the surrounding buildings of St. Mark's Square, Venice, was the most conspicuous landmark of the city for over 1,000 years. The tower was 325 feet high and forty-two feet square at the base. On the morning of July 14, 1902, it fell with a great crash into the square. The church of St. Mark and the palace of the Doges were not hurt, but the campanile in falling carried away the Sansovino Loggetta and the library of the Royal Palace.

Canada, Dominion of. The Dominion of Canada includes the various Provinces of North America formerly known as Upper and Lower Canada (now Ontario and Quebec respectively), New Brunswick, Nova Scotia, Prince Edward Island, British Columbia, and the territories of the Hudson Bay Company, now styled Manitoba, Saskatchewan, Alberta, the Northwest Territories, and the Yukon Territories; in fact, the whole of British North America except Newfoundland and Labrador. This territory, nearly as large as Europe, stretches from the Atlantic to the Pacific Ocean, and is estimated to contain a total area of 3,745,574 square miles, and a population of 6,504,000. From a physical point of view the whole region may be divided into an eastern and a western division, the Red River Valley forming the separating line. The eastern division comprises three areas, presenting radically distinct aspects:—(1) The south-eastern area, bounded by the line of the Gulf and River St. Lawrence, from Belle Isle to Quebec, thence by a line running directly south to Lake Champlain, which is generally hilly, and sometimes mountainous, with many fine stretches of agricultural and pastoral lands. (2) The southern and western area, presenting, in the main, a broad, level,

and slightly undulating expanse of generally fertile country, with occasional step-like ridges or rocky escarpments. The main hydrographical feature is the chain of lakes, with an area of 150,000 square miles, contributing to the great river system of the St. Lawrence. (3) The northern area, embracing nearly two-thirds of the Dominion, with an average elevation of 1,000 feet above the level of the sea, preëminently a region of waterways, and including the great Laurentian mountain range. In this area are found the other great river systems, the Nelson and the Mackenzie. From the western edge of the Prairie to the Pacific coast is a distance of 400 miles, and within this area is contained the Rocky Mountains and the Gold and Cascade Ranges, whose summits are from 4,000 to 16,000 feet high, the country being on the whole densely wooded. The climate in the eastern and central portions of the Dominion presents greater extremes of cold and heat than in corresponding latitudes in Europe, but in the south-western portion of the Prairie Region and the southern portions of the Pacific slope the climate is milder. Spring, summer, and autumn are of about seven to eight months' duration, and the winter four to five months. The country possesses great mineral wealth, and coal, gold, silver, copper, nickel, lead, petroleum, and asbestos are produced, while iron, phosphates, salt, graphite, etc., occur; the total value of the minerals produced in 1906 was about \$80,000,000. The soil is generally fertile; all the products of the temperate zone are cultivated. In 1881 there were thirty-five cities and towns of 5,000 inhabitants and upwards, having a total population of 660,040; in 1901 there were sixty-two of such cities and towns, and their total population was about 1,330,000. Montreal has a population of 267,730 (or with suburbs, over 350,000), and Toronto, the capital of Ontario, has over 272,600 inhabitants. Ottawa, the political capital, had, in 1907, 69,756 inhabitants; Winnipeg, in Manitoba, 90,234; Vancouver, in British Columbia, over 26,000; and the city of Dawson, the "business center" of the Klondike gold region, which was a barren waste in 1897, had, in 1901, a population of 9,142. In facilities for communication, Canada is unrivaled. The St. Lawrence, with its lakes, puts great part of it in connection at once with the most commercial portion of the United States and with the open ocean. The navigation of this great water-system has been greatly assisted by numerous and extensive canals, of which the Cornwall, Rideau, and the Welland are the most important. There is, besides, an immense and steadily increasing net-work of railroads embracing several trans-continental lines. The Victoria Bridge, by which the Grand Trunk crosses the St. Lawrence at Montreal, is one of the wonders of the world. The completion of the Canadian Pacific Railroad, in 1885, gave railroad communication between or westward from Montreal, its eastern terminus, to Vancouver, in British Columbia, a distance of 2,893 miles, or from Quebec, a distance of 3,039 miles.

Canossa (*kā-nos' sà*), a town northwest of Bologna, in the courtyard of the castle of which the Emperor Henry IV. stood three days in the

cold, in January 1077, bareheaded and barefooted, waiting for Pope Gregory VII. to remove from him the sentence of excommunication.

Canton, a large commercial city and port in the south of China, and capital of the maritime province of Kwang-tung, forms an irregular square, and is divided by a wall into the North and South, or Old and New City. The former is inhabited by the Tartar population, the latter by Chinese; and between the two communication is maintained by four gates in the separating wall. Many of the streets are devoted to distinct trades; thus there is "Carpenter" Street, "Apothecary" Street, etc. The Joss-houses, Buddhist Temples, are said to be about 124 in number. The largest of these, on Honam Island, covers seven acres, and has 175 priests attached. It is called "Hae Chwang Sze," or "The Temple of the Ocean Banner." Another famous structure is "The Temple of the Five Hundred Gods," situated in the western suburbs. Until 1843 all the legitimate foreign trade of China centered at Canton, and its amount at one time exceeded \$100,000,000 annually; but since other ports in the empire have been opened to foreigners this amount has decreased by nearly one half. Tea and silks are the staple articles of export to Europe, etc., after which come the precious metals, cassia, sugar, and many minor articles; population, 1,800,000.

Cape Colony, a British colony at the southern extremity of Africa, washed on the west, south, and east by the ocean. The colony extends about 450 miles from north to south and 600 from east to west; the coast line is about 1,300 miles. The area is 276,000 square miles; the population, 2,433,000.

The colony is better adapted for pasturage than for agriculture. All kinds of vegetables and pot herbs, and all the fruits of temperate climates thrive excellently, and fruits, dried and preserved, are exported. The vine is cultivated, and some excellent wines are made.

Sheep-rearing is the most important industry, and wool is the chief export (although surpassed in value by diamonds). Cattle-breeding is carried on to some extent, especially along the coasts and in the east and north districts. There are no manufactures of any importance.

The European inhabitants consist in part of English, Scottish, and Irish settlers and their descendants, but the majority are of Dutch origin, while there are also a considerable number of German origin. The colored people are chiefly Hottentots, Kaffirs, Bechuanas, Basutos, Griquas, Malays, and a mixed race, the offspring of black women and white fathers.

The constitution which was formed under the acts passed in the years 1853, 1865, and 1872 vests the executive in the governor and an executive council composed of office-holders appointed by the crown. The legislative power is in the hands of a legislative council of twenty-three members, elected for seven years, and a house or assembly of ninety-five members, elected for a term of five years.

The Dutch, who had early fixed upon the Cape as a watering-place for their ships, first colonized it under Van Riebeeck, in 1652. It was captured by the British in 1795, restored at the peace of

Amiens (1802), and again taken in 1806. From this time it has remained in the possession of Great Britain, to which it was formally assigned in 1815, along with Dutch Guiana. Subsequently the area of the colony was gradually enlarged by the annexation of surrounding districts.

Capitol (Lat. *Capitolium*), the great temple dedicated to Jupiter on the Tarpeian or Capitoline Hill at Rome. It is said to have been called the Capitolium, because a human head (*caput*) was found in digging the foundations. It was commenced by Tarquinius Priscus, and finished by Tarquinius Superbus, 507 B. C.; but it was three times burnt down, and, after its third destruction in the reign of Titus, it was again rebuilt by Domitian. The capitol included not only a temple to Jupiter, but one to each of his attendant deities, Juno and Minerva. It was one of the most imposing buildings in Rome. The consuls, on entering upon their office, offered sacrifices and took their vows in the capitol; and it was to the capitol that the victorious general on his return to the city, was carried, in his triumphal car, to return thanks for his victories. From that portion of the hill called the Tarpeian Rock, state criminals were thrown down. The modern building on the site, and partly on the foundations, of the ancient capitol, was erected from the designs of Michael Angelo.

Capri (*kăh'pre.*) (Anc. *Caprææ*.) A beautiful island in the Mediterranean, lying near the south entrance to the Neapolitan Gulf, about twenty miles from the city of Naples. It produces a good light wine. The island is covered with remains of antiquity, including the ruins of the villa of Tiberius, the Roman Emperor.

Caracas, the capital of the Republic of Venezuela, in South America. It stands a few miles from the northern coast of Venezuela, at an elevation of nearly 3,000 feet above the sea. Its climate is healthy, but earthquakes are frequent in the vicinity. In 1812, nearly the whole of the city was destroyed by an earthquake, and 12,000 persons are said to have perished. The population of the city in 1891 was 72,429.

Carlsbrooke, a village in the Isle of Wight, about one mile south of Newport, and celebrated for its castle, which dates originally from the Sixth Century. In this castle (now in ruins) Charles I. was confined, and, after his execution, his two youngest children were also confined in the castle, and the Princess Elizabeth died there. The population of the parish is about 8,000.

Carlsbad (*kărlz'băd.*) [Ger., "Charles' Bath."] A town and fashionable spa of the Austrian empire, province Bohemia, seventy-two miles west-northwest of Prague. It is finely built and romantically situated; its principal spring, the *Sprudel*, is the hottest in Europe, having a temperature of 165° Fahrenheit. Population, 16,000.

Carmel, Mount, a mountain ridge of Palestine, which runs out into the Mediterranean, to the south of the Bay of Acre. Its name means, "The Garden of God." On the summit of the ridge are oaks and pines, and, lower down laurels and olives. Near the top there is a monastery called *Elias*, after the prophet Elijah, the monks of which bear the name of *Carmelites*.

The order was probably founded in the Twelfth Century, but legend ascribes its foundation to Elijah, and the Virgin Mary is said to have been a Carmelite nun. One of the distinctions of the order is that they walk bare-footed. They exist at the present day in many Roman Catholic countries.

Caspian Sea, a great inland sea or lake, the largest in the world, forming a portion of the boundary between Europe and Asia. It is 730 miles long by from 150 to 270 miles broad. The surface of the Caspian is about eighty feet lower than the level of the Black Sea, which lies to the west, while the Sea of Aral, which lies to the east, is about forty feet above sea-level. Hence it is believed that at no distant period the Sea of Aral, the Caspian, and the Black Sea, formed one mass of water, which covered the intervening land. The water of the Caspian is salt, though less so than that of the ocean. The depth of its central portion is nearly 3,000 feet, but it is shallow round the shores. The Caspian has no tides, but its navigation is perilous because of violent storms. The Volga, the Ural, and many other rivers, fall into the Caspian; and by a canal, which unites the head waters of the Volga with the rivers Tvertza and Schlina, the Caspian is connected with the Baltic. The shallow northern basin, however, is frozen over during the entire winter. The sea abounds in fish, and seals and tortoises are found on its upper coasts. Its area is 140,000 square miles, or 20,000 square miles more than that of the British Isles. It was known to the Greeks and Romans under its present name (*Caspium Mare*), which was given to it from the Caspii, a people who inhabited its western shores.

Castile (*kăs-těl'*), a central district of Spain, divided by the mountains of Castile into Old Castile in the north, and New Castile in the south: the former consisting of a high bare plateau, bounded by mountains on the north, and on the south, with a variable climate, yields wheat and good pasturage, and is rich in minerals; the latter, also tableland, has a richer soil, and yields richer produce, breeds horses and cattle, and contains besides the quicksilver mines of Almaden. Both were at one time occupied by the Moors, and were created into a kingdom in the Eleventh Century, and united to the crown of Spain in 1469 by the marriage of Ferdinand and Isabella.

Caucasus (The) (*kau'kah-sūs*), a great mountain range, stretching between the Caspian and the Black seas, separating the two Russian provinces of Ciscaucasia and Transcaucasia, and forming part of the boundary between Europe and Asia. It has a continuous extent of about 700 miles, throwing off spurs, or lateral ridges, both towards Russia and Turkey in Asia. Its highest elevation is estimated at 18,500 feet, and its snow-limit at 11,000 feet. The Caucasus is generally remarkable for the picturesqueness of its scenery, and the wild independence of the tribes dwelling among its gorges.

Cenis (*sē-nē'*), a mountain belonging to the Graian Alps, between Savoy and Piedmont, 11,755 feet high. It is famous for the winding road constructed by Napoleon I., which leads over it from France to Italy, and for an immense

railway tunnel, which, after nearly fourteen years' labor, was finished in 1871. The Mount Cenis Pass is 6,765 feet above the level of the sea, whereas the elevation of the entrance to the tunnel on the side of Savoy is only 3,801 feet, and that on the side of Piedmont 4,246 feet. The total length of the tunnel is nearly eight miles. The total cost amounted to about \$12,000,000.

Cevennes (*sā-vēn'*), a mountain chain in the south of France, running northward between the basins of the Rhone and the Loire, as far as the Plateau of Langres, in the department of Haute Marne. The height of the Cevennes averages from 2,000 to 3,000 feet, but Mont Mézen, near the source of the Loire, reaches a height of 5,800 feet. The mountains are rich in minerals. The Cevennes are famous as the retreats of the Albigenes, Waldenses, and Camisards, during the religious wars of France.

Ceylon (*sē-lōn'*), an island belonging to Great Britain in the Indian Ocean, about sixty miles southeast of the southern extremity of Hindustan, from which it is separated by the Gulf of Manaar and Palk's Strait. Length, about 270 miles, north to south; average breadth 100 miles; area, 25,364 square miles.

Where the jungle has been cleared away and the land drained and cultivated, the country is perfectly healthy; where low wooded tracts, and flat marshy lands abound, covered with a rank, luxuriant vegetation, the climate is eminently insalubrious.

Most of the animals found on the opposite continent are native to this island, excepting the royal tiger, which does not exist here. Elephants are numerous and are esteemed for their superior strength and docility. Bears, buffaloes, leopards, jackals, monkeys, and wild hogs are numerous. Crocodiles, serpents, and reptiles of all sorts abound. Of the snake tribe, consisting of about twenty-six different species, six only are venomous. Among the insects are the leaf and stick insects, the ant-lion, the white ant, etc.

In the luxuriance of its vegetable productions, Ceylon rivals the islands of the Indian Archipelago, and in some respects bears a strong resemblance to them; its most valuable products are tea, rice, coffee, cinnamon, and the cocoanut. Tea is being widely cultivated. Tobacco is raised principally in the north district, and is of excellent quality. Indigo grows wild, but is not sought after.

Ceylon is one of the British crown colonies, its government being conducted by a governor and two councils, executive and legislative, of both of which the governor is president. The first is composed of six members, the other of seventeen members. The powers of the councils are limited, being wholly subservient to the governor, who can carry into effect any law without their concurrence. All laws must be approved by the Secretary of State for the Colonies before they can take effect. Any individual properly qualified may be appointed to the most responsible situation, without reference to service, nation, or religion, and native Singhalese have occupied some of the highest posts.

Chartreuse, La Grande, a famous

monastery of France, in the department of Isere, fourteen miles north of Grenoble among lofty mountains, at an elevation of 3,281 feet above sea-level. The access to it is very difficult. It was built in 1084, but having been several times pillaged and burnt down, the present building was erected after 1676.

Cherbourg (*shair'boorg*), a fortified seaport and naval arsenal of France, department Manche, at the head of a bay of same name, 185 miles west-northwest of Paris. The fortifications here are of the most formidable character, and as a naval stronghold it may almost be considered impregnable. Cherbourg possesses a magnificent harbor for ships of war, constructed by Napoleon I., at an immense cost, besides dockyards, dry-docks, etc. The roads afford secure anchorage to 400 sail at a time, and are protected by a magnificent breakwater began in 1784, and completed by Napoleon III., in 1864. Population, 42,952.

Chicago, second largest city of the United States, embraces all Cook County, on the southwest shore of Lake Michigan, and on both sides of Chicago River. It stands on a level plain, and is surrounded by a beautiful and fertile country. The Chicago River and its two branches separate the city into three unequal divisions, known as the North, the South, and the West, connected by numerous bridges and two tunnels under the river. The streets are wide and are laid out at right angles, many of them being adorned by rows of fine forest trees. The site of the city was originally unhealthy from its lowness, but a large portion of it has been artificially heightened (even while occupied by buildings), by eight or ten feet. The public parks have an area of 2,000 acres. Among the chief buildings are the new city hall, and courthouse, the custom-house and post-office, and the chamber of commerce. There is a university and a large number of higher-class colleges and seminaries. To supply the town with water two tunnels have been constructed under Lake Michigan, and convey the pure water of that lake into the town, where it is pumped up to a height of 160 feet and distributed. There are also a number of artesian wells. From its position at the head of the great chain of the American lakes, and at the center of a net-work of railroads communicating with all parts of the Union, Chicago has always been more a commercial than a manufacturing city. There are extensive docks, basins, and other accommodation for shipping. The industries embrace iron-founding, brewing, distilling, leather, hats, sugar, tobacco, agricultural implements, steam-engines, boots and shoes. In commerce Chicago is only second to New York. It has an enormous trade in pork-packing, and is the greatest market for grain and timber in America. Other articles for which it is a center of trade are flour, provisions, wool, hides, soft goods, clothing. Before 1831 Chicago was a mere trading station. Its charter is dated March 4, 1837, its population being then 4,170, but since then it has advanced at an altogether extraordinary rate. On October 9, 1871, a great fire occurred which burned down a vast number of houses and rendered about 150,000 persons homeless and destitute.

But the energy of its inhabitants and its favorable situation enabled it to recover in a surprisingly short time. The World's Columbian Exhibition was held in Chicago in 1892-1893. It celebrated Columbus' discovery of America. January 2, 1900, a ship and drainage canal was opened between this city and the Gulf; the cost was \$35,000,000. Population, 1,990,750.

Chile (*chil'e*) [sometimes written Chili]. A southwestern republic of South America, forming a long, narrow strip of country lying between the Andes and the Pacific Ocean; mean breadth, from 110 to 120 miles. Chile is bounded north by Bolivia; east by the Argentine Republic and the Andes; southeast and south by Patagonia and the Gulf of Ancud, separating it from Chiloe; and west by the Pacific. The backbone of this country is found in the Great Cordillera of the Andes, here attaining an average height of 14,000 feet, many of whose peaks are volcanic, notably that of Aconcagua (the highest Andean summit), which has an altitude of 23,910 feet above the sea. The coast line presents steep and rocky shores, broken into by some excellent harbors. The rivers and lagoons are so small as to be undeserving of mention. Climate is healthful, as a whole; a scarcity of rain is, however, often felt. Earthquakes are of common occurrence. Chile is one bed of metals; silver, gold, lead, and iron are found largely and worked; copper, however, is the principal resource of the national wealth, and is mined on an immense scale. Sulphur, antimony, zinc, manganese, alum, nitre, salt, coal, etc., are other mineral items which influence a large exportation. The soil is of varying fertility, most fertile towards the south and the foothills of the Andes, where luxuriant vegetation flourishes. Many hard woods are made useful, instead of iron, and the fruits of the temperate zone thrive excellently. The bulk of commercial transactions is carried on with Great Britain. The chief cities and towns are: Valparaiso, the chief port; Santiago, the capital; Valdivia, Concepcion, and Talca.

China, or The Chinese Empire. A country of Asia, occupying the vast elevated plateau known as Eastern High Asia. The Chinese Empire has an area of nearly 4,000,000 square miles, or one-fourth of the whole of Asia. It embraces China proper, Manchuria, Mongolia, and Tibet. China proper is bounded on the north by Mongolia, and Manchuria; on the west by Mongolia, Tibet, and Burmah; on the south by Burmah, Anam, and the China Sea; and on the east by the Pacific Ocean, the Yellow Sea, and Corea. It contains several mountain ranges, from which proceed the Hoang-Ho, the Yangtse-kiang, the Peiho, and the Canton rivers. The climate of China is very varied, and in some parts of the country there is excessively cold winter, followed by excessively hot summer; but the soil is generally productive, the mountains are clothed with timber, and the hillsides and the plains are laid out in rice fields and gardens. Agriculture is the chief occupation of the people, and it is conducted by them with great skill and assiduity. Besides rice, which is grown most extensively in the south, wheat and barley are cultivated in the north, and the tea plant in the maritime provinces, the ex-

ports of tea alone amounting in value to \$50,000,000 a year. Cotton is also grown in the neighborhood of Shanghai. In some of their manufactures, the Chinese have never been surpassed. Their silks and porcelains have always been famous, and in certain arts requiring patience and ingenuity, such as the making of cardcases, snuffboxes, and fans, they are equaled only by the Japanese. There is a great caravan trade carried on with Russia and Farther India, and a large traffic by sea with British India, North and South America, Great Britain, and the other countries of Europe. From India opium is imported, and its effects upon the people is most deleterious. Internal communication is carried on chiefly by means of rivers, and of a Grand Canal which, commencing at the city of Hang-kow, runs northward for a distance of seven hundred miles. Railways and telegraphs, however, are now being generally introduced, and at the beginning of 1903, more than thirty lines of railways were under construction. The provinces of China are: Chihli, Shantung, Kiangsu, Chehkiang, Fukien, Kwangtung, Shensi, Anhwei, Honan, Shansi, Kansu, Szechuen, Hupeh, Kwang-si, Hunan, Kiangsi, Kweichow, and Yunnan. The capital of China proper and of the entire empire is Peking. Other towns of importance are Nanking, Canton, Shanghai, Ning-po, Fuchau, Amoy, Hang-kow, Kin-te-ching, and Chee-foo.

Cincinnati, the "Queen City of the West," is situated in the southwest part of Ohio, on the northern shore of the Ohio River. The location is fine, and the suburbs are not surpassed for beauty. This great emporium of the Central States is an aggregation of towns that have merged into one. It is composite also as to population, which is derived from many nations. The German element is very large. Here are established a famous college of music and a richly endowed art school. Five bridges connect Cincinnati with the cities of Covington, Newport, and Ludlow on the Kentucky shore. The architectural achievements of the city are striking for splendor and variety. Among its other leading industries are pork-packing, brewing, distilling, and manufactures of iron, stone, wood, clothing, food-products, tobacco, soap, jewelry, and drugs. Among its interesting institutions are the university, public library, art museum, historical society, society of natural history, zoological garden, industrial exposition, May musical festival, city armory, medical colleges, hospitals, and crematory. Cincinnati is the site of one of the earliest astronomical observatories in the United States, founded about the same time as that of Harvard College and the Naval Observatory at Washington.

Circassia, a country of Asia, comprehending the north-western division of the Caucasus, between the shores of the Black and Caspian seas. The whole country is mountainous. For nearly forty years the Circassians maintained a brave struggle against the encroachments of the Russians, but were finally defeated, with the rest of the inhabitants of the Caucasus, in 1864, a defeat which led practically to their extinction as a nation. After the close of the war, large numbers of them emigrated to Asia

Minor and other provinces of Turkey. The women of Circassia have long been famous for their beauty.

Cleveland, the first city in Ohio in population, is situated on the south shore of Lake Erie, at the mouth of the Cuyahoga River. Its situation is central to great deposits of coal, iron ore, petroleum, and limestone. The city has a harbor at the mouth of the river giving safe anchorage for a large number of ships. Great breakwaters run out on each side of the river, forming commodious eastern and western harbors. The abundance of trees gives it the name of "The Forest City." The Cuyahoga is spanned by several bridges, and in particular by the Viaduct, an elevated street and bridge erected at great expense. Among the buildings are the United States building, city hall, Case Hall, medical college, railway depot, etc. Cleveland is an important railway center, has an extensive lake traffic, and large manufactures, especially in iron and steel; petroleum-refining and pork-packing being also important industries. There is a harbor of refuge constructed by government. Population, 437,114.

Cologne (*ko-lōn'*) [Ger. *Köln*]. An ancient city of Prussia, formerly capital of an independent electorate of same name, and now of the Rhine provinces. It connects by a magnificent iron bridge with Deutz on the opposite bank of the Rhine, is strongly fortified, and presents architecturally a fine *coup d'œil* of mediæval quaintness. Its cathedral, begun about 1248, finished in 1880, at a cost of \$10,000,000, is the most imposing structure in Germany and the most imposing Gothic edifice in the world. Cologne has an extensive commerce, and is the chief entrepôt between the Netherlands and the cities of Germany. Cologne was founded by the Romans, and reached the height of its prosperity during the Middle Ages, and the subsequent zenith of the Hanseatic League. Population, 432,835.

Colombia, a Republic of South America; area 513,938 square miles; population (according to government estimate), 4,000,000; capital, Bogota.

The surface of the country is extremely varied, with lofty mountains in the west, and vast plains in the east scarcely above the level of the sea.

Columbia possesses all the climates of the world; perpetual snows cover the summits of the Cordilleras, while the valleys abound in the rich vegetation of the tropics. In the north departments and in the immense llanos of the east great herds of cattle, descended from those imported by the Spaniards, are reared; in the central districts shorthorns and other English, Dutch, and Norman cattle and horses have been introduced, and are largely raised throughout the temperate zone. Among the natural mineral products are gold, silver, iron, copper, lead, coal, sulphur, zinc, antimony, arsenic, cinnabar, rock-salt, crystal, granite, marble, lime, gypsum, jet, amethysts, rubies, porphyry, and jasper; while much of the world's platinum is obtained from the upper San Juan, and the principal source of the finest emeralds is at Muzo in Boyaca.

Colombo, the capital of the island of Ceylon, on the west coast of the island, and one of

the chief ports of Southern India. It is strongly fortified both toward the land and the sea, and its suburbs are very attractive and generally well built. The native population live, however, for the most part in the old town, or Black Town, in which many of the houses are little more than mud huts; and there are many similar places of abode outside the walls. Coffee and oils are among the chief products of Colombo, and cinnamon is largely exported. The present name of the town was given to it by the Portuguese in honor of Christopher Columbus. Population, 158,000.

Constantinople, called by the Turks *Stamboul*, the capital of the Turkish Empire. It is said to have been founded in the Seventh Century before Christ, and it retained its name of *Byzantium*, derived from its founder, till its conquest (A. D. 330) by Constantine the Great, who built a new city on the site, and gave to it its present name. It came into the hands of the Turks in 1453. Situated on an arm of the sea called the Golden Horn, on the European side of the Bosphorus or Strait of Constantinople, the city holds a splendid position, and its appearance from the sea is very striking; but the streets are for the most part narrow and dirty, and the houses are mostly low, being built of wood and earth. It contains, however, some fine public buildings, such as the Seraglio, or Imperial Palace, and the Cathedral of St. Sophia, now converted into a mosque. Many of the mosques are very beautiful, and are generally surrounded with trees and gardens. The Golden Horn, on the north side of the city, forms one of the finest harbors in the world. On the northeast side of the harbor are the suburbs of Galata and Pera, where the English, the French, and other Europeans reside. Galata is the seat of the commercial establishments, Pera that of the diplomatic bodies. The inhabitants of Stamboul itself are Turks, Armenians, Greeks, and Jews, who have each particular quarters allotted to them. The objects of greatest attraction in Stamboul are the bazaars, or market-places, the fountains, and the baths. The Seraglio stands on the eastern side of the city, and is surrounded by public offices and government buildings, being altogether three miles in circumference. The principal entrance to the palace is called "the Porte." There are upwards of 350 mosques in Constantinople, and about thirty-six Greek, Roman Catholic, and Protestant churches. There are more than 130 public baths in the city, and 180 khans or lodging houses of great size, chiefly occupied by foreigners. Omnibuses and tramways have been introduced, and on the Pera side of the city many of the streets are well lighted. The old walls of the city are thirteen miles in circumference. Population, 1,106,000.

Corinth, a city of Ancient Greece, the capital of a small, but wealthy and powerful district in the Peloponnesus. It lay on the southeast of the "Gulf of Corinth," which stretches along the northern shore of the Peloponnesus; and its position on the "Isthmus of Corinth," which connects the Peloponnesus with the more northerly part of Greece, made it a place of great importance, and the emporium

of the trade between Europe and Asia. The city was taken and destroyed by the Romans, about the middle of the Second Century before Christ. It was afterwards, in the First Century of our era, made into a Roman colony, and regained much of its former wealth, which led to its population becoming once more famed for their luxuriousness and licentiousness. Little now remains of the city except the ruins of a Doric temple, believed to be one of the earliest existing specimens of that style of architecture. The modern town is of no importance.

Cossacks, a people inhabiting those parts of the Russian Empire which border on the northern dominions of Turkey, Poland, and the southern confines of Siberia. Both the name and the origin of this people are involved in great uncertainty, but they are believed to be of a mixed Caucasian and Tartar race. The country of the Don Cossacks, or Cossacks of the Don, to the north of the Sea of Azov and Caucasia, has an area of about 62,000 square miles, with a population of about 1,100,000. They pay no taxes to the government, but, in lieu of this, every Cossack of the Don, from fifteen to sixty years of age, is bound to render military service. Every Cossack is obliged to equip, clothe, and arm himself at his own expense, and to keep his horse. The number of Don Cossacks in military service is computed at 66,000; and there are, besides, the Cossacks on the Black Sea, the Great Russian Cossacks on the Caucasian Line, the Ural Cossacks, the Orenburg Cossacks, the Siberian Cossacks, and the Bashkir Cossacks, the total number of Cossacks in military service being estimated at about 330,000, all of whom are fully organized, and are supposed to be prepared to enter the field, on being summoned, in the course of ten days. They are thus the most important part of the irregular troops of Russia, but otherwise they maintain considerable independence.

Cotopaxi (*kō-tō-pāx'i*), the most remarkable volcanic mountain of the Andes, in Ecuador, about sixty miles northeast of Chimborazo; latitude 0° 43' south; longitude 78° 40' west; altitude 19,613 feet. It is the most beautiful of the colossal summits of the Andes, being a perfectly symmetrical, truncated cone, presenting a uniform, unfurrowed field of snow of resplendent brightness. Several terrific eruptions of it occurred in the course of the Eighteenth and the beginning of the Nineteenth Century.

Coventry (*kuv'en-tri*), a city in England, county of Warwick, eighty-five miles northwest of London. It was formerly surrounded with lofty walls and had twelve gates, and was the see of a bishop early conjoined with Lichfield. Parliaments were convened here by the earlier monarchs of England. Pageants and processions were celebrated in old times, and a remnant of these still exists in the processional show in honor of Lady Godiva. Population, 69,877.

Cracow (*krā'kō*), the old capital of Poland, in 1815-1846 capital of a republic of the same name now forming part of Austrian Galicia; is on the left bank of the Vistula, where it becomes navigable, and consists of Cracow proper

or the old city, and several suburbs. It is the see of a bishop, is well built and regularly fortified. The cathedral, a fine old Gothic edifice, contains monuments of many Polish kings, of Kosciusko, etc. The university was founded in 1364, but gradually fell into decay, and was reorganized in 1817. It has a library of 300,000 volumes. On a hill near the town stands the monument of Kosciusko, 120 feet high. Population, 100,520.

Crecy (*krē'se*), or **Cressy**, a small town of France, in the department of Somme, about twelve miles northeast of Abbeville, celebrated on account of the Battle of Crecy, won by Edward III., of England, over the French, under the Count of Alençon, August 26, 1346. In this battle the Prince of Wales (the Black Prince) greatly distinguished himself; and the crest now used by the Princes of Wales (three ostrich feathers, with the motto, "Ich dien," I serve) is commonly said to have been adopted by the Black Prince after this victory, in which the King of Bohemia, to whom the crest belonged, was slain. At present, the town of Crecy has only about 1,300 inhabitants.

Cronstadt (*krōn'stāt*), a maritime fortress of Russia, about twenty miles west of St. Petersburg, in the narrowest part of the Gulf of Finland, opposite to the mouth of the Neva, on a long, narrow, rocky island, forming, both by its position and the strength of its fortifications, the bulwark of the capital, and being the most important naval station of the Empire. It was founded by Peter the Great, in 1710, and used to be the commercial port of St. Petersburg, but since the construction of a canal, giving large vessels direct access to the capital, it has lost this position.

Cuba, the largest and most westerly of the West Indies. It stretches in the west, with a breadth varying from thirty miles to 160 miles, a coast-line of 1,976 miles, and an area of about 45,872 square miles, including adjacent islands (of which the Isle of Pines is the largest) and bays. Only about one-third of the coastline is accessible to vessels, the remainder being beset by reefs and banks. The shores, low and flat, are liable to inundations, but there are numerous excellent havens. A watershed running lengthwise through the islands, rises into mountainous heights only in the southeast, where are the Sierra de Maestra, shooting up in the Pico de Turquinto to 8,400 feet, and the Sierra del Cobre (copper). The mountains, composed of granite overlaid with calcareous rocks, and containing minerals, especially copper and iron, are clothed in almost perennial verdure, wooded to the summits. The limestone rocks abound in caverns, with magnificent stalactites. Mineral waters are plentiful. The rivers, running north and south, are navigable for only a few miles by small boats, but are very serviceable for irrigation of the plantations, and supply excellent drinking water. The climate, more temperate than in the other West Indian Islands, is salubrious in the elevated interior, but the coasts are the haunt of fever and ague. No month of the year is free from rain, the greatest rainfall being in May, June, and July. Earthquakes are frequent in the east. Hurricanes, less frequent

than in Jamaica, sometimes cause widespread desolation.

The soil of Cuba is a marvel of richness, and a large part is still covered with virgin forest. The vegetation of Cuba also includes tamarinds, palms, ferns, lianas, etc. Among the cultivated products are sugar, tobacco, coffee, cacao, rice, maize, cotton, esculent roots, and tropical fruits. Among the animals are a species of tailless rat peculiar to Cuba, a great abundance of birds. Of noxious animals and insects there are the crocodile, scorpion, and mosquitoes. The rivers and seas are well stocked with fish, the turtle abounding in the shallows and sandy places of the beach. The staple production of the island is sugar. In a single year Cuba has produced over 11,000,000 tons of this article for export.

Tobacco ranks next to sugar as a staple. Cuba produces the standard quality of cigar leaf, owing to the exquisite adaptation of the soil and climate to the development of the plant. The normal production is 6,000,000 pounds of leaf, and 130,000,000 cigars. The mineral wealth of Cuba is largely in the copper mines. There are almost inexhaustible deposits of this metal, part of which are found in the mountains near the east end, known as the Sierra del Cobre, or Copper Mountains. Here a great part of the ore taken out yields sixty per cent. of pure metal. Cuba has asphalt deposits rivaling those of Trinidad, for street paving. Iron ores abound. In the neighborhood of Santiago there are mountains of metal, and for a considerable period the Juragua and Daiquiri companies (American) shipped from 30,000 to 50,000 tons of the ore per month to the United States. Oranges of exquisite flavor grow spontaneously in all parts of the island, though no attention is paid to their culture or exportation. There are coconuts, six kinds of bananas, and such fruits as guavas, zapotes, anonas, guanabanas, and tamarinds. There are thirty-two species of the palm tree, the woods and the leaves of the majority of which could be transformed into a profitable article of commerce, but so far only two have been utilized, the "yarey" palm, whose leaves are used in the United States for the manufacture of hats and baskets, and the "palma real" (royal palm), from which durable boards are made, which last much longer than those of the yellow pine and are largely used in the construction of houses.

There are ten railway companies in Cuba, which operate upward of 1,000 miles of main line, and there are also private branch lines to all the important sugar estates.

There are over 2,300 miles of telegraph line in operation, all the property of the government, which also owns the telephones, leasing both systems to private corporations.

Population, 1,786,207.

Cuzco, an inland city of Peru, capital of a department of the same name, and formerly capital of the Empire of the Incas, about 400 miles southeast of Lima. According to tradition, this town was founded in 1043 by Manco Capac, the first Inca of Peru. The grandeur and magnificence of the edifices, of its fortress, and of the Temple of the Sun, struck the Spaniards with astonishment in 1534, when the city

was taken by Francis Pizarro. On the hill toward the north are yet seen the ruins of a fortress built by the Incas, and which has a communication, by means of subterranean passages, with three forts built in the walls of Cuzco. All the descendants of the Incas resided in a particular quarter of the city. Population, 22,000.

Czechs (*cheks*), the extreme western branch of the great Slavonic family of races. The Czechs have their headquarters in Bohemia, where they arrived in the Fifth Century. The origin of the name is unknown. The total number of the Czechs is about 6,000,000, nearly all of whom live in the Austrian Empire. The Czechs proper, in Bohemia, number about 2,700,000. They speak a Slavonic dialect of great antiquity and of high scientific cultivation. The Czech language is distinguished as highly inflectional. Like the Greek, it has a dual number, and its manifold declensions, tenses, and participial formations, with their subtle shapes of distinction, give the language a complex grammatical structure. The alphabet consists of forty-two letters. In musical value the Czech comes next to Italian.

Danube, a celebrated river of Europe, originates in two small streams rising in the Schwarzwald, or Black Forest, in Baden, and uniting at Donaueschen. The direct distance from source to mouth of the Danube is about 1,000 miles, and its total length, including windings, about 1,640 miles. The Danube is navigable for steamers up the Regensburg (Ratisbon) nearly 1,500 miles from its mouth.

Dardanelles (the ancient Hellespont), the narrow strait between Europe and Asia, connecting the Grecian Archipelago with the Sea of Marmora. The strait is about forty miles in length. Its western entrance is two miles wide, but at its narrowest part it is only three-quarters of a mile wide; and here stood the castles of the Dardanelles (*Dardanus*), from which the strait derived its name.

Date Line, an arbitrary line drawn on a map from north to south, on the one side of which it is to-day and on the other to-morrow, even in places not a mile apart. When ships cross this line they drop or repeat a day. The international date line describes the following course: Starting at the North Pole it passes through Bering Strait, then slants to the west to clear the long horn formed by the Aleutian chain of islands and give them the same day as the United States, to which they belong. This accomplished, it returns to the 180th meridian and drops south into the tropics, keeping far to the east of the Japanese group and the Philippines till it approaches the latitude of the Fiji Islands. As these and some of the neighboring groups belong to Great Britain and do business chiefly with her Australian colonies, the date line here makes a sudden swerve to the east, so as not to embarrass the local commerce with a change of day.

Dead Sea, The, a lake of Palestine, about twenty miles north of Jerusalem. It is called by the Arabs "Bahr Loot," or "Sea of Lot"; is about thirty-five miles long, and from ten to twelve broad, with a depth of 220 fathoms, and its surface 1,381 feet below the level of the

Mediterranean. The waters of the Dead Sea are intensely salt, of great specific gravity, and have no perceptible outlet; in the north it receives the waters of the Jordan.

Denmark, a kingdom of Northern Europe, is composed of a peninsular portion, and an extensive archipelago, lying east of it, with a few scattered islands on its west side. The peninsular portion is composed of Jutland, and measures, north to south, 185 miles, with a breadth varying from forty miles to 108 miles. Besides these territories, Denmark possesses the Faroe Islands and Iceland, in the North Atlantic Ocean, and Greenland in the Arctic regions, also the Danish West Indies. Denmark has no large rivers. Intercourse between the various islands and parts of the kingdom separated from each other by water is necessarily kept up by means of water communication, regular ferries being established at numerous points. Denmark is well supplied with excellent seaports, the most important being Copenhagen, Aalborg, Aarhus, and Randers. Horses and cattle are reared in great numbers, and both are excellent. Large flocks of sheep are kept; but rather for the flesh than the wool, which is coarse and short. Swine are also reared to a great extent. Although not particularly favored by nature, Denmark is yet preëminently an agricultural country. The land is greatly subdivided, as the law interdicts the union of small farms into larger, and encourages the division of landed property. The kinds of grain most largely cultivated are barley, oats, rye, and wheat, the greatest area being occupied by oats, the second by barley. The fisheries were formerly a more important branch of national industry than now.

Detroit, metropolis of Michigan, is situated on the Detroit River, about eighteen miles from Lake Erie, and four miles from Lake St. Clair. It has a water front of eight miles; steamship communication with the principal ports on the Great Lakes; and ferries to Windsor on the Canadian side. The river at this point is known as the "Dardanelles of the New World," leading from one great lake to another and affording an excellent harbor. Detroit has many magnificent public parks, and over \$500,000 is expended annually for their maintenance. The largest and most beautiful is Belle Isle, an island of 700 acres at the entrance of Lake St. Clair. This park is an immense pleasure ground and offers all sorts of amusements. No city of its size in the country surpasses Detroit in the number, beauty, and substantial quality of its public and business buildings. Among the most noteworthy are the Chamber of Commerce, Majestic, Union Trust, Hammond, municipal buildings, county courthouse, city hall, the post-office, built at a cost of \$2,000,000, Light Guard armory, art museum, Central high school, and Masonic Temple. Near the Campus Martius is the public library, with 150,000 volumes. In front of the city hall stands a magnificent soldiers' and sailors' monument. Other points of interest are Fort Wayne, the Bagley Fountain, Evacuation Day Tablet, the old home of General Grant, and relics of Perry's victory on Lake Erie. Detroit is an extensive manu-

facturing and commercial city. Population, 325,563.

Dresden, the capital of the kingdom of Saxony, is situated in a beautiful valley on both sides of the River Elbe. Among the chief edifices, besides several of the churches, are the museum (joined on to an older range of buildings called the Zwinger), a beautiful building containing a famous picture gallery and other treasures; and the Japanese Palace (Augusteum) containing the royal library of from 300,000 to 400,000 volumes. The city is distinguished for its excellent educational, literary, and artistic institutions, among which are the Polytechnic School, the Conservatory and School of Music, the Academy of Fine Arts, etc. The manufactures are important and various in character; the china, however, for which the city is famed, is made chiefly at Meissen, fourteen miles distant. The commerce is considerable, and has greatly increased since the development of the railway system. The chief glory of Dresden is the gallery of pictures, one of the finest in the world. The pictures number about 25,000, and in particular comprise many fine specimens of the Italian, Dutch, and Flemish schools. The city suffered severely in the Thirty Years' War, and also in 1813, when it was the headquarters of Napoleon's army. It was occupied by the Prussians in 1866, but was evacuated in the following spring. Population, 516,996.

Dublin (Irish, *Dubh-linn*, "black pool"), the capital of Ireland, stands on the River Liffey, where it disembogues into Dublin Bay. Much of Dublin is built on land reclaimed from the sea, a work which still continues; and the ground is generally flat, with a very few undulations. The river, running from east to west, divides the city into two almost equal portions. The aristocratic parts are the southeast and northeast, containing many beautiful squares, with splendid streets and terraces. The center and the northwest quarter are the great emporiums of trade and the residence of the middle classes. The southwest division, part of which is called the "Liberties," once the seat of the silk trade, is the most filthy and degraded portion of the city. The streets in this quarter are narrow, crooked, and irregular, while in the fashionable quarter they possess a totally opposite character. The city is surrounded by a "Circular Road," of nearly nine miles in length, forming a favorite drive and promenade. Population, 290,638.

Edinburgh, capital of Scotland, and chief town of Mid-Lothian, occupies a picturesque situation on a cluster of eminences at a distance of about one and one-half miles from the Firth of Forth. Its admirable position has induced the comparison with Athens, from which, as well as from its literary fame, it takes the title "Modern Athens." The Gaelic name of the city is "Dunedin." A picturesque castle crowns the highest point in the city. Holyrood Abbey and palace in the low ground east of the city have great historic interest. Edinburgh is the residence of considerable numbers of the Scottish landed gentry, and its society is regarded as unusually polished, from the predominance of the professional and literary elements in its

composition. Its medical practitioners — surgeons and physicians — have a high reputation. Its university and medical schools, its high school, and its various other educational institutes have a high repute. Population, 316,479.

Egypt is a country in the northeast of Africa, whose territory extends up the valley of the Nile as far as the Equator, embracing Nubia, Ethiopia, Darfur, etc. Egypt proper extends from the mouth of the Nile to the first cataract at Assouan, and is usually distinguished into Upper, Middle, and Lower Egypt, which last comprehends the Delta. The Delta begins just below Cairo, about ninety miles from the sea, and its greatest breadth is about eighty miles. It is this part of the country which is chiefly cultivated, its fertility being derived from the annual inundations caused by the overflow of the Nile. The rest of the country is mainly sandy desert, with some remarkable oases on the west of the Nile. The climate of Egypt is hot and dry, but not unhealthy. The date-palm, the acacia, and the sycamore, are scattered throughout the country; large plantations of roses are found in the province of Feiyoom; and the soil and climate are well suited for cotton, sugar, rice, indigo, cucumbers, melons, and onions, as well as for maize, wheat, and millet. There are no metals in Egypt, but salt, nitre, marble, red granite, oriental alabaster, and limestone, are found. The commerce of the country is very considerable, and centers chiefly in Alexandria, which suffered severely, however, in the war of 1882. The capital is Cairo, which is the largest city in Africa.

Eiffel Tower, a structure erected on the banks of the Seine in Paris, the loftiest in the world, being 985 feet in height, and visible from all parts of the city. It consists of three platforms, of which the first is as high as the towers of Notre Dame; the second as high as Strasbourg Cathedral spire; and the third, 863 feet. It was designed by Gustave Eiffel, and erected in 1887-89. There are cafés and restaurants on the first landing, and the ascent is by powerful elevators.

England, the most southern and richest portion of the island of Great Britain, is bounded north by Scotland, east by the German Ocean, south by the English Channel, and west by the Atlantic Ocean, the principality of Wales, and the Irish Sea. Maximum length, 425 miles; breadth, fluctuating between sixty-two and 280 miles; coast line, about 2,000 miles. Area, 50,812 square miles. The principal islands belonging to it are those of Man, Lundy, Scilly, Walney, Sheppey, Wight, Lindsfarne, and the Channel Islands. Chief rivers: Severn, Thames, Trent, Mersey, Ouse, Medway, Tyne, Dee, Tees, Wear, Derwent, and Eden. Lakes: Derwent-water, Ulleswater, Windermere, and Keswick. Estuaries: those of the Thames, Mersey, Humber, Severn, Dee, Southampton Water, and the Wash. It has numerous capes and headlands. Mountains: The principal mountains are those of Cumberland, Westmoreland, and Yorkshire, with the Cheviots on the Scottish border, the Derbyshire "Peak," and the Cotswolds in Gloucestershire. Numerous forests are spread over

the country. Soil: The major part of the land is fertile and highly productive, owing to an admirable system of tillage; while well-furnished farm houses and comfortable cottages everywhere meet the eye, and evince that taste for neatness and rural beauty which is so characteristic of the nation. The same features, too, on a larger and grander scale, are found in the country-seats of the nobility and squirarchy. The climate is generally moist, but mild and healthful. Chief towns: London (capital of the British Empire), Liverpool, Manchester, Leeds, Birmingham, Hall, Bristol, Newcastle-on-Tyne, Sheffield, Bath, Oxford, Carlisle, etc.

English Channel, the arm of sea which separates England from France, extending, on the English side, from Dover to Land's End; and on the French, from Calais to the island of Ushant. On the east it communicates with the German Ocean by the Strait of Dover, twenty-one miles wide; and on the west it opens into the Atlantic by an entrance about 100 miles wide. At its greatest breadth it is about 150 miles.

Erie Canal, the largest artificial waterway in the United States, serving to connect the Great Lakes with the sea. It begins at Buffalo on Lake Erie, and extends to the Hudson at Albany. It is 387 miles long; has in all seventy-two locks; a surface width of seventy feet, bottom width of forty-two feet, and depth of seven feet. It is carried over several large streams on stone aqueducts; was opened in 1825; and up to 1901 had cost for construction, enlargement, and maintenance \$52,540,800. In November, 1903, the people of New York voted favorably on the question of enlargement of the canal to accommodate one-thousand-ton barges.

Erie, Lake, one of the great chain of North American lakes, between Lakes Huron and Ontario, about 265 miles long, 63½ miles broad at its center, from 200 to 270 feet deep at the deepest part; area, 9,600 square miles. The whole of its south shore is within the territory of the United States, and its north within that of Canada. It receives the waters of the upper lakes by Detroit River at its northwest extremity, and discharges its waters into Lake Ontario by the Niagara River at its northeast end. The Welland Canal enables vessels to pass from it to Lake Ontario.

Etna, or Ætna, Mount, the greatest volcano in Europe, a mountain in the province of Catania, Sicily; height, 10,874 feet. It rises immediately from the sea, has a circumference of more than 100 miles, and dominates the whole northeast of Sicily, having a number of towns and villages on its lower slopes. The top is covered with perpetual snow; midway down is the woody or forest region; at the foot is a region of orchards, vineyards, olive groves, etc. The eruptions of Etna have been numerous, and many of them destructive. That of 1169 overwhelmed Catania and buried 15,000 persons in the ruins. In 1669, the lava spread over the country for forty days, and 10,000 persons are estimated to have perished. In 1693, there was an earthquake during the eruption, when over 60,000 lives were lost. One eruption was in 1755, the year of the Lisbon earthquake. Among

more recent eruptions are those of 1852, 1865, 1874, 1879, 1886, 1892.

Euphrates, or El Frat, a celebrated river of Western Asia, in Asiatic Turkey, having a double source in two streams rising in the Anti-Taurus Range. Its total length is about 1,750 miles, and the area of its basin, 260,000 square miles. It flows mainly in a southeasterly course through the great alluvial plains of Babylonia and Chaldaea till it falls into the Persian Gulf by several mouths, of which only one in Persian territory is navigable. About 100 miles from its mouth it is joined by the Tigris, when the united streams take the name of Shatt-el-Arab. It is navigable for about 1,200 miles, but navigation is somewhat impeded by rapids and shallows.

Faneuil Hall, a public hall in Boston, presented to the town by Peter Faneuil, in 1740, comprising a market-place on the first floor, and a town hall and other rooms above. In 1761, it was destroyed by fire. In 1763, it was rebuilt by the town; and, in 1775, during the British occupation of Boston, it was used for a theater. During the Revolutionary War this building was often used as a meeting place by the patriots.

Florence (Italian, Firenze; ancient, Florentia Tuscorum), a magnificent city of Italy, the capital of the province of Firenze, and formerly of Tuscany. It is situated in a beautiful valley on the banks of the Arno, 125 miles north of Rome. The two parts of the city are connected by six bridges, and the whole city was formerly surrounded by walls, upwards of six miles in extent. In architectural pretensions, Florence is one of the finest cities of Italy. Its cathedral, which dates from the close of the Thirteenth Century, is of great extent and magnificence; and it has many other churches only less interesting or beautiful. For its collections of paintings and sculpture Florence is scarcely excelled by any city of Europe. It has produced, perhaps, a greater number of celebrated men than any other continental city, including Dante, Petrarch, Boccaccio, Michael Angelo, Leonardo da Vinci, and Galileo. The manufactures of Florence are few and of small importance. Satins, silks, jewelry, and mosaics, are, however, manufactured to some extent, and straw-plaiting occupies a considerable number of the lower orders of the people. As the capital of the province, Florence is still a place of some political importance. Population, 205,589.

France is a maritime country in the west of Europe, forming one of its most extensive, most populous, and most influential states. It is bounded north by the German Ocean and the Straits of Dover; northwest by the English Channel; west by the Atlantic, more especially that part of it called the Bay of Biscay; south by Spain and the Mediterranean Sea; east by Italy, Switzerland, and the German Territory of Alsace; northeast by German Lorraine, Luxemburg, and Belgium. On taking a survey of this great country it is impossible not to be struck with the advantages it derives from its position. It not only forms a continuous and compact whole, but, while protected by great

natural barriers at most parts where it is connected with the continent, a long line of coast on the west and northwest gives it immediate access to the great ocean thoroughfare, while on the south its harbors in the Mediterranean secure to it a large share in the traffic of that important inland sea. The chief plains are those of Burgundy and of the oceanic district, embracing the lower basins of the Seine, Loire, and Garonne. There are four great mountain-chains — the Pyrenees, separating France from Spain; the Cevenno-Vosgian Range, formed of the Cevennes, running east and west between the Rhone and Loire, and the Vosges, running north and south between the Moselle and the new boundary-line; the Alps, which separate the Swiss Territory from the provinces of Savoy and Nice; and the Sardo-Corsican Range, which belongs, as the name implies, to the islands of Sardinia and Corsica. The French portion of the Alps now includes several of the highest mountains and most elevated passes of the range — as Mont Blanc, Mont Iseran, Mont Cenis, and the pass of Little St. Bernard, etc. In Corsica, the highest peak rises to an elevation of 9,000 feet. The grand watershed of France is the Cevenno-Vosgian chain, which determines the direction of the four great rivers, the Seine, the Loire, the Garonne, and the Rhone; the first three of which flow northwest into the Bay of Biscay or the English Channel, and the fourth into the Gulf of Lyons. France possesses only one lake of any importance, Le Grand-Lieu, a little to the south of Nantes, which has an area of about 14,300 acres; but the country abounds in salt marshes or ponds, more especially in the districts of Gascony, Roussillon, and Languedoc. France is peculiarly rich in mineral springs, of which there are said to be nearly 1,000 in use. It possesses one of the healthiest climates in Europe, although, owing to its great extent of area, very considerable diversities of temperature are to be met with. Of the vegetable products of France, which, from varied climatic and geognostic relations, are necessarily characterized by great abundance and diversity, the most generally cultivated are the cereals; the vine, chestnuts, olives, culinary fruits and vegetables, hops, beetroot for the manufacture of sugar, tobacco, madder, chicory. The cultivation of the mulberry tree derives importance from its bearing on the production of silk. The vine has, from a very early period, constituted one of the principal sources of the agricultural wealth of France. The choicest wines are grown in the Bordelais, Burgundy, and Champagne, but some excellent kinds are produced on the banks of the Loire and in some of the southern departments. The principal forest trees are the chestnut and beech on the central mountains, the oak and cork tree in the Pyrenees, and the fir in the Landes. The destruction of the national forests has been enormous within the last two centuries. The French government expends between 3,000,000 and 4,000,000 francs annually in aiding by subsidies those engaged in the great fisheries. The chief mineral products of France are coal and iron, in the excavation of which nearly 250,000 men are now employed. France presents a great variety of geological formations,

but although we meet with an almost complete succession of all the stratified and non-stratified formations they are distributed with great inequality. The best carpets are made in Aubusson, Abbeyville, and Amiens. Paris is the seat of industry for some of the most costly fabrics, as Gobelins, tapestry, shawls of great value, watches, clocks, articles of "vertu," carriages, philosophical instruments, etc. Sèvres stands unrivaled for its china and glass. St. Gobain and St. Quirin manufacture looking-glasses of the largest size. The great emporiums of trade are Paris, Lyons, St. Etienne, Lille, Rheims, Nîmes, Toulouse, etc.; and the most attractive maritime ports are Marseilles, Cette, Havre, Bordeaux, etc.

Ganges, a river of Hindustan, one of the greatest rivers of Asia, rising in the Himalaya Mountains, in Garhwal State, and formed by the junction of two head streams, the Bhagirathi and the Alaknanda, which unite at Deoprag, ten miles below Srinagar, 1,500 feet above sea-level. The Ganges is navigable for boats of a large size nearly 1,500 miles from its mouth. It is an imperative duty of the Hindus to bathe in the Ganges, or at least to wash themselves with its water, and to distribute alms, on certain days. The Hindus believe that whoever dies on its banks and drinks of its water before death is exempted from the necessity of returning into this world. Its water is a considerable article of commerce in the remoter parts of India.

Genoa, a city of Italy, is beautifully situated on the Gulf of Genoa, which lies to the south of Piedmont, and it stands at the foot and on the slope of the Ligurian Alps. In the old part of the city the streets are narrow and steep, but in the newer parts there are several spacious promenades; though generally the irregular rising ground on which the city is built has prevented any comprehensive plan of improvement, and it still retains much of that quaintness of architectural character for which it has long been celebrated. There are many magnificent churches in Genoa, of which the principal is the Duomo, or Cathedral, of St. Lorenzo. It is one of the chief ports of the Mediterranean, and there are local manufactures of cotton, silk, jewelry, etc. Genoa was the birthplace of Christopher Columbus, and of many other famous men. Population, 234,710.

German Empire, one of the great powers of Europe, consisting of a federation of semi-independent and other states, which occupy the greater portion of North-Central Europe. The following table shows the elements of which the German Empire as now constituted is made up:

States of the Empire	Area English Sq. Mi.	Population	Pop. per Sq. Mile
Saxe-Weimar,	1,397	388,095	277.8
Mecklenburg-Str.,	1,131	103,451	91.5
Saxe-Meiningen,	953	268,916	282.2
Anhalt,	888	328,029	369.4
Saxe-Coburg-Gotha,	764	242,432	317.3
Saxe-Altenburg,	511	206,508	404.1
Lippe,	469	145,577	310.4
Waldeck,	433	59,127	136.5
Schwarzburg-Rud.,	363	96,835	266.7
Schwarzburg-Sond.,	333	85,152	255.7
Reuss Junior Branch,	319	144,584	453.2
Schaumburg-Lippe,	131	44,992	343.4
Reuss Elder Branch,	122	70,603	578.7
Hamburg,	160	874,878	5,467.9
Lübeck,	115	105,857	920.5
Bremen,	99	263,440	2,661.0
Alsace-Lorraine,	5,604	1,814,564	323.8
Total,	208,780	60,641,278	290.4

The small island of Heligoland, now forming part of Prussia, was added to the empire in 1890.

Among the Germans themselves their country is known as "Deutschland"; to the French as "Allemagne"; while its Latin denomination is "Germania," whence the English name. Germany lies between the Baltic Sea, Denmark, and the North Sea on the north, and Switzerland and a part of Austria on the south, and between France, Belgium, and the Netherlands on the west, and the rest of Austria and Russia on the east. The northern part of Germany forms part of the great European plain, and is for the most part flat. Its soil is not very fertile, and extensive forests alternate with heaths, morasses, and small, shallow lakes. Central Germany may be described as hilly; its soil is fertile, and its scenery is often very picturesque. The greater part of Southern Germany is occupied by the plateau of Bavaria, which rises about 1,600 feet above the sea level, and increases in elevation towards the west, where it forms the Schwarz Wald, or Black Forest Range. Some of the mountain chains of Germany, especially the Harz Mountains and the Erzgebirge, are very rich in minerals. The chief rivers are the Rhine, Elbe, Oder, Vistula, and Upper Danube; others of less note are the Ems, Weser, Pregel, and Niemen. The climate of Germany is, on the whole, temperate and salubrious, though the winters are somewhat severe, and the Rhine is occasionally frozen as far south as Mannheim. Germany is rich in mineral products; cobalt, arsenic, sulphur, saltpeter, alum, gypsum, bismuth, pumice-stone, slate, ochre, emery, vitriol, are among the exports. Its vegetable products comprise a large portion of the European flora. All the ordinary cereals are extensively cultivated in the north. Its best wine-producing districts are the valleys of the Danube, Rhine, Main, Neckar, and Moselle, which are also noted for the excellence of their fruits and vegetables. The principal seaports are Hamburg, Bremen, Lübeck, Altona, Cuxhaven, Bremerhaven, Stralsund, Stettin, Dantzic, Königsberg, and Memel. Inland, the chief commercial cities are Frankfurt-on-the-Main, Breslau, Leipzig, Cologne, Nuremberg, Elberfeld, Muhlhouse, Chemnitz, Mentz, and Augsburg.

States of the Empire	Area English Sq. Mi.	Population	Pop. per Sq. Mile
Prussia,	134,616	37,293,324	277.3
Bavaria,	29,292	6,524,372	222.7
Württemberg,	7,534	2,302,179	305.5
Baden,	5,823	2,010,728	345.3
Saxony,	5,789	4,508,601	778.8
Mecklenburg-Schw.,	5,068	625,045	123.3
Hesse,	2,966	1,209,175	407.6
Oldenburg,	2,482	438,856	176.8
Brunswick,	1,418	485,958	342.5

Giants' Causeway (deriving its name from a legend that it was the commencement of a road to be constructed by giants across the channel to Scotland) is a natural pier or mole of columnar basalt, projecting from the north coast of Antrim, Ireland, into the North Channel, seven miles northeast of Portrush. It is part of an overlying mass of basalt from 300 to 500 feet in thickness, which covers almost the whole country of Antrim, and the east part of Londonderry.

Gibraltar, a seaport, and one of the strongest fortresses in Europe belonging to England, is situated in the south of Spain at the narrowest part of the Straits of Gibraltar, sixty-one miles southeast of Cadiz. The number and strength of the military works, and the vast galleries opened in the calcareous rock, excite admiration. The fortress, though taken by surprise by the British, in 1704, is considered impregnable. The sea-passage, extending from Cape Spartel, Spain, to Cape Ceuta, Africa, connects the Atlantic with the Mediterranean Sea; length about thirty-six miles; narrowest width between Europa Point and Ceuta, fifteen miles; broadening westward to twenty-four miles. A strong current sets in from the Atlantic through these straits, and it is supposed that a counter current passes underneath.

Glaciers are generally masses of consolidated snow, which by their own weight move slowly down the mountain where they have been accumulated. Their pace is seldom more than one inch per hour. Along their sides or over their surface are scattered accumulations of stone and detritus, which are called moraines. The Alpine Glacier give birth to the five great rivers of Central Europe—the Rhine, Rhone, Po, Inn, and Adige. Glaciers move like rivers, faster in the middle and above than at the sides and along the bottom. The torrent of icy water that issues from the lower end of them is simply the result of melting. The largest glacier in the world is the Muir, in Alaska; the largest in Europe is the Justeldals Brae, in Norway.

Glasgow, the industrial metropolis of Scotland, is one of the largest and most important cities in the United Kingdom. It is situated on the Clyde, which affords great facilities for steam-boat traffic and shipping. The wharfs and docks afford extensive accommodation for vessels of every description. Glasgow is celebrated as the great Scottish emporium of trade and manufactures. The annual tonnage of the port is some 1,500,000 tons. The trade of Glasgow rose about the middle of the last century, and consisted chiefly of American and West Indian commerce. Since then the manufacture of cotton goods has risen to a great extent; as also woolens, silks, glass, iron, stone-ware, and chemicals.

Grand Canyon, a gorge through which the Colorado River flows in Arizona; sixty-five miles from Flagstaff. It is one of the natural wonders with which that country abounds. The canyon is a gorge 217 miles long, or with the addition of Marble Canyon, connected with it, 286 miles. It is from nine to thirteen miles wide and 6,300 feet below the level of the plateau. This depth is maintained for about fifty

miles and surpasses that of any other canyon in the world.

Great Britain, or The British Empire. Britain, or rather Britannia, was the name which was given by the Romans to modern England and Scotland. The name Great Britain was applied to England and Scotland after James I. ascended the English throne in 1603. These with Ireland, the Isle of Man, and the Channel Islands, constitute the British Isles, or the United Kingdom of Great Britain and Ireland; and if the colonial and other foreign possessions be added, they form the British Empire. Of this empire it may safely be said that it is the greatest the world has ever known. It covers an area five times the size of the Persian Empire under Darius, and four times that of the Roman Empire under Augustus.

Great Britain proper is bounded on the north by the Atlantic, on the east by the North Sea, on the south by the English Channel, and on the west by the Atlantic, the Irish Sea, and St. George's Channel. The most northerly point is Dunnet Head in Caithness; the most southerly Lizard Point in Cornwall; the most easterly, Lowestoft Ness in Suffolk; and the most westerly, Ardnarmurchan Point in Argyshire. Its greatest length is about 608 miles, and its greatest width—from Land's End to the east coast of Kent—about 320 miles; while its surface contains 87,971 square miles. As the rocks of Great Britain form the typical series of the earth's strata, the geology of that country becomes of great importance as a key to the universal composition of the crust of the globe. The whole of the recognized series occur in Great Britain, one or two only being developed more fully elsewhere. All the physical features of the country are intimately connected with its geological structure. The older Paleozoic rocks produce mountainous regions intersected with deep and narrow valleys. The newer strata seldom rise to a great height. The highlands are rounded undulations of the strata, except where igneous rocks are intruded; and the valleys are broad and shallow. In Scotland there are consequently two extensive mountainous districts occupied chiefly with rocks of Silurian age, and intervening valleys filled up with Old Red Sandstone and Carboniferous measures. The climate of Great Britain derives its peculiar character from the insular situation of the country, taken in connection with the prevailing direction of the winds. It is mild and equable in a remarkable degree, the winters being considerably warmer and the summers cooler than at places within the same parallels of latitude. It appears from data furnished by the English meteorological societies that the mean temperature of England is 49.5°, and of Scotland 47.5°. The annual rain-fall in those districts where hills do not interfere is in England about twenty-five inches, and similar parts of Scotland about twenty-eight. Very few species of plants or animals are peculiar to Great Britain, its natural history corresponding generally with that of continental Europe. The flora of the greater part of the island resembles that of Germany.

The British colonies and foreign possessions include:

THE BRITISH

THE UNITED

COUNTRIES	CHARACTER OF POSSESSION	FORM OF GOVERNMENT	EXECUTIVE
ENGLAND, WALES, SCOTLAND, IRELAND, ISLANDS,	Constitute the United Kingdom of Great Britain and Ireland.	Constitutional Monarchy.	The King through the Ministers.

COLONIES AND

COUNTRIES	CHARACTER OF POSSESSION	FORM OF GOVERNMENT	EXECUTIVE
EUROPE —			
Gibraltar,	Colony,	Representative,	Governor,
Malta, etc.,	Colony,		Governor,
ASIA —			
India (including Burmah),	Vice-Royalty,		Governor-General,
Ceylon,	Colony,		Governor,
Cyprus,	Protectorate,		High Commissioner,
Aden and Socotra,	Protectorate,		Political Resident,
Straits Settlements,	Colony,		Governor,
Hong Kong,	Colony,		Governor,
Labuan,	Colony,		Governor,
British North Borneo,			
AFRICA —			
Cape Colony,	Colony,	Responsible,	Governor,
Natal and Zululand,			
St. Helena,	Colony,		Governor,
Ascension,	Naval Station,		British Admiralty,
Sierra Leone,			
British Guinea, Gold Coast, etc.,			
Mauritius, etc.,	Colony,	Representative,	Governor,
British South and East Africa,			
Transvaal,	Colony,		Governor,
Orange River Colony,	Colony,		Governor,
AMERICA —			
Dominion of Canada,	Dependency,	Commonwealth,	Governor-General,
Ontario and Quebec,	Provinces,	Representative,	Lieutenant-Governor,
New Brunswick,	Province,	Representative,	Lieutenant-Governor,
Nova Scotia,	Province,	Representative,	Lieutenant-Governor,
Manitoba,	Province,	Representative,	Lieutenant-Governor,
British Columbia, etc.,	Province,	Representative,	Lieutenant-Governor,
Northwest Territories,	Territory,	Military,	Commissioner,
Prince Edward Island,	Province,	Representative,	Lieutenant-Governor,
Newfoundland,	Colony,	Responsible,	Governor,
British Guiana,			
British Honduras,	Colony,		Lieutenant-Governor,
Jamaica,	Colony,		Governor,
Trinidad and Tobago,	Colony,		Governor,
Barbados,	Colony,	Representative,	Governor,
Bahamas,	Colony,	Representative,	Governor,
Bermuda,	Colony,	Representative,	Governor,
Other Islands,			
AUSTRALASIA —			
Commonwealth of Australia,	Dependency,	Commonwealth,	Governor-General,
New South Wales,	Dependency,	Responsible,	Governor,
Victoria,	Dependency,	Responsible,	Governor,
South Australia,	Dependency,	Responsible,	Governor,
Queensland,	Dependency,	Responsible,	Governor,
Western Australia,			
Tasmania,	Dependency,	Responsible,	Governor,
Dominion of New Zealand,	Dependency,	Responsible,	Governor,
Fiji,	Colony,		Governor,
New Guinea (British),	Colony,		Administrator,

EMPIRE KINGDOM

AREA IN SQUARE MILES	HOW ACQUIRED BY ENGLAND	DATE	POPULATION
50,839			
7,470	Conquest,	1282	32,527,843
29,785	Union,	1603	4,472,103
32,583	Conquest,	1172	4,458,775
302			150,599

DEPENDENCIES

AREA IN SQUARE MILES	HOW ACQUIRED BY ENGLAND	DATE	POPULATION
2	Conquest,	1704	27,460
122	Treaty cession,	1814	188,141
1,800,258	{ Conquest,	Begun 1757	294,360,356
	{ Transfer from East India Co.,	1858	
25,365	Treaty cession,	1801	3,578,333
3,584	Convention with Turkey,	1878	237,022
3,070	(Aden) Conquest,	1839	44,000
1,500	Treaty cession,	1785-1824	272,249
304	Treaty cession,	1841	386,159
31	Treaty cession,	1846	8,411
31,000	Cession to Company,	1877	175,000
276,800	Treaty cession,	1588, 1814	2,433,000
29,200	Annexation,	1843	925,118
47	Conquest,	1673	3,342
38	Annexation,	1815	380
4,000	Settlement,	1787	76,655
339,900	Treaty cession,	1872	23,455,000
1,063	Conquest and cession,	1810, 1814	392,500
1,989,247	Conquest and cession,	1870-1890	14,911,000
119,139	Conquest,	1900	1,091,156
48,326	Conquest,	1900	207,503
3,745,574	Conquest and settlement,	1670-1858	6,504,000 (1907)
612,735	Conquest,	1759-1760	
27,985	Treaty cession,	1763	
21,428	Conquest,	1627	
73,732	Settlement,	1813	
372,630	Transfer to Crown,	1858	
2,634,880	Charter to Company,	1670	
2,184	Conquest,	1745	
42,200	Treaty cession,	1713	217,037
104,000	Conquest and cession,	1803-1814	204,000
7,562	Conquest,	1798	37,479
4,193	Conquest,	1655	771,900
166	Settlement,	1605	195,600
5,794	Settlement,	1629	54,338
19	Settlement,	1612	17,536
8,742		...	255,000
2,972,575	Settlement, . . . . .	....	3,774,282
310,700	Settlement,	1788	1,370,700
87,884	Settlement,	1832	1,208,710
903,690	Settlement,	1836	364,800
668,497	Settlement,	1824	510,520
975,876	Settlement,	1828	194,800
26,215	Settlement,	1803	174,230
104,032	Purchase,	1845	787,660
7,423	Cession from the natives,	1874	120,950
88,460	Annexation,	1884	350,000

Greece is a maritime kingdom in the south-east of Europe. It consists of three portions—the mainland, the Archipelago, and the Ionian Islands; the mainland being almost separated into two parts by the gulfs of Patras and Lepanto on the west and the Gulf of Ægina on the east, but united by the Isthmus of Corinth. The surface of the country is nearly all mountainous, and its shores are bold and rocky. Although only about one-half of the country is capable of cultivation, the soil of the rest is naturally fertile, and vegetation is singularly rich and varied, though agriculture is in a backward state. The olive is cultivated everywhere; the currant-grape is found on the west coast and in the Ionian Islands; and the mulberry, the vine, the orange, the lemon, etc., with cotton and tobacco, are also cultivated. Currants, olive oil, and lead, are the principal exports, the larger portion of which go to Great Britain. In 1881, Greece acquired from Turkey a large portion of Albania, so that it now has an area of about 25,000 square miles. Its total population in 1900 was 2,433,806.

Gulf Stream, a well-defined current in the Atlantic Ocean. It is due to the reflux of the equatorial current. The condensation and superheating of the last-named current takes place mainly in the Caribbean Sea and the Gulf of Mexico, whence arises the name Gulf Stream. Its temperature there is about 50°. It emerges as a defined hot current through the Straits of Florida, and courses in a northeast direction at a little distance from the coast of the United States, so affecting the Bermudas as to make their climate semi-tropical. Between these islands and Halifax the Gulf Stream is about sixty miles broad, 100 fathoms deep, and moves at the rate of three knots an hour. It is of a deep blue color, in marked contrast to the dull green of the Arctic reflux. The Gulf Stream moves in a northeast direction toward Europe. It is generally believed to be through its influence that the west coast of the European continent is so much milder than the corresponding latitudes of America.

Hague, The (*hāg*). (French *La Haye*; Dutch *Gravenhaag*, "the count's mead.") The capital city of the Kingdom of the Netherlands, province South Holland, ten miles southwest of Lyden. It is a finely-built and commodious place, after the characteristic Dutch fashion, and contains the royal palace, and numerous fine public edifices. It is the seat of government and of the Supreme Court of Justice of the Netherlands. Iron-founding and copper and lead-smelting are among the principal industries of the city. It was the birthplace of William III. of England, and Charles II. embarked from this port prior to the Restoration. Population, 242,054.

Halifax, the capital of Nova Scotia, Dominion of Canada, and the principal naval station of the dominion, is situated on the south-east coast of the peninsula, on a declivity overlooking the harbor, which is one of the finest in the world. Its pure air and beautiful surrounding scenery have brought it into high repute as a watering-place; but it has also a thriving trade; and its exports, especially of dried fish,

timber, cattle, and whale and seal oil, are very considerable. The city is the seat of an Anglican bishopric and of a Roman Catholic archbishopric. It was founded by Governor Cornwallis in 1749. Population, 109,272.

Hamburg, one of the free cities of Germany, a member of the German Empire, is the greatest commercial port on the continent of Europe. It is situated about eighty miles from the North Sea, on the north branch of the Elbe. The town of Altona adjoins it on the west. From the Elbe proceed canals which intersect the east and lower part of the city in all directions, and it is also intersected by the Alster, which here forms two streams, the Binnenalster and Aussenalster. The quays and harbor accommodation are very extensive. After the destructive fire of 1842 whole streets were rebuilt in a magnificent and expensive style. Hamburg is of most importance on account of its great shipping trade and the business of banking, exchange, marine assurance, etc., carried on in connection with it. Its manufactures, including shipbuilding, tobacco and cigar making, iron-founding, brewing, etc., though large are less important. The city owes its foundation to the Emperor Charlemagne. Population, 802,793.

Havana, or, in English, "The Harbor," by far the most important city in the West Indies, is the capital of Cuba, and stands on the west side of the entrance to a magnificent harbor capable of holding 1,000 vessels. This entrance is defended by the Moro and Punta castles. The principal buildings, which are built entirely of stone, are the cathedral, the government house, the admiralty, general post-office, the royal tobacco factory, etc., and a university and law school. There are also theaters, daily newspapers, a fine dockyard, a botanic garden, and some fine promenades. The principal manufacture is cigars, which have a world-wide reputation. The trade is chiefly with Spain, the United States, and Great Britain. Population, 275,000.

Hell Gate, New York, is a narrow channel of the East River, about seven miles north-north-east of New York City, being the nearest passage into the Sound. Its navigation was formerly dangerous on account of the eddies produced under certain conditions of the tides—whence its old Dutch name of *Horll-gatt*, or "whirlpool pass," whereof the present term is a corruption. The rocks facing its entrance into the East River were removed by submarine blasting in 1876 and 1885.

Himalayas, The (*hīm-ah-lā'yāz*), or Himalaya Mountains. The loftiest chain of mountains in the world, lying between the Indian peninsula and the Thibetan table-land in South Central Asia. Its length is estimated at 1,900 miles; its mean breadth at ninety miles; and its surface covers an area of 160,000 square miles, or thereabouts. Its chief summits are those of Mount Everest, 29,002 feet (the highest point of land known); Kunchinjinga, 28,176; and Dhawalaghiri, 25,500 feet. On the southern slope, vegetation exists at an altitude of 13,000 feet above the sea, and the highest human habitation is found at 9,000 feet; on the

northern, vegetation is met with at 17,500 feet; and villages at 13,000 feet. It is rich in minerals, and possesses its own distinctive flora and fauna.

Hong-Kong, or Hiang Kiang (The Fragrant or Flowing Streams), a small island off the southeast coast of China, in the province of Quang-Tong, now belonging to the British. It is situated at the mouth of the estuary that leads to Canton, from which it is distant south-east seventy-five miles. It is about ten miles in length and seven and one-half miles in breadth, and is separated from the mainland by a strait. On the north side of the island, and situated on a magnificent bay is the thriving town of Victoria, where the great bulk of the population is centered. The town stretches for about four miles along the shore and also ascends the hillside and the faces of the ravines above. It is generally well-built, with wide streets and handsome terraces, and there is a massive sea wall along the sea front. Hong-Kong is a free port, and there are no returns of its total trade, the chief articles of which consists of cottons and opium as imports, tea and silk as exports. The foreign commerce is chiefly carried on with the United States, Singapore, Japan, Great Britain, Australia, and Germany. Population, 283,905.

Honolulu, a city and capital of Hawaii, on the island of Oahu, on Oahu Bay. It is the most important city in the Pacific islands and is an important entrepôt for vessels, between the United States and Asiatic countries. The city is situated amid beautiful tropical surroundings and has an equable and healthful climate. Among the chief points of interest are the palace, the government buildings, Roman Catholic cathedral, post-office, and the Bishop Museum. There are numerous churches, public schools, public library, theater, daily and weekly newspapers, telephone and telegraph, banks, electric lights and street railways, and many commercial establishments. Population, 39,306.

Hoosac Mountain, a part of the Green Mountain range in western Massachusetts, through which is pierced the most notable railway tunnel in America. The Hoosac tunnel, which has a length of nearly five miles, was commenced in 1851, for the line between Boston and Albany, was twice abandoned, and was finally opened in 1875, having cost the State of Massachusetts about \$18,000,000.

Hudson River, or North River. A river of New York, which rises in the hills to the west of Lake Champlain, and after a southerly course of upwards of 300 miles, falls into the Atlantic Ocean below the city of New York. It is navigable as far as Troy, 166 miles above New York, and is connected by canals with lakes Champlain and Erie.

Hungary, Kingdom of (Magyar, *Ország*; German, *Ungarn*). A large country of Central Europe, formerly having an independent autonomy, but now forming the major portion of the Austrian Empire. It consists for the most part of a large and fertile, and generally well-wooded plain, watered by the Danube and its numerous affluents. To the north and east this plain is bounded by the Carpathian Mountains, while on the west it impinges upon the

provinces of Moravia, Styria, and Lower Austria. To the south, the course of the Danube, and its tributary the Save, mark the line of the Turkish frontier. It is rich in mines of the precious metals, iron, copper, and coal. It, besides, has large agricultural wealth, cereals, hemp, tobacco, etc. Its wines, especially that of Tokay, are of excellent quality. The chief manufactures are cotton, woolen, coarse linen fabrics, glass and earthenware. Chief towns: Budapest (the twin capital), Maria Theresienstadt, Temesvar, Szegedin, Grosswardein, Debreczin, Presburg, Komorn, Gran, and Arad. The inhabitants consist of seven distinct races, viz: the Magyars (Hungarians proper), Slovaks, Croats, Rusniaks, Jews, Germans, and Wallachs. The Roman Catholic is the chief form of religion.

Huron. One of the five great lakes of North America, about 800 miles in circuit, bounded west and southwest by the State of Michigan; on other sides by Upper Canada. Its surface is 584 feet above the level of the sea; its depth about 1,000 feet. Its waters are remarkable for their clearness and purity. This vast body of water is said to contain 3,000 islands, one of them, the Great Manitoulin, or Sacred Island, running parallel to almost the whole of the northern coast, which is one continuous mass of comparatively barren rocks.

India, or Hindustan. The greatest of the three great peninsulas which constitute the south of Asia is bounded on the north by the Himalaya Mountains, on the east by Burmah and the Bay of Bengal, and on the west by the Sulieman and Hala Mountains and the Arabian Sea. The surface of the peninsula is highly diversified, but consists mainly of three parts — namely, first, the table-land of the Deccan, in the south, between the Vindhya Hills and Cape Comorin, and flanked on either side by the Eastern and the Western Ghauts; second, a vast lowland plain in the center, embracing the entire basin of the Ganges and the lower basins of the Indus and the Brahmaputra; third, a lofty plateau, in the north, forming the southern margin of eastern high Asia, and traversed by the Himalaya Mountains, the loftiest mountains on the earth's surface. In the central and southern regions the heat is very great, but the elevated regions in the north enjoy a temperate climate. The year is divided into three seasons — the hot, the rainy, and the temperate. The hot season commences in March, the rainy in June, and the temperate in October. As almost the whole of India lies within the tropics, the vegetation, wherever there is a sufficient amount of moisture, is abundant and luxuriant. Rice and grain are grown in immense quantities; all the fruits of the tropics are found in the utmost perfection; pepper, spices, and almost every kind of garden vegetable, are produced; and the forests are of vast extent, producing immense quantities of valuable timber. On the other hand, there are large and extensive tracts of sandy desert, many parts of the surface are jungle, and the Himalayas are the abode of snow. Many parts of India are still infested with wild animals. The principal cities are: Calcutta, Bombay, Madras, Lucknow, Delhi, Lahore, and Cawnpore.

Indian Ocean, one of the five grand divisions of the universal ocean, is bounded on the south by a line drawn from the Cape of Good Hope to the most southern extremity of Tasmania or Van Dieman's Land. Its other limits, reckoned from the last-mentioned point, are Van Dieman's Land, Australia, the Indian Archipelago, Farther India, Hindustan, Persia, Arabia, and Africa. Gradually narrowing from south to north, the Indian Ocean forks at Cape Comorin into the Bay of Bengal on the east and the Arabian Sea on the west, the latter again branching off into two arms, the Persian Gulf and the Red Sea, which reach respectively the mouth of the Euphrates and the neighborhood of the Mediterranean. These details exclude the waters of the Indian Archipelago, as belonging rather to the Pacific Ocean. It contains thousands of islands or rather tens of thousands. Of these, Madagascar is the largest, and, at about the same distance from it to the east as the continent of Africa is to the west, lie Bourbon or Reunion toward the south, and Mauritius toward the north. Next in size to Madagascar, and, in fact, the only other island of any considerable magnitude, is Ceylon.

Indianapolis, capital of the State of Indiana, is the geographical center of the State, and on the edge of a great natural gas region. The most prominent public building is the State House, completed in 1887, occupying two squares, and costing \$2,000,000. The courthouse, erected in 1876 at a cost of \$1,200,000, is another imposing structure. The principal manufactures include steam engines, machinery, foundry supplies, and products, steel, glass, flour, tin plate, tile, bicycles, chain, paper, and pumps. There are eight grain elevators with a capacity of 1,000,000 bushels. The stockyard interests are important, and the city ranks high as a railroad and distributing center. Population, 212,198.

Ireland, a large island to the west of Great Britain, and forming with it the United Kingdom of Great Britain and Ireland. It is separated from Great Britain by St. George's Channel, the Irish Sea, and the North Channel, the last being only about fourteen miles broad at its narrowest part, which is between the north coast of the county of Antrim, in Ireland, and the Mull of Cantire, in Scotland. The extreme length of the island, from Fair Head, in Antrim, to Mizen Head, in Cork, is about 300 miles; and its greatest breadth, from Howth Head, near Dublin, to Slyne Head, in Galway, is about 180 miles. The country is for the most part flat, but it has mountains of considerable elevation in the north, west, and south. A great portion of the central plain is covered with bog-land, which occupies no less than two-fifths of the whole surface of Ireland; but much of the remaining soil is fertile, and the humidity of the climate, and the equability of the temperature—much greater than those of England—have given to the island its verdant appearance, which has earned for it the name of the "Emerald Island." Agriculture is, however, in a backward condition; and, in consequence of the absence of coal, there are few manufactures, except that of linen, which is carried on chiefly

in the districts of Belfast, Armagh, and Drogheda.

Italy (Italian, *Italia*), a kingdom of Southern Europe, embracing the entire peninsula, boot-like in shape, extending between the Adriatic Sea on the east and the Ligurian and Tyrrhenian Seas on the west, together with the rich and considerable region which is bounded north by Switzerland and the Tyrol, east by Carniola and the Austrian Littorale, and west by France. Length, northwest to southeast (or from Mont Blanc to Cape Portio di Palo, Sicily), 780 miles; average width, 100 miles. This kingdom has a coast line of about 3,350 miles, one-third of which is insulated, the principal indentations of the sea being the gulfs of Venice, Manfredonia, Taranto, Squillace, Policastro, Gaëta, Spezzia, and Genoa; besides those of Asinora and Cagliari, in the island of Sardinia, and Castellamare in that of Sicily. The latter island is divided from the continent by the Strait of Messina. Besides the islands just named, there are those of the Lipari group, Elba, Monte Cristo, Stromboli, Ischia, Capri, Giglia, and the cluster upon which stands the city of Venice. Throughout its entire length, or rather from the Gulf of Genoa to the extremity of Calabria, Italy is intersected by the chain of the Apennines. Its western and northern frontiers are guarded by the Alps, ramifications of which mountain system extend over a great part of Piedmont, Lombardy, and Venetia; Sicily is also generally mountainous in regard to surface, Mount Etna forming the culminating point of altitude. The plains of Italy are extensive, and proverbial for their fertility and productiveness; notably so that of Lombardy, which has been termed the "garden of Italy." The Tuscan Maremma, the Pontine Marshes, and a large portion of the Roman Campagna, are also level tracts, highly prolific and generally well cultivated. The principal rivers are the Po, with its numerous feeders; the Adige, Brenta, Piave, Tiber, Arno, Tagliamento, and Volturno; the lakes comprise those of Como, Maggiore, Garda, Bolseno, and Bracciano; salt lagoons, too, fringe the coasts of Venetia and Tuscany. A great part of the lower peninsula is almost exclusively of volcanic formation, Mount Vesuvius, for example, manifesting periodical instances of subterranean activity. Iron is largely found in Elba, borax in Tuscany, and fine varieties of marble, with salt, nitre, alum, alabaster, gypsum, etc., in other parts. Mineral and thermal springs are almost innumerable. In point of climate, Italy may be said to possess four distinct zones—ranging from the almost arctic cold of her mountain belts to an almost tropical degree of heat in the southern lowlands and valleys. On the whole, it is a healthful country. The staple products of the soil are: wines, fruits, olive oil, silk, and cotton; which, with fish, marble, sulphur, and various manufactures, constitute the bulk of its exports abroad. The principal articles fabricated in the industrial centers are textile fabrics, lace, straw hats, leather goods, glass, pottery, perfumes, chemicals, and paper. The chief cities are Naples, Rome, Milan, Genoa, Turin, Florence, Palermo, etc.

Japan, an ancient empire of Eastern Asia, to the northeast of the Chinese Empire, consists of four principal islands, and of a large number of smaller ones; the four principal islands being Nippon, or Nipon (the country of the rising sun), which is the name given by the Japanese to the whole empire; Kiushiu (the nine provinces); Shikoku (the four provinces); and Yezo. The largest island, Nippon, or Hondo, is upward of 700 miles long northeast and southwest, breadth varying from fifty to 100 miles. The coasts of the larger islands are extremely irregular, being deeply indented with gulfs, bays, and inlets, which form magnificent harbors. The surface also is generally uneven, and in many instances rises into mountains of great elevation. Volcanic vents are numerous, and earthquakes, often causing great devastation, are of frequent occurrence, and it is calculated that every seven years a Japanese city is destroyed by their agency. In Yezo some dreadful eruptions have occurred. The metallic wealth of the empire is known to be very great, comprising gold, silver, copper, tin, lead, and iron. The island of Sado is particularly rich in gold. Both the tin and copper of Japan are considered to be of very superior quality. Coal is found in various parts, and the output is rapidly increasing. Petroleum is becoming a product of some consequence. Sulphurabounds; thermal and mineral springs are of frequent occurrence; and ambergris is met with on some of the shores. Streams are numerous in Japan, but have very short courses and are for the most part rather torrents than rivers. The climate of Japan, though extremely varied—being intensely cold in the north, and about as warm as the South of France in the south—is on the whole much milder than its latitude would indicate; owing chiefly to the influence of the surrounding ocean. Vegetation of the Japanese Islands is exceeding varied, the products of the tropics being intermingled with those of the temperate and frigid zones. The palm, banana, bamboo, bignonia, and myrtle flourish in the south, while in the north, more especially in the island of Yezo, oaks and pines abound. Sweet oranges, pomegranates, pears, apricots, peaches, and over 500 of the principal ornamental and useful plants are of foreign origin, having probably been introduced from Corea and China. The camphor and varnish trees are indigenous. The kadsí, or paper tree, a species of mulberry, grows naturally in the fields, and furnishes textile fibers from which paper is produced; paper is also made from various other plants. The chrysanthemum is a common and favorite plant and has become an emblem of Japan. The flora as a whole resembles that of a great part of North America. The soil of Japan is naturally indifferent; but the patient industry of the agriculturists favored by the genial climate has covered with vegetation every spot capable of bearing anything. In the south the sugar cane is cultivated with success; and rice yields two harvests and constitutes the chief article of food. Wheat and barley, maize and millet are grown to an important extent, and buckwheat, potatoes, melons, pumpkins, and cucumbers in great abundance.

Ginger, pepper, cotton, hemp, and tobacco are cultivated in considerable quantities; and there are extensive plantations of the tea plant—yielding, however, a produce inferior to that of China. Silk is also a Japanese product. The principal cities are Tokio, Osaka, Kioto, Yokohama, Nagoya, Kobe, and Nagasaki.

Jerusalem (Greek, Hierosolyma), a famous city of Western Asia, and anciently the capital of Judea, even as it was later of Christendom. It is situated in the modern district of El Kuds, Syria, thirty-seven miles east of the Mediterranean, twenty-four west of the River Jordan, and 126 southeast of Damascus, and stands at an elevation of some 2,500 feet above sea level. Its most imposing modern structures are the mosque of the Sultan Omar, occupying the site of the Holy Temple of the Jews; and the Church of the Holy Sepulchre, containing the tombs of Godfrey of Bouillon, and of Baldwin, King of Jerusalem. Generally speaking, the aspect of the modern city is mean, poor, and dirty, and merits little notice.

Lakes, Largest in the World

NAME OF LAKE	AREA IN Sq. MILES	ELEVATION IN FEET	DEPTH IN FEET
Aral Sea,	26,000	48	
Caspian Sea,	140,000	—80	3,000
Dead Sea,	320	—1,381	700
Great Salt Lake, . .	2,360	4,200	60
Lake Baikal,	12,500	490	4,500
Lake Chapala,	1,300	7,000	
Lake Erie,	9,600	573	270
Lake Huron,	23,800	584	1,000
Lake Ladoga,	7,000	55	730
Lake Michigan, . . .	26,000	578	1,000
Lake Nicaragua, . .	3,650	130	240
Lake Ontario,	5,400	247	735
Lake Superior,	28,600	640	1,008
Lake Titicaca,	3,200	12,645	700
Lake Victoria,	30,000	3,500	

La Plata, Rio de, a wide estuary of South America, between Uruguay on the north and the Argentine Republic on the south, through which the waters of the Parana and the Uruguay sweep down to the ocean; length about 200 miles, width twenty-eight miles at Buenos Ayres, and 140 miles at its mouth, between Maldonado and Cape San Antonio. The affluent of the La Plata drain an area estimated at 1,600,000 square miles, and the outflow of the estuary is calculated at about 52,000,000 cubic feet per minute, a volume exceeded only by that of the Amazon; the yellow, muddy stream is recognizable sixty miles out at sea.

Lawrence, St., one of the largest rivers in the world, which rises under the name of the St. Louis, and drains the great chain of North American lakes. In different parts of its course it is known by different names. From the sea to Lake Ontario it is called St. Lawrence; between Lakes Ontario and Erie it is called Niagara River; between Lakes Erie and St. Clair, Detroit River; between Lakes St. Clair and Huron, St. Clair River; between Lakes Huron and Superior, St. Mary's River or the Narrows, forming thus an uninterrupted waterway of upwards of 2,000 miles. It receives the Ottawa, its principal auxiliary, at Montreal, as also the St. Maurice, the Saguenay, and numerous other large rivers from the north. The river is navigable for Atlantic steamers to the city of Montreal, 600 miles up, and from Mon-

trear upwards by river and lake steamers. The rapids between Montreal and Lake Ontario are passed by means of canals, and Niagara Falls by the Welland Canal. The river's breadth between Montreal and Quebec is from one-half mile to four miles; the average breadth, about two miles. Below Quebec it gradually widens till it enters the Gulf of St. Lawrence. From the beginning of December to the middle of April the navigation is totally suspended by ice. In part of its course it forms the boundary between the United States and Canada.

Liberty Enlightening the World.

This colossal statue, on Liberty Island, New York harbor, was presented by the French nation to the people of the United States in commemoration of the centennial of their national independence. It was designed by and constructed under the supervision of the artist, Bartholdi, and the height of the statue proper from base to top of torch, is 151 feet. The height of the pedestal is ninety-five feet, and the total height of the whole work above the waters of the bay is 305 feet, eleven inches, the tallest statue in the world. The pedestal was built by popular subscription throughout the United States, but the statue was the free gift of the French people. In June, 1885, the colossal figure, taken apart and securely packed in boxes, arrived at New York on the transport *Isère*, and was accorded a fitting public reception. The work of placing the figure on its base was completed in 1886, and on October 28th the statue was unveiled, amid imposing ceremonies, by President Cleveland in the presence of the artist Bartholdi and other guests. The statue weighs 450,000 pounds, or 225 tons. The bronze alone weighs 200,000 pounds. Forty persons can stand comfortably in the head, and the torch will hold twelve people. The number of steps in the statue, from the pedestal to the head, is 154, and the ladder leading up through the extended right arm to the torch has fifty-four rounds.

Lisbon (Portuguese, *Lisboa*), the capital of Portugal, in the province of Estramadura, on the right bank of the Tagus, about eighteen miles from the mouth of that river. It stretches for about five miles along the river side, and is built on several hills rising to a considerable elevation. The new royal palace, which was completed in 1864, is a magnificent edifice. Opposite the city the river is about six miles wide, and its harbor, or roadstead, is one of the finest in the world. Lisbon owes its beauty as a modern city to the great earthquake of November 1, 1775, when it is said that 60,000 lives were lost, and when a great part of the old city was destroyed. Since then, the whole of the modern city, or new town, has grown up. It is the seat of the Patriarch, who is the head of the Roman Catholic Church in Portugal; and it has many museums, libraries, and other educational institutions. The export trade of Lisbon consists chiefly of wine, oil, fruits, and salt; and it has numerous and important manufactures. Population, 356,009.

Liverpool is an important fortified seaport, borough, and commercial emporium of England, on the estuary of the Mersey. This

city is the chief port of the trade between the United States and England, and possesses shipping interests on a gigantic scale. The famous docks here, nine miles in length, and unsurpassed with regard to massiveness of construction and extent of accommodation, were constructed at a cost of \$65,000,000. Population, 702,047.

London, on the Thames, fifty miles from the sea, the capital of the British Empire, is the most populous and wealthiest city in the world. The city of London proper occupies one square mile in the center, is wholly a commercial port, and is governed by an annually elected mayor and aldermen; is the seat of a bishopric, with St. Paul's for cathedral. The city of Westminster is also a bishopric under a high steward and high bailiff, chosen by the dean and chapter. These two cities, with twenty-five boroughs under local officers, constitute the metropolis, and since 1888 the county of the city of London, and send fifty-nine members to parliament. Streets in the older parts are narrow, but newer districts are well built; the level ground and density of building detracts from the effect of innumerable magnificent edifices. Buckingham, Kensington, and St. James's are royal residences; the houses of parliament are the biggest Gothic building in the world; St. Paul's, built by Sir Christopher Wren, contains the remains of Nelson and Wellington, Reynolds, Turner, and Wren himself. Westminster, consecrated 1269, is the burial place of England's greatest poets and statesmen, and of many kings; the royal courts of justice in the Strand were opened in 1882. There are many educational institutions, medical hospitals, and charitable institutions of all kinds. London is the center of the English literary and artistic world, and of scientific interest and research; here are the largest publishing houses, the chief libraries and art galleries, and museums; the British Museum and library, the national galleries, etc., and magnificent botanical and zoological gardens. London is also a grand emporium of commerce, and the banking center of the world. It has nine principal docks; its shipping trade is unrivaled, 55,000 vessels enter and clear annually; it pays more than half the custom duties of the kingdom, and handles more than a quarter of the total exports; its warehouse trade is second only to that of Manchester; it manufactures almost everything, chiefly watches, jewelry, leather goods, cycles, pianos, and glass. The control of traffic, the lighting, and water-supply of so large a city are causing yearly more serious problems. Pop., 4,536,541.

Los Angeles, on Los Angeles River, 480 miles southeast of San Francisco, is the commercial center for Southern California. It is in a region containing gold, silver, and lead mines, and petroleum wells, and yielding the principal grains, wines, and citrus and deciduous fruits. Its fine climate has attracted many people of wealth and culture to its environs, and has stimulated its marvelous growth as well. Population (estimated 1908), 275,000.

Lyons, third city of France in population, is situated chiefly on the peninsula between the rivers Rhone and Saone, 245 miles south-

east of Paris. It is the great warehouse of the south of France and of Switzerland; principal manufacture, silk stuffs, giving employment directly or indirectly to 100,000 hands. The cathedral and Church of St. Nizier, the Hotel de Ville (town hall), the finest edifice of the kind in the country, the hospital, the public library, and the Palais des Beaux Arts, are the most notable among numerous institutions. There are also a university-academy, an imperial veterinary school — the first founded in the country, and still the best — schools for agriculture, medicine, etc. The two rivers are crossed by nineteen bridges; twelve over the Saone, and seven over the Rhone. The quays, twenty-eight in number, are said to be the most remarkable in Europe. There are several large and important suburbs; several fine squares, of which the Place Bellecour is one of the largest in Europe. Population, 459,099.

Madrid, the capital of Spain and of the province of Madrid, a part of New Castile, situated near the heart of the country, on the left bank of the Manzanares, a sub-affluent of the Tagus, and on a hilly, sandy plateau, 2,200 feet above the sea. One of the handsomest of European cities, it has a very modern aspect, and is partly surrounded by a brick wall twenty feet high, and pierced by sixteen gates, the most notable being the Puerta de Alcala (1,759), a triumphal arch seventy-two feet high at the foot of the Calle de Alcala, a magnificent street that traverses the city from northeast to southwest. The city is girt with fine promenades and stately suburban villas embowered in beautiful gardens.

The great building in Madrid is the Real Palacio, on the west side, between the city and the river. It is a square, 470 feet on each side, and 100 feet high, built (1737–1750) of granite and white marble, inclosing a court 240 feet square, and containing a library of 100,000 volumes, an armory of 2,533 specimens, and a numismatic collection of 150,000 pieces. Madrid has also about sixty churches, forty-four monasteries, used since 1836 for secular purposes, twenty-four nunneries, twenty-four hospitals (one with 1,526 beds), fourteen barracks, 100 elementary schools, several colleges or higher schools, a university, a medical school a conservatory of music, eight theaters, four public libraries, eight museums, a botanical garden, an observatory, an academy modeled on that of Paris, etc. The royal museum in the Prado contains a gallery of 1,833 pictures, one of the richest collections in the world.

The industries of Madrid are slight. The commerce, however, is important, as Madrid is the entrepot for all the interior provinces. Population, 589,920.

Maggiore (Lake) (*mäd-jo'ra*), or Locarno, a considerable expanse of water in Northern Italy, lying partly within the latter, and partly included in the Swiss canton of Ticino. Length, thirty-nine miles, breadth from one-half mile to five and one-half miles; 646 feet above sea-level, with a maximum depth of 1,158 feet. It receives the rivers Tresa and Ticino, and its surface is dotted with several islands, chief among them being the Borromeo group — one

of which, "Isola Bella," is renowned for its exquisite beauty of location and surroundings.

Malays, a people inhabiting the Malay Peninsula and the Eastern or Malay Archipelago, or collectively Malaysia. They are of Mongolian affinity. This enterprising race has made its way widely over the Pacific islands, reaching as far south as Madagascar, where they exist as the dominant Hova element of the population. This widespread dominion is due to their bold, enterprising, and roving disposition, their place of residence on the peninsula and the larger islands being the coast region, whence they have driven the natives into the interior and where they long pursued a piratical career, darting from hidden streams in their well-manned proas on any vessel that approached too near the coast, or more boldly lying in wait in fleets in the open sea, for any expected rich prize. Physically considered, the Malays are of low stature. In various respects they bear a close resemblance to the Mongolians of Eastern Asia, but differ from them radically in language. Of late years the lessons taught them by European naval vessels have forced the Malays to desist from piracy. Intellectually they seem at a low level, and have never developed a native literature, such civilization as they possess being due to Arab and Hindu influence.

Mammoth Cave, a cavern near Green River, Edmonson County, Kentucky, about 85 miles south-southwest of Louisville. The cave is about 10 miles long, but it requires upward of 150 miles of traveling to explore its multitudinous avenues, chambers, grottoes, rivers, and cataracts. The main cave is 4 miles long, from 40 to 300 feet wide, and rises in height to 125 feet. The most interesting features of the cave are: The Chief City or Temple, covering an area of about four acres and having a dome of solid rock 120 feet high; the Star Chamber, about 500 feet long by 70 feet wide, with a ceiling 70 feet high, consisting of black gypsum dotted with many white points, which when the chamber is lighted, have all the appearance of stars; Silliman's avenue, 1½ miles long, 20 to 200 feet wide, and 20 to 40 feet high; Cleveland's Cabinet, an arch 50 feet wide, 10 feet high and 2 miles long, covered with a variety of formations; the Maelstrom Abyss and Bottomless Pit, each of which is 20 feet wide and about 175 feet deep; and the river Styx, 450 feet long, and crossed by a natural bridge about 30 feet high. The cave contains various kinds of animals, and there are also found lizards, crickets, frogs, bats, and different sorts of fish. The latter include the famous eyeless fish, which are white in color. The atmosphere is pure and healthful and there is a temperature throughout the year of about 59°.

Manchester, a city in Lancaster County, England, on the Irwell, an affluent of the Mersey, thirty-one miles east of Liverpool. It is the center of the cotton trade of Great Britain, and one of the principal manufacturing cities in the world. The manufacture of silk goods, which was introduced in 1816, has generally flourished since 1826, producing every description of fabrics from the rich brocade to the flimsy Persian. In some cotton factories the process of spinning

only is carried on; in many of them upward of 600 power looms are in action, each producing from fifteen to twenty pieces of fabric, of twenty-four yards each per week. There are over 60,000 persons employed in the cotton mills, besides 7,000 skilled mechanics engaged in the production of steam engines, looms, and other machinery. The climate of Manchester is very healthy, despite the disadvantage of the prevalence of smoke arising from the number of factories, etc. Population, 543,969.

Manchuria (Chinese, Shing-King), a Chinese territory occupying the northeast corner of the empire; it is divided into three provinces, Shing-King, Feng-Tien, or Leaotung in the south (of which Mukden is the capital), Kirin in the center (with a capital of the same name), and He-Lung-Kiang in the north (with capital Tsitsihar); total area, 362,310 square miles; population (1900), estimated 7,500,000. The country is mountainous, but on the whole fertile. The climate is good; though the winters are severe, they are healthy and bracing. The vast forests of the north are rich in useful timber of all kinds. The administration is military, the governors of the two northern provinces being subordinate to the governor of Mukden. The Manchus are a hardy race, and their country has long been the great recruiting ground for the Chinese army; but of late years vast numbers of Chinese proper have flocked into it, so that now they by far outnumber the native race. In the Seventeenth Century the Manchus invaded China and placed their leader's son on the throne. Since that time the Manchu Dynasty has continued to reign in China, and the Manchu language has become the court and official language.

For a considerable time prior to 1891, when the first sod was turned for the construction of the great Siberian railroad, the Russian Government was anxious to secure control of this territory. On November 9, 1901, the Russian minister of finance, in announcing the completion of this railroad from Transbaikalia territory to Vladivostok and Port Arthur, used the phrase "Our enterprise in Manchuria is practically, though not entirely, concluded." A number of times it was declared that the Chinese Government, under pressure from Li Hung Chang, had signed a secret treaty with Russia for the cession of this territory. In 1900, while the allied army was hastening to the relief of the legations in Peking a Russian military force occupied the right bank of the Amur River, and declared it to be Russian territory, and a provisional Russian administration was established. Official declarations were sent out from Petersburg to the effect that the current rumors of an incorporation of Manchuria with the Russian Empire were groundless.

In October, 1903, Russia having failed to evacuate Manchuria on the 8th of that month, as promised, Japan made military and naval preparations of a warlike character, while Russia also strengthened her forces in the distant Orient, which eventuated in the Russo-Japanese War. While, by the treaty of Portsmouth, Manchuria was restored to China, it is still a bone of contention between Russia and Japan.

Manila, or Manilla, a seaport of the island of Luzon, capital of the Philippines, situated near the mouth of the River Passig, at the head of a bay of same name. It possesses an excellent harbor, and carries on a large and important commerce with Europe, the United States, and China. The climate is healthful on the whole, but the place is subject to earthquakes, the last of which, in 1863, was the cause of serious loss of life. In Manila Bay, on May 1, 1898, Admiral Dewey with six warships, destroyed Spain's Asiatic Squadron, thirteen vessels, under Admiral Montejó. Population, 219,928.

Marseilles (*mār-sälz*), French **Marseille** (*mār-say'-e*), a city, principal commercial seaport of France, on the Mediterranean, and capital of the department of Bouches-du-Rhône. It lies in the form of an amphitheater round a natural harbor of moderate size, now known as the Old Harbor. Though a handsome city as a whole, Marseilles is not rich in public edifices. The harbor is strongly defended by various works. What is called the New Harbor consists of a series of extensive docks along the shore to the west, with a protecting breakwater in front.

In recent times Marseilles has made great progress in its extent, street improvements, population, and commerce, largely owing to the conquest of Algeria, and the opening of the Suez Canal. Marseilles was founded by a colony of Greeks from Asia Minor, about 600 years before Christ, the original name being Massalia. It attained great prosperity as a Greek colonial center, and the Greek language is said to have been spoken there till several centuries after Christ. It was taken by Cæsar in 49 B. C. On the decline of the Roman Empire it became a prey to the Goths, Burgundians, and Franks. In 735 it fell into the hands of the Saracens, and in the Tenth Century it came under the dominion of the counts of Provence, and for some centuries after followed the fortunes of that house. Population, 525,250.

Matterhorn, a peak of the Alps, between the Swiss canton of Valais and Piedmont, rising to the altitude of 14,705 feet. The actual peak was first scaled by Lord Francis Douglas, the Rev. C. Hudson, Hadow, and Whymper, with three guides, July 14, 1865, when the three first-named and one of the guides fell over a precipice and were killed.

Mecca, a city of Arabia, about sixty miles from the Red Sea, the chief town of the Hedjaz, and celebrated as the birthplace of Mohammed. It is the sacred city of the Mohammedans, and, in itself uninteresting, is important on account of the pilgrimages which are made annually to the Great Mosque, in which is contained the Kaaba. From 100,000 to 150,000 persons are said to take part in these pilgrimages annually. The city, like the whole province of the Hedjaz, now belongs to Turkey. Population, about 50,000.

Medina, a city of Arabia, about 230 miles north of Mecca. It is the second capital of the Hedjaz, and is celebrated as the seat of Mohammed's empire, as the place to which he fled from Mecca, and likewise as his burial-place. To the Mohammedans Medina is only less sacred than Mecca, but it is a much smaller city, and is now

chiefly important as one of the stations on the pilgrim-route to Mecca. The city, like the whole province of the Hedjaz, belongs to Turkey. Population, about 16,000.

Mediterranean Sea, The (*med-e-tēr-ra'ne-ān*), a great inland sea, separating the continent of Europe from that of Africa and part of Western Asia; connecting by the Strait of Gibraltar, at its western extremity, with the Atlantic Ocean, and on the northeast with the Sea of Marmora by the channel of the Dardanelles, and thence by the Bosphorus with the Euxine. Extreme length, 2,300 miles; maximum breadth, 1,200 miles. Estimated area, 690,000 square miles. Various portions of its surface take other names, as the "Ligurian," "Tyrrhenian," "Ionian," "Canadian," "Ægean," and "Adriatic" seas. Its coast-line, too, embraces the extensive gulfs of Taranto, Patras, Ægina, Salonika, Smyrna, Adalia, Iskanderoon, Gaeta, Genoa, Lyon, Cabes, and Sidra. It receives the waters of the Nile, Ebro, Rhone, Po, and many others; contains the considerable islands of Sardinia, Corsica, Sicily, the Balearic group, Malta, Candia, Cyprus, and the clusters of the Greek Archipelago; and possesses a temperature averaging from 72° to 76°, or $\frac{1}{2}$ ° Fahr. higher than that of the Atlantic Ocean. It has a tide rising from five to seven feet, and a constant upper current sets in from the Atlantic, through the Strait of Gibraltar. Its depth varies according to situation; and it is at times subject to destructive winds, such as the "sirocco" and the "white squall." The surrounding territories are the richest in the world, and the greatest movements in civilization and art have taken place around it in Africa, Phenicia, Carthage, Greece, and Rome.

Melbourne, the largest city of Australia; capital of Victoria; is situated on the Yarra Yarra River, a stream of no great size, Melbourne proper being several miles from its mouth, while suburban extensions reach the shores of Port Phillip Bay, into which the river flows. The shipping trade is large, both in exports and imports, the chief of the former being wool, of the latter manufactured goods. Most imports are subject to a heavy duty.

By its railway system the city is connected with all the principal towns of the Australian continent. The first settlements on the site of Melbourne were made in 1835, and a year or two after it received its present name, being so called after Lord Melbourne, who was then British prime minister. It was incorporated in 1842. In 1851 it became the capital of Victoria (then established as a separate colony), and received an immense impetus from the discovery of gold fields. A centennial exhibition was held in 1888 in celebration of the founding (in 1788) of the Australian colonies. The first Parliament of the Commonwealth of Australia was opened in the Exhibition Building on May 9, 1901, by the Prince of Wales. Population, 496,079.

Melrose, a village of Scotland, county of Roxburgh; on the Tweed, thirty-one miles southeast of Edinburgh. It is celebrated for possessing the finest monastic ruin in Scotland. Melrose Abbey, originally founded by David I.,

in 1136, was destroyed by Edward II., of England, in 1322. In 1336 it was rebuilt by Robert Bruce, and completed in the reign of James IV., about 1488–1513. It was again destroyed by the English in 1545. It was of Gothic style, and the ruins still attest its grandeur and magnificence.

Mexico (Spanish, *Mejico*; Mexican, *Anahuac*), an extensive republic and quondam empire of North America, bounded north by the United States, east by the Gulf of Mexico and Caribbean Sea, southeast by Central America, and south and west by the Pacific Ocean. Its extreme length, northwest to southeast, may be taken at 2,000 miles; and its maximum breadth at about 800 miles. Its chief centers of trade and population are Mexico, the capital; Vera Cruz, Tampico, La Puebla, Jalapa, Matamoras, Acapulco, San Blas, Mazatlan, Durango, and Chihuahua; of which Vera Cruz and Tampico are considerable seaports. Mexico is one of the richest and most varied zones in the world, and consists of three grand natural divisions, viz: the *tierras calientes*, or "hot regions," along its coasts; the *tierras templadas*, or "temperate tracts," occupying what is called the "table-land of Anahuac," and the *tierras frías*, or "cold climes," found high up among the Cordilleras and the Sierra Madre, two mountain systems that intersect the republic in almost parallel lines. Connected with, or outlying from, these chains, are some of the loftiest volcanic peaks on the North American continent, the highest of which is Popocatepetl. The frontier line separating Mexico from Texas is the great Rio Grande del Norte, besides which river there are the Bravo del Norte, Colorado, Grande de Santiago, and Conchas — all streams of magnitude. The chief lakes are those of Chapula, Mexico, and Parras. The soil of Mexico is among the richest in the world, producing the finest of tropical fruits and flowers, valuable timber and dyewoods, the cereals, and important medicinal drugs and spices. The products of the Mexican mines include silver — long the great staple of export, the annual average produce being valued at \$15,000,000 — iron, copper, lead, tin, quicksilver, alum, and precious stones. The foreign commerce of the country is carried on chiefly with the United States, England, and France.

Michigan, Lake, the second largest of the Great Lakes of North America. It is wholly within the United States, having the State of Michigan on the east and northwest, Wisconsin and Illinois on the west, and Indiana on the south. On the northeast it communicates with Lake Huron by the narrow Strait of Mackinaw. It is 350 miles long, and on an average sixty miles broad; area, estimated at 26,000 square miles. The lake is 578 feet above sea level; the greatest ascertained depth is about 1,000 feet.

Milan, a city of Italy, in the province of Milan, which is a part of the old province of Lombardy. It is situated on a plain, between the rivers Ticino and Adda, and is the largest city of Italy after Rome and Naples. Under the name of *Mediolanum* it was an important town of the Romans, and, from the time of

Diocletian till its capture by Attila, it was the usual residence of the emperors of the West. The modern city is about eight miles in circumference, and is encompassed on three sides by walls and low ramparts. It has a cathedral, the "Duomo," which dates from the Fourteenth Century, and which is the finest Gothic edifice in Italy, being constructed entirely of white marble. In the *Duomo*, in 1805, Napoleon I. was crowned King of Italy. The city possesses many other splendid buildings, and numerous educational and other institutions. It is the center of the silk trade of Lombardy, and is the largest book-mart in Italy. In 1872 an Arts Exposition was held in the city, in 1881, a National Exposition, and in 1907, an International Exposition of Industrial Arts. Population, 541,981.

Minneapolis, a city of the United States, county seat of Hennepin County, Minnesota, on both sides of the Mississippi, at the Falls of St. Anthony, eight miles northwest of St. Paul. It is regularly laid out with avenues eighty feet wide, running east and west, having double rows of trees on each side. The public buildings include the court house, the University of Minnesota (chartered in 1851), the Augsburg Theological Seminary, Lutheran (opened in 1869); a handsome Free Public Library, the building alone costing \$350,000, and containing 50,000 volumes. There are numerous fine schools, churches, colleges, banks, theaters, etc. The principal industries are the manufacture of flour, engines, boilers, agricultural implements, carriages, wagons, bicycles, machinery, foundries, and pork-packing. An immense traffic is done in lumber, dressed timber, and general merchandise, it being one of the greatest marts of the northwestern States. The city possesses a territory of about sixty square miles, and is built on a fine esplanade that commands a very fine view of the justly-celebrated Falls of Minnehaha, and several fine lakes. It is a great railroad center, being on the Burlington route; Chicago & Northwestern; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, St. Paul, Minnesota & Omaha; Great Northern; Minneapolis, St. Paul St. Saute Marié; the North Pacific; St. Paul & Duluth; and Wisconsin Central R. R's. The City and County Building stands a monument of the enterprise of the city; it is a most beautiful structure and was built at a cost of \$4,000,000. The Masonic Temple and other buildings add to the architectural beauties. There are six daily journals, and a large number of weekly, monthly, and other periodicals. Population, 261,974.

Mirage, a phenomenon extremely common in certain localities, and as simple in its origin as astonishing in its effects. Under it are classed the appearance of distant objects as double, or as if suspended in the air, erect or inverted, etc. One cause of mirage is a diminution of the density of the air near the surface of the earth, produced by the transmission of heat from the earth, or in some other way; the denser stratum being thus placed *above*, instead of, as is usually the case, *below* the rarer. Now, rays of light from a distant object, situated in the denser medium

(i. e., a little above the earth's level), coming in a direction nearly parallel to the earth's surface, meet the rarer medium at a very obtuse angle, and instead of passing into it, are reflected back to the dense medium; the common surface of the two media acting as a mirror. Suppose, then a spectator to be situated on an eminence, and looking at an object situated like himself in the denser stratum of air, he will see the object by means of directly transmitted rays; but besides this, rays from the object will be reflected from the upper surface of the rarer stratum of air beneath to his eye. The image produced by the reflected rays will appear inverted, and below the real object, just as an image reflected in water appears when observed from a distance. If the object is a cloud or portion of sky, it will appear by the reflected rays as lying on the surface of the earth, and bearing a strong resemblance to a sheet of water; also, as the reflecting surface is irregular, and constantly varies its position, owing to the constant communication of heat to the upper stratum, the reflected image will be constantly varying, and will present the appearance of a water surface ruffled by the wind. This form of mirage, which even experienced travelers have found to be completely deceptive, is of common occurrence in the arid deserts of Lower Egypt, Persia, Tartary, etc. In particular states of the atmosphere, reflection of a portion only of the rays takes place at the surface of the dense medium, and thus double images are formed, one by reflection, and the other by refraction — the first inverted, and the second erect. The phenomena of mirage are frequently much more strange and complicated, the images being often much distorted and magnified.

Miseno, a promontory of the province of Naples, nine miles southwest of the city of Naples. On the outskirts of the promontory are the extensive ruins of the ancient city of Misenum, including a vast church and theater. Miseno is much visited on account of its wonderful grotto Draconara, and a curious subterranean building or labyrinth, called the Hundred Chambers, supposed to have been anciently employed as dungeons.

Missolonghi, also Mesolonghi, a small town of Greece, in the government of Ætolia, on the northern shore of the Gulf of Patras, twenty-four miles west of Lepanto. It is chiefly memorable for the two sieges which it underwent during the war of independence in the early part of the present century. In 1822, it was invested by land and sea by the Turks, who, after a siege of two months, were compelled to withdraw. In 1826, it was again besieged by an overwhelming Ottoman force; and after ten months of resistance and suffering, its garrison, reduced from 5,000 to 3,000 fighting men, cut their way through the ranks of the enemy, carrying with them a great number of the women and children. The Turks then entered the town, which was all but totally destroyed. Here Lord Byron died in 1824. Population about 4,000.

Missouri, a river of the United States; formed in the Rocky Mountains, in Montana, winds circuitously along the base of the moun-

tains, then east till it reaches the west boundary of North Dakota and receives the Yellowstone. Here it begins to flow southeast through North and South Dakota, then forms the east boundary of Nebraska, separates for a short distance Kansas from Missouri, then strikes east across the latter State, and joins the Mississippi after a course of 2,908 miles. It is navigable 2,500 miles from the Mississippi, giving a water-route for commerce into the remote Northwestern States.

Mitylene (the ancient *Lesbos*), an island in the Grecian Archipelago, one of the largest of the Sporades, about ten miles from the Asiatic coast. Its chief town, *Mitylene*, or *Castro*, is situated on the east side of the island: Lesbos was important in the early history of Greece as the native region of the Æolian school of lyric poetry. Both Alcæus and Sappho were natives of the island. It attained great importance likewise, as a naval power, and planted colonies in Mysia and Thrace. The island is mountainous and is covered with pine forests. Its area is about 600 square miles, and its population is about 40,000.

Monaco, a small principality in the south of France, within the department of Alpes Maritimes. The only town, *Monaco* (of which the principality now mainly consists), is situated on a lofty promontory on the shore of the Mediterranean, about nine miles northeast of Nice. It has a fine climate, being sheltered toward the north by the lofty range of the Alps; and its soil is singularly fertile, producing oranges, lemons, and other fruits in abundance. It is notorious, however, for its great gaming establishments of Monte Carlo, from which the prince derives nearly the whole of his revenue. Monaco was held by the Genoese family of the Grimaldi from about the close of the Tenth to the close of the Eighteenth Century. In 1848, the communes of Rocca-bruna and Mentone, which up to that time had belonged to the principality, were annexed to Sardinia, and in 1861 they were ceded to France, the prince receiving for his remaining interest in them the sum of four million francs. The area of the still existing principality is about six square miles, and its population is 13,500.

Mongols (*mōng'gūlz*). A division of the human race, ranking second in the classification of Blumenbach, and, viewed collectively, the one great nomadic people of the earth. They include besides the Mongols Proper, the Tartars, Chinese and Indo-Chinese, the Burmese, Siamese, Japanese, Esquimaux, Samoyedes, Finns, Lapps, Turks, and Magyars. The physical characteristics of the true Mongol is thus depicted by Dr Latham: "The face of the Mongolian is broad and flat. This is because the cheek-bones stand out laterally, and the nasal bones are depressed. The cheek-bones, we say, stand out *laterally*, since they are not merely projecting, for this they might be without giving much breadth to the face, inasmuch as they might stand forward. * * * The distance between the eyes is great, the eyes themselves being oblique, and their caruncule concealed. The eyebrows form a low and imperfect arch, black and scanty. The iris is dark, the cornea yellow. The complexion is tawny, the stature

low. The ears are large, standing out from the head; the lips thick and fleshy rather than thin; the teeth somewhat oblique in their insertion, the forehead low and flat, and the hair lank and thin." Under the various designations of Scythians, Huns, Tartars, Turks, the Mongols during centuries were the terror of Eastern Europe, and under Genghis Khan and Tamerlane carried their victorious arms over China, Persia, Siberia, and India. The Mongolian family is estimated to number 528,000,000, or about one-half of the human race.

Mont Blanc, the highest mountain in the Alps, generally spoken of as the highest mountain in Europe, though Elburz, in the mountains of the Caucasus, is 3,000 feet higher. It is situated in the French department of Haute Savoie, on the Italian border, and about thirty-eight miles south of the Lake of Geneva. It has an elevation above the sea of 15,781 feet. The mountain is generally ascended from the village of Chamouni. The summit was first reached by Saussure, and a guide named Balmat, August 2, 1787.

Monte Carlo, in the principality of Monaco, is beautifully situated on a sheltered bay and enjoys a delightful climate; while the surrounding scenery is full of charm and variety. The Casino is on a promontory on the east side of the town; besides a fully-supplied reading room, there is an elaborately decorated *salle de fetes* and widely known *salles de jeu* (gaming rooms). High-class music twice daily. Splendid view from terrace behind the casino. The *salles de jeu* are open from 11.30 A. M. until 11.30 P. M., tickets gratis obtained in the vestibule; inhabitants of principality not admitted. *Trente-et-quarante* and *roulette* are the games played, at the former the minimum stake is twenty francs, the maximum 12,000 francs; at *roulette* the minimum is five francs, the maximum 6,000 francs. The gardens of the casino are famous for their beauty.

Adjoining the casino terrace is the *tir aux pigeons*, attended by the most expert trap shots from all parts; the grand prix, competed for in January, is 20,000 francs.

Montenegro, an independent principality in Europe, in the northwest of Turkey, bounded by Herzegovina, Albania, the Adriatic, and Dalmatia. Area, about 3,630 square miles. The surface is everywhere mountainous, being covered by an extension of the Dinaric Alps, rising to the height of 8,850 feet. There are, however, a few beautiful and verdant plains and valleys, in which the soil is tolerably fertile. The principal river is the *Moratcha*. About half of the Lake of Scutari, besides several smaller lakes, lies within the Montenegrin boundary. The climate is healthy. Forests of beech, pine, chestnuts, and other valuable timber cover many of the mountain sides. Fruit-trees of all kinds abound, especially in the sheltered valleys, where even almonds, vines, and pomegranates ripen. Agriculture is in a very rude and inefficient state, though every cultivable piece of land is planted with Indian corn, potatoes, tobacco, rye, wheat, cabbages, or some other useful plant. Sheep, cattle, and goats are reared in great num-

bers. Manufactures, with the exception of a coarse woollen stuff, are unknown. The chief occupations of the Montenegrins are agriculture and fishing, trade being altogether left to foreigners. The exports are sheep and cattle, mutton-hams, sumach, honey, hides, cheese, butter, and other agricultural produce. The chief towns (in reality little more than villages) are Cetinje (2,000 inhabitants), the capital; Podgoritza (4,000 inhabitants); Niksich; and the seaports Dulcigno and Antivari. The Montenegrins are pure Serbs and speak a Serbian dialect. They are generally of tall stature and well proportioned. The men go at all times fully armed, whatever be the occupation in which they are engaged, and all between 14 and 50 years of age (estimated at 29,000) are liable to military service. In religion they are of the Greek Church. Education, once neglected, is now free and compulsory. Montenegro is nominally a constitutional monarchy, with a state council of eight members, but the prince is practically absolute. The revenue is estimated at about \$300,000. The population is given as 245,380.

Montreal (*mont-re-äh'l*), the metropolitan city of Canada; on an island of the same name, in the province of Quebec, at the head of ocean navigation on the St. Lawrence River. The city, which is one of the most attractive in Canada, contains many handsome public buildings, and is divided into distinctly marked English and French quarters. The chief public buildings are the court-house, the barracks, Bonsecours Market, custom-house, city hall, etc.; and the principal churches are St. Peter's Cathedral, constructed on the model of St. Peter's at Rome, the church of Notre Dame (large enough to accommodate 10,000 persons), St. Patrick's Christ Church Cathedral, St. Andrew's, St. Paul's, etc. McGill University, Presbyterian College, Wesleyan Theological College, Congregational College, Anglican Diocesan College, Bishop's College and University, the Montreal School of Medicine and Surgery, are the leading Protestant educational institutions; those of the Roman Catholics comprise Laval University, St. Mary's College, Montreal College, Hochelaga Convent, etc. There are several libraries besides those of the above institutions, a natural history society with museum, an art association, musical societies, etc. The exports are chiefly the products of the country, such as grain, flour, cheese, lumber, etc., and there is a large trade in furs. The principal imports are cottons, woollens, and silks, iron and hardware, and tea and sugar. Among the industrial establishments of Montreal are iron foundries, distilleries, breweries, sugar refineries, soap and candle works; and there are manufactures of cotton, silk, boots and shoes, paper, carpets, tobacco, hardware, edge tools, floor-cloth, carriages, etc. The Grand Trunk Railway, which connects the railways of Canada with those of the United States, crosses the St. Lawrence at Montreal by the stupendous (tubular) Victoria Bridge, 9,184 feet in length, constructed in 1854-59.

Montreal was founded by Maisonneuve, May 18, 1642, during the French régime in Canada. On September 8, 1760, Montreal capitulated to

General Amherst and the surrender of the city completed the conquest of New France by the English. In 1775, Montreal was captured by the Americans, who sent expeditions under Montgomery and Arnold to capture Quebec and Montreal; and General Carleton in command of the British forces at Montreal had to retreat to Quebec, where the Americans were ultimately defeated. In 1775, the American General Wooster made his headquarters in the Chateau de Ramer-gay, which still stands opposite the city hall, and which was the official residence of the British governors after the conquest. In this same chateau, the Commissioners of Congress, Benjamin Franklin, Samuel Chase, and Charles Carroll, in 1776, met and held council under General Benedict Arnold. In 1776 the American forces retreated. Montreal obtained its first city charter in 1833, the first mayor being Jacques Viger. The recent history of the city has been an almost unbroken record of commercial and industrial progress. Great impetus was given to its growth by the opening of the Canadian Pacific Railway; the first train on which left Montreal for Vancouver on June 28, 1886. Population, 267,730.

Morocco, or **Marocco**, known to the natives as Maghreb-el-Aksa, "the farthest west," is an empire or sultanate which is confined to that part of Northwest Africa, bounded on the east (at the Wad Kiss) by Algeria, and on the south by Cape Nun and the Wad Draa, though both here and on the Sahara side of the Atlas the limits of the empire are rather indeterminate. Area, about 219,000 square miles; population estimated at 5,000,000.

Morocco produces crops of the temperate and tropical zones. Wheat and barley are grown largely. Various gums, oranges, figs, almonds, lemons, and dates are among the other vegetable products. Cotton and hemp are grown for home consumption. Most European fruits grow well, and among other products sugar has been raised. Cattle are exported; but no animals can be sent out of the country without an imperial permit.

The inhabitants consist of six principal groups. (1) The Berbers or Kabyles, of whom the Amazigh, Shelluh, and Tuareg are only branches, are the aborigines. They inhabit for the most part the mountain regions, and are still only half subdued. (2) The Arabs are descendants of the invaders who came in the Seventh Century. (3) The Jews were very early settlers, semi-independent colonies still subsisting in the Atlas and the Sus country, though most of them in the towns are refugees driven out of Spain and Portugal. (4) A few thousands of Europeans, chiefly Spaniards, are almost entirely confined to the coast towns. (5) The "Moors," a term vaguely applied to all the Mohammedan inhabitants, are really Arabs with a large admixture of Spanish and other European bloods. (6) The Negroes, of whom there are large numbers, were brought from the Sudan as slaves.

The Sultan is one of the most perfect specimens of an absolute monarch existing. He receives and disposes of the entire revenue. All justice is bought and sold. Yet, owing to the religious fanaticism of the people, and the mutual jealousies of the European powers, whose repre-

sentatives reside at Tangier, the political equilibrium is preserved. The only European nation which at present has any territory in Morocco is Spain, which maintains a fortress at Ceuta, and four convict settlements, and a fishing station at Ifni.

Much of the interior of Morocco is unknown to Europeans, but by the treaty of Algeciras, in 1907, commercial ingress and egress is now guaranteed to European nations. Fez, the capital, has a population of about 140,000, and Tangier about 35,000. Morocco City is the southern capital. The Sultan and his subjects are of the Malekite sect of Sunnite Mohammedans. The differences between sects are chiefly in the attitudes assumed during the recital of prayers.

Moscow (*mōs'kō*) [Russian, Moskwa], the second capital of the Russian Empire. It is the chief town of the government of the same name, and is situated in a highly-cultivated district on the Moskwa River, 400 miles southeast of St. Petersburg, with which it is in direct communication by rail. The quarter known as the Kreml or Kremlin, on a height about 100 feet above the river forms the center of the town, and contains the principal buildings. It is inclosed by a high stone wall, and contains the old palace of the czars and several other palaces; the Cathedral of the Assumption, founded in 1326, rebuilt in 1472; the Church of the Annunciation, in which the emperors are recrowned; the Cathedral of St. Michael; the Palace of Arms, an immense building occupied by the senate, the treasury and the arsenal; and the Tower of Ivan Veliki (209 feet), surmounted by a gilded dome, and having at its foot the great Czar Kolokol, or king of bells, sixty feet round the rim, nineteen feet high, and weighing upward of 192 tons, the largest in the world. Outside the Kreml the chief building is the Cathedral of St. Vassili, with no less than twenty gilded and painted domes and towers, all of different shapes and sizes. Among the principal educational establishments is the Imperial University, founded in 1755 by the Empress Catharine. It has a rich museum and a library of 200,000 volumes, and is the most important of the Russian universities. Moscow is the first manufacturing city in the empire, and of late years its industrial and commercial activity has greatly increased. The principal manufactures are textile fabrics, chiefly woolen, cotton, and silk, besides hats, hardware, leather, chemical products, beer, and spirits. From its central position, Moscow is the great entrepôt for the internal commerce of the empire. The foundation of the city dates from 1147. It became the capital of Muscovy, and afterwards of the whole Russian Empire; but was deprived of this honor in 1703, when St. Petersburg was founded. The principal event in the history of Moscow is the burning of it in 1812 for the purpose of dislodging the French from their winter quarters. Population, 1,092,360.

Mountains, Highest in the World

NAME	LOCATION	HEIGHT (FEET)
Aconcagua,	Chile,	22,422
Ararat,	Turkey,	17,260
Arequipa,	Peru,	20,320
Ben-Nevis,	Scotland,	4,368

NAME	LOCATION	HEIGHT (FEET)
Big Black Mountain,	(Harlan Co.) Kentucky,	4,100
Black Mountain,	North Carolina,	6,500
Blackburn,	Alaska,	16,140
Blanc, Mt.,	France,	15,781
Brown, Mt.,	Canada,	16,000
Chimborazo,	Ecuador,	21,420
Chinati Peak,	Texas,	7,730
Clingman Dome,	Tennessee,	6,619
Condor,	Argentina,	21,128
Crillon,	Alaska,	15,900
Dapsang,	Tibet,	28,278
Dhawalaghiri,	Asia,	25,500
Dickerman,	Washington,	15,766
Douglass, Mt.,	Montana,	11,300
Elburz,	Caucasus,	18,526
Everest, Mt.,	India,	29,002
Fremont's Peak,	Wyoming,	13,576
Geesh,	Africa,	15,100
Gilbert Peak,	Utah,	13,687
Harney Peak,	South Dakota,	7,216
Hermon, Mt.,	Palestine,	11,000
Hogback Mt.,	Nebraska,	5,084
Hooker, Mt.,	Canada,	12,700
Huascan,	Peru,	22,031
Hyndman Peak,	Idaho,	22,078
Ilampu,	Bolivia,	21,490
Itacolumi,	Brazil,	5,740
Itambe,	Brazil,	4,300
Jorullo,	Mexico,	4,265
Kanchanjañga,	India,	28,156
Katahdin,	Maine,	5,385
Kenia,	East Africa,	18,045
Kilauea,	Hawaiian Islands,	4,040
Kilima-Njaro,	Africa,	19,600
Kosciusko, Mt.,	Australia,	7,176
Kunchinjunga,	India,	28,156
Lebanon, Mt.,	Syria,	11,000
Logan, Mt.,	Canada,	19,500
Longs Peak,	Colorado,	14,271
McKinley,	Alaska,	20,464
Mansfield, Mt.,	Vermont,	4,364
Marcy, Mt.,	New York,	5,467
Massive,	Colorado,	14,424
Matterhorn,	Switzerland,	14,705
Mercedario,	Argentina,	22,312
Mercedario,	Mexico,	22,397
Miltain, Mt.,	Morocco,	11,400
Mitchell, Mt.,	North Carolina,	6,711
Monte Rosa,	Italy,	15,208
Olympus,	Greece,	6,600
Olympus,	Turkey,	9,745
Ophir,	Sumatra, East Indies,	13,800
Orizaba,	Mexico,	18,170
Parnassus,	Greece,	6,000
Perdu, Mont.,	France,	11,300
Peaks of Otter,	Virginia,	4,250
Pike's Peak,	Colorado,	14,147
Rainier,	Washington,	14,444
Redslate Peak,	California,	13,400
Roa, Mt.,	Hawaii,	17,500
Rogers, Mt.,	(Grayson Co.) Virginia,	5,719
Roraima,	Venezuela,	7,874
Round Top,	New York,	3,800
San Francisco, Mt.,	Arizona,	12,794
Santa Clara Mountain,	New Mexico,	11,507
Santa Fé Baldy Peak,	New Mexico,	12,661
Shasta,	California,	14,440
Sitting Bull Mountain,	Georgia,	5,046
Simplon,	Alps, Switzerland,	11,542
Sinai, Mt.,	Turkey,	8,593
Sneehattan,	Norway,	8,110
Snowdon,	Wales,	3,571
Sorata,	Bolivia,	21,300
Spruce Mountain,	(Pendleton Co.) W. Vir.,	4,860
St. Bernard,	Switzerland,	8,000
St. Gothard,	Switzerland,	10,000
Teneriffe Peak,	Canary Isles,	12,000
Truchas Peak,	New Mexico,	13,275
Vancouver,	Alaska,	15,666
Washaku Needle,	Arizona,	12,000
Washington, Mt.,	New Hampshire,	6,288
Wheeler Peak,	Nevada,	13,058
Whitney,	California,	14,898
Williamson,	California,	14,500
Wrangle, Mt.,	Alaska,	12,066
Ymesfield,	Norway,	8,543

Mount McKinley, a mountain of the McKinley Range in Alaska. It is situated about 125 miles north of Cook Inlet, and stands close to the intersection of the sixty-third parallel of

north latitude with the 151st meridian of west longitude. Recent measurements made by the United States Geological Survey show this to be the tallest peak in the United States, overtopping Mount St. Elias and Mount Logan by about 1,000 feet, its height being 20,464 feet. The great height of Mount McKinley has been known to the Indians and the scattering whites of that region, for many years, as its towering summit is plainly visible on clear days for a distance of 125 miles or more.

Munich (*mū'-nik*), the capital city of Bavaria, on an extensive plateau, about 1,700 feet above sea-level, chiefly on the left bank of the Isar. The old town has a quaint and irregular character, but the new town, which has sprung up chiefly to the north and west, has a regular and imposing appearance, and altogether Munich is one of the finest towns in Germany. The royal palace forms a very extensive series of buildings chiefly in the Italian style, and contains many magnificent apartments and rich artistic and other treasures. The royal library (occupying a fine building in the Florentine style) has upward of 1,000,000 volumes and 30,000 manuscripts, being thus one of the largest in Europe. The university had in 1899-1900, 194 professors and teachers, and 4,257 students in theology, jurisprudence, medicine, and philosophy, together with a library of over 300,000 volumes. The industries are numerous, and in some particular branches have acquired a high name. Among others may be mentioned painted glass and other artistic productions, mathematical, optical, and surgical instruments, gold and silver lace, jewelry, glass, carriages, bells, musical instruments, etc. Munich is the seat of the high courts of legislature and of law, and of all the more important offices of the state. It was founded by Henry, Duke of Saxony, in 962; taken by Gustavus Adolphus in 1632, by the French under Moreau in 1800, and by Napoleon in 1805. Population, 545,091.

Naples (Italian, *Napoli*), a magnificent city of Southern Italy, capital of a province of same name, and of the former kingdom of the Two Sicilies, on the north side of the far-famed Bay of Naples, near the base of Mount Vesuvius, 118 miles southeast of Rome. Built in the form of an amphitheater, Naples, as viewed from the sea, presents a panorama of almost unrivaled beauty. Architecturally speaking, its public edifices are more remarkable for their size than for their elegance of design. It has some manufactures and a large commerce. This city, the supposed *Parthenope* of the ancients, has, at various times, been devastated by the effects of war, earthquakes, and the volcanic eruptions of its neighbor, Vesuvius. The environs of Naples—Capri, Pompeii, etc.—are renowned for their picturesqueness and archaeological interest. Population, 563,731.

Netherlands, The, or Holland (Dutch *Nederland*, or *Koninkrijk der Nederlanden*), is a kingdom of Europe on the North Sea, north of Belgium and west of part of Northern Germany. In addition to its European territories, Holland possesses extensive colonies and dependencies in the Asiatic archipelago and America; including Java, Sumatra, great part of

Borneo, Celebes, part of New Guinea, Surinam or Dutch Guiana, the West Indian islands of Curacao, Saba, St. Eustatius, etc. Some portions of the Netherlands proper are sixteen to twenty feet below the surface of the sea, and nearly all parts too low for natural drainage. The coast line is very irregular, being marked by the great inlet of the *Zuider Zee*, as well as by various others, and fringed by numerous islands. In great part the coast is so low that were it not for massive sea-dykes, large areas would be inundated and lost to the inhabitants. In the interior also dykes are a common feature, being built to protect portions of land from the lakes or rivers, or to enable swampy pieces of land to be reclaimed by draining, the water being commonly pumped up by windmills. These inclosed lands are called "polders," and by the formation of the polders the available area of the country is being constantly increased, lakes and marshes being converted into fertile fields, and considerable areas being even rescued from the sea. One of these reclamations was the Lake of Haarlem, the drainage of which, yielding more than 40,000 acres of good land now inhabited by about 12,000 persons, begun in 1839, was finished in 1852. Almost the only heights are the sand hills, about 100 to 180 feet high, along the coast, and a similar chain of low hills, southeast of the *Zuider Zee*. In the same line with the sand hills, extending past the mouth of the *Zuider Zee*, runs a chain of islands, namely, Texel, Vlieland, Schelling, Ameland, etc., which seem to indicate the original line of the coast before the ocean broke in on the low lands. The coast of Friesland, opposite these islands, depends for its security altogether on artificial embankments. The highest elevation, 656 feet, is in the extreme southeast. The general aspect of the country is flat, tame, and uninteresting, and about a fifth of the whole surface consists of marsh, sand, heath, or other unproductive land. Wheat, of excellent quality, is grown only in favored portions of the south provinces. Rye, oats, and buckwheat, with horse-beans, beet, madder, and chicory, are more common crops; and tobacco is cultivated in the provinces of Gelderland, South Holland, and Utrecht; flax in North Brabant, South and North Holland, Friesland, and Zeeland; and hemp, sugar-beet, oilseeds, and hops in various parts of the kingdom. Culinary vegetables are cultivated on a large scale, not merely for the sake of supplying the internal demand, but also for the exportation of the seeds, which form an important article of Dutch commerce. But it is in stock (cattle, horses, sheep, swine, goats), and dairy products in particular, that the rural industry of the Netherlands shows its strength. The commerce of the country was, at one time, the most important in the world, and is even yet of great importance and activity. The foreign trade centers chiefly in Amsterdam and Rotterdam. The industrial occupations are varied. Shipbuilding and subsidiary trades are among the chief. Of textile manufactures, that of linen is the most important; but silks and velvets, as well as woolens and cottons, are produced in considerable quantity. Pigments, brandy, gin, paper, glass,

earthenware, etc., are among the more important products. Large numbers of the sea-board population are employed in the deep-sea fisheries.

New York City, the commercial metropolis of the New World, occupies the whole of the island of Manhattan lying between Hudson and East rivers, in the southeast corner of the State of New York, and large contiguous areas, the total area being 327 square miles. The Greater City comprises the boroughs of Manhattan, Bronx, Brooklyn, Queens, and Richmond. Manhattan, or the city proper, is eighteen miles from the Atlantic, with which it is connected by New York Bay. The harbor of New York, forming the inner portion of its bay, is one of the safest and finest commercial natural basins known, is strongly fortified, and has lighthouses at its respective entrances. Manhattan Island is separated from the mainland of the State by the Harlem River and Spuyten Duyvel Creek. Built on a long, narrow, and gently undulating spit of land, New York, viewed from seaward, presents little that is striking or picturesque to the eye of the spectator. The city, as seen internally, is characterized by all those salient features of space, development, and architectural attraction, which unite in giving it its metropolitan rank. Broadway, its chief street, and one of the finest thoroughfares in the world, extends the whole length of the city for a distance of six miles, and is lined throughout, on either side, by handsome stores and houses. The principal of the nineteen public squares and parks of New York is Central Park, a magnificently and picturesquely laid-out demesne of 843 acres. Among the most noticeable buildings are the city hall, courthouse, stock exchange, customhouse, post-office, United States sub-treasury building, the Roman Catholic cathedral of St. Patrick, and Trinity and other churches, without particularizing the numerous splendid theaters, hotels, hospitals, colleges, etc., which serve to complete the requirements of a large and wealthy urban center. As a manufacturing place, New York carries on various and important industries, embracing the chief articles of fabrication and use required by civilized life. Commercially, its trade is only surpassed by that of London and Liverpool; it constitutes the main American emporium and is the entrepôt of a vast and yearly increasing export and import traffic. New York, too, besides being the financial focus of the Union, is the port at which the bulk of immigrants into the United States arrive. After the discovery of the island of Manhattan by Hudson in 1609, the Dutch permanently settled upon it in 1623, and gave it the name of New Amsterdam. In 1664, it was taken possession of by the English, who rechristened it by its present name. In 1673, the Dutch retook the city, and, naming it New Orange, held it for a year, when it reverted to their immediate predecessors. In 1776, during the War of the Revolution, New York was occupied by British troops from August 26th till November 25, 1783. Since that period it has progressed in size, wealth, and population, till it has become the second city in the world. Population (1908), 4,285,435.

Niagara Falls. The Niagara River, which flows from Lake Erie north into Lake Ontario, is about thirty-six miles in length; its descent from the level of one lake to that of the other is about 334 feet. At the foot of Grand Island, which reaches within one and one-half miles of the falls, the river is contracted to a width of two and one-half miles, and grows narrower as it proceeds. By this, and by the descent in the channel, which is about sixty feet in the mile, are produced the swift currents known as the rapids, in which the river, notwithstanding its great depth, is perpetually white with foam. At the falls, which are twenty-two miles from Lake Erie, the river is divided by an island called Goat Island; but the largest portion of the water is sent down by the Canadian side. On this side is the grander cataract, which has been named the Horseshoe Fall, and which is about 600 yards in width and 154 feet high. The water rushes over with such force that it is thrown about fifty feet from the foot of the cliff. The separation caused by Goat Island leaves a large wall of rock between the Canadian and American falls, the latter being again divided by an islet at a short distance from Goat Island. This fall is from eight to ten feet higher than the Horseshoe, but only about 220 yards wide. The river is crossed by a suspension bridge, and by a ferry about 200 or 300 yards below the falls, where it is 1,200 yards wide. A stratum of rock runs across the direct course of the river, three or four miles below, which, after forming a vast circular basin, with an almost impassable whirlpool, is forced away at right angles to its old channel. The total energy of the falls is calculated at 16,000,000 horsepower, and the work of utilizing this power is the beginning of the most stupendous engineering feat ever undertaken. On April 15, 1895, the first large dynamo was run at full speed, 250 revolutions per minute, and proved quite satisfactory. On July 1st, the first electric power transmitted for commercial purposes, 4,000 horsepower, was sent to an aluminum factory a mile distant. Various other developments were afterward reported in rapid succession. On January 17, 1896, the Niagara Falls Power Company accepted a grant for the transmission of electric power for lighting and power purposes to Buffalo.

Nile (Latin, Nilus), a large and celebrated river of Africa, formed by the confluence of two branches, the Bahr-el-Azrek, or "Blue River" (often called the "Blue Nile"), and the Bahr-el-Abiad, or "White River" ("White Nile"). The first-mentioned arm rises in Abyssinia, and taking a northerly course through the Lake of Dembea, joins the Bahr-el-Abiad at Khartoum, after being in some places broken by cataracts. The real sources of the Nile were, until recently, supposed to lie in Lakes Victoria Nyanza and Albert Nyanza, discovered by the English explorer Grant and Speke. In June, 1872, however, intelligence received from Dr. Livingstone, the famous African explorer, stated that he had arrived within 180 miles of the Chambesi River, where he had reason to believe lay the springs of this mysterious stream. After the union of the two branches at Khar-

toum, the Nile forms one grand main river, taking a generally winding course north, as far as Edab, in Dongola, where it forms what is called the Great Bend. Thence flowing through a country rich in architectural trophies of the past, and rendered highly fertile by its annual inundations, the Nile empties into the Mediterranean by a delta of seven mouths, of which that of Rosetta, the principal one, has a width of 1,800 feet, with a depth of five feet in the dry season. Total length, 3,500 miles from Victoria Nyanza.

Norway is a kingdom of Europe, occupying the western portion of the Scandinavian peninsula. The coast line is extensive, of bold outline, and deeply indented by fiords and fringed with almost innumerable islands, chief among which are the Loffoden group. The surface of the country is rugged and somewhat bleak, comprising a succession of mountains and valleys. The Kiölen, or Great Scandinavian chain, running south from Finland for several hundred miles, forms an Alpine barrier between this country and Sweden; in the province of Drontheim it lapses into the Dovrefjeld, which, with its spurs, extends nearly as far south as the Naze. Highest points, Sneehætta and Skagtols-tind, each over 8,000 feet. Chief rivers, the Glommen and Tana; lakes, those of Miosen, Fømund, and Speddillen. A large extent of the mountain districts produces only lichens, mosses, and hardy berry-yielding plants; the Scotch fir, spruce and birch cover extensive tracts, and constitute nearly a moiety of the country. The harder fruits flourish well. Agriculture, though pursued with some vigor of late years, is still unable to furnish sufficient produce for home consumption. Flax and hemp are raised in some parts; in others, barley and oats. Next, or about equal, in importance to the timber trade are the cod and herring fisheries, which employ a very large part of the population during the entire year. In Finmark, the fisheries and reindeer form the only wealth and source of subsistence of the population. The mineral products are similar, but less considerable than those of Sweden. Shipbuilding is largely carried on, and the chief exports include timber, fish, fish oil, minerals, furs, feathers, and ice. Chief cities and towns are Christiania, Bergen, and Trondhjem.

Nyassa, a lake in the heart of Africa, which Dr. Livingstone discovered in 1861, by ascending the River Shiré. The lake is 300 miles long, about twenty-six miles wide, and is 1,300 feet above sea level. It is in many places over 100 fathoms in depth. The scenery of Nyassa is described as grand in the extreme, though much of the land surrounding it is low and marshy.

Obelisk, a column of a rectangular form, diminishing towards the top, generally terminating in a low pyramid. The proportion of the thickness to the height is nearly the same in all obelisks, that is, between one-ninth and one-tenth; and the thickness at the top is never less than half, nor greater than three-fourths of the thickness at the bottom. Egypt abounded with obelisks, which were always of a single block of hard stone; and many have been removed thence to Rome and other places. They seem to have

been erected to record the honors or triumphs of the monarchs. The two largest obelisks were erected by Sesostris in Heliopolis; the height of these was 180 feet. They were removed to Rome by Augustus. A fine obelisk from Luxor was erected in Paris in 1833, and the two known as Cleopatra's Needles are now in London and New York, ornaments of public parks. Besides those of Egypt, monoliths of this appearance, but smaller in size, have been found in the ruined cities of Nineveh and Nimrud. The obelisks which were common to Rome, Florence, etc., had all been removed from Egypt during its domination by the Roman emperors.

Oberammergau, a village in Upper Bavaria, celebrated for the performance, every ten years, of the passion-play of Christ's crucifixion and ascension. The performance takes place every Sunday during the summer, on a large wooden stage open to the sky, and it usually lasts eight hours. Primarily regarded by these Bavarian villagers as a religious exercise, it has become in their performances a mystery play of impressive beauty. Latterly, however, it has taken the character of a European amusement and a source of profit.

Ohio, a river in the United States of America, formed by the confluence of the Allegheny from the north and the Monongahela from the south at Pittsburgh in Pennsylvania, where it is a navigable stream 600 yards broad. It flows west-southwest, separating the States of Virginia and Kentucky on the south from Ohio, Indiana, and Illinois on the north, and enters the Mississippi at Cairo. Its length from Pittsburgh to its junction with the Mississippi is 975 miles; area of basin, 214,000 square miles. The width of the river varies from 400 to 1,400 yards; average width, about 800 yards, at its mouth 900 yards. Its principal affluents are the Miami, Kentucky, Wabash, Green, Cumberland, and Tennessee.

Ontario, Lake, the most easterly of the great lakes of North America, lying along the northeast side of the State of New York, and forming part of the boundary between the United States and Canada; greatest length, 190 miles; greatest breadth, about fifty-five miles; area, 5,400 square miles. It receives the waters of Lake Erie by the Niagara, and discharges its waters by the St. Lawrence into the Atlantic, 1,000 miles distant. The Hudson, and the Oswego and Erie canals, form a connection through the United States, between it and the Atlantic. It is navigable throughout its whole extent and at all seasons. The most important places on its shores are Toronto, Hamilton, Kingston, and Coburg in Canada, and Oswego in the United States.

Oporto, the second city of the kingdom of Portugal, in the province of Minho, about two miles from the mouth of the Douro. The city is picturesquely situated on a declivity above the river, and has several well-built suburbs, with one of which, Villanova de Gaya, on the opposite bank of the river, it is connected by an elegant wire suspension bridge, about 750 feet in length. It is the seat of a bishopric, and has a cathedral. The city has some manufactures of hats, silks, linen, and pottery; but it chiefly depends on its trade in wine, of which

large quantities are annually exported, chiefly by British merchants. Oporto is the ancient *Portus calensis*. Population, 180,215.

Oregon or Columbia, the largest of North American rivers emptying into the Pacific, rises in the Rocky Mountains. After pursuing a somewhat devious course it empties into the ocean between Point Adams and Cape Disappointment. At its mouth it is from five to six miles in width. Vessels of considerable tonnage may ascend about 100 miles above its mouth, as far as Fort Vancouver.

Orinoco, one of the great rivers of South America, has its origin on the slopes of the Sierra Parima, in the extreme southeast of Venezuela; its exact sources were only discovered in 1886, by Chaffanjon. It flows at first west by north, a mountain-stream. A little below Esmeralda it divides and sends off to the south an arm, the Cassiquiare, which, after a course of 180 miles, enters the Rio Negro, a tributary of the Amazon. The other branch on reaching San Fernando, is met by the strong current of the Guaviare; the united stream then turns due north, and, after passing over the magnificent cataracts of Maypures and Atures, and picking up the Meta on the left, meets the Apure, which likewise strikes it from the left. Below the confluence with the Apure, the Orinoco turns east and traverses the llanos of Venezuela, its waters, with an average breadth of four miles, being augmented from the right by the Caura and the Caroni. About 120 miles from the Atlantic, into which it rolls its milk-white flood, its delta (5,500 square miles) begins. Of the numerous mouths which reach the ocean over 165 miles of coast-line only seven are navigable.

Orleans (*or-lā-on'*), English (*or'lē-anz*), a city of France, the capital of the department of Loiret, about seventy-six miles southwest of Paris. It is situated on the right bank of the Loire, and on the edge of the Forest of Orleans, which is 146 square miles in extent. The city is well and regularly built, and has a large trade, and several manufactures. Its cathedral, which dates only from the Seventeenth Century, is one of the finest Gothic edifices in France. The city was besieged by the English in 1428, and was saved by the heroism of Joan of Arc, whose house is still preserved, and of whom the city contains three statues. It gives its name to the Royal House of Orleans, of which the Bourbons constitute the principal branch. Population, 70,104.

Osaka or Ozaka, an important city of Central Japan, at the head of the gulf of the same name, and at the mouth of the Yodo River, which issues from Lake Biwa. The city covers an area of about eight square miles, and is intersected with canals. Its fine castle, the stones of whose walls are of astonishing size, was constructed in 1583, and the palace, built afterward in its precincts and destroyed in 1868, was perhaps the most magnificent structure in Japan. Population, 821,235.

Ottawa, a city in the province of Ontario, capital of the Dominion of Canada, on the right bank of the Ottawa, about ninety miles above its confluence with St. Lawrence, 100 miles west of Montreal, and on the Canadian Pacific Rail-

way. The city, divided into the Upper and Lower town by the Rideau Canal, has wide streets crossing at right angles, and some of the finest buildings in the Dominion. The chief are the government buildings, constructed of light-colored sandstone, in the Italian-Gothic style. They stand on elevated ground, commanding a fine view, and form three sides of a quadrangle, the south front being formed by the houses of parliament building, which is 500 feet long, and containing the halls for the meetings of the Dominion Senate and House of Commons. There is a library forming a detached circular building, with a dome ninety feet high. The buildings cover about four acres, and are said to have cost \$4,000,000. The educational institutions include a Roman Catholic College, the Canadian Institute, the Mechanics' Institute, and Athenæum, etc. Ottawa has important and increasing manufactures, and is the great center of the lumber trade. It is connected with Hull, on the Quebec side of the Ottawa, by a suspension bridge. Ottawa was founded in 1827 by Colonel By, and until 1854 was known as Bytown. On April 26, 1900, it, with Hull, suffered severely from fire. Population, 59,928.

Ottawa, a river in the Dominion of Canada, forming for a considerable part of its length the boundary between the provinces of Quebec and Ontario. It rises in the high land which separates the basin of Hudson's Bay from that of the St. Lawrence, and after a course of some 750 miles discharges into the St. Lawrence above the island of Montreal. Six miles above the city of Ottawa, rapids begin which terminate in the Chaudière Falls, where the river, here 200 feet wide, takes a leap of forty feet. Its banks, mostly elevated, offer magnificent scenery. Immense quantities of valuable timber are floated down the Ottawa from the wooded regions of the interior to Ottawa city, where it is manufactured into lumber.

Oxford, a city and county borough in England; capital of Oxford County, and seat of one of the most celebrated universities in the world; about fifty miles west-northwest of London, on a gentle acclivity between the Chervell and the Thames, here called the Isis. Of the university buildings, the most remarkable are Christ's Church, the largest and grandest of all the colleges, with a fine quadrangle and other buildings, a noble avenue of trees (the Broad Walk), the cathedral serving as its chapel; Magdalen College, considered to be the most beautiful and complete of all; Balliol College, with a modern front (1867-1869), and a modern Gothic chapel; Brasenose College; and New College (more than 500 years old), largely consisting of the original buildings, and especially noted for its gardens and cloisters; besides the Sheldonian Theater, a public hall of the university; the new examination schools, new museum, Bodleian Library, Radcliffe Library, and other buildings belonging to the university. Oxford depends mostly on the university, and on its attractions as a place of residence. Population, 49,413.

Pacific Ocean, the largest of the five great oceans, lying between America on the east, and Asia, Malaysia, and Australasia on the west. The name "Pacific," given to it by Magellan,

the first European navigator who traversed its wide expanse, is doubtless very appropriate to certain portions of this ocean; but, as a whole its special claims to the epithet are, at the least, doubtful, though the name has by long usage become too well established to be easily supplanted by any other. The greatest length of the Pacific Ocean, from the Arctic (at Behring Strait) to the Antarctic Circles is 9,200 miles, and its greatest width, about 10,300 miles; while its area may be roughly estimated at about two-fifths of the whole surface of the earth. Its surface is studded with numerous islands, either scattered or in groups. The deepest sounding yet found in the Pacific Ocean is 26,850 feet, or about five miles — nearly equal to the height of the highest mountain on the globe. The coasts of the Pacific Ocean present a general resemblance to those of the Atlantic, and the similarity in the outline of the western coasts of each is even striking, especially north of the equator. The shore on the American side is bold and rocky, while that of Asia varies much in character. Though the Pacific Ocean is by far the largest of the five great oceans, the proportion of land drained into it is comparatively insignificant. Its basin includes only the narrow strip of the American continent to the west of the Andes and Rocky Mountains; Melanesia; which contains few rivers, and none of them of large size; the Indo-Chinese states, China proper, with the eastern part of Mongolia, and Manchuria in the Asiatic continent.

The currents of the Pacific Ocean, though less marked in character and effects than those of the Atlantic, are yet of sufficient importance to require a brief notice. The Southern Pacific current takes its rise south of Van Dieman's Land, and flows east at the rate of half a mile per hour, dividing into two branches about longitude 95° west, the north branch, or Current of Mentor, turning north and gradually losing itself in the counter Equatorial Current; the south branch continuing its eastern course till it is subdivided by the opposition of Cape Horn into two branches, one of which, the cold Current of Peru, or Humboldt's Current, advances north along the west coast of South America, becoming finally absorbed in the Equatorial Current; the other washing the coast of Brazil and becoming an Atlantic Current. The existence of this ocean first became known to Europeans through Columbus, who had received accounts of it from some of the natives of America, though it was first seen by Balboa, September 29, 1513, and first traversed by Magellan eight years afterward. Captain Cook deserves the first place among the investigators of the Pacific Ocean.

Padua (*păd'-u-ă*), a walled city of Venetia, twenty-three miles by rail west of Venice, has some manufactures of leather and musical-instrument strings, but is chiefly interesting for its artistic treasures; these include the municipal buildings, cathedral, and nearly fifty churches, innumerable pictures and frescoes, and Donatello's famous equestrian statue of Gattamelata; there is also a renowned university, library, museum, and the oldest botanical garden in Europe; after very varied fortunes it was held

by Venice, 1405-1797, then by Austria till its incorporation in Italy 1866. Livy was a native, as also Andrea Mantegna. Population, 82,281.

Palermo (*pah-lir'-mo*), a handsome city of Sicily, of which island it is the capital, at its northwest extremity. It is built in amphitheatrical form, surrounded by mountains on three sides, and contains many fine churches, and other edifices. Palermo has some textile and other manufactures, carries on an active foreign commerce, and is largely interested in the tunny fishery. The Carthaginians made of Palermo a naval station, 480 B. C.; as later also did the Romans after taking it in 254 B. C. It subsequently passed into the hands of the Goths, the Saracens, and the Normans, and in 1282 it was the spot where occurred the massacre known in history as "The Sicilian vespers." Between 1806 and 1814, it was the seat of the court, owing to the occupation of Naples by the French, and in May, 1860, surrendered to the liberating army of Garibaldi. Population, 340,104.

Palestine, a country of Southwestern Asia, forming the southern portion of Syria, in which most of the events recorded in Scripture took place. It stretches from Mount Hermon to the Desert of Arabia, and is bounded by the Mediterranean on the west, and by the Syrian Desert on the east. The deep valley of the Jordan divides the country from north to south, the surface on either side rising into elevated plains with alternate hills and valleys. The climate is mild and warm, though in the hilly districts the winters are often severe, and snow sometimes falls. The soil may, with care, be rendered exceedingly productive, but agriculture is in a backward condition. In the time of the Romans it was divided into four tetrarchies or presidencies, viz: Judæa, Samaria, Galilee, and Peræa. The first three were included in what was considered Palestine proper; the last embraced the territory beyond the Jordan. There was also a fifth division, Idumæa, part of which lay, however, out of the borders of Palestine. In the Seventh Century this country fell into the power of the Mohammedans, and afterwards of the Turks, which led to the wars called the Crusades. In 1099 the city of Jerusalem was taken, and was, under Godfrey de Bouillon, made the capital of a Latin kingdom, which lasted for above eighty years. In 1187 the country was reconquered by Saladin, and in 1291 the Crusaders were finally expelled. From this time it continued subject to the sovereigns of Egypt, until the conquest of both Syria and Egypt by Selim I., in 1517, when they were brought under the Turkish sway. The country is now a portion of the Turkish Empire. It is divided into various pashalics, the greater part being comprehended within the pashalic of Damascus. Of late years the country has been carefully surveyed, many hitherto doubtful sites have been settled, several geographical problems have been solved, and much light has been thrown upon the history of the country, especially as it is contained in the Bible records. The area of the country is about 6,000 square miles; its population is about 400,000, and comprises Syrians, Turks, Arabs, and about 10,000 Jews, nearly all of whom are found in the

sacred cities of Jerusalem, Hebron, Tiberias, and Safed.

Panama, capital of the republic of Panama, capital of the department of the same name, on the Gulf of Panama and on the Pacific coast of the Isthmus of Panama. The city lies on a tongue of land, across which its streets stretch from sea to sea. The harbor is shallow, but affords secure anchorage. Panama is chiefly important as the terminus of the interoceanic railway, and also of the proposed Panama Canal. The railway, which has been in operation since 1855, runs across the isthmus from Panama to Colon or Aspinwall on the Atlantic, and accommodates a large traffic. Population, 30,000.

Panama, Republic of. Was formerly a department of the Republic Colombia, and asserted its independence on November 4, 1903, and the government was established on November 13th. Its extreme length is about 480 miles, and its breadth varies between thirty-seven and 110 miles. The total area is 33,800 square miles, and the population about 400,000. The inhabitants are of a mixed race, comprising Spanish, Indian, and Negro elements, with a small number of temporary immigrants from the United States and Germany, and other European countries. Chinese laborers are estimated at 2,000. The Indian element preponderates in the Cordillera region and towards the west, while there are about 40,000 negroes on the Atlantic coast and inland, especially in the neighborhood of the railway. Agriculture and cattle-breeding are the leading industries, but the climate is generally unhealthy. The soil of Panama is of great fertility, and the climate induces luxuriant growth of tropical vegetation. But of the whole area about five-eighths are unoccupied, and of the remainder only a small part is properly cultivated. The most important product is the banana, which grows freely on the lands adjacent to the Chiriqui Lagoon. In this neighborhood the United Fruit Company (a United States company) has large plantations and exports annually from Bocas del Toro about two and one-half million bunches of bananas, worth about \$700,000. Caoutchouc is collected by the Indians of the Cordillera, or is obtained from trees planted by Europeans near the coast. Coffee is grown in the province of Chiriqui, near the Costa Rican frontier. In the province of Coclé (Atlantic coast) there is one large agricultural undertaking, begun in 1894, with German capital. Here about 75,000 cocoa trees, 50,000 coffee bushes, and 25,000 caoutchouc trees have been planted, and are now beginning to yield returns. Other products of the soil of Panama are coconuts, mahogany, and other woods, copaiba, sarsaparilla, and ipecacuanha. Cattle rearing is carried on successfully in the provinces of Chiriqui, Los Santos, Coclé, and Veraguas, and hides form an important article of export. Pearl fishing is carried on at the Pearl Islands in the Gulf of Panama, and at Coiba Island to the west. Turtle-shell is also exported to a considerable amount. For the development of the mineral resources of Panama little has been done, but there are two mining companies now at work, on the Pacific and Atlantic coasts.

On November 18, 1903, a treaty between the United States and Panama was signed, providing for the construction and maintenance of the Inter-Oceanic Canal. In this treaty, Panama granted in perpetuity the use of a zone five miles wide on each side of the canal route, and within this zone the exclusive control for police, judicial, sanitary, and other purposes. For sub-city area canals other territory was conceded, and for the defense of the canal, the coast line of the zone and the islands in Panama Bay were also conceded. The cities of Panama and Colon remain under the authority of the new State, but complete jurisdiction was granted to the United States in both the cities, and in their harbors in all that relates to sanitation and quarantine. In return for these grants the United States paid \$10,000,000 on the ratification of the treaty, and will pay \$250,000 yearly, beginning after nine years. This treaty was ratified on February 23, 1904, and in July, 1904, the provisional delimitation of the boundaries of the United States territory on the isthmus was signed.

Panama Canal. Under the superintendence of M. de Lesseps, a company was formed in 1881 for the construction of a ship canal, forty-six miles in length, across the Isthmus of Panama, mainly following the line of the railway. The capital received up to June 30, 1886, amounted to 772,545,412 francs; and it was expected that before the undertaking was completed this would have to be nearly doubled. The company, being unable to proceed, was compelled to go into liquidation, and suspend payment and all operations on the canal (from March 15, 1889). In March, 1893, a further extension was granted for the organization of a new company to take over the business; in 1894 a new company was formed, which obtained a concession for ten years, extended in 1900 by six years, so as to terminate in April, 1910. By that time the canal, according to the annual report of 1899, might be completed at a cost of 512,000,000 francs (\$10,000,000). On January 4, 1902, the board of the company offered to sell to the United States all their rights and property. In view of this offer the United States Isthmian Canal Commission recommended the Panama route, and on January 22, 1903, a treaty was signed whereby the United States would have obtained a lease of the necessary strip of land for 100 years, renewable at the pleasure of the United States, but this treaty was in August, 1903, rejected by the Colombian Congress. A canal treaty between the United States and Panama was signed on November 18, 1903. This treaty is closely associated with the separate existence of the Panama Republic, and its general terms are given above, under the head of "Government." The treaty between Great Britain and the United States, signed November 18th, and ratified by the United States Senate December 16, 1901, provides for the neutralization of the inter-oceanic canal by whatever route it may be constructed, and for its use on equal terms by vessels of all nations. In June, 1906, it was decided that the canal should be of the lock type. Seven years is the period estimated for the completion of the Culebra section of the

canal, and eight years for the construction of the dam and locks at Gatun.

Pantheon, The (*pan'-the-on*), Rome, midway between the Corso and Piazza Navona. The Pantheon was erected by Agrippa, son-in-law of Augustus, B. C. 27. There has been much discussion as to the original purpose of the building, but the name Pantheon was in use as early as A. D. 59. In 399 it was closed as a temple by decree of Honorius, and in 608 it was consecrated as a Christian Church, to which latter fact its preservation is doubtless due. The Pantheon is the only building of Ancient Rome not now in ruins; excavations and removals are in progress to ascertain, if possible, its connection with the other ancient structures.

In 645, Emperor Constans II. carried away the gilt bronze tiling of its roof; and Urban VIII. plundered it of 450,000 pounds of bronze for the baldacchino of St. Peter's, and for cannons for St. Angelo; adding, by way of compensation, the two impertinent campaniles, appreciatively called "asses' ears"; and finally, Benedict XIV. pillaged it of the marbles lining the attic. Notwithstanding all of which it is to-day one of the most pleasing structures of Rome. Within the wall, directly opposite the entrance, is the tomb of Victor Emmanuel. Around the sides are seven recesses, which formerly contained statues of the gods, Jupiter being in the center; between these are eight *adiclee*, in which are modern altars. Among the artists enshrined in the Pantheon are Raphael, An. Carracci, Taddeo Zuccaro, and Peruzzi. Raphael's tomb is behind the third chapel to the left. On either side of Raphael are buried Carracci and Zuccaro.

Papal States, the name given to that portion of Central Italy of which the pope was sovereign by virtue of his position. The territory extended irregularly from the Adriatic to the Mediterranean, and latterly comprised an area of 15,289 square miles, with 3,126,000 inhabitants. Rome was the capital. The foundation of the Papal States was laid in 754, when Pepin le Bref presented the exarchate of Ravenna to Stephen II., bishop of Rome. Benevento was added in 1053, and in 1102 Matilda of Tuscany left Parma, Modena, and Tuscany to the pope. In 1201 the Papal States were formally constituted an independent monarchy. Subsequently various territories were added to or subtracted from the pope's possessions, which were incorporated with France by Napoleon in 1809, but restored to the pope in 1814. A revolution broke out in Rome in 1848, and the pope fled to Gaeta, but he was reinstated by French troops, and Rome was garrisoned by French soldiers until 1870. In the meantime one state after another threw off its allegiance to the pope and joined the kingdom of Italy, and when the French left Rome in August, 1870, King Victor Emmanuel took possession of the city, declared it the capital of Italy, and thus abolished the temporal power of the pope.

Parthenon, a celebrated temple of Athena (Minerva) at Athens, erected under the superintendence of Phidias, during the administration of Pericles, about 440 B. C. The Parthenon was 227 feet long by 101 feet broad, and sixty-five feet high; and it was built entirely

of Pentelic marble, in the purest style of Doric architecture. In 1687, during a siege of Athens by the Venetians, a bomb exploded in the very center of the building, and threw down much of both the side walls. The ruins are still, however, in sufficient preservation to give a good idea of the ancient structure. A large number of fragments of the Parthenon were taken to England by Lord Elgin in 1812, and are preserved in the British Museum. A model of the Parthenon, still unfinished, stands on the Calton Hill, in the city of Edinburgh. It was founded in 1822 as a national monument, intended to commemorate the Scotchmen who had fallen in the wars consequent on the French Revolution; but after £13,000 had been expended, the design was not prosecuted further.

Paris, the capital of France and of the department of the Seine. The city lies in the Seine valley, surrounded by heights, those on the north being Charonne La Villette, the Buttes-Chaumont, and Montmartre, those on the south, St. Geneviève, Montrouge, and the Butte-aux-Cailles. Through the valleys between these heights the river runs from east to west, inclosing two islands, upon which part of the city is built. It is navigable by small steamers. The quays or embankments, which extend along the Seine on both sides, being built of solid masonry, protect the city from inundation, and form excellent promenades. The river, which within the city is fully 530 feet in width, is crossed by numerous bridges, the more important being Pont Neuf, Pont des Arts, Pont du Carrousel, Pont Royal, Pont de l'Alma, etc. The city is surrounded by a line of fortifications, which measures twenty-two miles; outside of this is the enceinte, while beyond that again are the detached forts. These now form two main lines of defense. The inner line consists of sixteen forts, the outer line of eighteen forts, besides redoubts. In the older parts of the city the streets are narrow and irregular, but in the newer districts the avenues are straight, wide, and well-paved. What are known as "the boulevards" include the interior, exterior, and military. That which is specifically called "The Boulevard" extends, in an irregular arc on the north side of the Seine, from the Place de la Bastille in the east to the Place de la Madeleine in the west. It includes the Boulevards du Temple, St. Martin, St. Denis, des Italiens, Capuchins, Madeleine, etc., and its length of nearly three miles forms the most stirring part of the city. Here may be noted also the magnificent triumphal arches of Porte St. Denis and Porte St. Martin, the former of which is seventy-two feet in height. On the south side of the Seine the boulevards are neither so numerous nor so extensive. Among the many public squares or places, is the Place de la Concorde, one of the largest and most elegant squares in Europe, surrounded by fine buildings, and adorned by an Egyptian obelisk, fountains, and statues. But the most extensive parks are outside the city. Of these the Bois de Boulogne, on the west, covers an area of 2,150 acres, gives an extensive view toward St. Cloud and Mount Valerien, comprises the race courses of Longchamps and Auteuil, and in it are situated lakes,

an aquarium, conservatories, etc. The Bois de Vincennes, on the east, even larger, is similarly adorned with artificial lakes and streams, and its high plateau offers a fine view over the surrounding country. Of the churches of Paris the most celebrated is the Cathedral of Notre Dame, situated on one of the islands of the Seine, called the Ile de la Cité. It is a vast cruciform structure, with a lofty west front, flanked by two square towers, the walls sustained by many flying buttresses, and the east end octagonal. The whole length of the church is 426 feet, its breadth 164 feet. The foundation of Notre Dame belongs to the Sixth Century; the present edifice dates from 1163; but was restored in 1845. The interior decorations are all modern. Saint Chapelle is said to be the finest Gothic masterpiece extant. The Panthéon, originally meant for a church, is the burial-place of the great men of the country, where lie the remains of Voltaire, Rousseau, and Carnot. Notable among the public buildings of Paris are its palaces. The Louvre, a great series of buildings within which are two large courts, is now devoted to a museum which comprises splendid collections of sculpture, paintings, engravings, bronzes, pottery, Egyptian and Assyrian antiquities, etc.; the palace of the Tuileries, the Palais du Luxembourg, the Palais Royal, the Palais de l'Elysee, and many others. A notable and unique structure is the Eiffel Tower, built in connection with the Paris Exhibition of 1900, and which is to have a permanent existence. It is a structure of iron lattice-work, 984 feet high, and having three stages or platforms. It is as yet the highest building in the world. The University Schools in the Quartier Latin attract the youth of all France; the chief are the Schools of Medicine and Law, the Scotch College, the College of France, and the Sorbonne, the seat of the faculties of letters, science, and Protestant theology.

The first appearance of Paris in history is on the occasion of Cæsar's conquest of Gaul, when the small tribe of the Parisii were found inhabiting the banks of the Seine, and occupying the island now called Ile de la Cité. It was a fortified town in 360 A. D., when the soldiers of Julian here summoned him to fill the imperial throne. In the beginning of the Fifth Century it suffered much from the northern hordes, and ultimately fell into the hands of the Franks, headed by Clovis, who made it his capital in 508. In 987 a new dynasty was established in the person of Hugh Capet, from whose reign downward Paris has continued to be the residence of the kings of France. In 1437 and 1438, under Charles VII., Paris was ravaged by pestilence and famine. Under Louis XI. a course of prosperity again commenced. In the reign of Louis XIV. the Paris walls were levelled to the ground after having stood for about 300 years, and what are now the principal boulevards were formed on their site (1670). Only the Bastille was left (till 1789), and in place of the four principal gates of the old walls, four triumphal arches were erected, two of which, the Porte St. Denis and Porte St. Martin, still stand. Many of the finest edifices of Paris were destroyed during the Revolution, but the work of embellishment was resumed by the Directory, and continued by all subsequent

governments. The reign of Napoleon III. is specially noteworthy in this respect; during it Paris was opened up by spacious streets and beautified to an extent surpassing all that had hitherto been effected by any of his predecessors. The most recent events in the history of Paris are the siege of the city by the Germans in the war of 1870-1871, and the subsequent siege carried on by the French national government in order to wrest the city from the hands of the Commune. Paris has been the scene of international exhibitions in the years 1855, 1867, 1878, 1889, and 1900. Population, 2,810,915.

Patagonia, the name applied to that extreme portion of South America which is bounded east by the Atlantic, west by the Pacific; south by the Strait of Magellan, and north by the Rio Negro. Since 1881 this large territory has been, by treaty, divided between Chile and the Argentine Republic, so that the portion west of the Andes (63,000 square miles) belongs now to the former, and the portion east of the Andes (360,000) belongs to the latter. The Straits of Magellan form a southern boundary of 360 miles, and separate the mainland from the numerous islands of Tierra del Fuego. Here the Chilean Government has established the settlement of Punta Arenas, with stations along the coast. Patagonia, east of the Andes, consists mainly of vast undulating plains, frequently covered with shingle and broken up by ridges of volcanic rock. The vegetation is scanty, except in the region adjoining the Andes, and in many places there are shallow salt lakes and lagoons. The chief rivers are the Rio Negro, the Chupat, the Rio Desire, and the Rio Chico, all of which have their sources in the Andes, and run east. There are few, if any, good seaports. The Pantagonians are a tall, muscular race, averaging fully six feet in height, with black hair, thick lips, and skin of a dark brown color. They are a nomad race, divided into numerous tribes, whose chief occupation is in hunting and cattle breeding. This native population is rapidly disappearing. Colonization is encouraged by the Argentine Government, and there are many tracts suitable for European settlement. The country was first discovered by Magellan in 1520.

Paul's (St.) Cathedral, London, is situated on Ludgate Hill, an elevation on the north bank of the Thames. The site of the present building was originally occupied by a church erected by Ethelbert, King of Kent, in 610. This was destroyed by fire in 1087, and another edifice, Old St. Paul's, was shortly afterwards commenced. The structure was in the Gothic style, in the form of a Latin cross, 690 feet long, 130 feet broad, with a lead-covered wooden spire rising to the height of 520 feet. The middle aisle was termed Paul's Walk, from its being frequented by idlers, as well as money-lenders and general dealers. Old St. Paul's was much damaged by a fire in 1137, by lightning in 1444, again by fire in 1561, and was utterly destroyed by the great fire in 1666. The ruins remained for about eight years, when the rebuilding was taken in hand by the government of Charles II. (1675-1710). The whole building was completed at a total cost of \$7,500,000, under one architect (Sir Christopher Wren), one master-mason

(Thomas Strong), and one Bishop of London (Dr. Henry Compton). The building is of Portland stone, in the form of a cross. Its length is 510 feet; the width from north to south portico 282 feet; the general height is 100 feet. The whole is surmounted by a great dome raised on eight arches. Above the dome is a lantern or gallery terminated above by a ball and gilded cross, 404 feet from the pavement beneath. The elevated portico, forming the grand entrance, consists of twelve Corinthian columns, with an upper series of eight pillars of the composite order, supporting a pediment; the front being flanked by two bell-towers, 120 feet in height. The entablature represents in relief the conversion of St. Paul, a work of Francis Bird. Upon the south front, which corresponds with the north, is a phoenix rising from the flames, with the motto, "Resurgam" (I shall rise again). The pavement of the interior is composed of slabs of black and white marble. The crypt under the nave contains the burying-places of many illustrious personages, and some interesting relics of old St. Paul's. Among the numerous monuments and statues to the illustrious dead may be noted those of John Howard and Dr. Johnson, by Bacon; statues of Nelson, Earl Howe, and Sir Joshua Reynolds, by Flaxman; Bishop Heber, by Chantrey; and monuments to Lord Rodney, Lord Heathfield, Admiral Collingwood, General Abercrombie, etc., by Rossi, Westmacott, and others. The monument to the Duke of Wellington, by Alfred Stevens, is accounted the finest work of its kind in England. It consists of a rich marble sarcophagus and canopy, elaborately ornamented with bronze sculptures. It is thirty feet in height and cost upwards of \$150,000. Various decorative, structural, and other improvements have recently been made on the interior of the cathedral.

Peking, or Pekin, the capital of the Chinese Empire, Province of Chihle, or Pechili, in a vast sandy plain, between the Pei-ho and its important affluent, the Hoang-ho, 562 miles northwest of Nankin, and 100 miles west-northwest of the Gulf of Pechili, in the Yellow Sea. It consists of two contiguous cities, each separately surrounded by walls, and together entered by sixteen gates. The entire circumference is twenty-five miles. The northern city, which is nearly a perfect square, consists of three enclosures. The outer one is used by Chinese traders. The second enclosure contains the residences of the dignitaries of the empire and foreign legations, the national literary institutions, and the temples of Ancestors and Peace, and is inhabited mostly by the Manchus. The inner enclosure, or "forbidden city," surrounded by walls of yellow tiles, two miles in circumference, hence called the "Yellow Wall," contains the palaces of the emperor and empress. The southern city, called the Wai-ching, or "outer city," is also square, and occupied by the Chinese, and is both the seat of business and the residence of most of the population. The wall is thirty feet high, twenty-five feet thick at the base, and twelve feet at the top. That of the imperial city is forty feet high. The principal streets are very wide and regular, running between opposite gates. The houses are generally one story

high, and built of brick. Of the ornamental buildings, the most conspicuous are those commonly called triumphal arches. They consist of a large central gateway, with small ones on each side, all covered with narrow roofs, and, like the houses, are splendidly gilded, varnished, and painted. Peking is indebted for its importance to its being the residence of the emperor and the seat of government. The country round the city being sandy and poor, a large portion of its supplies are brought from a distance — partly from sea by the Pei-ho, but principally by the Grand Canal and the Eu-ho, which connect it with Nankin, and most of the eastern provinces. The early history of Peking is involved in obscurity. Kublai Khan rebuilt it, and made it his capital in 1260. The Mongol dynasty, founded by Kublai Khan, continued to occupy this city till it was expelled from China, in 1367. In 1421, the third emperor of the Chinese dynasty of Ming transferred his residence thither from Nankin, since which it has been the capital of the empire. During the "Boxer" uprising of 1900 the various foreigners in Peking were besieged in the English legation. For weeks they were given up as lost, but they managed to hold out till the arrival of the foreign troops. Population (about), 1,700,000.

Peloponnesus, the ancient name of the peninsula which forms the southern part of Greece, now called the "Morea." It is said to have derived its name from Pelops, a son of Tantalus, King of Phrygia, and grandson of Zeus (Jupiter), who was celebrated in Greek fable, and by whom the country was said to have been settled about 1280 B. C. The "Peloponnesian War," between the Athenians and the people of the Peloponnesus (431-404 B. C.) is the most famous of the wars of Greece. The area of the peninsula is 8,263 square miles, and its population about 1,500,000, divided among the five provinces, or nomarchies, of Argolis and Corinth, Achaia and Elis, Arcadia, Messenia, and Laconia.

Persia (native name *Iran*), the most extensive, opulent, and powerful kingdom of Western Asia, is bounded north by the Caspian Sea, Asiatic Russia and Turkestan, east by Afghanistan and Beloochistan, south by the Persian Gulf and west by the Turkish territories. Length from north to south, about 700 miles; breadth, 900 miles. The surface of Persia is for the greater part a vast plateau, broken in upon in the north by the Elborz Mountains, and in the west and south by various isolated ranges. In the more east and northeast parts are found the Great Salt Desert, and that of Luth. Persia is drained by the Aras, Kerkhas, etc., but has scarcely a river that can be termed navigable, though some of them extend several hundred miles in length, and possess great volumes of water. Some of its immense valleys abound with vegetable productions; among them are wheat of the very best quality, barley, and other cereals; cotton, sugar, rice, and tobacco. The vine flourishes in many of the provinces, and the wines of Shiraz are celebrated. The mulberry tree is largely cultivated, silk being one of the most important staples of the country. The chief manufacture is that of silk stuffs, of the

richest kinds, textile goods, arms, carpets, shawls etc. Persian commerce is very extensive, and chiefly carried on with Russia via the Caspian Sea, and with British India by way of the Persian Gulf.

Phœnicia (*fē-nish'zā*), the name given by the Greeks and Romans to a fertile province of Syria, on the western declivity of Lebanon, and bordering upon the Mediterranean. Its limits varied at different times; generally it was included within two degrees of latitude, and was of narrow breadth. Its inhabitants were enterprising navigators, and the country has been called "the birthplace of commerce." Phœnician pilots and sailors navigated the vessels of Solomon; and, before other ships had ventured to lose sight of their own shores, colonies of this people were established in some of the most distant parts of Europe, Asia, and Africa. They were also distinguished for their knowledge of the arts and sciences. Phœnician workmen were employed at the building of the Temple of Solomon, and by Phœnicians the knowledge and use of letters were introduced into Greece. The climate of the country is mild; the land is abundantly watered; and it yields large crops of fruit, corn, cotton, and sugar. But its once populous and opulent cities are reduced, under the rule of a despotic government, to impoverished villages or masses of ruins. Under the Romans, Phœnicia formed a part of the Province of Syria. Since the beginning of the Sixteenth Century, it has formed a part of the Turkish Empire.

Philadelphia, is coextensive with Philadelphia County, Pa., and is situated on the Delaware and Schuylkill rivers, eighty-five miles southwest of New York. It is the largest city of Pennsylvania and the third largest in the United States. The city is built chiefly on a low peninsula between the two rivers. There is a water frontage on the Delaware River of over sixteen miles, of which more than five miles have docks. The harbor has been greatly improved by the removal of the islands in the middle of the river, and in front of the wharves there is an average depth of fifty feet. Among the attractions of the city is Fairmount Park, one of the largest public parks in the world, extending more than seven miles on both banks of the Schuylkill River, and more than six miles on both banks of Wissahickon creek, giving it an area of over 3,000 acres. In 1876, the Centennial Exposition was held here. Memorial Hall, erected at a cost of \$1,500,000, which was used for the art gallery of the Exposition, now contains a permanent industrial and art collection. Here also is the Horticultural Building filled with tropical and other plants and surrounded by thirty-five acres of ground devoted to horticulture. In the heart of the city, at the intersection of Market and Broad streets, stands the City Hall, on a piece of ground which was formerly Penn Square. This great structure, usually called the Public Building, is said to be the largest building in the United States. It is built of white marble and granite. The central tower rises to a height of 547 feet, three inches, and is surmounted by a colossal statue of William Penn, thirty-seven feet in height. The total cost of the building was over \$20,000,000.

In addition to these, its chief public buildings comprise Girard College, United States Mint, customhouse, exchange, chamber of commerce, post-office, etc. The State house contains the so-called Independence Hall, a chamber in which sat the Congress which issued the American Declaration of Independence in 1776. The Academy of Music, union league clubhouse, newspaper buildings and Masonic Temple, are imposing structures. In manufactures, Philadelphia ranks next to New York. The chief products are locomotives, sugar, and molasses, men's clothing, foundry and machine shop products, carpets and rugs, hosiery and knit goods, woolen and cotton goods, malt liquors, morocco, chemicals, packed meat, refined petroleum, silk, and silk goods. The great Cramp shipbuilding yards are on the Delaware, just west of the heart of the city. The institutions for higher education include the William Penn Charter School, founded in 1689; the University of Pennsylvania, several well-known medical colleges, and many others.

Philippine Islands lie north of Borneo and Celebes. They are more than 1,200 in number, with an area of about 127,800 square miles. Luzon, in the north, has an area of 51,300 square miles, and Mindanao, or Magindanao, in the south, fully 25,000. There are upward of 1,000 lesser islands. To the southwest of the Bissayas lies the long, narrow island of Paragoa, or Palawan, formed of a mountain-chain with low coast-lines, cut with numerous streams, and exceedingly fertile. The forests abound in ebony, logwood, gum-trees, and bamboos. To the north of Luzon lie the Batanens, Bashee, and Babuyan Islands, the first two groups having about 8,000 inhabitants, the last unpeopled. The Sulu Islands form a long chain from Mindanao to Borneo, having the same mountainous and volcanic structure as the Philippine Islands, and all are probably fragments of a submerged continent. Immense forests spread over the Philippine Islands, clothing the mountains to their summits; ebony, iron-wood, cedar, sapan-wood, gum-trees, etc., being laced together and garlanded by the bush-ropes or palasan, which attains a length of several hundred feet. The variety of fruit-trees is great, including the orange, citron, bread-fruit, mango, cocoa-nut, guava, tamarind, rose-apple, etc.; other important products of the vegetable kingdom being the banana, plantain, pineapple, sugar-cane, cotton, tobacco, indigo, coffee, cocoa, cinnamon, vanilla, cassia, the areca nut, ginger, pepper, etc., with rice, wheat, maize, and various other cereals. Gold is found in riverbeds and detrital deposits, being used, in form of dust, as the medium of exchange in Mindanao. Iron is plentiful, and fine coal beds, from one to four feet thick, have been found. Copper has long been worked in Luzon. There are also limestone, a fine variegated marble, sulphur in unlimited quantity, quicksilver, vermilion, and saltpeter—the sulphur being found both native and in combination with copper, arsenic, and iron. The Tagals and Bisayans are the most numerous native races. They dwell in the cities and cultivated lowlands, 2,500,000 being converts to Roman Catholicism, and a considerable number,

especially of the Bisayers, Mohammedan. The mountain districts are inhabited by a negro race, who, in features, stature, and savage mode of living, closely resemble the Alfoors of the interior of Papua, and are probably the aborigines driven before the inroads of the Malays. A few of the negroes are Christians, but they are chiefly idolaters, or without any manifest form of religion, and roaming about in families without fixed dwelling. The Mestizos form an influential part of the population; by their activity engrossing the greatest share of the trade. These are mostly of Chinese fathers and native mothers. Few Spaniards reside in the Philippine Islands. The Sulu Islands have a population of 150,000, and are governed by a sultan, whose capital is Sung.

Pisa (*pē'zā*), a city of Italy, the capital of a province of the same name, which was formerly a part of Tuscany. The city, which is situated on the banks of the Arno, about eight miles from the mouth of that river, is surrounded by old walls and moats, within which are numerous gardens and cultivated fields, studded with the ruins of convents. Among its old buildings the most noteworthy is its cathedral, in the Tuscan style of the Eleventh Century; to the east of which is the famous Campanile, or leaning Tower of Pisa, a round, marble belfry, 188 feet in height, erected in the latter part of the Twelfth Century. Pisa is the seat of a university, which was founded in 1329. At the Council of Pisa, in 1409, the rival popes, Benedict XIII. and Gregory XII., were deposed, and Alexander V. elected in their room. Pisa is said to have been founded six centuries before Christ. It was a flourishing city in the time of the Romans. At the time of the Crusades its population was not less than 150,000, and at one time it disputed the dominion of the sea with Genoa. Population, 61,279.

Pittsburg (according to its city charter, Pittsburgh), a city, port of entry, and county-seat of Allegheny County, Pennsylvania; at the confluence of the Monongahela and Allegheny rivers, at the head of the Ohio River, 353 miles west of Philadelphia. The city owns a water-works system, costing over \$7,000,000. The reservoirs have a storage capacity of 68,000,000 gallons, and the water is distributed through 300 miles of mains. There are in all 230 miles of streets, of which 200 miles are paved. The sewer system covers 220 miles. The city is lighted by electricity. The annual death rate averages nineteen per 1,000. The principal public buildings are the Allegheny court house, the Carnegie Library and Institute, with museum, music hall, and art gallery, and having an endowment of \$2,000,000; the United States Government building, the West Pennsylvania Exposition Society's buildings; Municipal Hall; United States Arsenal, and the Western State Penitentiary. The two chief industries are the production of iron and steel; but there are many other flourishing manufactures. The city is well known as the Iron City, for there is nothing in the iron industry which is not here manufactured. The capacity of the iron mills is over 800,000 tons annually, and that of the Bessemer steel mills upward of 400,000 tons. There are

in Pittsburg, besides blast furnaces and iron and steel works, over 1,500 manufacturing establishments, employing more than 60,000 persons. The schools are flourishing and their accommodations keep pace with increasing population. There are over 200 churches in Pittsburg. The most important of these are Trinity (P.E.), St. Peter's (P.E.), First Presbyterian, United Evangelical (German), First Baptist, English Evangelical, etc. In 1754, at the suggestion of George Washington, the English began to erect a block-house on the present site of the city. They were driven away by the French, who built a fort at the junction of the two rivers and named it Du Quesne. In 1758, after two unsuccessful attempts to retake the place, the English, under General Forbes, made a third attempt, and the French burned and evacuated the fort. In the following year another fort was erected here, named in honor of William Pitt. The British withdrew from the post in 1772, and it was held by Virginia in 1775-1779. The place was incorporated as a city March 18, 1816. In 1877 a railroad strike and riot occurred in which much damage was done to railroad property and for which Allegheny County had to settle at a cost of \$4,000,000. Population, 364,161.

Plymouth, the largest town in Devonshire, stands on the north shore of Plymouth Sound, 250 miles west of London by rail; adjacent to it are the towns of Stonehouse and Devonport. Among the chief buildings are a Gothic town-hall, a Fifteenth-Century church, and a Roman Catholic cathedral. The chief industry is chemical manufactures. There is a large coasting and general trade, and important fisheries. Many sea-going steamship companies make it a place of call. The Sound is an important naval station, and historically famous as the sailing port of the fleet that vanquished the Armada. Population, 107,109.

Po, the largest river of Italy, rises on Monte Viso, one of the Cottian Alps, at an altitude of 6,405 feet, close to the French frontier. It has an entire length of 360 miles, and drains an area of nearly 28,900 square miles. Below Piacenza its stream has from ante-Roman days been artificially embanked along great stretches with double lines of embankments on each side.

Pompeii, a seaport at the mouth of the Sarnus, on the Neapolitan Riviera, founded about 600 B. C. by the Oscans, and after them occupied by the Tyrrheno-Pelasgians, and by the Samnites, till these, about 80 B. C., were dispossessed by the Romans. From that time down to its destruction, A. D. 79, it became a sort of Rome-super-Mare, frequented by the aristocracy. On February 5, A. D. 63, by an earthquake in the vicinity, these buildings were all but leveled with the ground, and some years elapsed ere the fugitive citizens recovered confidence enough to reoccupy and rebuild what was once Pompeii. Revolutionized as it was for the worse, the city, however, retained much of Greek character and coloring, and had relapsed into more than its former gaiety and licentiousness, when, on August 23 (or, more probably, on November 23), 79, with a return of the shocks of earthquake, Vesuvius was seen to throw up a column of black smoke expanding

like some umbrella pine of the neighborhood, till it assumed the proportions of a great swarthy cloud, dense with ashes, pumice, and red-hot stones, settling down with a force increased by the rain-torrents that intermittently fell. For three days the flight of the inhabitants continued till Pompeii was abandoned by all who could effect their escape. By the fourth day the sun had partially reappeared, and the more courageous of the citizens began to return for such of their property as they could disinter. The reigning emperor, Titus, organized relief on an imperial scale, and even undertook the clearing and rebuilding of the city. This attempt was soon abandoned, and Pompeii remained a heap of hardened mud and ashes, gradually overgrown with grass—the wall of the great theater and the outline of the amphitheater alone marking its site—till 1592, when the architect Fontana, in cutting an aqueduct, came on some ancient buildings. Unsystematic, unscientific excavations proceeded fitfully till 1860, when the Italian kingdom took in hand the unearthing of the city. This was carried out with admirable ingenuity, care, and success, and it now attracts the pilgrim from every clime for the object lessons it is unique in affording as to the public and private life of antiquity. House construction consists mainly of concrete or brick, and sometimes of stone blocks, especially at the corners. Two-storied, sometimes three-storied, houses are numerous, though the upper floors, built of wood, have been consumed by the eruption. Stores usually occupied the ground floors of dwelling houses, on their street aspect, let out to merchants or dealers as at the present day, but not connected with the back part of the house. They could be separated from the street by large wooden doors, while inside they had tables covered with marble, in which earthen vessels for wine or oil were inserted. The storekeeper had sometimes a second room at the back, when he did not live on an upper floor or in another part of the town. Retail traffic must have been considerable at Pompeii, to judge from the number of those stores along the streets. Only a personal visit can convey an idea of the indoor life of the Pompeians, with whom the absence of glass, the fewness of the openings in the street aspect of the house wall, and the protection of these with iron gratings are among the points noted by the most casual visitor. As rebuilt after 63, Pompeii shows little marble, the columns being of tufa or brick cemented by mortar. A coating of stucco was laid over wall or column and presented an ample field for ornamental painting. This must have given to Pompeii its bright, gay coloring, which, with its reds, blues, and yellows, on column and capital, on wall and partition, harmonize so well with the glowing sunlight of the south.

Port Arthur, a strongly-fortified port commanding the northern promontory enclosing the Gulf of Pechili, in China. It was taken by storm by the Japanese in the war of 1894, but Japan was compelled to restore it, in return for an increased indemnity, by Russia, Germany, and France. China, however, gained nothing by invoking this European intervention, Port Arthur

being occupied by Russia in December, 1897, immediately after the seizure of Kiao-Chau by Germany. In the spring following, Russia secured by "lease" both Port Arthur and Talienwan, with other advantages, which gave her the command of Manchuria and a sort of tacit acknowledgment that this portion of China belonged to her exclusive sphere of influence. The Russians, under Gen. Stössel, were successfully besieged here by the Japanese under Gen. Nogi, July, 1904, to January 1, 1905. At the close of the war, the lease was transferred to Japan by the treaty of Portsmouth, in 1905. As the terminus of a branch of the Siberian Railway, Port Arthur is an important strategic point.

Porto Rico, a West Indian island; seventy miles east of Haiti; till 1898 a colony of Spain; area, 3,600 square miles; population, 953,243; capital, San Juan, metropolis, Ponce. Under the provisions of the Spanish-American peace protocol the American flag was officially raised and the island formally transferred to the United States on October 18, 1898. The Spanish form of the name of the island is Puerto Rico; but an act of the United States Congress, approved April 12, 1900, established the official form as Porto Rico. The people are most loyal in their devotion to their new country and are solicitous to be regarded as a part of the United States. While there is a great amount of wealth in the island, and in many places evidences of great prosperity, rich plantations, and promise of a great future for Porto Rico, throughout the interior of the island, the people are poor and their homes are of the poorest character, consisting almost altogether of "shacks" constructed of the palm and covered with a straw thatch or palm leaves. Into the cities and these homes is crowded a large population, variously estimated from 800,000 to 1,000,000. They are generally a peaceful and law-abiding people, and while there is unquestionably some lawlessness, and some small offenses are being committed, they do not exceed, if they equal, the number being committed in the States of a like population. It has been estimated that from 10 to 20 per cent. only of the people can read and write. The people are anxious to have their children educated, and are exceedingly solicitous for the establishment of public schools. There is no starvation upon the island, and while there is great poverty in many places, there cannot be any real starvation in Porto Rico, for the reason that the people live frugally and are content with little, while the soil and the climate are so productive of many of the simple necessities of life that it would be almost impossible to starve a people who live upon tropical fruits and tropical vegetable productions. Vegetables of all kinds known to our climate grow in abundance. Irish potatoes are not a success. There are no plums, cherries, or grapes. It would seem that there would be no difficulty in growing grapes, but so far they have not been tried. Indian corn is raised with some success, and while the ears are small, that is made up by the fact that two and even three crops can be grown yearly on the same ground. This can be grown either in the valleys or on the hillsides. No wheat is grown on the island. At present all

flour is imported. The native grasses grow luxuriantly wherever an opportunity offers, from the lowest valley to the highest mountain top, and afford excellent pasture for stock everywhere all the months of the year. They make no hay, but cut it with sickles or the machete and tie it in small bundles, pack it on ponies to the cities, and sell it while it is still green. The cattle grazing in large numbers on the pastures are found all over the island, and are mostly in very good condition, making excellent beef. Hogs are raised to a limited extent, but are of poor breeds, being of the old "razor-back" variety. They are fed mainly from the nuts grown on the royal palm trees. Horses are plentiful. They are small, and used only to ride and as pack ponies and in carriages. The hard work of hauling loads and plowing the land is done with oxen, yoked in the Spanish fashion by tying the yoke to the horns, and they are guided with a whip or "gad." The wagons are mostly two-wheeled carts with large wooden axles. There seems to be a considerable deposit of iron and copper on the island. In some places these are being developed with good prospects of proving paying investments. Traces of gold and silver are also found in the mountains, but up to date prospecting has not developed any considerable quantities of these more precious metals. Soon after the surrender of Santiago de Cuba to the American forces under General Shafter, July 17, 1898, an army numbering 16,973 men was sent from Guantanamo to Porto Rico to take possession of that island. They landed July 25th at Quianica, fifteen miles west of Ponce. Lieutenant Haines, commanding the marines, went ashore and raised the American flag over the custom house, amid the cheers of the people. General Wilson was the first army officer to land, and was welcomed with cheers and a serenade. A portion of the army marched toward the capital, San Juan, but were stopped when about half way by the suspension of hostilities between the belligerent powers. On October 18th the island was formally surrendered to the United States in the city of San Juan. In 1899 a census of the island was taken under the direction of the United States War Department, which by departments gave the following: Aguadillo, 99,645; Arecibo, 162,308; Bayamon, 160,046; Guayama, 111,986; Humacao, 88,501; Mayaguez, 127,566, and Ponce, 203,191 — total for the island, 953,243. The island has prospered greatly under American rule, and is fast becoming Americanized.

Portugal. The most western kingdom of Europe, occupying the greater portion of western seaboard of the Iberian peninsula. North and east it is bounded by Spain, and on all other sides by the Atlantic Ocean. Length, from north to south, 338 miles; mean breadth, about 100 miles. The surface of the country is generally of a hilly character, receiving the terminal continuation of several Spanish mountain chains — one of which, under the name of Serro de Estrella, pierces the center in a south-westerly direction, and rises in its highest part to an altitude of 7,524 feet above the sea. Further south is the Serrado Monchique, terminating at the Atlantic in the headland of Cape

St. Vincent. The chief rivers are the Tagus, Douro, Minho, Guadina, and Mondego. The soil is, generally speaking, quite rich, but agriculture is much neglected. Wine is the chief industrial product of the country, the best growths of which, known as *port*, are shipped to England, the United States, and other countries. The exports consist almost entirely of wine, fruits, oil, cork, and salt. Portuguese manufacturing interests include those of the fabrication of textile goods, gloves, metallic, and ceramic wares, tobacco, cigars, etc. The chief cities and towns are Lisbon, the capital; Oporto, Braga, Coimbra, Setubal, Evora, and Elvas; and, in Madeira, Funchal.

Potomac, a river of the United States, formed by two branches which rise in the Allegheny Mountains in West Virginia, and unite fifteen miles southeast of Cumberland, Md., from which point the river flows in a generally southeast course 400 miles, and falls into Chesapeake Bay, after forming an estuary nearly 100 miles long, and from two and one-half to seven miles wide. The largest ships can ascend to Washington. The Potomac forms the greater part of the boundary between Virginia and Maryland.

Potsdam, eighteen miles southwest of Berlin, stands on an island at the confluence of the Nuthe and Havel, and is the capital of the Prussian Province of Brandenburg; a handsome town, with broad streets, many parks and squares, numberless statues and fine public buildings; it is a favorite residence of Prussian royalty, and has several royal palaces; was the birthplace of Alexander von Humboldt; has sugar and chemical works, and a large violet-growing industry. Population, 59,814.

Prague (*prág*), a city of the Austro-Hungarian Empire, the capital of the province (formerly the kingdom) of Bohemia. It is situated on the rising ground at each side of the Moldau, about 160 miles northwest of Vienna; and is, with the exception of Vienna and Buda-Pesth, the largest city in the empire. Both the old and the new town stand on the right bank of the river, as well as the industrial suburbs of Carolinenthal and Zizkow; on the left bank are the quarters known respectively as the Kleinsite and the Hradshin, in which dwell the nobility and the higher officers of state. This portion of the city is surrounded by a wall. In the immediate neighborhood of the Hradshin is the White Mountain, 1,300 feet high, the scene of the battle in which the Protestants of Bohemia suffered a decisive defeat early in the Thirty Years' War (November 8, 1620). The Cathedral of Prague belongs to the Fourteenth Century, as does also the university, which was founded in 1348 by the Emperor Charles IV. A large trade is carried on in the city, and several large fairs are held in it annually. It has, however, suffered greatly from war, and so recently as 1848 was bombarded by the Austrians for two days, in consequence of an insurrectionary movement on the part of the inhabitants. The "Battle of Prague," so celebrated in history, in which the Austrians were defeated by Prince Henry of Prussia, and their whole camp taken, was fought May 6, 1747. Population, 245,750.

Providence, a city, capital of the State of Rhode Island, and county-seat of Providence County; on the Providence River, an arm of Narragansett Bay, and forty-four miles southwest of Boston. It is the second city of New England in population and wealth, and is built on a rolling plateau. Providence has upward of 2,000 manufacturing establishments, with a combined capital of about \$60,000,000, and employing about 40,000 persons. It is noted for its manufactures of cotton and woolen goods, jewelry, and stoves, and is the largest seat of fine jewelry manufacture in the United States. The other industries include silverware, tools, engines, locomotives, boilers, sewing machines, serews, files, general hardware, yarn, calico, lace, braids, worsteds, broadcloth, chemicals, etc. There is an extensive coastwise commerce and shipping industry, especially in the coal, cotton, and wool trade. There is also an important shell-fish industry. In 1636, Roger Williams, a Baptist clergyman, was exiled from Massachusetts because he opposed its theocratic laws. He first settled at What Cheer Rock, on the Seekonk River, and later at the head of the Providence River, where the Indian Chief, Canonieus, granted him a piece of land. In 1643-1644 local government was formed under a royal charter. Providence received its city charter in 1832, and has been enlarged by annexation of territory from adjoining towns. Population, 198,635.

Prussia (*prüsh'ah*). A kingdom of Europe, and the principal state of the German Empire, bounded on the north by the Baltic Sea and Denmark, east by Russia and Poland, south by the Austrian dominions and the states of Southern Germany, southwest by France and west by Belgium and Holland. The geographical form of this kingdom is very irregular. Prussia has an extensive seaboard extending along the Baltic from Russia on the east to Denmark on the west. It has, besides, a tract of coast line washed by the North Sea, formed by the Schleswig-Holstein and Hanoverian provinces. The length of the kingdom, taken from east-northeast to west-southwest, is about 775 miles; maximum breadth, 404 miles. The surface is for the most part flat. The principal mountains are those of the Hartz, Brocken, and Riesengebirge. The Baltic seaboard is low and sandy, and forms a number of bays and inlets such as the Gulf of Dantzic, the bays of Swinemunde, Lübeck, and Kiel, the Frische Haff and the Curische Haff. Prussia possesses a large number of navigable rivers in close proximity with each other, viz: the Niemen, Pregel, Vistula, Oder, Elbe, Weser, and the Rhine with its numerous tributaries, such as the Moselle, Lahn, etc. The forests are extensive, occupying an area of nearly 10,000 square miles, chiefly consisting of fir. Its minerals consist of iron, copper, lead, alum, nitre, zinc, cobalt, sulphur, nickel, arsenic, baryta, amber, several varieties of precious stones, and, to a small extent, silver. Salt from the brine springs of Prussian Saxony is plentiful, as is also coal. All metals, salt, amber, and precious stones are Crown property. Agriculture and cattle-rearing constitute the chief sources of employment and wealth of the rural population. The western division of Prussia is

noted for its excellent fruits and vegetables, and the Rhenish provinces stand preëminent for their wines. In the kingdom there are upwards of 100 mineral springs, as those of Wiesbaden, Ems, Spa, Pyrmont, etc. The chief cities and towns are Berlin (the capital), Breslau, Cologne, Königsberg, Dantzic, Strassburg, Frankfurt-on-the-Main, Magdeburg, Hanover, Aix-la-Chapelle, Muhlhouse, Mentz, Frankfurt-on-the-Oder. The seaports (besides Dantzic and Königsberg) include Memel, Swinemunde, Stettin, Lübeck, Altona, and Cuxhaven. That of Kiel is the principal naval station and arsenal of the German Empire. Prussian manufactures consist mainly of silk, woolen, cotton, and linen fabrics; arms, shawls, carpets, leather, pottery, glass, tobacco, and metallic wares. The brewing of beer is a business carried on extensively. The leading exports comprise linens, woollens, hardware, grain, raw wool, timber, pitch, linseed, tobacco, mineral waters; to these may be added horses, horned cattle, salted and dried meats, etc., and from the Rhenish provinces, wine. Education is compulsory, and its higher branches are provided for at the universities of Berlin, Bonn, Breslau, Königsberg, Halle, and Greifswalde.

Pyramids, The a name given in pre-eminence to three rock-built tombs (said by recent authorities to have been used also for astronomical observations and for religious purposes) found in the neighborhood of Ghizeh, near Cairo, on the left bank of the Nile. They are all solid masses of stone or brick, with sepulchral chambers in the center or near the base; and these chambers are reached by a gallery, or passage, which opens from the outside. The first of the Pyramids is said to have been erected by Cheops, an Egyptian King, who lived about 3,000 B. C. It was intended by him, and was used, as his tomb. According to Herodotus, one hundred thousand men were employed for twenty years in building this Pyramid; and ten years were occupied in constructing a causeway by which to convey the stones to the place, and in conveying them there. This Pyramid, called "the Great Pyramid," was originally 480 feet in height, with a base of 764 feet square. At present, it is externally a huge mass, rudely built of rough limestone blocks in steps, and with a platform of considerable area at the top; but it is believed to have been originally covered with a solid marble casing, the stones of which began to be removed about A. D. 1000 for the building or the adornment of Cairo. The second Pyramid is said to have been built by Chephron, the brother and successor of Cheops. Although slightly inferior to the first Pyramid in size, and probably far inferior in quality of masonry, it is still a structure of enormous dimensions, which must have required many years of labor from tens of thousands of workmen. After Chephron, Mycerinus, son of Cheops, ascended the throne. He, too, left a Pyramid, but much inferior in size to his father's, the height of this third Pyramid being only 218 feet, with a base about 354 feet square. Besides these three principal Pyramids, there are nearly forty others included under the general designation of the

Pyramids of Ghizeh, or Jeezeh. There are others in other parts of Egypt and in Nubia; and similar structures are to be found in Mexico, and in other parts of the world.

Pyrenees (*pir'e-nēz*), a broad chain of lofty mountains running from the Bay of Biscay, 276 miles eastward, to the Mediterranean, form the boundary between France and Spain. They are highest in the center, Mount Maladetta reaching 11,168 feet. The snowline is about 8,000 or 9,000 feet, and there are glaciers on the French side. Valleys run up either side, ending in precipitous "pot-holes," with great regularity. The passes are very dangerous from wind and snow storms. The streams to the north feed the Adour and Garonne; those to the south, the Ebro and Douro. Vegetation in the west is European, in the east sub-tropical. Minerals are few, though both iron and coal are worked. The basis of the system is granite with limestone, strata superimposed.

Quebec, a province of the Dominion of Canada, formerly called Canada East; bounded on the north by Labrador and Hudson Bay; on the east by Labrador and the Gulf of St. Lawrence; on the south by New Brunswick, Chaleurs Bay, Maine, New Hampshire, Vermont, and New York; on the southwest and west by the province of Ontario; gross area, 347,350 square miles; population, 1,648,898; capital, Quebec. The surface of the province is varied, being diversified by mountains, rivers, lakes, and extensive forests. The chief river is the St. Lawrence, which flows through the entire length of the province. The climate is variable, though salubrious, the temperature ranging from 20° below zero in winter to 90° in summer.

The mineral wealth is undeveloped, but is said to be invaluable. Copper is mined in Brome and Megantic counties; gold in Beauce; iron ore in St. Maurice; and nickel in Pontiac. The other mineral productions include asbestos, apatite, plumbago, mica, slatestone, etc. The soil is generally fertile and is chiefly cultivated near the rivers. About half of the population of Quebec is engaged in agriculture. The chief products include maize, buckwheat, tobacco, peas, turnips, barley, wheat, oats, potatoes, and hay. Montreal and Quebec are the largest cities.

Rain is the return to the earth, in condensed drops, of the aqueous vapors which are continually rising into the atmosphere by evaporation; the condensation being occasioned by a change in the general temperature, by a collision produced by contrary currents, or by a cloud passing into a cold stratum of air. The power of the air to hold water in solution increases in a much higher ratio than the temperature. Hence, when two masses of air, saturated with moisture and of different temperatures, are mixed, the resulting compound is not capable of holding the whole water in solution, and a part is, in consequence, precipitated as rain. As the whole atmosphere, when saturated, is calculated not to hold in solution more water than would form a sheet five inches in depth, while the mean annual deposit of rain and dew is probably from thirty-five to forty inches, it is obvious that the supply of atmospheric moisture must be renewed many times

in the course of a year. The quantity of rain precipitated from the atmosphere depends upon a variety of circumstances—on the previous hygrometric state of the unmixed portions of air, their difference of heat, the elevation of their mean temperature, and the extent of the combination which takes place. When the deposition is slow, and the electricity set free by change of state is not suddenly removed, the very minute aqueous globules remain suspended and form clouds; but if the deposition be rapid and copious, and the electricity is more or less suddenly carried off, those particles conglomerate, and produce, according to the temperature of the medium through which they descend, rain, mist, snow, or hail.

Rainbow, the well-known colored arch so frequently seen when the sun is shining during a shower of rain. Sometimes only one bow is seen, sometimes there are two; the second being broader and fainter, and situated above or outside the first. In both bows alike the colors are the same as those in the spectrum, and they are arranged in the same order. In the lower or primary bow the red is uppermost; in the secondary bow their relative positions are reversed, the violet being uppermost and the red lowest. The formation of the rainbow is due to the refraction and reflection of the sun's light by the rain drops. The rays which make the primary bow have undergone two refractions and one reflection, whilst those that make up the secondary bow have undergone two refractions and two reflections. Rainbows are only seen when the observer has his back to the sun, and looks in the direction in which the rain is falling.

Rangoon, the capital of Lower Burmah, and the chief seaport of Burmah, is situated at the junction of the Pegu, Hlaing or Rangoon and Pu-zun-doung rivers, about twenty-one miles from the sea. Since its occupancy by the British, in 1852, Rangoon has undergone such changes that it is practically a new town, and its population has increased fivefold. The principal streets are broad, and contain many large and not a few handsome buildings. There are the law-courts, post-offices, Bank of Bengal, custom-house, Anglican and Roman Catholic churches, St. John's College, high school, etc. A large and increasing commerce is carried on with British, Indian, and Chinese ports; and an extensive trade is conducted with inland towns as far as Mandalay. The chief exports are rice, timber, cotton, hides, gums, and resins, mineral oil, ivory, precious stones; the imports being mainly manufactured goods. A number of rice-mills have been erected; there is a government dockyard, and steam tram-cars have been introduced. Population, 234,881.

Rastadt, a fortified town in the grand duchy of Baden, about fifteen miles to the southwest of Carlsruhe. It is chiefly celebrated for two congresses, the one in 1714, which put an end to the War of the Spanish Succession, and the other in 1797-99, to negotiate a peace between France and the German Empire. After the close of the latter, the French plenipotentiaries were treacherously murdered at a short distance from the town. A monument marks the spot where they fell. Population, 16,822.

Ratisbon (German, *Regensburg*), a city of Bavaria, on the south bank of the Danube, about sixty-five miles northeast of Munich. It was formerly a place of great importance, having been, in the Thirteenth Century, the most populous and flourishing city of Southern Germany. It was the seat of the Germanic Diet from 1663 to 1806. Its most remarkable building is its cathedral, which dates from the Thirteenth Century, and which was restored in 1830-38. The city has some manufactures, and ship-building is carried on. The astronomer Kepler, to whom a monument is erected in the city, died at Ratisbon, and is buried there. Population, 48,412.

Ravenna, a city of Italy, and the capital of a province of the same name, situated near the mouth of the river Montone, about four miles from the Adriatic Sea. It has a cathedral which dates from the Fourth Century, but which was rebuilt early in the Eighteenth Century, it also contains many interesting remains of antiquity, the city having been, in the time of the Romans, one of the most important places in Northern Italy, and at that time a seaport. After the downfall of the Western Empire, Ravenna became the capital of the kingdom of Theodoric, whose mausoleum is still in existence, about a mile outside the city. It also contains the grave of the poet Dante, who died at Ravenna in 1321. The place is now of little importance, except for its antiquities. It has some manufactures in silk, and is connected with the Adriatic by a canal. Population, 63,839.

Red Sea, an extensive inland sea, which lies between Arabia, on the east, and Egypt, Nubia, and Abyssinia, on the west; and which communicates with the Arabian Sea by the Strait of Bab-el-Mandeb and the Gulf of Aden, and with the Mediterranean at Port Said by the Suez Canal. The Red Sea (also called the Arabian Gulf), is about 1,400 miles long, and 230 miles broad at its broadest part. Towards its northern extremity it is divided into two gulfs, the Gulf of Suez (about 180 miles long), and the Gulf of Akabah, or the Elanitic Gulf (about 100 miles long), between which is the Peninsula of Sinai. The sea is remarkable for its coral reefs, which extend generally in long strips parallel with the shore. It is also remarkable for its numerous islands, which cause the navigation to be difficult, and occasionally dangerous, but there are good harbors on either side. Originally the sea was called the Sea of Edom, which the Romans translated into "*Mare Rubrum*," or Red Sea. The name "*Edom*" signifies "*red*," and this is doubtless the origin of the name; but the waters are said to be in some parts tinged with red, which is due to the presence of certain marine plants. The average depth of the sea is about 100 fathoms; its greatest depth (between Jeddah, in Arabia, and the opposite coast) is upwards of 1,000 fathoms.

Rheims, or Reims (*Rëms*), a city in the French department of Marne; on the Vesle, 100 miles east-northeast of Paris. It is well built, and from the prevalence of the older style of domestic architecture, has a picturesque appearance. Under the Frank rule it was a place of much importance, and it acquired a deeply religious interest from its having been the scene

in 496 of the baptism of Clovis and his chief officers by the bishop, St. Remy (438-533). In the Eighth Century it became an archbishopric, and from 1179, when Philip Augustus was solemnly crowned here, it became the place for the coronation of the kings of France. Joan of Arc brought the dauphin hither, and the only sovereigns in the long series, down to 1825, not crowned at Rheims were Henry IV., Napoleon I., and Louis XVIII. In 1830 the ceremony of coronation at Rheims was abolished. The cathedral, though the towers of the original design are still unfinished, is one of the finest extant specimens of Gothic architecture. It was built between 1212 and 1430. The Romanesque Church of St. Remy (mainly 1160-1180), with the saint's shrine, is nearly of equal size, but of less architectural pretension. Rheims is one of the principal entrepôts for the wines of Champagne, and the hills which surround the town are planted with vineyards. Population, 109,350.

Rhine (German, *Rhein*), the finest river of Germany, and one of the most important rivers of Europe, its direct course being 460 miles, and its indirect course 800 miles (about 250 miles of its course being in Switzerland, 450 in Germany, and 100 in Holland); while the area of its basin is 75,000 square miles. It is formed in the Swiss canton Grisons by two main streams called the Vorder and Hinter Rhein. The Vorder Rhein rises in the Lake of Toma, on the southeast slope of the St. Gothard, at a height of 7,690 feet above the sea, near the source of the Rhone, and at Reichenau unites with the Hinter Rhein, which issues from the Rheinwald Glacier, 7,270 feet above sea-level. Beyond Reichenau the united streams take the common name of Rhine. Generally speaking, it pursues a northern course till it enters Holland, below Emmerich, when it divides into a number of separate branches, forming a great delta, and falling into the sea by many mouths. That which retains the name of Rhine, a small stream, passes Leyden and enters the North Sea. In the German part of its course the chief tributaries are the Ill, Nahe, Moselle, Ahr, and Erft, Neckar, Main, Lahn, Sieg, Ruhr, and Lippe. In Switzerland its tributaries are short and unimportant, and this part of its course is marked by the Falls of the Rhine at Schaffhausen, where the river is precipitated in three leaps over a ledge of rocks forty-eight to sixty feet in height, and by the cataracts of Lauterberg and the rapids of Rheinfelden. It is navigable without interruption from Basel to its mouth, a distance of 550 miles. Large sums are spent every year in keeping the channel in order, and in the erection or repair of river harbors, both in Germany and Holland. The Rhine is distinguished by the beauty of its scenery, which attracts many tourists.

Rhodesia, the name given to that part of South Africa which has been occupied of recent years by the British South African Company, acting mainly under Cecil John Rhodes. Area, 750,000 square miles; population, 1,075,000. The whole territory is administered by the British South African Company, which was given a royal charter in October, 1889. The River Zambesi flows through it, cutting the

region into two portions — Southern and Northern Rhodesia.

Southern Rhodesia consists of the two provinces of Matabeleland and Mashonaland. The capital and the seat of government of Rhodesia is Salisbury, with a population of 1,800. The other principal townships are New Umtali, Melsetter, and Enkeldoorn. A railway is being built, running inland from Beira, and it will place Salisbury in direct communication with the sea over a line 382 miles in length. Matabeleland lies between the Limpopo and middle Zambesi rivers. The principal town, and the chief commercial center in Rhodesia, is Bulawayo, with a population of 5,000. The extension of the Cape government west railway system through Kimberley and Vryburg to Bulawayo was completed in October, 1897. The distance from Cape Town to Bulawayo is 1,360 miles. Northern Rhodesia consists of the whole of the British sphere north of the Zambesi, lying between Portuguese East Africa, German East Africa, the Kongo Free State, and Angola, with the exception of the strip of territory forming the British Central Africa Protectorate, which is under direct imperial administration. North of the Zambesi the country has as yet been little prospected. Coal has been found on the shore of Lake Nyassa. There are 5,250 square miles of gold fields in Rhodesia.

Richmond, a city of the United States, capital of Virginia, is finely situated on the north side of James River, at the head of tide-water, 100 miles southwest of Washington. The streets are generally wide and well-built, and mostly intersect each other at right angles. There are many fine buildings, including the capitol, governor's house, city hall, federal buildings, buildings of Richmond College, churches, schools, asylums, etc. The State House or capitol contains Houdon's celebrated marble statue of Washington, and in the capitol grounds are Toley's bronze statue of General T. J. ("Stonewall") Jackson and Crawford's bronze statue of Washington, twenty-five feet high, on a pedestal forty-two feet high, surrounded by other bronze statues. Water-power is almost unlimited, and the various mills and factories give employment to numerous workmen. The trade staples are tobacco, iron, grain, and flour. The first occupation of any part of its site was by English settlers in 1609; the city was formally founded in 1742, and became the seat of government in 1780. During the Civil War it was the seat of the Confederate Government. It was invested by the federal armies, and surrendered on April 3, 1865. Population, 86,880.

Riga, a city and capital of Livonia, and after St. Petersburg and Odessa, the third seaport of Russia, on the Dwina River, seven miles from the mouth of the river, and 350 miles southwest of St. Petersburg, via Pskoff. The old town has narrow streets and mediæval houses and stores; but the suburbs are laid out in broad streets with handsome buildings. The chief edifices are the cathedral built in 1204, burned down in 1547, but rebuilt; St. Peter's Church (1406), with a steeple 460 feet high; the castle of the old Knights of the Sword, built 1494-1515, the former residence of the

grandmaster of the order; and several old guild houses and Hanseatic halls. Riga was founded in 1201 by Albert, Bishop of Livonia, and soon became a first-rate commercial town, and member of the Hanseatic League. In 1710 was annexed to Russia. Population, 282,230.

Rio de Janeiro, or simply Rio, a city and seaport, capital of Brazil and of the province of the same name, the largest and most important city of South America; on the west side of one of the finest bays in the world, eighty miles west of Cape Frio. The city stands on a tongue of land close to the shore, on the west side of the bay, at the foot of several high mountains which rise behind it. The houses are generally built of stone or brick. The streets are straight, well paved, and have excellent footpaths. The convents and churches are numerous, but none of them can be called fine buildings. Parallel with the beach runs the main street, called Rua de Direita, from which the minor streets branch off at right angles and are intersected by others at regular distances. The imperial palace skirts the beach, and is seen to great advantage from the landing place, which is within sixty yards of its entrance. The other public buildings are the naval and military arsenal, a public hospital, a national library containing about 100,000 volumes. The entrance into it from the sea does not exceed a mile from point to point; it afterward widens to about three or four miles. This city is the chief mart of Brazil. Population, 750,000.

Rio de la Plata, a river, or rather an estuary, on the South American coast, between the Argentine Republic and Uruguay. The estuary itself is about 185 miles long, and 130 miles broad, at its entrance. It is formed by the confluence of the Paraguay, the Pilcomayo, the Parana, the Uruguay, and several other rivers; the total length of the stream, measured from the source of the Paraguay, being estimated at upwards of 2,500 miles. The estuary of the La Plata is not deep; and it has a number of submarine banks all around its coasts, which, along with its strong irregular currents, render navigation difficult. The waters of the estuary are so turbid that they tinge the sea visibly for a distance of 200 miles from its mouth. About 150 miles from the mouth of the estuary, on its southern side, is the city of Buenos Ayres; on the opposite side of the estuary, but nearer the Atlantic, is the city of Monte Video. The area of the basin of the La Plata, from its source to its mouth, is estimated at 1,250,000 square miles.

Rivers, Longest of the World

NAME OF RIVER	LENGTH
Amazon,	4,000
Amur,	1,500
Arkansas,	1,514
Brahmaputra,	2,000
Cambodia,	2,417
Colorado,	1,100
Columbia,	1,400
Congo,	2,700
Danube,	1,640
Dnieper,	1,230
Don,	1,104
Dwina,	700
Elbe,	550
Euphrates,	1,750

NAME OF RIVER	LENGTH
Ganges,	1,800
Hoang-Ho,	2,700
Indus,	2,000
Irrawadi,	2,532
Kongo,	3,000
La Plata,	2,500
Lena,	2,550
Loire,	598
Mackenzie,	2,400
Martaban,	2,152
Missouri and Mississippi,	4,200
Murray,	3,000
Nelson,	1,800
Niger,	3,500
Nile,	3,500
Obi,	2,500
Ohio and Allegheny,	1,265
Orange,	1,152
Orinoco,	1,500
Parana,	2,211
Red River,	1,200
Rhine,	960
Rhone,	550
Rio Bravo del Norte,	1,800
Rio de la Plata,	1,800
Rio Grande,	1,800
Rio Madeira,	2,300
Rio Negro,	1,650
San Francisco,	1,680
Saskatchewan,	1,918
Seine,	497
St. Lawrence,	2,000
Thames,	250
Ural,	1,099
Vistula,	598
Volga,	2,000
Yang-tse,	3,300
Yenesai,	3,322
Yukon,	2,000
Zambezi,	1,600

Riviera (*rê-vê-â'rá*), an Italian term for coast-land flanked by mountains, especially applied to the strip of land lying around the Gulf of Genoa from Nice to Lèghorn, which is divided by Genoa into the Western and Eastern Riviera, the former the more popular as a health resort; but the whole coast enjoys an exceptionally mild climate, and is replete with beautiful scenery.

Rochester, a city and county-seat of Monroe County, N. Y.; on the Genesee River, 229 miles west of Albany. In the center of the city are the Upper Falls of the Genesee, a perpendicular cataract of ninety-six feet. Rochester is built on a plateau on both sides of the river, 263 feet above Lake Ontario. The city is the trade center of a large and rich agricultural region. In the Genesee River there are three falls, ninety-six, twenty-six, and eighty-three feet respectively, giving abundant water-power for manufacturing. There are over 1,900 industrial establishments, employing upward of 40,000 persons, with a combined capital of about \$50,000,000, and an output of about \$70,000,000. The most important of these are flour mills, india-rubber goods, photographic materials, cigarettes, shoes, etc. In the suburbs is an extensive nursery, including two great plants for the packing and shipment of garden and farm seeds. Rochester is the seat of the University of Rochester, and the Rochester Theological Seminary. The most remarkable structure in the city and county is the aqueduct which carries the Erie Canal across the Genesee River. It is of cut stone, 848 feet long, with a channel forty-five feet wide, and is supported by nine arches. Population, 182,022.

Rocky Mountains, a name indefinitely

given to the whole of the extensive system of mountains which covers a great portion of the western half of North America, but more properly applied to the eastern border of this mountain region, commencing in New Mexico in about 32° 30' north latitude, and extending throughout the continent to the Polar Sea; terminating west of the Mackenzie River, in latitude 69° north longitude 135° west. The Rocky Mountains in the United States are divided into two parts in Southern Wyoming by a tract of elevated plateaus. The chief group of the southern half are the Front or Colorado Range, which in Wyoming has a mean elevation of 9,000 feet (at Evan's Pass, where it is crossed by the Union Pacific Railway, 8,269 feet). In Colorado it increases to a mean height of 13,000 feet, its highest points being Gray's Peak (14,341 feet), Long's Peak (14,271 feet), and Pike's Peak (14,147 feet). The Sawatch Range south of the Arkansas River, has its highest peak in Mount Harvard (14,375 feet), with passes at an elevation of from 12,000 to 13,000 feet. "Parks" of Colorado are high mountain valleys, known as North, Middle, South, and San Luis parks, with an elevation of from 6,000 to 10,000 feet, surrounded by ranges 3,000 to 4,000 feet higher. The west border of the San Luis Park is formed by the San Juan Range with at least a dozen peaks over 14,000 feet, and between one and two hundred above 13,000 feet. On the north-eastern side this park is bounded by the Sangre de Cristo Range, in which is Blanca Peak (14,464 feet). The Uintah Range, directly west of North Park, has several points above 13,000 feet; and the Wahsatch Range, which forms the western limit of the southern division of the Rocky Mountains, rises to a height of 12,000 feet just east of Salt Lake City. The northern division of the Rocky Mountains, with the exception of the Wind River Range and the Yellowstone region, is lower and has less impressive scenery than the southern. In Idaho and Montana the groups are more irregular in outline than in the south, and the division into ranges more uncertain. Of these the Bitter Root Mountains in part of their course form the divide between the Missouri and the Columbia. There two ranges reach altitudes of upwards of 9,000 feet, and are crossed by a number of passes at elevations of from 5,500 to 6,500 feet. The Northern Pacific Railway crosses at Mullan's Pass (5,548 feet) through a tunnel 3,850 feet long. The Crazy Mountains, north of the Yellow Stone, reach a height of 11,000 feet; other groups are the Big Horn Mountains and the Black Hills, whose highest point is Mount Harvey (9,700 feet). In Canada the highest known peaks are Mount Brown (16,000 feet) and Mount Hooker (15,700 feet), lying about 53° north latitude; the general altitude of this part of the range varying from 10,000 to 14,000 feet. The pass leading between Mount Brown and Mount Hooker, called the Athabasca Portage, has a height of 7,300 feet. The Rock Mountains contain some of the finest scenery in the world, and are especially rich in deposits of gold, silver, iron, copper, etc., which are worked extensively.

Rome, the capital of Italy, as formerly of the Roman Empire, republic, and kingdom, and

long the religious center of Western Christendom, is one of the most ancient and interesting cities of the world. It stands on both sides of the Tiber, about fifteen miles from the sea. The city is tolerably healthy during most of the year, but in late summer and early autumn malaria prevails to some extent. It has been greatly improved in cleanliness and healthfulness since it became the capital of modern Italy.

The streets of ancient Rome were crooked and narrow, till after the fire that took place in Nero's reign, when the new streets were made both wide and straight. In the reign of Augustus the population is believed to have amounted to about 1,300,000 and in that of Trajan was not far short of 2,000,000.

Ancient Rome was adorned with a vast number of splendid buildings, including temples, palaces, public halls, theaters, amphitheaters, baths, porticoes, monuments, etc., of many of which we can now form only a very imperfect idea. The oldest and most sacred temple was that of Jupiter Capitolinus on the Capitoline Hill. The Pantheon, a temple of various gods (now Church of S. Maria Rotonda), is still in excellent preservation. It is a great circular building with a dome roof of stone 140 feet wide and 140 feet high, a marvel of construction, being two feet wider than the great dome of St. Peter's. The interior is lighted by a single aperture in the center of the dome. Other temples were the Temple of Apollo, which Augustus built of white marble, on the Palatine, containing a splendid library, which served as a place of resort to the poets; the Temple of Minerva, which Pompey built in the Campus Martius, and which Augustus covered with bronze; the Temple of peace, once the richest and most beautiful temple in Rome, built by Vespasian, in the Via Sacra, which contained the treasures of the temple of Jerusalem, a splendid library, and other curiosities, but was burned during the reign of Commodus; the temple of the Sun, which Aurelian erected to the east of the Quirinal; and the magnificent temple of Venus, which Cæsar caused to be built to her as the origin of his family. The principal palace of ancient Rome was the Palatium or imperial palace, on the Palatine Hill, a private dwelling house enlarged and adopted as the imperial residence by Augustus. Succeeding emperors extended and beautified it. Among the theaters, those of Pompey, Cornelius Balbus, and Marcellus were the most celebrated. That of Pompey, in the Campus Martius, was capable of containing 40,000 persons. The most magnificent of the amphitheaters was that of Titus, completed A. D. 80, now known as the Coliseum or Colosseum. Though only one-third of the gigantic structure remains, the ruins are still stupendous. The principal of the circuses was the Circus Maximus, between the Palatine and Aventine, which was capable of containing 260,000 spectators. With slight exception its walls have entirely disappeared, but its form is still distinctly traceable. The public baths or thermæ in Rome were also very numerous. The largest were the Thermæ of Titus, part of the substructure of which may still be seen on the Esquiline Hill; the Thermæ of Caracalla, even larger, extensive remains of which still exist in

the southeast of the city; and the Thermæ of Diocletian, the largest and most magnificent of all, part of which is converted into a church. Of the triumphal arches the most celebrated are those of Titus (A. D. 81), Severus (A. D. 203), and that of Constantine (A. D. 311), all in or near the Forum and all well preserved structures. It was not till the Seventeenth Century that the modern city was extended to its present limits on the right bank, by a wall built under the pontificates of Urban VIII. (1623-1644) and Innocent X. (1644-1655), and inclosing both the Janiculum and the Vatican hills. The boundary wall on the left or east bank of the river follows the same line as that traced by Aurelian in the Third Century, and must in many parts be identical with the original structure. The walls on both banks are built of brick, with occasional portions of stone work, and on the outside are about fifty-five feet high. The greater part dates from A. D. 271 to 276. The city is entered by twelve gates (several of those of earlier date being now walled up) and several railway accesses. Since Rome became the capital of United Italy great changes have taken place in the appearance of the city, many miles of new streets being built, and much done in the way of paving, drainage, and other improvements. It has thus lost much of its ancient picturesque appearance, and is rapidly acquiring the look of a great modern city with wide straight streets of uniform-looking tenements having little distinctive character. The three finest streets, the Corso and the strade del Babuino and di Ripetta, diverge from the piazza del Popolo near the north gate. The city is divided into 14 *rioni* or quarters, twelve of which are on the left bank and two on the right bank of the river. The latter two are the rione Trastevere, the ancient Janiculum, and the rione di Borgo, containing the castle of Sant' Angelo, the citadel, now chiefly used as a state prison, and the Vatican. Besides the great collection of the Vatican, there are ten or eleven public libraries. There are in the city about 360 churches. Preëminent among the Christian temples of the world is St. Peter's church. The chief church in point of antiquity and ecclesiastical dignity is the church of St. John Lateran. Among the principal palaces are the palazzi Doria, Ruspoli, Corsini, Orsini, Giustiniani, Altieri, Cicciaporei, Farnese, Barberini, and Colonna. The Quirinal, formerly the pope's ordinary residence, is now the royal palace, the pope residing in the Vatican. On the Capitoline hill are three palaces appropriated for the assemblies of the magistrates, the observatory, and the fine art collections. There are several palaces which, from being surrounded by extensive gardens, are called villas. Of these the principal is the villa Borghese, the gardens of which form the most fashionable promenade in Rome. There are many squares and fountains in the city. Among the most curious remains of ancient Rome are the catacombs. The Ghetto, the quarter in which the Jewish inhabitants were formerly confined, is a relic of the Middle Ages.

Till the establishment of the Italian kingdom, Rome was the capital of the states of the Church; and it was, at a much earlier period, the capital

of the Roman Empire. It was founded by Romulus about 753 B. C. At first only a small castle on the summit of Mount Palatinus, it had grown by the time of Servius Tullius, the sixth of its kings, who died 534 B. C., large enough to occupy the "seven hills of Rome" ("Palatinus," "Capitolinus," "Quirinalis," "Cælius," "Aventinus," "Viminalis," "Esquilinus"), and was hence called "the city of the seven hills." In the time of the Emperor Augustus, the first of the emperors, who died A. D. 14, the population of the city is estimated to have been at least 1,300,000; and in the time of the Emperors Vespasian and Trajan (A. D. 70-117), it is believed to have contained nearly 2,000,000. About 728 the city of Rome became independent under the popes, and it remained (with the exception of vicissitudes) the seat of the Papal Court till the abolition of the temporal power of the popes in 1870. Since then, Rome has been the capital of the kingdom of Italy, only the Vatican being under the sovereignty of the pope. The city is the seat of a university, founded in 1244. Population, 530,179.

Rotterdam, the chief port and second city of Holland, situated at the junction of the Rotte with the Maas, nineteen miles from the North Sea and forty-five miles southwest of Amsterdam; the town is cut in many parts by handsome canals, which communicate with the river and serve to facilitate the enormous foreign commerce; the quaint old houses, the stately public buildings, broad tree-lined streets, canals alive with fleets of trim barges, combine to give the town a picturesque and animated appearance. Boymans' Museum has a fine collection of Dutch and modern paintings, and the Groote Kerk is a Gothic church of imposing appearance; there is also a large zoological garden; ship-building, distilling, sugar-refining, machine and tobacco factories are the chief industries. Population, 382,951.

Rumania, a European kingdom, bounded by Austria-Hungary, Servia, Bulgaria, the Black Sea, and Russia; area, 50,760 square miles. It includes the former Danubian principalities of Walachia and Moldavia and the province of the Dobrudsha on the Black Sea. Population, 5,500,000. The capital is Bukarest; other chief towns are Jassy, Galatz, Braïla, and Giurgevo. The surface is mainly occupied by undulating and well-watered plains of great fertility, gradually sloping upwards to the Carpathians on the north and west borders, where the summits range from 2,650 to 8,800 feet above sea-level. The entire kingdom is in the basin of the Danube, which has a course of 595 miles in Rumania, forming the boundary with Bulgaria nearly the whole way. Its chief Rumanian tributaries are the Olta or Aluta, Ardjis, Jalomitza, Sereth, and Pruth (on northwest border). The Danube forms a number of marshy lakes as it approaches the alluvial region of the Dobrudsha, through which it discharges itself into the Black Sea by the St. George, Sulina, and Kilia channels. The climate is much more extreme than at the same latitude in other parts of Europe; the summer is hot and rainless, the winter sudden and very intense; there is almost no spring, but the autumn is long and

pleasant. Rumania is an essentially agricultural and pastoral state, fully 70 per cent. of the inhabitants being directly engaged in husbandry. The chief cereal crops are maize, wheat, barley, rye, and oats; tobacco, hemp, and flax are also grown; and wine is produced on the hills at the foot of the Carpathians. Cattle, sheep, and horses are reared in large numbers. Excellent timber abounds on the Carpathians. Bears, wolves, wild boars, large and small game, and fish are plentiful. The country is rich in minerals of nearly every description, but salt, petroleum, and lignite are the only minerals worked. Manufactures are still in a rudimentary state. Trade is fairly active, but it is almost entirely in the hands of foreigners; the internal trade is chiefly carried on by Jews, whose numbers and prosperity are constant sources of anxiety to Rumanian statesmen, and who are in consequence subject to certain disabilities. The chief exports are grain (especially maize), cattle, timber, and fruit; the chief imports, manufactured goods, coal, etc. Germany, Great Britain, and Austria-Hungary appropriate by far the greatest share of the foreign trade, the bulk of which passes through the Black Sea ports. The Rumanians, who call themselves Romani, claim to be descendants of Roman colonists introduced by Trajan; but the traces of Latin descent are in great part due to a later immigration, about the Twelfth Century, from the Alpine districts. Their language and history both indicate that they are a mixed race with many constituents. Their language, however, must be classed as one of the Romance tongues, though it contains a large admixture of foreign elements. In Rumania there are about 4,500,000 Rumanians, 300,000 Jews, 200,000 gypsies, 50,000 Bulgars, 1,500 Magyars, 20,000 Germans, 20,000 Greeks, and 15,000 Armenians. Three-fourths of the population are peasants, who, till 1864, were kept in virtual serfdom by the boiars or nobles. In that year upward of 400,000 peasant families were made proprietors of small holdings averaging ten acres, at a price to be paid back to the state in fifteen years. About 4,500,000 of the people belong to the Greek Church. Energetic efforts are being made to raise education from its present low level. Rumania has two universities (at Bucharest and Jassy), several gymnasia, and a system of free primary schools.

Russia one of the most powerful empires of the world, second only in extent to the British Empire, and third as regards population, the British Empire ranking first, the Chinese Empire second. It comprehends most of Eastern Europe and all Northern Asia, and is bounded north by the Arctic Ocean; west by Sweden, the Gulf of Bothnia and the Baltic, Prussia, Austria, and Rumania; south by the Black Sea, Turkey in Asia, Persia, Afghanistan, the Chinese Empire; east by the Pacific and Behring Strait. The total area has been officially estimated at 8,644,100 square miles, while the population is as follows:

Russia in Europe (including Poland),	118,400,700
Finland,	2,816,500
Caucasian Provinces,	10,259,600

Siberia,	6,568,000
Central Asia,	8,751,800

146,796,600

The largest towns are St. Petersburg, Moscow, Warsaw, Odessa, Lodz, Riga, Kieff, Kharkoff, and Tiflis. St. Petersburg and Moscow are the capitals of the empire. European Russia consists almost wholly of immense plains, the Valdai Hills, between St. Petersburg and Moscow, averaging 500 feet and never exceeding 1,200 feet above sea-level, forming the only elevated region of the interior and an important watershed. The mountains include: the Caucasus, running from the Black Sea to the Caspian, reach to the height of 18,500 feet; the Urals, stretching from the Caspian to the Arctic Ocean and separating European from Asiatic Russia, have their greatest height below 7,000 feet. Beyond the Urals are the vast Siberian plains. The whole of the vast empire is watered by numerous rivers, some running a course of thousands of miles. Altogether Russia and Poland have 49,000 miles of navigable rivers. Asiatic Russia has also a number of very large rivers, as the Obi, Yenisei, and Lena in Siberia, and the Amur toward the Chinese frontier. This complete river system is of incalculable value to Russia, as by its means internal communication is carried on. Canals connect the navigable rivers, so as to form continuous waterways; there being 500 miles of canals and 717 of canalized rivers. As may be expected from its vastness, this empire offers soils and climates of almost every variety. Extreme cold in winter and extreme heat in summer, are, however, a general characteristic of Russian climates. As regards soil, large sections of Russia are sandy, barren wastes and vast morasses. The most productive portion is that between the Bal and the Gulf of Finland, and the Volga, on the north and east; Prussia, Austria, etc., on the west; and the Black Sea on the south. It has, generally speaking, a soft, black mold of great depth, mostly on a sandy bottom, easily wrought, and very fertile. The more southern portion of Siberia, as far east as the river Lena, has, for the most part, a fertile soil, and produces, notwithstanding the severity of the climate, nearly all kinds of grain. Boundless forests exist, the area of the forest land in Europe being 42 per cent. of the total area. The fir, larch, alder, and birch predominate. Most of the forest land is now under government control, and waste is prevented. Agriculture remains the chief pursuit of the bulk of the population. For some years it has, however, remained stationary, while manufacturing industries are steadily going ahead. The chief crops are rye, wheat, barley, oats, hemp, flax, and tobacco. Vine and beet culture is rapidly increasing, and the breeding of horses and cattle is also extensively carried on. Russia is rich in minerals. The precious metals are chiefly obtained in the Ural and Altai regions. The output for 1899 was, gold, 1,072,333 ounces; platinum, 12,339 pounds; silver, 134,887 ounces. In the Ural, iron beds are also rich and numerous, exceeding all others in productiveness. Copper is most abundant in the government of Perm; lead in the Ural and

some parts of Poland; saltpeter in Astrakhan. Of the coal mines those of the Don basin are the principal at present, those of Kielce ranking second; the mines around Moscow come next. About 60,000 tons of manganese ore are annually extracted in the Ural and the Caucasus. The petroleum wells of Baku on the Caspian now send their products all over Europe. Prior to the accession of Peter the Great, Russia had no manufactures; he started them, and under the more or less fostering care of his successors and Russia's protective policy they have steadily grown. The latest statistics give a total of about 1,400,000 persons as being employed in the various manufacturing industries. Two-fifths of the entire production comes from the two capitals, St. Petersburg and Moscow. The various manufactures rank approximately as follows: spirits, sugar, cottons and yarns, flour, tobacco, foundry products, flax, yarn, and linen, leather, woolen cloth and yarn, iron, machinery, beer, soap, timber, paper, oil, glass, chemicals, and agricultural implements. The bulk of Russia's external trade is carried on through the European frontier and the Baltic and Black Sea ports. The chief exports are: grain (about one-half of entire exports), flax, linseed, and other oleaginous seeds, timber, hemp, wool, butter and eggs, spirits, bristles, and furs, in the order indicated. The chief imports are cotton, wool, tea, machinery, coal and coke, cotton yarn, metal goods, wine, olive oil, raw silk, herrings, textile goods, fruit, coffee, tobacco. The import trade is heaviest with Germany, Great Britain, France, Austria-Hungary, and Belgium, in the order named. In the export trade Great Britain takes the lead, Holland, France, and Germany following.

San Francisco, the most important city of California, and the principal emporium of the Pacific Coast of America, is situated on San Francisco Bay. The bay, which is fifty miles long by five miles wide, makes one of the grandest harbors in the world, and the principal one on the Pacific coast. The mean altitude is 130 feet above the sea. The city is served by an extensive waterworks system. The reservoirs have a storage capacity of 100,000,000 gallons, and the consumption averages 30,000,000 gallons per day. There are in all 750 miles of streets, of which 192 miles are paved. The sewer system covers 308 miles, and the annual cost of maintaining the city government exceeds \$5,700,000. The Golden Gate Park, named after the popular name of the entrance to San Francisco Bay, is the most important park in the city, comprising 1,043 acres. It extends from the city to the ocean. About half of it is beautifully laid out in promenades, drives, lawns, etc. It was here that the Midwinter Exposition was held in 1894. The park contains a magnificent conservatory, and monuments of Francis Scott Key, author of "The Star-Spangled Banner," President Garfield, General Halleck, and Thomas Starr King. Hill Park, lying a half mile east of Golden Gate Park, affords a fine view from its highest point, which is 570 feet above the sea. The Presidio, or Government Military Reservation, extends along the Golden Gate for about four miles, and has an area of 1,500 acres. The city proper was almost

totally destroyed by earthquake and fire, April 18, 1906, and following. The loss amounted to nearly \$250,000,000; but with marvelous energy the city is being rapidly rebuilt, on a magnificent scale. Population, 475,000.

Scotland, the northern division of the island of Great Britain. The greatest length, from north-northeast to south-southwest, between Dunnet Head and the Mull of Galloway, is 287 miles. The breadth varies from 140 miles to less than thirty, the latter in the north, between Dornoch Firth and Loch Broom. Few points in the mainland are more than forty miles from the sea, the country being so much penetrated by inlets. The most important cities are: Glasgow, Edinburgh, Dundee, and Aberdeen.

The islands of Scotland are said to number altogether nearly 800. On the east coast they are few and small; but on the northeast coast are the two large groups of the Orkneys and Shetlands; while on the west coast the islands are large and numerous. The west coast of the mainland is generally a wild, deeply indented mountain wall, presenting a series of inlets or sea lochs, while toward the middle the coast is cleft by two great inlets with openings to the southwest, the Firth of Lorn and its continuation Loch Linnhe, and the Firth of Clyde and its ramifications running far inland. The east coast is sometimes low and sandy, but is often formed of steep, rocky cliffs of considerable elevation, the chief inlets being the Firth of Forth and Tay, and the Moray Firth, Cromarty Firth, etc.

Both from the configuration of the surface and the geological structure, the country divides into three divisions: the Highlands, Central Lowlands, and Southern Uplands. The first of these divisions lies north of a line stretching in a southwest direction from the coast of Kincardineshire to the Firth of Clyde; the third is the country south of a line drawn from Dunbar southwest to Girvan; the country between these lines forms the Central Lowlands. The Highland division is remarkable for the number and elevation of its mountain-masses, many of the summits being over 4,000 feet high. The mountains best known by name are the Grampians, which form a system or series of masses covering a large area, and culminating on the west coast in Ben Nevis, 4,406 feet high; while fifty-five miles to the northeast rises a remarkable cluster of summits reaching in Ben Macdui the height of 4,296 feet. The Grampians and their connections are separated from the mountains farther to the north by Glenmore or the Great Glen of Scotland, a remarkable depression stretching quite across the country from sea to sea, and forming, by the series of lakes occupying it and the Caledonian Canal connecting them, a waterway from the west coast to the east. The Southern Uplands are also essentially a mountainous region, summits of over 2,000 feet being frequent, though none exceed 3,000 feet above the sea. The Central region, though much less elevated than the other two divisions, has none of the monotony usual in flat countries. Though occupying not more than a sixth of the whole surface, the fertility of the soil and its mineral

treasures make this part by far the wealthiest and most populous.

The chief rivers flow (roughly speaking) to the east, and enter the German Ocean, the largest being the Tweed, Forth, Tay, South Esk, North Esk, Dee, Don, Deveron, Spey, Findhorn, etc.; those entering the sea on the west are the Clyde, Ayr, Doon, Dee, Nith, Annan, and Esk. The Tay carries to the sea a larger quantity of water than any river in Britain, but neither it nor most of the others, except when they form estuaries, are of much use for navigation. The Clyde, however, in its lower course carries a vast traffic, this being rendered possible chiefly by dredging. Many of the rivers are valuable from the numbers of salmon they produce. A striking feature of the country is the great multitude of lakes, varying in size from Loch Lomond (twenty-eight square miles) to the pool-like mountain tarns. In the Northern Highlands almost every glen has its lake and every mountain hollow is filled by a stream or spring. Among the more noted are Lochs Lomond, Katrine, Tay, Earn, Rannoch Awe, Shiel, Laggan, Lochy, Ness, Marce, Shin, in the Western and Northern Highlands; Loch Leven, in the Central Highlands; and St. Mary's Loch, Lochs Ken, Dee, and Doon in the Southern Uplands.

Seasons, the four divisions or portions of the year: namely, spring, when the sun enters Aries; summer, when he enters Cancer; autumn, when he enters Libra; and winter, when he enters Capricorn. Hence spring is supposed to commence about the 21st of March; summer, about the 22d of June; autumn, about the 23d of September; and winter, about the 23d of December. The diversity of the seasons depends upon the oblique position of the sun's path through the heavens; in consequence of which this luminary rises to different heights above the horizon, making the day sometimes longer, and sometimes shorter, than the nights. When the sun rises highest at noon, its rays fall most nearly in the direction of a perpendicular, and consequently a greater number is received upon a given spot; their action also, at the same time, continues the longest. These circumstances make the difference between summer and winter.

Shanghai, a city and seaport of China, in the province of Kiangsü; near the junction of the Hwang-pu and the Wu-sung rivers. The Chinese city proper is inclosed within walls twenty-four feet high, the streets being narrow and dirty, and the buildings low, crowded, and for the most part unimportant. In 1843 Shanghai was opened as one of the five treaty ports, and an important foreign settlement is now established (with a separate government) outside the city walls. Shanghai has water communication with about a third of China, and its trade since the opening of the port has become very extensive. The chief imports are cottons, yarns, woolens, and opium; and the exports, silk, tea, rice, and raw cotton. The largest part of the foreign trade is in the hands of British and American merchants. Population, 457,000.

Sheffield, a municipal and parliamentary borough of England, county of York (West Riding); on hilly ground at the junction of the

Sheaf and Don, about 160 miles north of London. In the central parts great improvements have recently been made in the crowded streets by the corporation, and the suburban districts are well built and picturesquely situated. The trade of Sheffield is chiefly connected with cutlery, for which it has long been famous, and the manufacture of all forms of steel, iron, and brass work. The steel manufacture includes armor plating, rails, engine castings, rifles, etc. There are also manufactures of engines, machinery, plated goods, Britannia-metal goods, optical instruments, stoves and grates, etc. Population (1901), 380,717.

Shenandoah, a river of the United States, which flows northeast through the valley of Virginia, and immediately below Harper's Ferry joins the Potomac, of which it is the principal tributary. Its length is 170 miles, the greater part of which is navigable for boats. The valley of the Shenandoah was the scene of numerous military operations in the American Civil War, and was devastated by General Sheridan in 1864.

Siam, an extensive kingdom of southeastern Asia, occupying the middle portion of the Indo-Chinese Peninsula, between British Burmah on the west and Tonquin and Cochin China on the east, and extending southwards into the northern portion of the Malay Peninsula. In the north the country is mountainous, but it stretches toward the south into broad plains, which are well watered and extremely fertile. The minerals include gold, tin, iron, copper, lead, zinc, and antimony, besides several precious stones, such as the sapphire, Oriental ruby, and Oriental topaz. Mining is chiefly in the hands of the Chinese. Cocoa and areca palms are numerous in Siam; fruits are abundant and of excellent quality; black pepper, tobacco, cardamoms, and gamboge are important products. The forests produce aloes, wood, sappan wood, teak, timber, bamboos, rattans, gutta percha, dammar, catechu, benzoin, etc. Among wild animals are the tiger, leopard, bear, otter, orang-ou-tang, single-horned rhinoceros, and elephant, which here attains a size and beauty elsewhere unknown. The last, when of a white color, is held in the highest reverence. Nearly the whole of the trade of Siam is in the hands of foreigners, and the foreign trade centers at Bangkok. The chief export is rice, after which come teak, pepper, dried fish, birds' nests, cattle, and teel seed. The chief imports are gold leaf and treasure and cottons, after which come opium, china goods, gunny bags, hardware, kerosene oil and silk goods. The trade is chiefly with Hong Kong and Singapore, and to a much less extent with Lower Burma and Great Britain.

The Siamese are members of the great Mongolian family, and of the same race as the people of Burma and Annam. The Siamese profess Buddhism, introduced into the country about the middle of the Seventh Century. Christianity is now making some progress in the country. The language forms a connecting link between the Chinese and Malay. The written characters seem to be derived from a form of Sanskrit. By a series of aggressive operations, the French appropriated about 110,000 square miles, the remainder of about 200,000 square miles being

guaranteed to Siam by a treaty in January, 1896, between the French and British Governments.

Snow, water deposited from the atmosphere in a frozen condition, the ice being in the form of distinct crystals which have become interlaced one with another, producing bulky light feathery flakes. The atmosphere offers considerable resistance to the passage of these flakes, and consequently the fall of each snow-flake is comparatively slow. It appears highly probable that snow is formed when aqueous vapor is condensed in an upper layer of the atmosphere which has previously been cooled down considerably below the freezing-point. Under these conditions the minute particles of ice are deposited one upon another, and arrange themselves in definite crystals. It is found that all these snow crystals have a form derived from the hexagon.

Sophia, Church of St., in Constantinople, the most celebrated ecclesiastical edifice of the Greek Church, now used as a mosque; was built by the Emperor Justinian, and dedicated in 558. It is in the Byzantine style of architecture, has a fine dome rising to the height of 180 feet, and is richly decorated in the interior. The mass of the edifice is of brick, but is overlaid with marble; the floor is of mosaic work, composed of porphyry and verd antique. The great piers which support the dome consist of square blocks of stone bound with hoops of iron. The numerous pillars supporting the internal galleries, etc., are of white and colored marbles, porphyry, granite, etc., and have capitals of various peculiar forms. The interior of the church is 243 feet in width from north to south, and 269 feet in length from east to west.

Spain, a kingdom in the southwest of Europe, forming with Portugal the great southwest peninsula of Europe. It is separated from France on the northeast by the chain of the Pyrenees, and is otherwise bounded by Portugal and the Atlantic and Mediterranean. In greatest breadth north and south it measures 540 miles; greatest length east and west, 620 miles. Spain retains practically none of her once magnificent colonies. The war with the United States deprived her of Cuba, Porto Rico, the Philippine and Sulu Islands, and Guam; and a treaty with Germany, February 8, 1899, of the Marianne (or Ladrone) Caroline, and Pelew Islands. On November 8, 1900, Spain sold the islands of Cagayan and Sibutu to the United States for \$100,000. Her last remaining colonies are in Africa. The coast line is not much broken, but sweeps round in gentle curves, presenting few remarkable headlands, or indentations. The interior is considerably diversified, but its characteristic feature is its central tableland, which has an elevation of from 2,200 to 2,800 feet, and a superficial extent of not less than 90,000 square miles. It descends gradually on the west toward Portugal; but on the east, toward the provinces of Catalonia and on the north by the Asturian and Cantabrian Mountains, reaching an elevation of about 8,500 feet, and on the south by the Sierra Morena. Besides these ranges, there is the chain of the Pyrenees, which, though partly belonging to France, presents its boldest front to Spain and

has its loftiest summits within it. The whole country teems with mineral wealth, the minerals including, in greater or less quantities, gold, silver, quicksilver, lead, copper, iron, zinc, calamine, antimony, tin, coal, etc. The exploitation of the minerals has, however, in recent times been mostly accomplished by foreign capital, while most of the ore is exported to foreign countries in its raw state. About one-sixth of the acreage is under wood; the more remarkable trees being the Spanish chestnut and several varieties of oak, and in particular the cork oak. Fruits are extremely abundant, and include, in addition to apples, pears, cherries, plums, peaches, and apricots, the almond, date, fig, orange, citron, olive, and pomegranate; and in the lower districts, the pineapple and banana. The culture of the vine is general, and great quantities of wine are made, both for home consumption and exportation. The more important farm crops are wheat, rice, maize, barley, and legumes. In the south, cotton and sugar cane are grown. Hemp, flax, esparto, the mulberry for rearing silk worms, saffron, licorice, are also to be mentioned.

St. Louis, chief city of Missouri, on the west bank of the Mississippi River, twenty miles south of the mouth of the Missouri, is the fourth city in the United States in population, and the commercial metropolis of the Mississippi Valley. The city is built on rising ground, comprising three terraces, the highest of which is 200 feet above the level of the river. The city owns an extensive water-works system, costing \$20,000,000. There are in all 873 miles of streets, of which 432 miles are paved. The sewer system covers 488 miles. St. Louis has a park system which constitutes one of its most attractive features. The total area of the parks is 2,268 acres. Forest Park, which comprises 1,370 acres, is the largest, and although the land is largely unimproved is probably the most beautiful of the parks. Tower Grove Park, covering 276 acres in the southwestern part of the city, was the donation of Henry Shaw, who also gave the city the Missouri Botanical Garden. The fair grounds, with 137 acres, contain a one-mile race track, an amphitheater seating 40,000 people, many halls, etc. Carondelet and Lafayette Parks are small but fine specimens of landscape gardening. The principal public buildings are the massive post-office and custom-house, costing more than \$6,500,000; the city hall, built at a cost of \$2,000,000; the courthouse; the union railroad station with a train house covering thirty tracks, and used by twenty-one railroad companies, erected at a cost of \$6,500,000; and the Chamber of Commerce building, costing \$2,000,000. The St. Louis bridge, a massive structure, was completed in 1874 at a cost of over \$10,000,000. It consists of three spans, the center one being 520 feet long, and the other two 500 feet each. The piers upon which these spans rest are built of limestone carried down to bed rock. The main passage for the accommodation of pedestrians, is fifty-four feet wide, and below this are two lines of rails. The merchant's bridge, three miles north, was completed in 1890 at a cost of \$3,000,000. The latter is used exclusively for

railroad traffic. The favorable location of St. Louis in the heart of the vast and fertile Mississippi Valley makes it one of the greatest commercial cities in the United States. There is an immense trade in breadstuffs, grain, provisions, lumber, hides, fur, agricultural products, manufactured articles, etc. There are about 7,000 manufacturing establishments, with a combined capital of about \$150,000,000, and employing upward of 100,000 persons. It is one of the largest tobacco manufacturing cities in the world. The city has direct communication with more than 6,000 miles of rivers. A considerable amount of its foreign trade is entered and cleared at New Orleans. The institutions of higher education are Washington University, St. Louis University (Roman Catholic), the College of the Christian Brothers, St. Louis School of Fine Arts, Maria Consilia Convent, training school for nurses, several medical colleges, dental college, theological seminaries (Lutheran and Evangelical Lutheran), manual training school, the State school for the blind, and the St. Louis day school for deaf mutes. Population, 750,000.

Stockholm, the capital of the kingdom of Sweden; on several islands and the adjacent mainland, between a bay of the Baltic and Lake Malar; in a situation that is accounted one of the most picturesque in Europe. The nucleus of Stockholm is an island in mid-channel called "The Town"; on it stand the imposing royal palace (1697-1754); the principal church (St. Nicholas), in which the kings are crowned; the House of the Nobles (1648-1670), in which that class hold their periodical meetings; the town house; the ministries of the kingdom; and the principal wharf, a magnificent granite quay, fronting east. Immediately west of the central island lies the Knights' Island; it is almost entirely occupied with public buildings, as the houses of parliament; the old Franciscan Church, in which all the later sovereigns of Sweden have been buried; the royal archives; and the chief law courts of the kingdom. There is considerable industry in the making of sugar, tobacco, silks and ribbons, candles, linen, cotton, and leather, and there are large iron foundries and machine shops. The water approaches to the city are in general rendered inaccessible by ice during three or four months every winter; but to remedy this defect it is proposed to build a new harbor at Nynas on the Baltic shore, thirty miles to the south. In spite of the winter drawback Stockholm is the seat of a trade sufficient to bring an average of 1,760 vessels of 635,000 tons into the port every year, carrying principally grain (wheat and rye), rice, flour, herrings, oils and oilcake, cork, groceries, metals, and wine and spirits (imports). The commodities exported consist chiefly of iron and steel, oats and tar. Though Stockholm was founded by Birger Jarl in 1255, it was not made the capital of Sweden till comparatively modern times. Since then, however, it has grown rapidly. Population, 302,462.

St. Peter's, the Cathedral of Rome, the largest and one of the most magnificent churches in Christendom. It is a cruciform building in the Italian style, surmounted by a lofty dome,

built on the legendary site of St. Peter's martyrdom; the foundation stone was laid on the 18th of April, 1506. Michael Angelo was appointed architect in 1546. He nearly completed the dome and a large portion of the building before his decease (1564). The nave was finished in 1612, the façade and portico in 1614, and the church was dedicated by Urban VIII., November 18, 1626. The interior diameter of the dome is 139 feet, the exterior diameter 195½ feet; its height from the pavement to the base of the lantern, 405 feet; to the top of the cross outside, 448 feet. The length of the cathedral within the walls is 613½ feet; the height of the nave near the door, 152½ feet; the width, 87½ feet. The width of the side aisles is 33½ feet; the entire width of the nave and side aisles, including the piers that separate them, 197½ feet. The circumference of the piers which support the dome is 253 feet. The floor of the cathedral covers nearly five acres. Its cost is estimated to have exceeded \$50,000,000.

St. Petersburg, the capital of the Russian Empire, at the head of the Gulf of Finland and the mouth of the Neva. When a strong wind is blowing from the sea its level rises by several feet, and the poorer parts of St. Petersburg are inundated every year; but when the overflow exceeds ten feet nearly the whole of the city is inundated. Peter I. laid the foundations of his capital in 1702 on one of the islands of the delta, and dreamed to make of it a new Amsterdam. The actual connection between Russia and its capital was established through the Neva, which since it was connected by canals with the upper Volga, became the real mouth of the immense basin of the chief river of Russia and its numberless tributaries. Foreign trade and the centralization of all administration in the residence of the emperor have made of St. Petersburg a populous city covering forty-two square miles. The Great Neva, the chief branch of the river, which has within the city itself a width of from 400 to 700 yards, is so deep that large ships can lie alongside its granite embankments. Cronstadt, built on an island sixteen miles to the west of St. Petersburg, is both the fortress and the port of the capital. Two-thirds of the foreign vessels unload within the city itself. The main body of the city, containing more than one-half of its inhabitants as well as all the chief streets, stands on the mainland, on the left bank of the Neva; and a beautiful granite quay, with a long series of palaces and mansions, stretches for two and one-half miles. Only two permanent bridges cross the Neva; the other two, built on boats, are removed in autumn and spring. The island Vasilievsky, between the Great and Little Nevas, has at its head the Stock Exchange, surrounded by spacious storehouses, and a row of scientific institutions, all facing the Neva. On the Peterburgsky Island, between the Little Neva and the Great Neva, stands the old fortress of St. Peter and St. Paul, facing the Winter Palace, and containing the mint and the cathedral. It has behind it the arsenal, and a series of wide streets bordered by small, mostly wooden houses, chiefly occupied by the poorer civil service functionaries. Farther up the mainland on the right bank of the Neva

is covered by the poorer parts of the city, but contains some public buildings and a great number of factories. Numerous islands, separated from each other by small branches into which both Nevas subdivide, and connected together by a great number of wooden bridges, are covered with beautiful parks and summer houses, to which most of the wealthier and middle-class population repair in the summer. The main part of St. Petersburg has for its center the Old Admiralty. Near the Admiralty are the chief public buildings of the city. The principal churches (which are generally distinguished by prominent cupolas) are St. Isaac's Cathedral, the most costly of all, and one of the largest churches of Europe, modeled on St. Peter's, Rome, built of granite and Finland marble, and with a profusely decorated interior; the cathedral of St. Peter and St. Paul, the resting-place of the emperors, with a conspicuous pyramidal spire (302 feet); the cathedral of Our Lady of Kazan, with an image of the Virgin enriched with precious stones and pearls; the Smolny Cathedral, a white marble edifice; and the Memorial Church, built on the spot where the Czar, Alexander II., was assassinated, one of the most splendid of the many sacred edifices in the city. Among the many palaces are the Winter Palace, now used only for ceremonial purposes, one of the largest and most luxurious in Europe; the Marble Palace, so-called; the Michael Palace, now used as the School of Military Engineers; and the Hermitage Palace, containing a fine library and one of the richest collections of French, Flemish, Dutch, Italian, Spanish, Russian, and other paintings, the private property of the czars, besides engravings, coins, gems, antiquities, etc. The cottage in which Peter the Great lived while superintending the construction of St. Petersburg is still preserved. Other buildings of importance are: the Admiralty, a vast parallelogram of brick, with a naval and natural history museum and library; the arsenal, containing a museum of artillery; the palaces of the general staff and of the senate; the custom-house, the exchange, and imperial bank; the fortress of Petropavlovsk (the Russian bastille); the Academy of Sciences, with extensive museum and library; and the imperial library, with over a million volumes and large collections of manuscripts and engravings. There are numerous hospitals and charitable institutions, a university, founded in 1819, many special academies, and four theaters maintained by the state. Of the monuments, the colossal equestrian statue of Peter the Great, erected by Catharine II. (1782), and the monolithic Doric column of granite, eighty feet high, erected by Nicholas to the memory of Alexander I., take first rank.

St. Petersburg was founded by Peter the Great in 1703, when he had just wrested its site from the Swedes. The forced construction of a city in a site apparently forbidden by nature, cost the lives, according to various accounts, of from 100,000 to 200,000 peasants, collected from all parts of the Russian Empire. It was at first built entirely of wood, and without a proper street system, but the extensive fires of 1736 and 1737 facilitated the reconstruction on an

improved plan. The Empress Elizabeth did much to improve the city; it is, however, chiefly indebted to Catharine II. for its regularity and architectural splendor; and the improvements under Nicholas and Alexander II. have made it one of the finest of European capitals. Population, 1,429,000.

Suez Canal, a great artificial channel cutting the isthmus of Suez, and thus forming a waterway between the Mediterranean and the Red Sea; was planned and undertaken by the French engineer Lesseps, through whose untiring efforts a company was formed and the necessary capital raised; occupied ten years in the construction (1859-69), and cost some twenty million pounds; from Port Said on the Mediterranean to Suez at the head of the Red Sea the length is about 100 miles, a portion of which lies through Lakes Menzaleh, Ballah, Timsah, and the Bitter Lakes; as widened and deepened in 1886 it has a minimum depth of twenty-eight feet, and varies from 150 to 300 feet in width; traffic is facilitated by electric light during the night, and the passage occupies little more than twenty-four hours; has been neutralised and exempted from blockade, vessels of all nations in peace or war being free to pass through; now the highway to India and the East, shortening the voyage to India by 7,600 miles; three-fourths of the ships passing through are English; an annual toll is drawn of close on three million pounds, the net profit of which falls to be divided amongst the shareholders, of whom, since 1875, the British Government has been one of the largest.

Superior, Lake, the extreme west and most extensive of the Great Lakes of North America, being the largest body of fresh water in the Western Hemisphere. Its length, east to west, is about 360 miles, with a mean breadth of about eighty miles, so that its area may be taken at about 28,600 square miles. The mean depth is estimated at 900 feet, and the height of its surface at about 640 feet above the Atlantic. It receives upward of fifty rivers, but none is of much importance except the St. Louis which enters at its southwest extremity, and the Riviere au Grand Portage. During the melting of the snow, these and the other rivers sweep into the lake vast quantities of sand, boulder stones, and drift timber. It discharges itself at its eastern extremity into Lakes Huron and Michigan, by the river and falls of St. Mary. This lake embosoms many large and well-wooded islands, the chief of which is Isle Royal. Toward each extremity the lake contracts in width, and at the lower end terminates in a bay which falls into the outlet, the St. Mary's River, at the two opposite headlands of Gros Cape on the north and Point Iroquois on the south. Thence to the mouth of the St. Mary's at Lake Huron is about sixty miles. The navigation of this river is interrupted twenty miles below its source at the Falls of St. Mary, or, as the place is commonly called, Sault Ste. Marie. Here the river descends in a succession of rapids extending three-fourths of a mile, from eighteen to twenty-one feet, the fall varying with the stage of the water in Lake Superior.

A ship canal has been constructed past the

falls by the United States Government, so that now the lake is accessible to vessels from the Atlantic Ocean. The water of Lake Superior, remarkable for its coldness, purity, and transparency, is inhabited by many kinds of fish, among which are the delicious white fish and the gray trout.

Sweden (Swedish, *Sverige*), a kingdom of Northern Europe, comprising, with Norway and Lapland, the whole of the Scandinavian Peninsula, of which it forms the east, south, and most important portion; having northeast, Russian Finland; east and south, the Gulf of Bothnia and the Baltic; southwest, the Sound, Cattegat, and Skagerrack; and west and north, Norway, from which it is, for the most part, divided by the great mountain chain of Scandinavia. Length, north to south, 950 miles; average breadth about 190 miles; area, 172,876 square miles; population, estimated at 5,162,918. Capital, Stockholm; population, 295,789.

Sweden is divided into three principal regions: Gæthland (Gothia) in the south; Sweden proper, occupying the center; and Norland (by far the largest part), comprising the remainder. These three regions are again subdivided into twenty-four lars, or districts. Sweden is mountainous in the west, but, in general, flat; and it is remarkable that along the whole road, from Gotenburg in the west to Stockholm in the east, there is not a single acclivity of consequence till within a few miles of the latter.

The climate is less severe than might be expected in so high a latitude. The summers are hot, and spring is almost unknown. In the north snow covers the ground for five or six months in the year; and the west coasts are milder and more humid than the east.

The domestic animals are the same as those of North America. The others are hares and foxes, beavers, wolves, and, in the cold provinces of the north, bears, the leming, and the reindeer. Water fowl are abundant and the mosquitoes are as troublesome as they are in tropical countries.

Only about a fiftieth part of the country is cultivated. Agriculture is in a very backward state, but has been recently much improved. Apple, pear, and cherry trees grow but languidly; while berries of many different kinds are produced spontaneously and spread luxuriantly. Wheat succeeds only in the southern provinces; oats are raised more generally, and in larger quantities; but rye and barley are the kinds of grain most frequently met with. The manufacturing industries include those connected with iron, steel, wooden goods, woollens, cottons, silks, refined sugar, leather, paper, spirits, &c. The greater part of the trade is with Great Britain and Germany.

Switzerland, a west-central republic of Europe, bounded on the north by Baden, Württemberg, and Bavaria, east by the Tyrol, south by Italy, and west and northwest by France. Maximum length from east to west, 210 miles; breadth, 140 miles. This, the most mountainous country in Europe, has the Alps forming the whole of its southern and eastern frontiers, besides extending its ramified chains over the greater part of its interior. The most level

tracts of surface are found in the northwestern cantons of Berne, Basle, and Zurich, where they form a series of mountain-locked vales, backed by the Jura Range on the French border. The chief valley is that of the Rhone in the south embracing the canton of Valais, with rich tillable tracts and fertile pastures extending on either hand towards the bases of the Bernese and Pennine Alps. The principal rivers, all rapid and unnavigable, are the Rhone, Rhine, Ticino, Reuss, Aar, etc., with their affluents. The Swiss lakes, notably numerous and picturesquely located, as well as of great depth, comprise those of Geneva, Constance, Lucerne, Neuchâtel, Zurich, Thun, Bienne, Wallenstadt, and Brienz. Forests cover about one-sixth of the entire surface of Switzerland. Agriculture is carried on chiefly in the valleys, where the cereals, along with flax, hemp, and tobacco, are raised. The mountain slopes, occupying fully two-fifths of the territorial area, afford excellent pasturage, and furnish dairy produce, tallow, hides, etc., in quantities enough for exportation. Fruits of the hardier varieties grow well and profitably. In the western cantons, the vine flourishes; while the orchards of the Thurgau and other northern districts supply ample material for the manufacture of cider, and of Kirschenwasser and other liquors. The national industry (other than rural) is largely developed in important manufactures, of which those of textile fabrics, leather goods, pottery, sugar, watches, jewelry, etc., constitute the staple items. The chief cities and towns are: Geneva, Zurich, Berne, the capital, Basle, Lausanne, La Chaux de Fonds, St. Gall, Lucerne, Neuchâtel, and Freiburg.

Taj Mahal, or Mehal ("Gem of Buildings"), a famous mausoleum, erected at Agra, India, by Shah Jehan for his favorite wife. It is 186 feet square with the corners cut off, the whole surmounted by a dome fifty-eight feet in diameter and about 210 feet in height, flanked by four octagonal kiosks. The interior is divided into four domed chambers in the corners, and a large central arcaded octagon, all connected by corridors. The central octagon contains two cenotaphs surrounded by a very noticeable openwork marble rail. The only light admitted enters through the delicately pierced marble screens of the windows. The decoration is especially noticeable for the stone mosaics of flower themes and arabesques, much of them in agate, jasper, and bloodstone. The entire structure stands on a white marble platform eighteen feet high and 313 feet square, with tapering cylindrical minarets 133 feet high at the corners. The whole Koran is said to be written in mosaics of precious stones on the interior walls. In the construction of this magnificent building, which, as Bayard Taylor says alone repays a visit to India, 20,000 men were employed twenty years. Although the labor cost nothing, over \$20,000,000 were expended in its construction. The doors are of solid silver, and an enormous diamond was placed upon the tomb itself.

Thames, the most important river of Great Britain; usually said to rise about three miles southwest of Cirencester in Gloucestershire,

near a bridge over the Thames and Severn Canal, called Thameshead Bridge, but is more properly formed by the Isis, Churn, Colne, and Leach, which have their sources on the east side of the Cotswold Hills, and unite near Lechlade. Its total course is estimated at 250 miles. Its tributaries include the Windrush, Cherwell, Thame, Colne, Brent, Lea, and Roding, on the left; the Kennet, Loddon, Wey, and Mole, on the right. Thameshead Bridge is 376 feet above sea level; the junction of the Colne above Lechlade is 243 feet. At London Bridge the width of the river is 266 yards, at Woolwich, 490 yards, at Gravesend, 800 yards, and three miles below, 1,290 yards. The depth of the river in the fair way above Greenwich to London Bridge is twelve to thirteen feet, while its tides have a mean range of seventeen feet and an extreme rise of twenty-two feet. By means of numerous canals immediate access is given from its basin to those of all the great rivers of England.

Thunder, the dazzling light emitted by the electric spark when it shoots from clouds charged with electricity is called lightning. In the lower regions of the atmosphere the light is white, but in the higher regions, where the air is more rarefied, it takes a violet tint; as does the spark of the electrical machine in a rarefied medium. The flashes of lightning are sometimes several leagues in length; they generally pass through the atmosphere in a zig-zag direction — a phenomenon ascribed to the resistance offered by the air condensed by the passage of a strong discharge. The spark then diverges from a right line, and takes the direction of least resistance. In vacuo electricity passes in a straight line. The sound which accompanies lightning is called thunder. It is due to the sudden disturbance of the air in the vicinity of the line in which the spark passes. It is generally a long rolling sound rising and falling in intensity. The duration of the thunder peal is generally attributed to the re-echoing of the sound produced at various places.

Tiber, a river of Italy celebrated in ancient Roman history, rises in the Apennines, in the province of Arezzo, Tuscany; rapid and turbid in its upper course, but navigable 100 miles upwards from its mouth; flows generally in a southern direction, and after a course of about 260 miles enters the Mediterranean about fifteen miles below Rome.

Tides, the rising and falling of the water of the sea, which occurs periodically, as observed at places on the coasts. The tide appears as a general wave of water, which gradually elevates itself to a certain height, then as gradually sinks till its surface is about as much below the medium level as it was before above it. From that time the wave again begins to rise; and this reciprocating motion of the waters continues constantly, with certain variations in the height and in the times of attaining the greatest degree of height and of depression. The alternate rising and falling of the tide-wave are observed to take place generally twice in the course of a lunar day, or of twenty-four hours, forty-nine minutes of mean solar time, on most of the shores of the ocean, and in the

greater part of the bays, firths, and rivers which communicate freely with it. The tides form what are called a flood and an ebb, a high and low water. The whole interval between high and low water is often called a tide; the water is said to flow and to ebb; and the rising is called the flood-tide and the falling the ebb-tide. The rise or fall of the waters, in regard to elevation or depression, is exceedingly different at different places, and is also variable everywhere. The interval between two succeeding high-waters is also variable. It is shortest about new and full moon, being then about twelve hours, nineteen minutes; and about the time of the moon's quadratures it is twelve hours, thirty minutes. But these intervals are somewhat different at different places. Tides are caused by the attraction which the sun and moon exert over the water of the earth. The moon is the nearest of the heavenly bodies to the earth, and the mobile nature of water leads it to yield readily to the attractive influence. Those parts of the waters directly under the moon's vertical path in the heavens are drawn out towards the moon. At the same time the moon attracts the bulk of the earth, and, as it were, pulls the earth away from the water on the surface furthest from it, so that here also the water is raised, although not quite so much as on the nearer side. The waters being thus heaped up at the same time on these two opposite parts of the earth, and the waters situated half-way between them being thus necessarily depressed, two high and two low tides occur in the period of a little more than one revolution of the earth on its axis. The sun's influence upon the tides is evidenced in its either increasing or diminishing the lunar tide, according as the sun's place in the heavens coincides with the line of the moon's attraction, or the reverse. It is this difference which produces what are known as spring tides and neap tides. Spring tides occur at new and full moon, and are the result of the gravitating influence of both sun and moon; neap tides occur when the moon is in her quarters, and are not so high as the spring tides, the lunar influence being lessened by the sun's force acting in a direction at right angles to it. The interference of coasts and irregularities in the ocean beds cause the great variations as to time and range in the actual tides observed at different places. In some places, as in the German Ocean at a point north of the Straits of Dover, a high tide meets low water, and thus maintains perpetual mean tide. In the case cited, high water transmitted through the Straits of Dover encounters low water transmitted round the north of Scotland, and vice versa. The interval of time at any place between noon and the time of high water on the day of full or new moon is called the establishment of the port.

Tokyo, formerly called Yeddo, the capital of Japan, and chief residence of the Mikado; on a bay of the same name; on the southeast coast of Hondo, the largest of the Japanese Islands, and connected by rail with Yokohama and Kanagawa. The bulk of the houses are of wood, but there are many new buildings of brick and stone, and an imperial palace has been

erected near the center, as also public offices, etc. The greater part of the town is flat, and intersected by numerous canals crossed by bridges. The streets are generally narrow and irregular. Gas and electricity have been introduced, and the sanitary arrangements have been improved. Education is well organized, and there are nearly 700 private and elementary schools. Tokyo contains the imperial university, and it may be considered the center of the political, commercial, and literary activity of Japan. Population, 1,000,000.

Toronto, capital of the province of Ontario, Canada; on Lake Ontario. Its site is low, but rises gently from the water's edge to a height of about 100 feet. The Bay of Toronto an arm of Lake Ontario, on the south of the city, affords a commodious and excellent harbor, capable of receiving the largest lake vessels. Toronto has various manufacturing interests, including several engineering plants and iron foundries, soap works, an immense distillery, a number of breweries, rolling mills, car shops, tanneries, carriage factories, machine shops, cabinet factories, spice mills, car wheel works, pork packing plants, boot and shoe establishments, sash and door, and sewing machine factories, etc. The city has large facilities for an extensive lake traffic. There is regular steamboat connection with all lake ports as well as those on the St. Lawrence River, making the city one of great commercial importance. Toronto was founded in 1794 by Governor Simcoe. The town was captured in 1813 by the Americans under General Pike, who was killed during the attack. Since that period it has made steady progress as a commercial, educational, and residential center. Population, 262,149.

Turkey. In Europe it occupies a considerable portion of the Balkan peninsula, and in this portion is situated the capital, Constantinople, but the larger part of Turkey is in Asia. The immediate possessions of Turkey in Europe, extend from Montenegro, Bosnia, Servia, and Eastern Rumelia on the north to the Ægean and Greece on the south, and from the Black Sea to the Adriatic, the Straits of Otranto, and the Ionic Sea. In 1878 the area under Turkish rule was reduced, and the independence and the limits of several of the formerly tributary states extended. There are still nominally under Turkey the autonomous province of Eastern Rumelia; the island of Crete; the tributary principality of Bulgaria; the semi-detached provinces of Bosnia, Herzegovina, and Novibazar, administered by Austria-Hungary. A number of islands in the Ægean belong to Turkey. Egypt also is nominally part of the Turkish dominions. European Turkey is traversed in different directions by numerous mountain chains, but the main systems are the Balkan range, stretching from west to east between Bulgaria and Eastern Rumelia to Cape Emineh on the Black Sea; Rhodope, south of the Balkans; the Shardagh and Grammos on the west, continued northwest under various names into Bosnia and Herzegovina. The most important river basin is that which drains into the Archipelago or Ægean Sea, which receives the Vardar, the Struna, the Mista or Karasu,

and the Maritza. There are several plains remarkable for their fertility and beauty. The climate is not so mild as its latitude might seem to indicate, the winter being severe; but the summer heat is excessive. For the production of the ordinary cereals no part of the world is more admirably adapted. The principal grains are maize, wheat, and barley, while rice, millet, and buckwheat, are produced, as also flax, hemp, sesame, and madder. The cultivation of tobacco and cotton is very general. Among fruits the figs are highly esteemed; the cultivation of the olive is carried on along the coasts of the Archipelago and the Adriatic; wine is an important product in many districts; and much attention is paid in some parts to the growing of roses. There are few manufactures except in Constantinople, Adrianople, and Salonica, and these are of little importance.

Turkey in Asia includes Anatolia, otherwise known as Asia Minor, the country intersected by the Euphrates and the Tigris, the mountainous region of Armenia between their upper courses and the Black Sea, the ancient lands of Syria and Palestine, and the coast strips of Arabia along the Red Sea and Persian Gulf. Omitting Arabia, the country consists mainly of: (1) a high plateau traversed by the mountains of Taurus and Anti-Taurus, and stretching from the Archipelago to the borders of Persia. (2) A plateau of less elevation and extent (Syria and Palestine) traversed by the double range of Lebanon. (3) The extensive plain of Mesopotamia on the lower Tigris and Euphrates. The islands Chios, Lesbos, Rhodes, etc., belong to Turkey in Asia, while the island of Samos is a tributary principality, and Cyprus is held by Great Britain. The chief towns in Asiatic Turkey are Smyrna, Damascus, Bagdad, Aleppo, and Beyrout. The chief exports are raisins, figs, and dates, silk, cotton, wool, and mohair, opium, coffee, wheat, wine, valonia, olive oil, and tobacco; while the imports are cotton, woolen, and silk goods, metals, iron, steel, glass wares, etc. The inhabitants of the Ottoman Empire are of very diverse races. First in order are the Osmanli Turks, who, as the dominant race, are diffused over the country. The Greeks form the bulk of the population over great part of the Ægean coasts and islands. Aronauts, or Albanians, are found in the west throughout Albania; the northwest is occupied by Servians; and Bulgarians inhabit the district south of the Danube and east of Servia and Albania. In Asiatic Turkey the Turks are an important element, but there are also numbers of Armenians, Arabs, Kurds, Jews, Greeks, Circassians, etc.

Ural Mountains. Form part of the boundary between Europe and Asia, and separate European Russia on the west from Siberia on the east. The chain extends south from the Kara Sea, an arm of the Arctic Ocean, to the middle course of the Ural River, and is 1,333 miles long, with a width varying from sixteen to sixty-six miles. Although the Ural Mountains form really a single uninterrupted chain, geographers have agreed to consider them as divided into three sections—the North, Middle, and South Ural. The Middle Ural, commonly

called *Roudnoi* (metalliferous), the principal seat of the mineral riches of the whole chain, comprises the highest peaks, as the Kanjakovski Kamen, rising to 5,000 feet. The chain is composed chiefly of crystalline and metamorphic rocks, granite, gneiss, porphyry, chloritic and micaceous schists. The Ural Mountains, especially the middle and the north part of the South Ural (the governments of Perm and Orenburg), abound in mines of gold, platinum, copper, and iron. Among the precious stones the most notable are the emerald, amethyst, and diamond.

Vatican, The, the palace of the pope in Rome and one of the largest in the world; contains a valuable collection of works of art, and is one of the chief attractions in the city; it is a storehouse of literary treasures as well and documents of interest bearing on the history of the Middle Ages.

Venice (Italian, *Venezia*), a city of Italy, the capital of a province of the same name, on the Gulf of Venice, about 155 miles east of Milan. The city is built on a number of low islands, chiefly upon the island of Rialto, and is intersected by numerous canals. Many of the palaces and other public buildings of the city are very fine, especially the Cathedral of St. Mark, dating from the Eleventh Century, which is remarkable for its five cupolas, its five hundred marble columns, and its rich mosaics; and the palace of the Doges, built in the Fourteenth Century, and now used for ceremonies of state. From the palace of the Doges to the prisons on the opposite side of the canal called the Rio Palazzo stretches the famous Bridge of Sighs; and at some distance in front of the cathedral stands the also famous campanile, or bell tower, of St. Mark, which was completed in the Sixteenth Century, and which reaches a height of upwards of 320 feet, at the top being the figure of an angel, which is said to be thirty feet high. Venice was once called the Queen of the Adriatic.

Vesuvius, Mount (*ve-soo'veūs*). A famous volcano of South Italy, six miles east of Naples. Its base commands a circuit of thirty miles; its height is 3,949 feet above sea level; and its crater, 350 feet in depth, has a circumference of two miles at its outer place, with a level plain at the bottom a half mile in diameter. It towers above a smiling pastoral country dotted with towns and vineyards, and which has time after time been the scene of its devastating eruptions. The earliest known of the latter occurred in 79 A. D., when the cities of Pompeii, Herculaneum, and Stabiae were overwhelmed beneath the floods of lava it disgorged. The most remarkable of later eruptions have been those of 1036, 1779, 1822, 1839, 1855, and 1872. On the last-named occasion the volcano continued for some days in a state of ebullition, and during its continuance made considerable ravages upon immediately surrounding life and property.

Victoria Nyanza, a lake in East Central Africa, on the Equator, is about the size of Ireland, 300 miles long and twenty miles broad, at an elevation of 3,500 feet above the sea level; discovered by Captain Speke in 1858, and circumnavigated by Stanley in 1875; is regarded as the head-source of the Nile, the waters of it

flowing through Albert Nyanza eighty miles to the north, between which two lakes lies the territory of Uganda.

Vienna (German, *Wien*), the capital of the Austrian Empire, situated on the right bank of the Danube, in a small plain at the foot of the Wiener Wald. It is divided into an old and a new town, the former occupying a small semicircle near the Danube, and being still, notwithstanding that its streets are narrow and often crooked, the seat of the court and the center of fashionable life. Round this portion of the city (which contains, besides the Imperial palace, the magnificent Gothic cathedral of St. Stephen, and the university, founded in 1635) is a zone 1,300 feet in breadth, known as the *Ring*. This space was formerly occupied by fortifications, but it is now laid out in boulevards, with palaces and other noble buildings. It is separated from the old town by the Ringstrasse, which is more than two miles long, nearly two hundred feet wide, and bordered on both sides by trees. The new part of the city contains many handsome edifices. To the southwest is the castle of Schönbrunn, the summer palace of the emperor, surrounded by a large and admirably laid-out garden; and there are several other fine palatial residences in the same quarter of the city. Altogether, the city has a circumference of sixteen miles. It has large manufactures of silk-stuffs, as well as of meerschaum pipes and other fancy articles, and does a very considerable trade in grain. In fact, Vienna is the great emporium of the western province of Austria. It is an ancient town, and was a place of importance even in Roman times, when it bore the name of *Vindobona*. In modern history it is celebrated as the scene of numerous congresses, notably of that generally known as the *Congress of Vienna* (1814-15), for the rearrangement of the affairs of Europe after the abdication of the Emperor Napoleon. During the revolution of 1848 the city was held for a short time by the insurgents, and was bombarded. Population, 1,856,949.

Volcanoes, Greatest of the World

NAME OF VOLCANO	LOCATION	HEIGHT (FEET)
Altar,	Ecuador,	17,710
Antisana,	Ecuador,	19,335
Cayambí,	Ecuador,	19,253
Cotopaxi,	Peru,	19,613
Demavend,	Persia,	18,500
Etna,	Sicily,	9,652
Fujiyama,	Japan,	12,390
Hecla,	Iceland,	5,110
Hood, Mt.,	Oregon,	11,934
Iztaccihuatl,	Mexico,	16,076
Klincheoskaia,	Kamchatka,	16,512
Lullailac,	Chile,	21,000
Mauna Kea,	Hawaii,	13,953
Mauna Loa,	Hawaii,	13,600
Misti,	Peru,	20,015
Orizaba,	Mexico,	17,380
Pico, Peak of,	Azores,	7,013
Popocatepetl,	Mexico,	17,784
Sahama,	Peru,	23,000
Sangai,	Ecuador,	17,400
San Jose,	Chile,	20,020
St. Elias, Mt.,	Alaska,	18,010
St. Helen, Mt.,	United States,	10,000
Stromboli,	Lipari Islands,	3,090
Tahiti, Peak of,	Friendly Islands,	7,400
Teneriffe,	Canary Islands,	12,200
Tolima,	Colombia,	18,069
Toluco,	Mexico,	14,950
Vesuvius,	Italy,	3,948

Volga, the most important river of Russia, and the longest in Europe, has its origin in a marshy plain among the Valdai Hills, in the government of Tver. Its source is 550 feet above ordinary sea level and 633 above the Caspian; its length, 2,000 miles.

Wales, a principality in the southwest of the island of Great Britain, which, since Edward I., gives the title of Prince of Wales to the heir-apparent of the British Crown; area, 7,442 square miles; population included in that of England. It is divided into twelve counties. As a whole it is very mountainous, particularly in the north, where Snowdon, the culminating point of South Britain, rises to the height of 3,571 feet; and it is intersected by beautiful valleys, traversed by numerous streams, including, among others, the large River Severn. It is rich in minerals, particularly coal, iron, copper, and even gold, and to these Wales owes its chief wealth. The coal trade is most extensive, and Cardiff is the largest coal port in the world. In 1898 about 24,000,000 tons of coal were produced in Wales. Iron, steel, and copper works are also on a large scale. Besides the mineral industries, there are considerable woolen manufactures, especially of flannel, coarse cloth, and hosiery. The Welsh have many strange customs and peculiar superstitions. They are remarkably fond of poetry and music, and their language is said to be peculiarly adapted to poetical effusions. Their ancient language is, however, falling fast into disuse throughout the principality, more especially the southern part. Family distinction is held in great estimation. The aboriginal Celtic race still inhabits some parts of the country. Llewellyn ap Gryffydd was the last prince who exerted himself for the independence of Wales. In 1282 he was subdued by Edward I., and fell on the field of battle. From that time Wales has been annexed to the English Crown; but the union was not complete till the reign of Henry VIII., when the government and laws were assimilated with those of England.

Warsaw, the chief city of Russian Poland, and the capital of the Kingdom of Poland from towards the close of the Sixteenth Century to the final partition of the kingdom in 1795. It is situated on the left bank of the Vistula, about 320 miles east of Berlin. It possesses a cathedral which dates from the Thirteenth Century, and a large number of palaces and other imposing buildings, situated in broad and handsome squares; but for the most part the city is irregularly built and of indifferent appearance, the chief modern buildings being in the suburbs, with one of which, Praga, on the opposite side of the Vistula, the city is connected by a bridge of boats. The whole city is defended, or rather overawed, by a vast citadel, erected by the Russians, under the Emperor Nicholas. Warsaw is the residence of an archbishop, who is primate of Poland. Its university, founded in 1816, was suppressed after the insurrection of 1830, but was reopened in 1864. The city is the principal seat of both the manufactures and the trade of Poland. Its annual fairs are much frequented, and it carries on a large commercial intercourse, not only with Cracow and Dantzic by the Vis-

tula, but with St. Petersburg and Vienna by rail. Population, 756,426.

Washington, a city, and the capital of the United States of America; in the District of Columbia; at the confluence of the Potomac and the Anacostia, or East Branch, rivers, and on the Pennsylvania, the Baltimore & Ohio, the Southern, the Chesapeake & Ohio, and the Richmond, Fredericksburg & Potomac railroads; 136 miles southwest of Philadelphia; 226 miles southwest of New York; forty miles southwest of Baltimore, and 185 miles west of the Atlantic Ocean. The site of the city is an admirable one, surrounded by a circle of hills and comprising a rolling plain, with here and there irregular eminences which provide beautiful and advantageous positions for the various public buildings. The city was laid out expressly for the National Capital and on a scale indicating that it was expected to grow into a vast metropolis. The United States and the District of Columbia own an extensive waterworks system, costing \$10,000,000. The reservoirs have a storage capacity of 76,000,000 gallons, and the water is distributed through 381 miles of mains. The consumption averages 55,000,000 gallons a day. There are in all 320 miles of streets, of which 266 miles are paved. The streets of Washington are irregularly laid out, being from seventy to 160 feet wide. Pennsylvania Avenue is the principal street of the city, having on or near it many of the leading hotels, theaters, stores, etc. F street is the next business street in importance. The sewer system covers 418 miles. The streets are lighted by gas and electricity at an annual cost of about \$250,000. The average cost of the police department exceeds \$743,500 per annum, and that of the fire department \$185,000. The annual cost for the maintenance of the city government is over \$9,052,000. The annual death rate averages 21.82 per 1,000.

The city contains many magnificent structures. The Capitol, crowning Capitol Hill, is one of the most beautiful public edifices in the world. It is built in pure classic style, with two immense wings of white marble, extending from a central structure constructed of light yellow freestone, painted white. The main front facing east is beautified, with three splendid porticoes adorned by Corinthian pillars. The central portico contains noted groups of statuary, and on the esplanade immediately in front stands Greenough's famous colossal statue of Washington. The entrance to the rotunda is by the celebrated bronze door, designed by Randolph Rogers and made by Von Muller in Munich. It is seventeen feet high by nine feet wide, and cost \$28,000. The relief work on the door commemorates the discovery of America by Columbus. The walls of the interior of the rotunda, which is 180 feet high and ninety-six feet in diameter, are ornamented with eight panels containing paintings of scenes in American history. America is depicted with Indian and eagle, standing with History, who records on her tablet the progress of events. The canopy overhanging the eye of the dome, at a height of 180 feet above the rotunda floor, is 65 feet in diameter, and gives a field of 4,640 square feet for Brumidi's allegorical fresco. The lofty central dome of iron is

surmounted by a statue of liberty, giving a total height to the capitol of 307½ feet. The structure covers three and one-half acres, and cost over \$13,000,000. It accommodates the two Houses of Congress, United States Supreme Court, and until recently also held the Library of Congress.

The new Congressional Library is built just east of the capitol, in a square comprising about ten acres. It is three stories high, 470 feet long by 340 wide, is constructed of white New Hampshire granite in the Italian Renaissance style, and cost \$6,347,000. The building contains an octagonal reading room, 100 feet in diameter. There are many magnificently carved marble arches. The library is constructed around four spacious inner courts and in all has over 2,000 windows, which make it the best-lighted building of its kind in the world. Besides the reading room, there are a lecture hall, copyright record rooms, a large art gallery, a map room, etc. The whole library could be made to accommodate 6,000,000 volumes. It is now the third library in point of size in the world, and, in the beginning of 1908, contained 1,434,000 books and pamphlets, and some 900,000 other articles.

The United States Treasury building is one and one-fourth mile west of the capitol. It is constructed of granite in the Ionic style, and cost \$6,000,000. It is three stories high and 468 feet long by 264 wide. An Ionic colonnade, modeled after the Temple of Minerva in Athens, is built on the east front. On the west front is a magnificent central entrance with eight colossal monolithic columns. There are in all about 200 rooms, including the cash room, which is finished with rich marble and occupies two stories; the gold room, containing millions of dollars in gold coin; the Redemption Division; counterfeit room, etc. All of the United States notes, bonds, etc., are made here.

The building of the State, War, and Navy Departments is one of the largest public edifices in Washington. It is built of granite in the Roman Doric style, is four stories high, 567 feet long by 342 feet wide, covers four and one-half acres, and cost \$11,000,000. In the north and east wings are the War and Navy Departments; in the south portion is the State Department. The building contains in all 566 rooms, including the Hall of the Secretary of State, the Ambassador's Room, and the library with 60,000 volumes. In the latter apartment the Declaration of Independence is preserved.

The building of the Patent Office, also known as the Department of the Interior, is located in the central part of the city. It is 453 feet long by 351 feet wide, and is constructed of granite, marble, and freestone, in the Doric style. The main entrance faces F Street, and is reached by a broad stairway of granite steps. The portico has sixteen enormous Doric columns supporting a classic pediment. The building contains besides offices and other rooms, the model room, in which there are great numbers of models, representing every department of mechanical art. The length of the floor in the latter room is 1,350 feet, or over one-fourth of a mile. The offices of the Secretary of the Interior, of the Commissioner of Patents, and of the Indian Bureau are on the second floor.

The building of the Land Office, formerly occupied by the Post-office Department, and costing \$1,700,000, is of white marble, in the Italian or modified Corinthian style, and is 300 feet long by 204 feet wide. It is three stories high, and on the Eighth Street side has sculptures illustrating the telegraph and railroad.

The Pension building is constructed in the Renaissance style. It borders on Judiciary Square, covers 80,000 square feet, is seventy-five feet high, and 400 feet long by 200 feet wide. On the exterior and on a level with the second floor is a notable band of sculpture in terracotta, three feet in height, and 1,200 feet in length. It represents an army in campaign, supported by sailors and boats of the navy.

The Smithsonian Institution is a magnificent structure, erected of red sandstone in the Romanesque style. It is 477 feet long by 150 feet wide, and has nine towers from seventy-five to 150 feet in height. It was established by James Smithson. The remaining noteworthy buildings include the Bureau of Education, Department of Agriculture, Army Medical Museum and Library, building of the Commission of Fish and Fisheries, the United States Naval Observatory, Executive Mansion or "White House," a National Soldiers' Home, etc. The buildings of note not belonging to the government include the Corcoran Gallery of Art, the Masonic Temple, Odd Fellows' Hall, "Evening Star" building, the "Baltimore Sun" building, Washington Market, the court house, New Willard, Raleigh, Shoreham, Arlington, and Gordon hotels, and the Cosmos, Army and Navy, Washington, and Metropolitan clubs.

Monuments.—These include the Washington Monument, the Naval Monument, in honor of the officers, sailors and marines who were killed in the Civil War, the Lafayette Monument, with statues of Lafayette, Rochambeau, D'Estaing, De Grasse, and Dupontail, statues of Washington, Franklin, Webster, two of Lincoln, General Rawlins, Admiral Farragut, Martin Luther, Admiral Dupont, President Garfield, and Chief-Justice Marshall; and equestrian statues of General Winfield Scott, Nathaniel Greene, George H. Thomas, W. S. Hancock, John B. McPherson, and Andrew Jackson.

Education.—The city has 125 buildings used for school purposes. The white and negro pupils are provided with separate schools. The institutions for higher education are the George Washington University, Howard University, Galaudet College, Georgetown University, the Catholic University of America, Gonzaga College, American University, National University Law and Medical Schools. The centennial of Washington was fitly celebrated December 12, 1900.

Washington Monument, a magnificent monument erected by the American people, in honor of George Washington. It stands in the Mall, a public park on the banks of the Potomac and Tiber Creek, Washington, D. C. The corner stone was laid by President Polk, July 4, 1848, and December 6, 1884, the cap stone was set in position. The foundations are 126½ feet square and 36 feet 8 inches deep. The base of the monument is 55 feet 1½ inches square, and the walls 15 feet ¼ inch thick. At the 500 foot

mark, where the pyramidal top begins, the shaft is 34 feet 5½ inches square and the walls are 18 inches thick. The monument is made of blocks of marble two feet thick, and it is said there are over 18,000 of them. The height above the ground is 555 feet. The pyramidal top terminates in an aluminum tip, which is 9 inches high and weighs 100 ounces. The mean pressure of the monument is five tons per square foot, and the total weight, foundation and all, is nearly \$1,000 tons. The door at the base, facing the capitol, is 8 feet wide and 16 feet high, and enters a room 25 feet square. An immense iron framework supports the machinery of the elevator, which is hoisted with steel wire ropes 2 inches thick. At one side begins the stairs, of which there are 50 flights, containing 18 steps each. Five hundred and twenty feet from the base there are 8 windows, 18 x 24 inches, two on each face. The area at the base of the pyramidal top is 1,187½ feet, space enough for a six-room house, each room to be 12 x 16 feet. The Washington Monument is the highest monument in the world; total cost, \$1,500,000.

Wellington, a city and capital of New Zealand; on Port Nicholson, an islet of Cook's Strait; on the southwest extremity of the provincial district of Wellington, North Island. Its harbor is six miles long and five wide. The provincial district of Wellington has an area of 11,003 square miles. It has an equable and healthy climate, but is subject to earthquake shocks. It is intersected by several mountain ranges, but there are many fine agricultural and pastoral districts. Gold was found in 1881. Population, 63,807.

Westminster Abbey, the coronation church of the sovereigns of England, and one of the chief ornaments of London. It is a magnificent Gothic pile, situated near the Thames, and adjoining the Houses of Parliament. In 1065 a church was built here in the Norman style by Edward the Confessor. Part of this structure still remains in the pyx house and the south side of the cloisters; but the main building, as it now stands, was begun in 1220 by Henry III., and was practically completed by Edward I. Various additions, however, were made, down to the time of Henry VII., who built the chapel which bears his name.

The extreme length of the church, including Henry VII.'s chapel, is 531 feet; breadth of transepts, 203 feet; height of roof, 102 feet; height of tower, 225 feet. The coronation ceremony takes place in the choir, where the coronation stone brought by Edward I. from Scotland is situated beside the coronation chairs of the English sovereigns. Westminster Abbey is distinguished as the burial place of a large number of English kings from Edward the Confessor to George II.; the north transept is occupied chiefly by monuments to warriors and statesmen; while in the south transept is situated the "Poet's Corner," the burial and memorial place of most of England's great writers from Chaucer to John Ruskin.

Westminster Hall, the hall of the old palace of Westminster, was erected by Richard II. (1397-99) on the foundations of a structure built by William Rufus. It has a fine porch,

and its hammer-beam roof of carved timber is considered the most notable of its kind; length of the building, 290 feet, breadth 68 feet, and height 110 feet. This building is closely associated with many stirring events in English history; but it is chiefly remarkable as the place where were held such great state trials as those of the Chancellor More, Lady Jane Grey, the Earl of Strafford, King Charles I., and Warren Hastings, and as the center of the highest English courts of law till these were removed to the new buildings recently erected for their accommodation. The hall now serves as a fine vestibule to the Houses of Parliament.

Westphalia, the name given at different periods to (1) one of the circles of the old German Empire, (2) one of Napoleon's kingdoms (1807-13), conferred upon his brother Jerome; and (3) now to a province of Prussia. The latter is bounded by Rhenish Prussia, Holland, Hanover, Brunswick, Hesse, and Nassau. Its area is 7771 square miles. The surface in the south and northeast is generally mountainous; the northwest spreads out into extensive and often marshy plains, and belongs to the basin of the Ems; the northeast and a small part of the east to the basin of the Weser; the remainder, constituting the far larger portion of the whole, belongs to the basin of the Rhine, whose chief tributaries are the Ruhr and Lippe. Besides iron and coal in abundance the minerals include copper, lead, zinc, and salt; and the manufactures are varied and important. The province is divided into the three governments of Münster, Minden, and Arnsberg. Münster is the capital.

Wind. The movement of the air in currents from one place to another. Speaking generally, all winds are caused by the variations taking place continually in the condition of the air as respects heat and moisture, and, therefore, as respects rarity. When the air over a given place becomes rarefied, that is, when the atmospheric pressure there becomes relatively small, that region at once becomes a center towards which inflowing air-currents direct themselves. According to the nature, extent, and continuance of this diminution of pressure, the nature of the resulting air-currents varies within very wide limits. The causes which produce storms, tempests, hurricanes, etc., are very obscure. It is difficult to arrive at general laws regarding them, since it is not easy to obtain an exact knowledge of the various circumstances which accompany them. Storms are violent and destructive in the torrid zone; they are comparatively insignificant in temperate, and are scarcely known in polar regions. It was formerly supposed that a storm was merely a wind blowing in a certain direction at the rate of 100 or 120 miles an hour; but it has been recently found to be far more complicated in its nature. There is reason to believe that, in the northern hemisphere, the great body of the storm whirls in an horizontal circuit round a vertical or somewhat inclined axis of rotation which is carried forward with it; and that to a spectator placed in the center the rotation is always from right to left. Storms travel in a direction differing from the actual movement of the wind at the time. When the storm progresses westward the wind, at the

commencement, is from a northern quarter, and towards the end from a southern. When the progressive motion is eastward, the phenomena are reversed; southern storms are subject to the same modification as northern, but in a reversed order. In all latitudes, the barometer sinks during the first half of the storm, in every part of its track; and rises during the second.

Yang-tze-kiang (*yāng'-tse-kē-āng'*), one of the two great rivers of China, is formed by two streams rising in Eastern Tibet, and after flowing east and then south enters the Chinese province of Yunnan. Pursuing a very tortuous course, much of it through most fertile and densely-populated regions, it reaches the great city of Nanking, 200 miles from the sea, where it widens gradually into the vast estuary which connects it with the Yellow Sea. Its whole course, under various names, is 3,300 miles, and the area of its basin is computed to be 548,000 square miles. It is connected by the Grand Canal with the Hoang-ho or Yellow River, and is navigable for vessels of considerable draught for 1,200 miles from its mouth. By the treaty of Tien-tsin the Lower Yang-tze was opened to European trade; and 700 miles from its mouth is the treaty-port of Hangkow, the great commercial port of Mid-China. The highest port on the river at present open to foreign trade is Ichang, 1,000 miles from its mouth.

Yarmouth, or, as it is more strictly called, Great Yarmouth, an English sea-port, important fishing-station, watering-place, and municipal and parliamentary borough, in the county of Norfolk, twenty miles east of Norwich. It is situated on a large and narrow tongue of land running from north to southward between the German Ocean and the estuary of the Yare. The town is connected by a bridge with Little Yarmouth, or South Town, in Suffolk. Along the sea frontage stretches a promenade and carriage-drive for three miles, with two piers. Parallel with the north and south quays, extending for nearly a mile and a quarter, are the principal streets, crossed by numerous narrow lanes called "rows." The parish church of St. Nicholas, founded in 1101, and of late years completely restored, is one of the largest in the kingdom. Yarmouth has a naval lunatic asylum, the only one in the kingdom. It is the great seat of the English herring and mackerel fishery, and also furnishes large quantities of white-fish. The curing of herring as "Yarmouth bloaters" is an important industry. The coast is dangerous, but Yarmouth Roads, between the shore and a range of sandbanks, offers a safe anchorage. Population, 51,250.

Yellow Sea (Chinese, *Whang-hai*), an arm of the Pacific Ocean, on the northeast coast of China; length, about 620 miles; greatest breadth, about 400 miles. It is very shallow, and obtains its name from the lemon yellow color of its water near the land, caused by mud suspended in the water from the inflow of the rivers Hoang-ho and Yang-tse-kiang.

Yellowstone National Park, a region mainly in Wyoming, United States, which in 1872 was withdrawn from settlement by the United States Government to become a park or tract for the recreation of the people. Its area, as fixed by Act of Congress in 1892, is about 5,000

square miles. It is readily accessible by a branch of the Northern Pacific Railway. Its surface is mainly an undulating plain, diversified, however, by great mountain ranges, one of which, the Absaraka, a range separating the waters of the Yellowstone River (which see) from those of the Big Horn, contains some of the grandest scenery in the United States. The whole region exhibits an endless variety of wild volcanic scenery — hot springs, mud volcanoes, geysers, cañons, waterfalls, etc. The geysers are more remarkable than those of Iceland, and the Grand Geyser in Firehole Basin is the most magnificent natural fountain in the world. The Yellowstone Lake, one of many, is a magnificent sheet of water, with an area of 150 square miles. A large part of the park is covered with forest. Stringent legislation protects the game, with the result that elk, deer, antelope, bear, and bison have taken refuge in it.

Yokohama, the chief port of entry in Japan, and the headquarters of foreign shipping companies, banks, consulates, and commerce generally. Yokohama is a poorly-laid-out town with narrow, winding streets. The Bluff, however, conceded for residence in 1867, is a beautiful spot, commanding fine views of Fuji-san and of Yokohama Bay. The bay is beautiful. Work on a large harbor was carried out in 1889–1896; it is enclosed by two breakwaters one and one-fourth miles long, and an iron pier, 1,900 feet long. The foreign community here is the largest in the country. Silk represents three-fifths of the exports, the rest being other tissues, tea, rice, copper, curios, etc.; the imports are cottons and woollens, raw sugar, oils, metals, chemicals, arms, and ammunition, watches, etc. The annual exports from Yokohama are valued at \$33,000,000, the imports at \$27,000,000. Population, 326,000.

York (British, *Caer Eborac*, or *Eborac*; Latin, *Eboracum*), a cathedral city and archbishop's see, a municipal and parliamentary borough, and capital of Yorkshire, 188 miles north of London by rail, is situated at the confluence of the Foss and the Ouse. The city proper, embracing a circuit of nearly three miles, was inclosed by walls, restored by Edward I., the portions of which still remaining have been converted into promenades, commanding a prospect of the surrounding country. There are many quaint, old-fashioned houses in the narrow streets of its older portion. The great object of attraction, however, is the minster or cathedral, the finest in England. York was the capital of Roman Britain. It was made an archiepiscopal see by Edwin of Northumbria in 624. It still ranks second among English cities, its archbishop having the title of Primate of England, and its chief magistrate takes the title of Lord-mayor. It was incorporated by Henry I., and the city boundaries were extended in 1884. The trade is local, and the industries unimportant. Population, 77,793.

York Minster, one of the chief English cathedrals, was erected at different periods, and on the site of former buildings. The first Christian church erected here, which appears to have been preceded by a Roman temple, was built by Edwin, King of Northumbria, of wood, in

625, and of stone about 635. It was damaged by fire in 741, and was rebuilt by Archbishop Albert about 780. It was again destroyed by fire in the year 1069, and rebuilt by Archbishop Thomas. It was once more burnt down in 1137, with St. Mary's Abbey, and thirty-nine parish churches in York. Archbishop Roger began to build the choir in 1171; Walter Gray added the south transept in 1227; John de Romaine, the treasurer of the cathedral, built the north transept in 1260. His son, the archbishop, laid the foundation of the nave in 1291. In 1330, William de Melton built the two western towers, which were finished by John de Birmingham in 1342. Archbishop Thoresby, in 1361, began to rebuild the choir, in accordance with the magnificence of the nave, and he also rebuilt the lantern tower. Thus, by many hands, and many contributions of multitudes on the promise of indulgences, this magnificent fabric was completed. It was first set on fire by Jonathan Martin, a lunatic, and the roof of the choir and its internal fittings destroyed, February 2, 1829; the damage, estimated at \$300,000, was repaired in 1832. An accidental fire broke out, which in one hour reduced the belfry to a shell, destroyed the roof of the nave, and much damaged the edifice, May 20, 1840.

Yo-Semite (*yō-sem'i-te*) **Valley**, one of the greatest natural wonders of North America, is in Mariposa County, California, about 140 miles southeast of San Francisco and midway between the eastern and western bases of the Sierra Nevada. It is a narrow valley at an elevation of 4,000 feet above the sea, and is itself nearly level, about six miles in length, and varying in width from one-half mile to a mile. On each side rise enormous domes and almost vertical cliffs of granite, one of them called the Half Dome, being 4,737 feet higher than the River Merced at its base, while the more important waterfalls are the Yosemite and the Bridal Veil. This valley has been added by Congress to the State of California, on condition that it shall be kept as a public park or free domain "inalienable for all time."

Yukon, a great river of Alaska, rises in British territory, and after a course of 2,000 miles falls, by a number of mouths forming a delta, into the Bering Sea; it is navigable nearly throughout, and its waters swarm with salmon three months in the year, some of them from eighty to 120 pounds in weight, and from five to six feet long.

Zambesi, one of the four great African rivers, and the fourth largest as regards both the volume of its waters and the area it drains, the other three being the Nile, the Congo, and the Niger; its head streams being the Lungebungo, the Leeba, and Leeambye. It waters a rich pastoral region, and it falls into the Indian Ocean after a course of nearly 1,600 miles, in which it drains 600,000 square miles of territory, or an area three times larger than that of France. Owing to cataracts and rapids it is only navigable in different stretches. At 900 miles from its mouth it plunges in a cataract known as the Victoria Falls, and which rivals in grandeur those even of Niagara.

SIXTH BOOK

GOVERNMENT AND POLITICS

LINCOLN'S CABINET

GOVERNMENT AND POLITICS

Abyssinia. The system of government is monarchical, and each large province is under a Ras or feudal chief, the more important of whom form a Council of State, while under them are the governors of districts and the chiefs of villages. In October, 1907, a decree was issued announcing the formation of a cabinet on European lines, and ministers of justice, finance, commerce, war, and foreign affairs were appointed. Each Ras has a standing force as garrison and at call in case of war, and a considerable number of retainers not embodied. The forces united are estimated at 100,000 men.

Afghanistan. The government of Afghanistan is monarchical under one hereditary prince, called the Ameer, whose power varies with his own character and fortune. The dominions are politically divided into the four provinces of Kabul, Turkistan, Herat, and Kandahar, Badakhshan being now under Turkistan. Each province is under a *hakim* or governor (called *Náib*), under whom nobles dispense justice after a feudal fashion. Spoliation, exaction, and embezzlement are almost universal. The Ameer has a subsidy of eighteen lakhs (£120,000) per annum from the Indian Government. By the treaty of 1893, confirmed in 1905, the Ameer accepts the advice of the British Government in regard to his relations with foreign powers, and is guaranteed against unprovoked aggression on his dominions. A standing army is maintained, and service is obligatory, but rests lightly upon the population, about one man in eight being called upon to serve. The army comprises about 27,000 infantry, 7,000 cavalry, and a strong force of artillery, apart from the irregulars, who number some 25,000 mounted men and a smaller force of infantry, capable of being increased on a war footing to 80,000 horse and 60,000 foot.

Alabama was organized as a Territory in 1817, and admitted into the Union as a State in 1819. The Legislature consists of a Senate of thirty-five members and a House of Representatives of sixty-seven members; all the legislators being elected for four years. The chief executive officer of the State is the governor, elected for four years. He is commander-in-chief of the militia, has a limited veto in legislation, and exercises the powers usually entrusted to State governors. Other elective officers are the lieutenant-governor, auditor, attorney-general, treasurer, and superintendent of education.

Argentine Republic. The Constitution of the Argentine Republic bears date May 15, 1853, with modifications in 1862. By its provisions, the executive power is left to a president, elected for six years by representatives of the fourteen provinces, equal to double the number of senators and deputies combined; while the legislative authority is vested in a national congress, consisting of a senate and a house of deputies, the former numbering thirty, two from the capital and from each province, elected

by a special body of electors in the capital, and by the legislatures in the provinces; and the latter, 120 members elected by the people. By the constitution there should be one deputy for every 33,000 inhabitants. A deputy must be 25 years of age, and have been a citizen for four years. The deputies are elected for four years, but one-half of the house must retire every two years. Senators must be 30 years of age, have been citizens for six years. One-third of the senate is renewed every three years. The two chambers meet annually from May 1st to September 30th. The members of both the senate and the house of deputies are paid for their services, each receiving 12,000 pesos per annum (about 1,060 lire). A vice-president, elected in the same manner and at the same time as the president, fills the office of chairman of the senate, but has otherwise no political power. The president is commander-in-chief of the troops, and appoints to all civil, military, and judicial offices, and has the right of presentation to bishoprics; he is responsible with the ministry for the acts of the executive; both president and vice-president must be Roman Catholics, Argentine by birth, and cannot be re-elected.

Arizona was organized as a Territory in 1863. Legislative authority is vested in a Legislative Assembly consisting of a council of twelve and a House of Representatives of twenty-four members elected by the people for two years. Acts are passed as in the States, but are subject to limitations by Congress. The Territory is represented in the Federal House of Representatives by a delegate who is elected every two years by the people, and exercises all functions of a representative except that of voting. The executive authority is vested in a governor appointed for four years, with the advice and consent of the United States Senate, by the President. He is commander-in-chief of the militia. He has a veto in legislation but its exercise may be overridden by a two-thirds vote of both houses. He has the power to summon extra sessions of the Legislature, but his reasons for doing so must first have been submitted to and approved by the President. The President appoints the secretary of state who, in case of the governor's absence or disqualification, takes the place of acting governor. Other officials are auditor, treasurer, attorney-general, and superintendent of public instruction.

Arkansas. The Constitution of 1836 was followed by those of 1864, 1868, and 1874; the last-named, amended five times from 1885 to 1902, is still in force. Amendments proposed in either house of the Legislature, approved by a majority of the members of each house and by a "majority voting at the said election" in the prescribed manner, became part of the Constitution. Legislative power is vested in the General Assembly, consisting of a Senate of thirty-six members, elected for four years, partially renewed every two years, and a House of Repre-

sentatives of 100 members elected for two years. Any bill may originate in either house. The House of Representatives has the right to impeach; the Senate tries cases of impeachment. Senators and Representatives must be citizens, the former 25 years of age and the latter 21, and both must have resided in the State two years, and in the county or district one year next before election. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia; he can appoint to executive offices which have become vacant, has unlimited pardoning power (but not in cases of impeachment), and may call special sessions of the Legislature. He has a veto which may be overridden by a two-thirds majority of the members of each house. Other officials elected for two years are the treasurer, auditor, attorney-general, superintendent of public instruction, and commissioner of mines, manufactures and agriculture.

Articles of Confederation. While the Declaration of Independence was under consideration in the Continental Congress, and before it was finally agreed upon, measures were taken for the establishment of a constitutional form of government; and on the 11th of June, 1776, it was "*Resolved*, That a committee be appointed to prepare and digest the form of a confederation to be entered into between these Colonies"; which committee was appointed the next day, June 12, and consisted of a member from each Colony, namely: Mr. Bartlett, Mr. S. Adams, Mr. Hopkins, Mr. Sherman, Mr. R. R. Livingston, Mr. Dickinson, Mr. McKean, Mr. Stone, Mr. Nelson, Mr. Hewes, Mr. E. Rutledge, and Mr. Gwinnett. On the 12th of July, 1776, the committee reported a draught of the Articles of Confederation, which was printed for the use of the members under the strictest injunctions of secrecy.

This report underwent a thorough discussion in Congress, from time to time, until the 15th of November, 1777; on which day, "Articles of Confederation and Perpetual Union" were finally agreed to in form, and they were directed to be proposed to the legislatures of all the United States, and if approved by them, they were advised to authorize their delegates to ratify the same in the Congress of the United States; and in that event they were to become conclusive. On the 17th of November, 1777, the Congress agreed upon the form of a circular letter to accompany the Articles of Confederation, which concluded with a recommendation to each of the several legislatures "to invest its delegates with competent powers, ultimately, and in the name and behalf of the State, to subscribe articles of confederation and perpetual union of the United States, and to attend Congress for that purpose on or before the 10th day of March next." This letter was signed by the President of Congress and sent, with a copy of the articles, to each State legislature.

On the 26th of June, 1778, Congress agreed upon the form of a ratification of the Articles of Confederation, and directed a copy of the articles and the ratification to be engrossed on parchment; which, on the 9th of July, 1778, having been examined and the blanks filled,

was signed by the delegates of New Hampshire, Massachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, Pennsylvania, Virginia, and South Carolina. Congress then directed that a circular letter be addressed to the States whose delegates were not present, or being present, conceived they were not authorized to sign the ratification, informing them how many and what States had ratified the Articles of Confederation, and desiring them, with all convenient dispatch, to authorize their delegates to ratify the same. Of these States, North Carolina ratified on the 21st and Georgia on the 24th of July, 1778; New Jersey on the 26th of November following; Delaware on the 5th of May, 1779; Maryland on the 1st of March, 1781; and on the 2d of March, 1781, Congress assembled under the new form of government.

ACT OF CONFEDERATION OF THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME, WE THE UNDERSIGNED DELEGATES OF THE STATES AFFIXED TO OUR NAMES, SEND GREETING.

Whereas the Delegates of the United States of America in Congress assembled did on the 15th day of November in the Year of our Lord One Thousand Seven Hundred and Seventy seven, and in the Second Year of the Independence of America agree to certain articles of Confederation and perpetual Union between the states of New Hampshire, Massachusetts-bay, Rhodeisland and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia in the Words following, viz.

"ARTICLES OF CONFEDERATION AND PERPETUAL UNION BETWEEN THE STATES OF NEWHAMPSHIRE, MASSACHUSETTS-BAY, RHODEISLAND AND PROVIDENCE PLANTATIONS, CONNECTICUT, NEW YORK, NEW JERSEY, PENNSYLVANIA, DELAWARE, MARYLAND, VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA AND GEORGIA.

ARTICLE I. The Stile of this confederacy shall be "The United States of America."

ARTICLE II. Each State retains its Sovereignty, freedom and independence, and every Power, Jurisdiction and right, which is not by this confederation expressly delegated to the United States in Congress assembled.

ARTICLE III. The said states hereby severally enter into a firm league of friendship with each other, for their common defence, the security of their Liberties, and their mutual and general welfare, binding themselves to assist each other, against all force offered to, or attacks made upon them, or any of them, on account of religion, sovereignty, trade, or any other pretence whatever.

ARTICLE IV. The better to secure and perpetuate mutual friendship and intercourse among the people of the different states in this union, the free inhabitants of each of these states, paupers, vagabonds and fugitives from Justice excepted, shall be entitled to all privileges and immunities of free citizens in the several states; and the people of each state shall have free ingress and regress to and from any other state, and shall enjoy therein all the privileges of trade and commerce, subject to the same duties, impositions and restrictions as the inhabitants thereof respectively, provided that such restrictions shall not extend so far as to prevent the removal of property imported into any state, to any other state of which the Owner is an inhabitant; provided also that no imposition, duties or restriction shall be laid by any state, on the property of the united states, or either of them.

If any Person guilty of, or charged with treason, felony, or other high misdemeanor in any state, shall flee from Justice, and be found in any of the united states, he shall upon demand of the Governor or executive power, of the state from which he fled, be delivered up and removed to the state having jurisdiction of his offence.

Full faith and credit shall be given in each of these states to the records, acts and judicial proceedings of the courts and magistrates of every other state.

ARTICLE V. For the more convenient management of the general interest of the united states, delegates shall be annually appointed in such manner as the legis-

lature of each state shall direct, to meet in Congress on the first Monday in November, in every year, with a power reserved to each state, to recall its delegates, or any of them, at any time within the year, and to send others in their stead, for the remainder of the Year.

No state shall be represented in Congress by less than two, nor by more than seven Members; and no person shall be capable of being a delegate for more than three years in any term of six years; nor shall any person, being a delegate, be capable of holding any office under the united states, for which he, or another for his benefit receives any salary, fees or emolument of any kind.

Each state shall maintain its own delegates in a meeting of the states, and while they act as members of the committee of the states.

In determining questions in the united states, in Congress assembled, each state shall have one vote.

Freedom of speech and debate in Congress shall not be impeached or questioned in any Court, or place out of Congress, and the members of congress shall be protected in their persons from arrests and imprisonments, during the time of their going to and from, and attendance on congress, except for treason, felony, or breach of the peace.

ARTICLE VI. No state without the Consent of the united states in congress assembled, shall send any embassy to, or receive any embassy from, or enter into any conference, agreement, alliance or treaty with any King prince or state; nor shall any person holding any office of profit or trust under the united states, or any of them, accept of any present, emolument, office or title of any kind whatever from any king, prince or foreign state; nor shall the united states in congress assembled, or any of them, grant any title of nobility.

No two or more states shall enter into any treaty, confederation or alliance whatever between them, without the consent of the united states in congress assembled, specifying accurately the purposes for which the same is to be entered into, and how long it shall continue.

No state shall lay any imposts or duties, which may interfere with any stipulations in treaties, entered into by the united states in congress assembled with any king, prince or state, in pursuance of any treaties already proposed by congress to the courts of France and Spain.

No vessels of war shall be kept up in time of peace by any state, except such number only, as shall be deemed necessary by the united states in congress assembled, for the defence of such state, or its trade; nor shall any body of forces be kept up by any state, in time of peace, except such number only, as in the judgment of the united states, in congress assembled, shall be deemed requisite to garrison the forts necessary for the defence of such state; but every state shall always keep up a well regulated and disciplined militia, sufficiently armed and accoutred, and shall provide and constantly have ready for use, in public stores, a due number of field-pieces and tents, and a proper quantity of arms, ammunition and camp equipage.

No state shall engage in any war without the consent of the united states in congress assembled, unless such state be actually invaded by enemies, or shall have received certain advice of a resolution being formed by some nation of Indians to invade such state, and the danger is so imminent as not to admit of a delay, till the united states in congress assembled can be consulted: nor shall any state grant commissions to any ships or vessels of war, nor letters of marque or reprisal, except it be after a declaration of war by the united states in congress assembled, and then only against the kingdom or state and the subjects thereof, against which war has been so declared, and under such regulations as shall be established by the united states in congress assembled, unless such state be infested by pirates, in which case vessels of war may be fitted out for that occasion, and kept so long as the danger shall continue, or until the united states in congress assembled shall determine otherwise.

ARTICLE VII. When land-forces are raised by any state for the common defence, all officers of or under the rank of colonel, shall be appointed by the legislature of each state respectively by whom such forces shall be raised, or in such manner as such state shall direct, and all vacancies shall be filled up by the state which first made the appointment.

ARTICLE VIII. All charges of war, and all other expenses that shall be incurred for the common defence or general welfare, and allowed by the united states in congress assembled, shall be defrayed out of a common treasury, which shall be supplied by the several states, in proportion to the value of all land within each state, granted to or surveyed for any Person, as such land

and the buildings and improvements thereon shall be estimated according to such mode as the united states in congress assembled, shall from time to time direct and appoint.

The taxes for paying that proportion shall be laid and levied by the authority and direction of the legislatures of the several states within the time agreed upon by the united states in congress assembled.

ARTICLE IX. The united states in congress assembled, shall have the sole and exclusive right and power of determining on peace and war, except in the cases mentioned in the sixth article — of sending and receiving ambassadors — entering into treaties and alliances, provided that no treaty of commerce shall be made whereby the legislative power of the respective states shall be restrained from imposing such imposts and duties on foreigners, as their own people are subjected to, or from prohibiting the exportation or importation of any species of goods or commodities whatsoever — of establishing rules for deciding in all cases, what captures on land or water shall be legal, and in what manner prizes taken by land or naval forces in the service of the united states shall be divided or appropriated — of granting letters of marque and reprisal in times of peace — appointing courts for the trial of pirates and felonies committed on the high seas and establishing courts for receiving and determining finally appeals in all cases of captures, provided that no member of congress shall be appointed a judge of any of the said courts.

The united states in congress assembled shall also be the last resort on appeal in all disputes and differences now subsisting or that hereafter may arise between two or more states concerning boundary, jurisdiction or any other cause whatever; which authority shall always be exercised in the manner following: Whenever the legislative or executive authority or lawful agent of any state in controversy with another shall present a petition to congress stating the matter in question and praying for a hearing, notice thereof shall be given by order of congress to the legislative or executive authority of the other state in controversy, and a day assigned for the appearance of the parties by their lawful agents, who shall then be directed to appoint by joint consent, commissioners or judges to constitute a court for hearing and determining the matter in question: but if they cannot agree, congress shall name three persons out of each of the united states, and from the list of such persons each party shall alternately strike out one, the petitioners beginning, until the number shall be reduced to thirteen; and from that number not less than seven, nor more than nine names as congress shall direct, shall in the presence of congress be drawn out by lot, and the persons whose names shall be so drawn or any five of them, shall be commissioners or judges, to hear and finally determine the controversy, so always as a major part of the judges who shall hear the cause shall agree in the determination: and if either party shall neglect to attend at the day appointed, without showing reasons, which congress shall judge sufficient, or being present shall refuse to strike, the congress shall proceed to nominate three persons out of each State, and the secretary of congress shall strike in behalf of such party absent or refusing; and the judgment and sentence of the court to be appointed, in the manner before prescribed, shall be final and conclusive; and if any of the parties shall refuse to submit to the authority of such court, or to appear or defend their claim or cause, the court shall nevertheless proceed to pronounce sentence, or judgment, which shall in like manner be final and decisive, the judgment or sentence and other proceedings being in either case transmitted to congress, and lodged among the acts of congress for the security of the parties concerned: provided that every commissioner, before he sits in judgment, shall take an oath to be administered by one of the judges of the supreme or superior court of the state, where the cause shall be tried, "well and truly to hear and determine the matter in question, according to the best of his judgment, without favour, affection or hope of reward:" provided also that no state shall be deprived of territory for the benefit of the united states.

All controversies concerning the private right of soil claimed under different grants of two or more states, whose jurisdictions as they may respect such lands, and the states which passed such grants are adjusted, the said grants or either of them being at the same time claimed to have originated antecedent to such settlement of jurisdiction, shall on the petition of either party to the congress of the united states, be finally determined as near as may be in the same manner as is before prescribed for deciding disputes respecting territorial jurisdiction between different states.

The united states in congress assembled shall also have the sole and exclusive right and power of regulating the alloy and value of coin struck by their own authority, or by that of the respective states—fixing the standard of weights and measures throughout the united states—regulating the trade and managing all affairs with the Indians, not members of any of the states, provided that the legislative right of any state within its own limits be not infringed or violated—establishing and regulating post-offices from one state to another, throughout all the united states, and exacting such postage on the papers passing thro' the same as may be requisite to defray the expences of the said office—appointing all officers of the land forces, in the service of the united states, excepting regimental officers—appointing all the officers of the naval forces, and commissioning all officers whatever in the service of the united states—making rules for the government and regulation of the said land and naval forces, and directing their operations.

The united states in congress assembled shall have authority to appoint a committee, to sit in the recess of congress, to be denominated "A Committee of the States," and to consist of one delegate from each state; and to appoint such other committees and civil officers as may be necessary for managing the general affairs of the united states under their direction—to appoint one of their number to preside, provided that no person be allowed to serve in the office of president more than one year in any term of three years; to ascertain the necessary sums of Money to be raised for the service of the united states, and to appropriate and apply the same for defraying the public expences—to borrow money, or emit bills on the credit of the united states, transmitting every half year to the respective states an account of the sums of money so borrowed or emitted,—to build and equip a navy—to agree upon the number of land forces, and to make requisitions from each state for its quota, in proportion to the number of white inhabitants in such state; which requisitions shall be binding, and thereupon the legislature of each state shall appoint the regimental officers, raise the men and cloath, arm and equip them in a soldier like manner, at the expence of the united states; and the officers and men so cloathed, armed and equipped shall march to the place appointed, and within the time agreed on by the united states in congress assembled: But if the united states in congress assembled shall, on consideration of circumstances judge proper that any state should not raise men, or should raise a smaller number than its quota, and that any other state should raise a greater number of men than the quota thereof, such extra number shall be raised, officered, cloathed, armed and equipped in the same manner as the quota of such state, unless the legislature of such state shall judge that such extra number cannot be safely spared out of the same, in which case they shall raise officer, cloath, arm and equip as many of such extra number as they judge can be safely spared. And the officers and men so cloathed, armed and equipped, shall march to the place appointed, and within the time agreed on by the united states in congress assembled.

The united states in congress assembled shall never engage in a war, nor grant letters of marque and reprisal in time of peace, nor enter into any treaties or alliances, nor coin money, nor regulate the value thereof, nor ascertain the sums and expences necessary for the defence and welfare of the united states, or any of them, nor emit bills, nor borrow money on the credit of the united states, nor appropriate money, nor agree upon the number of vessels of war, to be built or purchased, or the number of land or sea forces to be raised, nor appoint a commander-in-chief of the army or navy, unless nine states assent to the same: nor shall a question on any other point, except for adjourning from day to day be determined, unless by the votes of a majority of the united states in congress assembled.

The Congress of the united states shall have power to adjourn to any time within the year, and to any place within the united states, so that no period of adjournment be for a longer duration than the space of six Months, and shall publish the Journal of their proceedings monthly, except such parts thereof relating to treaties, alliances or military operations, as in their judgment require secrecy; and the yeas and nays of the delegates of each state on any question shall be entered on the Journal, when it is desired by any delegate; and the delegates of a state, or any of them, at his or their request shall be furnished with a transcript of the said Journal, except such parts as are above excepted, to lay before the legislatures of the several states.

ARTICLE X. The committee of the states, or any

nine of them, shall be authorized to execute, in the recess of congress, such of the powers of congress as the united states in congress assembled, by the consent of nine states, shall from time to time think expedient to vest them with; provided that no power be delegated to the said committee, for the exercise of which, by the articles of confederation, the voice of nine states in the congress of the united states assembled is requisite.

ARTICLE XI. Canada acceding to this confederation, and joining in the measures of the united states, shall be admitted into, and entitled to all the advantages of this union: but no other colony shall be admitted into the same, unless such admission be agreed to by nine states.

ARTICLE XII. All bills of credit emitted, monies borrowed and debts contracted by, or under the authority of congress, before the assembling of the united states, in pursuance of the present confederation, shall be deemed and considered as a charge against the united states, for payment and satisfaction whereof the said united states, and the public faith are hereby solemnly pledged.

ARTICLE XIII. Every state shall abide by the determinations of the united states in congress assembled, on all questions which by this confederation are submitted to them. And the Articles of this confederation shall be inviolably observed by every state, and the union shall be perpetual; nor shall any alteration at any time hereafter be made in any of them; unless such alteration be agreed to in a congress of the united states, and be afterwards confirmed by the legislatures of every state.

AND WHEREAS it hath pleased the Great Governor of the World to incline the hearts of the legislatures we respectively represent in congress, to approve of, and to authorize us to ratify the said articles of confederation and perpetual union. KNOW YE that we the undersigned delegates, by virtue of the power and authority to us given for that purpose, do by these presents, in the name and in behalf of our respective constituents, fully and entirely ratify and confirm each and every of the said articles of confederation and perpetual union, and all and singular the matters and things therein contained: And we do further solemnly plight and engage the faith of our respective constituents, that they shall abide by the determinations of the united states in congress assembled, on all questions, which by the said confederation are submitted to them. And that the articles thereof shall be inviolably observed by the states we respectively represent, and that the union shall be perpetual.

IN WITNESS whereof we have hereunto set our hands in Congress. DONE at Philadelphia in the state of Pennsylvania the ninth Day of July in the Year of our Lord one Thousand seven Hundred and Seventy-eight, and in the third year of the independence of America.

On the part and behalf of the State of New Hampshire.
JOSIAH BARTLETT, JOHN WENTWORTH, JUNR.
August 8, 1778.

On the part and behalf of the State of Massachusetts Bay.
JOHN HANCOCK, FRANCIS DANA,
SAMUEL ADAMS, JAMES LOVELL,
ELBRIDGE GERRY, SAMUEL HOLTEN.

On the part and in behalf of the State of Rhode Island and Providence Plantations.

WILLIAM ELLERY, JOHN COLLINS.
HENRY MARCHANT,

On the part and behalf of the State of Connecticut.
ROGER SHERMAN, TITUS HOSMER,
SAMUEL HUNTINGTON, ANDREW ADAMS.
OLIVER WOLCOTT,

On the part and behalf of the State of New York.
JAS DUANE, WILLIAM DUER,
FRAS LEWIS, GOUVR MORRIS.

On the part and in behalf of the State of New Jersey.
JNO WITHERSPOON, NATHL SCUDDER, Nov. 26,
1778.

On the part and behalf of the State of Pennsylvania.
ROBT. MORRIS, WILLIAM CLINGAN,
DANIEL ROBERDEAU, JOSEPH REED, July 22nd,
JONA BAYARD SMITH, 1778.

On the part and behalf of the State of Delaware.
JOHN DICKINSON, May 5, THO. M'KEAN, Feb. 12,
1779, 1779.
NICHOLAS VAN DYKE,

On the part and behalf of the State of Maryland.
JOHN HANSON, March 1, 1781,
DANIEL CARROLL Do

On the part and behalf of the State of Virginia.

RICHARD HENRY LEE, JNO HARVIE,
JOHN BANISTER, FRANCIS LIGHTFOOT LEE.
THOMAS ADAMS,

On the part and behalf of the State of North Carolina.

JOHN PENN, July 21, 1778, JNO. WILLIAMS.
CORN. HARNETT.

On the part and behalf of the State of South Carolina.

HENRY LAURENS, RICHARD HUTSON,
WILLIAM HENRY DRAYTON, THOS. HEYWARD, JUNR
JNO MATHEWS,

On the part and behalf of the State of Georgia.

JNO WALTON, 24th July, EDWD. LANGWORTHY.
1778.
EDWD TELFAIR,

Austria-Hungary is a monarchy composed of a Cisleithan portion, officially known as Austria, and a Transleithan portion known as Hungary. The reigning dynasty is the Habsburg-Lorraine dynasty, and the law of succession is that the Crown passes by right of primogeniture and lineal succession to males, or, in default of males, to females. Each country has according to the compromise made in 1867, its own constitution, a limited monarchy, and each possesses a separate parliament, but they have united under a common sovereign in the establishment of a common army and navy, and in the conduct of foreign affairs. The control in regard to common affairs and the voting of money for common purposes are entrusted to a supreme body known as the delegations. Of these there are two, each composed of sixty members, representing the legislative bodies of Austria and Hungary, the upper houses returning twenty and the lower houses forty delegates. The members of the delegations are appointed for one year, and are summoned annually by the emperor alternately at Vienna and at Budapest. Subject to the delegations are the three executive departments for foreign affairs, war, and common finance, and the common court of public accounts. The compromise is expressly subject to periodical revision, only so far as it affects the regulation of the fiscal and commercial affairs of the two countries, the quota paid by them to the common expenses of the empire, and the privileges of the Austro-Hungarian Bank. After prolonged negotiations a new customs and commercial treaty was signed, October 8, 1907, which recognized the equality and freedom of action of each contracting party, and a separate (but identical) customs tariff for each country.

Belgium is a kingdom under Leopold II., of Saxe-Coburg, and by the constitution of 1831, following on the secession from the Netherlands in 1830, declared to be a constitutional representative, and hereditary monarchy. Belgium is a neutral power, her neutrality being guaranteed under the Treaty of London, 1831, by Great Britain, Austria, Prussia, and Russia. The executive power is vested in the king and his ministers, the legislative power jointly in king, senate, and chamber of deputies. All citizens over 25, who have lived at least a year in the same commune, have a vote. An additional vote is accorded them if they are (1) either 35 years of age, married, with legitimate offspring, and pay a tax of at least five francs to the state; or (2) are 25 years old and own immovable

property to the value of at least 2,000 francs, or have a corresponding income from such property, or for two years have received at least 100 francs a year from Belgium funds. Two additional votes are given to citizens of 25 years of age who possess a diploma of higher education or have filled a public or private position implying the possession of such education. No citizen can have more than three votes. From this electorate both houses of the legislature are chosen, save for those senators who are elected indirectly. The senate of 110 members is elected for eight years. The number of members elected directly, eighty-three, is equal to half the number of deputies. The indirectly elected senators are chosen by the provincial councils, two for each province with less than 500,000 inhabitants; three for each with more than 500,000 and less 1,000,000; and four for each with over 1,000,000. The deputies are elected for four years, in the proportion of one to every 40,000 inhabitants, and number 166. One-half retire every two years. Senators must be 40, and deputies 25 years of age. Each deputy receives 4,000 francs yearly, and travels free.

Bolivia. The constitution of the Republic of Bolivia bears date October 28, 1880. By its provisions the executive power is vested in a president, elected for a term of four years by direct popular vote, and not eligible for reelection at the termination of his period of office; while the legislative authority rests with a congress of two chambers, called the senate, and the chamber of deputies. The suffrage is possessed by all who can read and write. There are sixteen senators (two for each department) elected for six years, and sixty-nine deputies elected for four years. Both senators and deputies are elected by direct vote of the people. Of the senators one-third retire every two years; of the deputies one-half retire every two years. Senators and deputies receive a salary of 500 boliviños (40 lire) per month during the sittings, which, as a rule, last for sixty days, but may be extended to ninety days. Extraordinary sessions may be held for special purposes. There are a president, two vice-presidents and a ministry, divided into six departments — of foreign relations and worship; finance and industry; government and fomento; justice and education; war; colonization and agriculture.

Brazil. A republic on the east coast of Central South America, which, until 1889, was an empire under Emperor Pedro II., of the house of Braganza. A revolution then, however, broke out, and a new constitution was adopted in February 1891. The chief feature of this was the establishment of the old provinces as twenty-one separate states, self-governed except for federal purposes, but with all fiscal matters, the maintenance of order, the defense of the country, the currency, reserved to the federal government. The executive authority is in the hands of the president, elected for four years only by the people directly. Legislative authority is exercised by the national congress, composed of a senate of sixty-three members, directly elected by the states for nine years, one-third retiring every three years, and a chamber of deputies of 212 members. Deputies and senators are paid.

The former must have been citizens for four and the latter for six years. Deputies are elected directly, with provision for minority representation, for three years, one member being chosen for every 70,000 of the population:

British Empire. The United Kingdom of Great Britain and Ireland, the nucleus around which the British Empire has been built, was perfected in 1603, when the crowns of England and Scotland were united. The executive power of the empire vests in the sovereign, through his ministers. The real power of the empire, however, is to be found in Parliament, a body which not only has complete legislative power, but which exercises, through the Lower House, much authority in executive matters. Parliament consists of an Upper House of Lords and a Lower House of Commons. It lasts seven years or until dissolved by the sovereign, and it usually meets annually for a term of about six months. The members of the House of Lords are peers, who hold either by hereditary right, or by crown appointment to the peerage. In 1908 there were 616 peers. The House of Commons consists of members elected from counties, boroughs, and universities — 670 in all in 1908.

The Colonies proper form three classes: — (1) The *Crown Colonies*, which are entirely controlled by the home government; (2) those possessing *Representative Institutions*, in which the Crown has no more than a veto on legislation, but the home government retains the control of public officers; and (3) those possessing *Responsible Government*, in which the home government has no control over any public officer, though the Crown appoints the governor and still retains a veto on legislation.

The established Church of England is the Protestant Episcopal Church, of which the king is the supreme head; but all religions are tolerated and are equal at law. Public instruction is not compulsory, but the national board of education maintains control of the school boards and requires that accommodations be provided for all children between the ages of five and fourteen years. Secondary education is not controlled by the government, but the university system is, perhaps, more perfectly developed in England than in any other country. England, Ireland, Scotland, and Wales each has its graded systems of courts of justice.

The Parliament.—The present form of Parliament, divided into two houses, the Lords and the Commons, dates from the middle of the Fourteenth Century. The members of the House of Commons are elected by popular vote, about one-sixth of the population being electors, and the election must be by secret vote by ballot. The House of Lords is composed of peers, who hold their seats by hereditary right, by creation of the sovereign, by virtue of office (the bishops), by election for life (the Irish peers), and by election for the term of Parliament (the Scottish peers).

No one under 21 years of age can be a member of Parliament. All clergymen of the Church of England, ministers of the Church of Scotland, and Roman Catholic clergymen, and

all government contractors and sheriffs or returning officers are disqualified. No English or Scottish peer can be elected to the House of Commons; but non-representative Irish peers are eligible for membership.

The present Cabinet consists of the following offices:

1. *Prime Minister and (usually) First Lord of the Treasury.*
2. *Lord High Chancellor.*
3. *Lord Privy Seal.*
4. *Lord President of the Council and President of the Board of Education.*
5. *Chancellor of the Exchequer.*
6. *Secretary of State for Home Affairs.*
7. *Secretary of State for Foreign Affairs.*
8. *Secretary of State for The Colonies.*
9. *Secretary of State for India.*
10. *Secretary of State for War.*
11. *First Lord of the Admiralty.*
12. *Lord Chancellor of Ireland.*
13. *President of Local Government Board.*
14. *President of Board of Trade.*
15. *Chief Secretary to the Lord Lieutenant of Ireland.*
16. *Secretary for Scotland.*
17. *President of Board of Agriculture and Fisheries.*
18. *Postmaster General.*
19. *Chancellor of the Duchy of Lancaster.*

The right of Edward VII. to the throne of England rests upon the statute by which the succession to the Crown of Great Britain and Ireland was vested upon Princess Sophia of Hanover and "the heirs of her body, being Protestants."

The present ruler is "Edward VII., by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions Beyond the Seas, King, Defender of the Faith, Emperor of India," as his title was declared under the Royal Title Act, proclaimed November 4, 1901.

The Heir Apparent.—The heir apparent to the throne is the eldest son of the King, George Frederick, Prince of Wales, Duke of Cornwall and York, and Duke of Rothesay, in Scotland.

Bulgaria. By the treaty of Berlin, 1878, Bulgaria was constituted an autonomous and tributary principality under the suzerainty of the Porte. In 1885, Eastern Roumelia was united to Bulgaria. The executive power is vested in the prince, assisted by a council of ministers, and the legislative power in a single chamber, the *Sobranje*, or national assembly, elected for five years by manhood suffrage in the proportion of one member to every 20,000 of the population. There is also a Great *Sobranje*, consisting of delegates selected in the proportion of one to 10,000 of the population, to which constitutional and other questions, such as a vacancy on the throne or the acquisition of territory, must be referred.

California. A Constitution was framed by a convention of delegates assembled in the pueblo of Monterey in the year 1849, but it did not become effective until the Congress of the United States passed the act of admission, September 9, 1850. In 1862 the Constitution received important amendments, and in 1879

a new Constitution was adopted. Since that year numerous amendments have been made, but all of minor importance. To amend the California Constitution it is necessary only to secure a two-thirds majority in each branch of the Legislature, and a simple majority vote for the amendments at the next popular election. The State Legislature is composed of the Senate, a body of forty members, elected for terms of four years—half the number being elected each two years—and the Assembly, eighty members, elected for two years. The qualifications for eligibility to the Senate or Assembly are citizenship of the State for three years and residence in the district for one year. Neither house of the Legislature possesses any advantage over the other in originating legislation. Certain of the governor's appointments must be submitted to the Senate for approval. In impeachment cases the Assembly brings the impeachment, and it is tried by the Senate. The present Constitution contains numerous specific prohibitions of local and special laws, besides forbidding them in all cases where a general law can be made applicable. In 1870 there was adopted a complete set of codes—political, civil, civil procedure, and penal—and these have been subject to amendment at each session of the Legislature. At the session of 1905 the penal code and code of civil procedure were revised. The term of office of the governor is four years. He possesses supreme executive authority, issues all commissions, is commander-in-chief of the army and navy, and is charged with responsibility to see that all laws are faithfully executed. All State boards and commissions, with two or three exceptions, are filled by his appointment, the concurrence of the Senate being required in certain instances, and in others not. He is empowered to grant pardons, but where a person has been more than once convicted there is required the assent of a majority of the justices of the Supreme Court. The governor is vested with authority to call the Legislature together in extraordinary session. During sessions of the Legislature the governor may veto any bill which has passed, and it does not become law unless it again passes, and by a two-thirds vote in each house. Besides the governor and secretary of state the other officials are the lieutenant-governor, who is presiding officer of the Senate, the State controller, the attorney-general, the State treasurer, the State surveyor-general, who is also registrar of the land office, the superintendent of public instruction, and the State printer. The most important State boards and commissions are: The board of education; the board of regents of the university, appointed by the governor for terms of sixteen years; the State board of prison directors, appointed by the governor for terms of ten years, and having entire control of the penitentiaries; the State board of equalization, elected at general elections, and dealing with the assessment of property for revenue purposes; the railroad commission, elected and vested with authority to regulate railroad charges; the bank commission, the State board of health, the insurance

commission, and the commission of public works, the State board of charities and corrections, board of agriculture, and the commission in lunacy. The last-named, which is an *ex-officio* commission made up of State officers, controls the hospitals for the insane. California is divided into fifty-seven counties, one of which—San Francisco—has a combined county and city government; the other fifty-six have county governments distinct from the government of the cities and towns which they contain. County governments are created by the Legislature by general act. In each county government the legislative authority is vested in a board of supervisors of five members elected from districts. The other county officers, with few exceptions, are also elective.

City charters are framed by boards of freeholders elected for that purpose; are submitted to the voters of the cities for which they are framed, and must afterwards be ratified by the Legislature. Towns are incorporated by vote of their inhabitants under a general municipal corporations act, providing for six different classes of corporations, according to population.

Canada. The Dominion of Canada originally consisted of the two provinces of Canada—Upper and Lower—Nova Scotia and New Brunswick, but the "British North American Act," which was passed in 1867, not only provided for the consolidation of these provinces, but made provision for the admission of British Columbia, Prince Edward Island, the Northwest Territories and Newfoundland, a privilege of which Newfoundland alone has not availed herself. In accordance with this act of consolidation the Constitution of the Dominion is "similar in principle to that of the United Kingdom," and, while the executive authority is vested in the British Sovereign, the legislative power of the Dominion is exercised by a Parliament of two Houses—the Senate and the House of Commons. Each province forming the Dominion has a separate Parliament and administration, a lieutenant-governor being at the head of all provincial bodies. The Senate of the Dominion is composed of eighty-one members, who have been nominated for life. Each must be at least 30 years of age, a born or naturalized subject and possessed of \$4,000 worth of property in the province from which he was appointed. The 213 members of the House are elected by the vote of their constituencies, the electors of which are qualified by the act of each provincial assembly. The Speaker of the Senate and House each receives a salary of \$4,000, while each member of the two houses is granted a session allowance of \$1,500, with ten cents per mile for traveling expenses. In cases of absence, except for sickness, the sum of \$8 per diem is deducted. The Governor-General, who receives a salary of \$50,000 per annum, is appointed by the Federal Government for a term of five years, and he is assisted in his functions by a council composed of fourteen heads of departments, each of whom receives a salary of \$7,000 per annum, except the Premier, who has a salary of \$8,000 per annum. The heads of departments are as follows:

1. *Premier and President of the Council.*

2. *Secretary of State.*
3. *Minister of Trade and Commerce.*
4. *Minister of Justice and Attorney-General.*
5. *Minister of Marine and Fisheries.*
6. *Minister of Railways and Canals.*
7. *Minister of Militia and Defence.*
8. *Minister of Finance.*
9. *Postmaster-General and Minister of Labor.*
10. *Minister of Agriculture.*
11. *Minister of Public Works.*
12. *Minister of Interior.*
13. *Minister of Customs.*
14. *Minister of Inland Revenue.*

The representation from the several provinces is as follows: Ontario, twenty-four Senators, ninety-two Commons; Quebec, twenty-four Senators, sixty-five Commons; Nova Scotia, ten Senators, twenty Commons; New Brunswick, ten Senators, fourteen Commons; Manitoba, four Senators, seven Commons; British Columbia, three Senators, six Commons; Prince Edward Island, four Senators, five Commons; Northwest Territories, two Senators, four Commons.

Provincial Government. By the provisions of the Consolidation Act each province has full power to regulate its own local affairs and dispose of its own revenue, provided it does not interfere with the policy of the central government. The lieutenant-governor of each province is appointed by the Governor-General, while the other officials are elected by the people. There is a very perfect system of municipal government throughout the Dominion, the counties and townships having local governments or councils which regulate their local taxation. The administration of justice is based on the English model, except in Quebec Province, where the old French law prevails. The only court that has jurisdiction throughout the Dominion (except the Exchequer and the Maritime Court), is the Supreme Court, the ultimate court of appeal in civil and criminal cases. In certain cases an appeal may be had to her Majesty's Privy Council.

Chile. Chile is a Republic, with laws administered under a Constitution formed in 1833 and subsequently amended. The President is elected for a term of five years by indirect vote, much as the like officer is chosen in the United States. He is assisted by a Cabinet as follows:

Secretary of Premier and Secretary of the Interior.

Secretary of Foreign Affairs.

Secretary of Justice and Public Instruction.

Secretary of Finance.

Secretary of War and Marine

Secretary of Industry and Public Works.

He is not eligible for reelection for a succeeding term. The day of election is June 25th of the last year of the President's term of office, and the inaugural date is September 18th of the same year. Congress consists of two Houses—a Senate and a Chamber of Deputies. Members of the Senate are elected by popular vote for a term of six years, and Deputies are chosen in the same way for a term of three years. The proportion is one Senator for three Deputies. Electors must be 21 years of age and able to read and write. The republic is divided

into provinces, which are subdivided into departments. Local government is exercised in the former by Intendents and in the latter by Gobernadores. The police of Santiago and the capitals of the provinces are organized and regulated by the President of the Republic.

China. The ninth Emperor of China, the present sovereign of the Manchu dynasty of Tsing, which destroyed the native dynasty of Ming in 1644, reigns under the style of Kuang-su. In this country there is no law relative to hereditary succession to the throne, the right being given each sovereign to appoint as his successor a member of the family of a younger generation. In the case of the late Emperor Tung-Chi, who died in his 80th year, no successor was named, but, as a result of arrangements conducted by the Empress Dowager Tzu-Hszi (born November 17, 1834), widow of the Emperor Hien-Feng, predecessor and father of Tung-Chi, in conjunction with Prince Chun, the infant son of the latter was designated as the nominal occupant of the throne. The young Emperor, having become of age, assumed the government in March, 1887. Two years later, in February, he assumed full control. An imperial edict stating that the Emperor had resigned power to the Empress Dowager was issued September 22, 1898, and as a result the direction of affairs has been in her hands ever since. Kuk Wel (whose official name is Pu Tsing), the son of the Prince of Tuan, was, on January 24, 1900, declared by decree the successor to Tung Chi.

The Ministry.—Civil Administration (Lipou), Soun Chia-Nai; Finance (Houpou), Young Lou; Religion and Ceremonies (Lipou), Shihhsu; War (Pingpou), Koun-Kang; Justice (Hsingpou), Kouei-heng; Foreign Office (Li-fan-yuan), Ching-hsin and A-Ko-tan; Censors (Tou-tcha-youen), Pouliang and Lu-jun-hsiang; Imperial Academy (Han-lin-youan), K'oun-kang; Railroads and Mines, Wang-wen-shao; Counselors of the Empire (Cheng-wou-chou), Ch'ing, Young-lou, K'oun-Kang, Wang-wen-shao, Lou-ch'ouan-lin, Ch'u-houng-chi, Chan-chih-fung, Liou-k'ou-yi.

The Nation.—The laws of the empire are laid down in the Ta-ts'ing-hwei-tien, or "Collected Regulations" of the "Ts'ing dynasty," and are founded on the idea that the government of the State be based upon the government of its family. To the Chun Chi Chu, or the Privy Council, or Grand Council, is intrusted the supreme direction of the empire. The supreme direction of the administration is in the hands of the Nei-Ko, or Cabinet, which is composed of four members two of Manchu and two of Chinese origin. In addition to the above are two assistants from the Han-Lin, of Great College, whose duties are to see that nothing contrary to both the civil and religious laws of the empire contained in the Ta-ts'ing-hwei-tien and sacred books of Confucius is done. The members of this Cabinet are denominated Ta-hsio-shih, or Ministers of State; and under their orders are the Chu-pu, or seven boards of government. Each of these boards is presided over by a Manchu and a Chinese. These boards are as follows: (1) The Board of Civil Appointments, looking to the conduct and administration of all civil affairs; (2) The Board of Revenues, in charge of all financial affairs;

(3) The Board of Rites and Ceremonies, whose duty is to enforce the laws and customs to be observed by the people; (4) The Military Board; (5) The Board of Public Works; (6) The High Tribunal of Criminal Jurisdiction, and (7) The Admiralty Board at Tientsin, established in 1885. A body that is independent of the Government and theoretically is above the central administration is the Tu-ch'a-yuen, or Board of Public Censors. The membership numbers between forty and fifty, who are under two presidents, one of Manchu and the other of Chinese birth. By an ancient custom of the empire all the members of the board are permitted to present any remonstrance to the sovereign. It is necessary that one censor be present at the meetings of each of the Government Boards. On January 19, 1861, the Tsungli Yamen, or Foreign Office, was created by a decree, and in July, 1902, it was superseded by the formation of a new Foreign Office designated as the Wai-wu-pu. Prince Ching was appointed president, and this office, with its four secretaries, took precedence over all other boards. On the conclusion of the war between Russia and Japan in 1905, a treaty and additional agreement relating to Manchuria were entered into between Japan and China. By the former the Chinese Government consented to all the transfers and assignments made by Russia to Japan in Manchuria; and the latter provides, *inter alia*, for the speedy opening by China of the following cities and towns in Manchuria as places of international residence and trade:—Feng-huang-ch'eng, Liao-yang, Hsinmintun, Tung-chiang-tzu (on the Liao River), and Fa-kumen in Fengtien Province; Ch'ang-ch'un, Kirin, Harbin, Ninguta, Hunch'un, and Sansing in the Kirin Province; and Tsitsihar, Hailar, Aihun, and Manchuli in the Heilungchiang Province.

Colombia. The Republic of Colombia gained its independence of Spain in 1819, and was officially constituted December 27, 1819. It split up into Venezuela, Ecuador, and the Republic of New Granada, February 29, 1832. The Constitution of April 1, 1858, changed the Republic into a confederation of eight States, under the name of Confederation Granadina. On September 20, 1861, the convention of Bogotá brought out the confederation under the new name of United States of New Granada, with nine States. On May 8, 1863, an improved Constitution was formed, and the States reverted to the old name Colombia—United States of Colombia. The revolution of 1885 brought about another change, and the national council of Bogotá, composed of three delegates from each State, promulgated the Constitution of August 4, 1886. The sovereignty of the States was abolished, and they became simple departments, with governors appointed by the President of the Republic, though they have retained some of their old rights, such as the management of their own finances. The legislative power rests with a Congress of two Houses, called the Senate and the House of Representatives. The Senate contains forty-eight Senators of whom three are chosen for the Federal District by the President and two Cabinet Ministers, and three for each department by the governor, his secretaries and the president or judge of the Court of

Accounts of each department. The House of Representatives consists of sixty-seven members elected by the people in twenty-four electoral circumscriptions (one for every 50,000 of population), but in each of the four intendencies appointed by the Intendente, his secretary and three inhabitants chosen by the municipal council of the capital of the intendency. Senators and Representatives are elected for four years. The President is chosen by Congress in public session and by an absolute majority of votes. His term of office is four years, but the present President is appointed exceptionally for ten years from January 1, 1905. Congress elects, for a term of two years, a substitute, who, failing the President and Vice-President during a Presidential term, fills the vacancy. The Ministries are those of the Interior, Foreign Affairs, Finance and the Treasury, War, Public Instruction, and Public Works.

Colorado. The original Constitution of 1876 is still in force in Colorado, though up to 1904 it has been ten times amended. The Legislature, known as the General Assembly, consists of a Senate of thirty-five members elected for four years, one-half retiring every two years, and of a House of Representatives of sixty-five members elected for two years. Sessions are biennial and are limited to ninety days. All bills for raising revenue must originate in the House of Representatives. It is the right of the House of Representatives to impeach; of the Senators, to try and determine impeachments. Amendments to the Constitution may be proposed in either House, but to become part of the Constitution they must have received the sanction of a two-thirds vote of all the members of each House and of a majority ratification by popular vote. Eligible to either House are all citizens of the United States twenty-five years of age, and twelve months resident in the district for which they seek election. The executive power is vested in a governor elected for two years. He is commander-in-chief of the State militia. It rests with him to nominate and, by and with the advice and consent of the Senate, appoint officers not otherwise provided for by law or the Constitution. He may summon special sessions of the Legislature, and has a limited power to grant reprieves, commutations, and pardons. In legislation he has the power of veto, which may be overridden by a two-thirds vote of each House. The State officials are the governor, secretary of state, a lieutenant-governor, an auditor, a treasurer, an attorney-general, and a superintendent of public instruction, all of whom, with the governor, are elected on a two-year tenure.

Connecticut. The present Constitution of Connecticut was adopted in 1818 and there have been thirty-one amendments to it at different times. The Legislative power is vested in the General Assembly, consisting of a Senate and a House of Representatives. The Senate at present consists of thirty-five members, one from each of the senatorial districts into which the State is divided. The House of Representatives consists of 255 members, who must be electors of the towns for which they are elected, each town of over 5,000 inhabitants being entitled to

send two representatives. Members of each House are elected for the term of two years. The supreme executive power is vested in a governor elected for two years by the legal voters. He must be an elector of the State and be over 30 years of age. His duties include the command of the military forces, the adjournment of the Legislature when necessary, the recommendation of legislation, the granting of reprieves until the end of the next session of the General Assembly, and the supervision of the execution of the laws. Every bill passed by both Houses requires the assent of the governor, who may within three days remit it for reconsideration to the House in which it originated; if then the bill be approved by a majority in each House it becomes law. Amendments to the Constitution agreed to by a majority in each House, approved by a two-thirds majority in each House of the Legislature next elected, and approved by the people at special meetings held for the purpose in each town, become part of the Constitution. The State officials are: the governor, secretary of state, treasurer, and the comptroller of public accounts. For local administration the State is divided into eight counties, which are subdivided into cities, boroughs, and townships.

Constitution of the United States

of America. In May, 1785, a committee of Congress made a report recommending an alteration in the Article of Confederation, but no action was taken on it, and it was left to the State Legislatures to proceed in the matter. In January, 1786, the Legislature of Virginia passed a resolution providing for the appointment of five commissioners, who, or any three of them, should meet such commissioners as might be appointed in the other States of the Union, at a time and place to be agreed upon, to take into consideration the trade of the United States; to consider how far a uniform system in their commercial regulations may be necessary to their common interest and their permanent harmony; and to report to the several States such an act, relative to this great object, as, when ratified by them, will enable the United States in Congress effectually to provide for the same. The Virginia commissioners, after some correspondence, fixed the first Monday in September as the time, and the city of Annapolis as the place for the meeting, but only four other States were represented, viz: Delaware, New York, New Jersey, and Pennsylvania; the commissioners appointed by Massachusetts, New Hampshire, North Carolina, and Rhode Island failed to attend. Under the circumstances of so partial a representation, the commissioners present agreed upon a report (drawn by Mr. Hamilton, of New York), expressing their unanimous conviction that it might essentially tend to advance the interests of the Union if the States by which they were respectively delegated would concur, and use their endeavors to procure the concurrence of the other States, in the appointment of commissioners to meet at Philadelphia on the second Monday of May following, to take into consideration the situation of the United States; to devise such further provisions as should appear to them necessary to render the

Constitution of the Federal Government adequate to the exigencies of the Union; and to report such an act for that purpose to the United States in Congress assembled as, when agreed to by them and afterwards confirmed by the Legislatures of every State, would effectually provide for the same. Congress, on the 21st of February, 1787, adopted a resolution in favor of a convention, and the Legislatures of those States which had not already done so (with the exception of Rhode Island), promptly appointed delegates. On the 25th of May, seven States having convened, George Washington, of Virginia, was unanimously elected President, and the consideration of the proposed constitution was commenced. On the 17th of September, 1787, the Constitution as engrossed and agreed upon was signed by all the members present, except Mr. Gerry, of Massachusetts, and Messrs. Mason and Randolph, of Virginia. The president of the convention transmitted it to Congress, with a resolution, stating how the proposed Federal Government should be put in operation, and an explanatory letter. Congress, on the 28th of September, 1787, directed the Constitution so framed, with the resolutions and letter concerning the same, to "be transmitted to the several Legislatures in order to be submitted to a convention of delegates chosen in each State by the people thereof, in conformity to the resolves of the convention." On the 4th of March, 1789, the day which had been fixed for commencing the operations of Government under the new Constitution, it had been ratified by the conventions chosen in each State to consider it, as follows: Delaware, December 7, 1787; Pennsylvania, December 12, 1787; New Jersey, December 18, 1787; Georgia, January 2, 1788; Connecticut, January 9, 1788; Massachusetts, February 6, 1788; Maryland, April 28, 1788; South Carolina, May 23, 1788; New Hampshire, June 21, 1788; Virginia, June 26, 1788; and New York, July 26, 1788. The President informed Congress, on the 28th of January, 1790, that North Carolina had ratified the Constitution November 21, 1789; and he informed Congress on the 1st of June, 1790, that Rhode Island had ratified the Constitution May 29, 1789. Vermont, in convention, ratified the Constitution January 10, 1791, and was, by an act of Congress approved February 18, 1791, "received and admitted into this Union as a new and entire member of the United States."

CONSTITUTION OF THE UNITED STATES

PREAMBLE.—We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this CONSTITUTION for the United States of America.

ARTICLE I.

SECTION I. All legislative powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

SECTION II. 1. The House of Representatives shall be composed of members chosen every second year by the people of the several States, and the electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislature.

2. No person shall be a Representative who shall not have attained to the age of twenty-five years, and been

seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen.

3. Representatives and direct taxes shall be apportioned among the several States which may be included within this Union according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose 3; Massachusetts, 8; Rhode Island and Providence Plantations, 1; Connecticut, 5; New York, 6; New Jersey, 4; Pennsylvania, 8; Delaware, 1; Maryland, 6; Virginia, 10; North Carolina, 5; South Carolina, 6; and Georgia, 3.*

4. When vacancies happen in the representation from any State, the Executive Authority thereof shall issue writs of election to fill such vacancies.

5. The House of Representatives shall choose their Speaker and other officers, and shall have the sole power of impeachment.

SECTION III. 1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six years; and each Senator shall have one vote.

2. Immediately after they shall be assembled in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the Senators of the first class shall be vacated at the expiration of the second year, of the second class at the expiration of the fourth year, and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the Legislature of any State, the Executive thereof may make temporary appointment until the next meeting of the Legislature, which shall then fill such vacancies.

3. No person shall be a Senator who shall not have attained to the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State for which he shall be chosen.

4. The Vice-President of the United States shall be President of the Senate, but shall have no vote unless they be equally divided.

5. The Senate shall choose their other officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the office of President of the United States.

6. The Senate shall have the sole power to try all impeachments. When sitting for that purpose, they shall be on oath or affirmation. When the President of the United States is tried, the Chief Justice shall preside; and no person shall be convicted without the concurrence of two-thirds of the members present.

7. Judgment in cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honor, trust, or profit under the United States; but the party convicted shall nevertheless be liable and subject to indictment, trial, judgment, and punishment, according to law.

SECTION IV. 1. The times, places, and manner of holding elections for Senators and Representatives shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by law make or alter such regulations, except as to places of choosing Senators.

2. The Congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

SECTION V. 1. Each House shall be the judge of the elections, returns, and qualifications of its own members, and a majority of each shall constitute a quorum to do business; but a smaller number may adjourn from day to day, and may be authorized to compel the attendance of absent members in such manner and under such penalties as each House may provide.

2. Each House may determine the rules of its proceedings, punish its members for disorderly behavior, and with the concurrence of two-thirds expel a member.

3. Each House shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy; and the yeas and nays of the members of either House on

any question shall, at the desire of one-fifth of those present, be entered on the journal.

4. Neither House, during the session of Congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two Houses shall be sitting.

SECTION VI. 1. The Senators and Representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the Treasury of the United States. They shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective Houses, and in going to and returning from the same; and for any speech or debate in either House they shall not be questioned in any other place.

2. No Senator or Representative shall, during the time for which he was elected, be appointed to any civil office under the authority of the United States which shall have been created, or the emoluments whereof shall have been increased during such time; and no person holding any office under the United States shall be a member of either House during his continuance in office.

SECTION VII. 1. All bills for raising revenue shall originate in the House of Representatives, but the Senate may propose or concur with amendments, as on other bills.

2. Every bill which shall have passed the House of Representatives and the Senate shall, before it become a law, be presented to the President of the United States; if he approve, he shall sign it, but if not, he shall return it, with his objections, to that House in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two-thirds of that House shall agree to pass the bill, it shall be sent, together with the objections, to the other House, by which it shall likewise be reconsidered; and if approved by two-thirds of that House it shall become a law. But in all such cases the votes of both Houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered on the journal of each House respectively. If any bill shall not be returned by the President within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law in like manner as if he had signed it, unless the Congress by their adjournment prevent its return; in which case it shall not be a law.

3. Every order, resolution, or vote to which the concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the same shall take effect shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and the House of Representatives, according to the rules and limitations prescribed in the case of a bill.

SECTION VIII. 1. The Congress shall have power: To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States.

2. To borrow money on the credit of the United States.

3. To regulate commerce with foreign nations, and among the several States, and with the Indian tribes.

4. To establish an uniform rule of naturalization and uniform laws on the subject of bankruptcies throughout the United States.

5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

6. To provide for the punishment of counterfeiting the securities and current coin of the United States.

7. To establish post-offices and post-roads.

8. To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries.

9. To constitute tribunals inferior to the Supreme Court.

10. To define and punish piracies and felonies committed on the high seas, and offences against the law of nations.

11. To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water.

12. To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years.

13. To provide and maintain a navy.

* See Article XIV., Amendments.

14. To make rules for the government and regulation of the land and naval forces.

15. To provide for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions.

16. To provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress.

17. To exercise exclusive legislation in all cases whatsoever over such district (not exceeding ten miles square) as may, by cession of particular States and the acceptance of Congress, become the seat of Government of the United States, and to exercise like authority over all places purchased by the consent of the Legislature of the State in which the same shall be, for the erection of forts, magazines, arsenals, dry-docks and other needful buildings.

18. To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department or officer thereof.

SECTION IX. 1. The migration or importation of such persons as any of the States now existing shall think proper to admit shall not be prohibited by the Congress prior to the year one thousand eight hundred and eight, but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person.

2. The privilege of the writ of habeas corpus shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

3. No bill of attainder or ex post facto law shall be passed.

4. No capitation or other direct tax shall be laid, unless in proportion to the census or enumeration heretofore directed to be taken.

5. No tax or duty shall be laid on articles exported from any State.

6. No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another, nor shall vessels bound to or from one State be obliged to enter, clear, or pay duties in another.

7. No money shall be drawn from the Treasury but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.

8. No title of nobility shall be granted by the United States. And no person holding any office of profit nor trust under them shall, without the consent of the Congress, accept of any present, emolument, office, or title of any kind whatever from any king, prince, or foreign state.

SECTION X. 1. No State shall enter into any treaty, alliance, or confederation, grant letters of marque and reprisal, coin money, emit bills of credit, make anything but gold and silver coin a tender in payment of debts, pass any bill of attainder, ex post facto law, or law impairing the obligation of contracts, or grant any title of nobility.

2. No State shall, without the consent of the Congress, lay any impost or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws, and the net produce of all duties and imposts, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress.

3. No State shall, without the consent of Congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another State, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

ARTICLE II.

SECTION I. 1. The Executive power shall be vested in a President of the United States of America. He shall hold his office during the term of four years, and, together with the Vice-President, chosen for the same term, be elected as follows:

2. Each State shall appoint, in such manner as the Legislature thereof may direct, a number of electors, equal to the whole number of Senators and Representatives to which the State may be entitled in the Congress; but no Senator or Representative or person holding an office of trust or profit under the United States shall be appointed an elector.

3. [The Electors shall meet in their respective States

and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same State with themselves. And they shall make a list of all the persons voted for, and of the number of votes for each, which list they shall sign and certify and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted. The person having the greatest number of votes shall be the President, if such number be a majority of the whole number of electors appointed, and if there be more than one who have such majority, and if there be an equal number of votes, then the House of Representatives shall immediately choose by ballot one of them for President; and if no person have a majority, then from the five highest on the list the said House shall in like manner choose the President. But in choosing the President, the vote shall be taken by States, the representation from each State having one vote. A quorum, for this purpose, shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. In every case, after the choice of the President, the person having the greatest number of votes of the electors shall be the Vice-President. But if there should remain two or more who have equal votes, the Senate shall choose from them by ballot the Vice-President.]*

4. The Congress may determine the time of choosing the electors and the day on which they shall give their votes, which day shall be the same throughout the United States.

5. No person except a natural born citizen, or a citizen of the United States at the time of the adoption of this Constitution, shall be eligible to the office of President; neither shall any person be eligible to that office who shall not have attained to the age of thirty-five years and been fourteen years a resident within the United States.

6. In case of the removal of the President from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the Vice-President, and the Congress may by law provide for the case of removal, death, resignation, or inability, both of the President and Vice-President, declaring what officer shall then act as President, and such officer shall act accordingly until the disability be removed or a President shall be elected.

7. The President shall, at stated times, receive for his services a compensation which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the United States, or any of them.

8. Before he enter on the execution of his office, he shall take the following oath or affirmation:

"I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will, to the best of my ability, preserve, protect, and defend the Constitution of the United States."

SECTION II. 1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the militia of the several States when called into the actual service of the United States; he may require the opinion, in writing, of the principal officer in each of the executive departments upon any subject relating to the duties of their respective offices, and he shall have power to grant reprieves and pardons for offences against the United States except in cases of impeachment.

2. He shall have power, by and with the advice and consent of the Senate, to make treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the advice and consent of the Senate shall appoint ambassadors, other public ministers and consuls, judges of the Supreme Court, and all other officers of the United States whose appointments are not herein otherwise provided for, and which shall be established by law; but the Congress may by law vest the appointment of such inferior officers as they think proper in the President alone, in the courts of law, or in the heads of departments.

3. The President shall have power to fill up all vacancies that may happen during the recess of the Senate by granting commissions, which shall expire at the end of their next session.

SECTION III. He shall from time to time give to the Congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extra-

* This clause is superseded by Article XII., Amendments.

ordinary occasions, convene both Houses, or either of them, and in case of disagreement between them with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he shall receive ambassadors and other public ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

SECTION IV. The President, Vice-President, and all civil officers of the United States shall be removed from office on impeachment for and conviction of treason, bribery, or other high crimes and misdemeanors.

ARTICLE III.

SECTION I. The judicial power of the United States shall be vested in one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish. The judges, both of the Supreme and inferior courts, shall hold their offices during good behavior, and shall at stated times receive for their services a compensation which shall not be diminished during their continuance in office.

SECTION II. 1. The judicial power shall extend to all cases in law and equity arising under this Constitution, the laws of the United States, and treaties made, or which shall be made, under their authority; to all cases affecting ambassadors, other public ministers, and consuls; to all cases of admiralty and maritime jurisdiction; to controversies to which the United States shall be a party; to controversies between two or more States, between a State and citizens of another State, between citizens of different States, between citizens of the same State claiming lands under grants of different States, and between a State, or the citizens thereof, and foreign States, citizens, or subjects.

2. In all cases affecting ambassadors, other public ministers, and consuls, and those in which a State shall be party, the Supreme Court shall have original jurisdiction. In all the other cases before-mentioned the Supreme Court shall have appellate jurisdiction both as to law and fact, with such exceptions and under such regulations as the Congress shall make.

3. The trial of all crimes, except in cases of impeachment, shall be by jury, and such trial shall be held in the State where the said crimes shall have been committed; but when not committed within any State the trial shall be at such place or places as the Congress may by law have directed.

SECTION III. 1. Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort. No person shall be convicted of treason unless on the testimony of two witnesses to the same overt act, or on confession in open court.

2. The Congress shall have power to declare the punishment of treason, but no attainder of treason shall work corruption of blood or forfeiture except during the life of the person attained.

ARTICLE IV.

SECTION I. Full faith and credit shall be given in each State to the public acts, records, and judicial proceedings of every other State. And the Congress may by general laws prescribe the manner in which such acts, records, and proceedings shall be proved, and the effect thereof.

SECTION II. 1. The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States.

2. A person charged in any State with treason, felony, or other crime, who shall flee from justice, and be found in another State, shall, on demand of the Executive authority of the State from which he fled, be delivered up, to be removed to the State having jurisdiction of the crime.

3. No person held to service or labor in one State, under the laws thereof, escaping into another shall, in consequence of any law or regulation therein, be discharged from such service or labor, but shall be delivered up on claim of the party to whom such service or labor may be due.

SECTION III. 1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the jurisdiction of any other State, nor any State be formed by the junction of two or more States, or parts of States, without the consent of the Legislatures of the States concerned, as well as of the Congress.

2. The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State.

SECTION IV. The United States shall guarantee to every State in this Union a republican form of government, and shall protect each of them against invasion, and, on application of the Legislature, or of the Executive (when the Legislature cannot be convened), against domestic violence.

ARTICLE V.

The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose amendments to this Constitution, or, on the application of the Legislatures of two-thirds of the several States, shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by conventions in three-fourths thereof, as the one or the other mode of ratification may be proposed by the Congress; provided that no amendment which may be made prior to the year one thousand eight hundred and eight shall in any manner affect the first and fourth clauses in the Ninth Section of the First Article; and that no State, without its consent, shall be deprived of its equal suffrage in the Senate.

ARTICLE VI.

1. All debts contracted and engagements entered into before the adoption of this Constitution shall be as valid against the United States under this Constitution as under the Confederation.

2. This Constitution and the laws of the United States which shall be made in pursuance thereof and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land, and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

3. The Senators and Representatives before mentioned, and the members of the several State Legislatures, and all executive and judicial officers, both of the United States and of the several States, shall be bound by oath or affirmation to support this Constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

ARTICLE VII.

The ratification of the Conventions of nine States shall be sufficient for the establishment of this Constitution between the States so ratifying the same.

AMENDMENTS TO THE CONSTITUTION

ARTICLE I.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II.

A well-regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed.

ARTICLE III.

No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war but in a manner to be prescribed by law.

ARTICLE IV.

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V.

No person shall be held to answer for a capital or other infamous crime unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service, in time of war or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation.

ARTICLE VI.

In all criminal prosecutions, the accused shall enjoy

the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

ARTICLE VII.

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise re-examined in any court of the United States than according to the rules of the common law.

ARTICLE VIII.

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX.

The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people.

ARTICLE X.

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

ARTICLE XI.

The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States, by citizens of another State, or by citizens or subjects of any foreign State.

ARTICLE XII.

The electors shall meet in their respective States, and vote by ballot for President and Vice-President, one of whom at least shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President; and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which list they shall sign and certify, and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate; the President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted; the person having the greatest number of votes for President shall be the President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers, not exceeding three, on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President shall be the Vice-President, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

ARTICLE XIII.

1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

2. Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XIV.

1. All persons born or naturalized in the United

States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the executive and judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male members of such State, being of twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

3. No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or holding any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State Legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid and comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.

4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection and rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations, and claims shall be held illegal and void.

5. The Congress shall have power to enforce by appropriate legislation the provisions of this article.

ARTICLE XV.

1. The right of the citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

2. The Congress shall have power to enforce the provisions of this article by appropriate legislation.

RATIFICATION OF THE CONSTITUTION

The Constitution was ratified by the thirteen original States in the following order:

Delaware, December 7, 1787, unanimously.
 Pennsylvania, December 12, 1787, vote 46 to 23.
 New Jersey, December 18, 1787, unanimously.
 Georgia, January 2, 1788, unanimously.
 Connecticut, January 9, 1788, vote 128 to 40.
 Massachusetts, February 6, 1788, vote 187 to 168.
 Maryland, April 28, 1788, vote 63 to 12.
 South Carolina, May 23, 1788, vote 149 to 73.
 New Hampshire, June 21, 1788, vote 57 to 46.
 Virginia, June 25, 1788, vote 89 to 79.
 New York, July 26, 1788, vote 30 to 28.
 North Carolina, November 21, 1789, vote 193 to 75.
 Rhode Island, May 29, 1790, vote 34 to 32.

RATIFICATION OF THE AMENDMENTS

I to X, inclusive, were declared in force December 15, 1791.

XI was declared in force January 8, 1798.

XII, regulating elections, was ratified by all the States except Connecticut, Delaware, Massachusetts, and New Hampshire, which rejected it. It was declared in force September 28, 1804.

XIII, the emancipation amendment was ratified by 31 of the 36 States; rejected by Delaware and Kentucky; not acted on by Texas; conditionally ratified by Alabama and Mississippi. Proclaimed December 18, 1865.

XIV, Reconstruction amendment was ratified by 23 Northern States; rejected by Delaware, Kentucky, Maryland, and 10 Southern States, and not acted on by California. The 10 Southern States subsequently ratified under pressure. Proclaimed July 28, 1868.

XV. Negro citizenship amendment was not acted on by Tennessee; rejected by California, Delaware, Kentucky, Maryland, New Jersey, and Oregon; ratified by the remaining 30 States. New York rescinded its ratification January 5, 1870. Proclaimed March 30, 1870.

Corea or Korea. A country embracing the peninsula lying between the Yellow Sea and the Sea of Japan. Yi Heui, who succeeded to the throne in 1864, and assumed the title of emperor in 1897, abdicated and was succeeded by his son in 1907. Until 1894, China was the suzerain of Corea, but on the conclusion of the war in 1895, China relinquished her suzerainty, and the independence of Corea was acknowledged. Then a struggle began with Russia, which culminated in the Russo-Japanese War, and by the Peace Treaty between Russia and Japan, 1905, the paramount interest of the latter country in Corea was acknowledged. A treaty between Corea and Japan, signed at Seoul, November 17, 1905, provided that Japan, through the department of foreign affairs in Tokio, should control and direct the external relations and affairs of Corea; that Japan should be represented at the court of the Emperor of Corea by a resident-general residing at Seoul, and have the right to station residents at the several open ports and such other places in Corea as it might deem necessary. The attitude of the emperor, culminating in his action in sending a delegation to The Hague Conference, led to his abdication in favor of the crown prince, July 19, 1907, on the unanimous advice of the ministry, who were nearly murdered for their pains. The Japanese troops had to put down some serious rioting in Seoul, and the attitude of the ex-emperor, who at once began to conspire against the Japanese, led to a new convention being promulgated (July 25th), the terms of which were as follows: (1) The administration of Corea was placed under the Japanese resident-general. (2) The enactment of all laws and ordinances and the transaction of important state affairs must receive the approval of the resident-general. (3) The appointment of all high responsible officials must receive the approval of the resident-general. (4) A distinct line of demarcation was drawn between administrative and judicial affairs. (5) Japanese subjects recommended by the resident-general are eligible to office under the Corean Government. (6) Foreigners may be employed only with the consent of the resident-general. (7) The first clause of the convention of August 22, 1904, providing for the employment of a financial adviser, was annulled. The Corean native army was disbanded on August 1st, not without some trouble and loss of life.

Cuba, after having been continuously in the possession of Spain from its discovery, was, by the peace preliminaries and by the definitive treaty signed by the Peace Commissioners at Paris, December 10, 1898, relinquished by Spain, and thus has the position of an independent state. The direct armed interposition of the United States in the struggle against Spanish domination has, however, brought the island into close association with the United States Government. On November 5, 1900, a convention met to decide on a Constitution, and on

February 21, 1901, a Constitution was adopted, under which the island has a republican form of government, with a President, a Vice-President, a Senate, and a House of Representatives. The United States Legislature passed a law authorizing the President of the United States to make over the government of the island to the Cuban people as soon as Cuba should undertake to make no treaty with any foreign power endangering its independence, to contract no debt for which the current revenue would not suffice, to concede to the United States Government a right of intervention, and also to grant to it the use of naval stations. On June 12, 1901, these conditions were accepted by Cuba, on February 24, 1902, the President and Vice-President of the Republic were elected, and on May 20th, the control of the island was formally transferred to the new Cuban Government. Under treaties signed July 2, 1903 (to be ratified within seven months of that date), the United States will have coaling stations in the Bay of Guantánamo and Bahia Honda, for which they will pay \$2,000 annually. The connection between Cuba and the United States was rendered still closer by the reciprocal commercial convention which came into operation on December 27, 1903. In August, 1906, an insurrection broke out and, after futile attempts at the restoration of order, and serious warning from the United States Peace Commission, which had arrived, President Palma, on September 28th, resigned office. No successor was elected and, as Cuba was without a government, Mr. Taft, the United States Secretary for War, and Peace Commissioner to Cuba, undertook the provisional government. He was succeeded on October 13th by Mr. C. E. Magoon; as soon as it seems expedient a regular Cuban Government will be formed. There is (normally) a Cabinet consisting of the Secretary of State and of Justice, and the Secretaries of the Interior, of Finance, of Agriculture, of Public Instruction, and of Public Works.

Declaration of Independence

THE UNANIMOUS DECLARATION OF THE THIRTEEN UNITED STATES OF AMERICA, IN CONGRESS, JULY 4, 1776.

When in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed. That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Gov-

ernment, and to provide new Guards for their future security. Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing Importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the meantime exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harrass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies without the Consent of our legislature.

He has affected to render the Military independent of and superior to the Civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock Trial, from punishment for any Murders which they should commit on the Inhabitants of these States:

For cutting off our Trade with all parts of the world:

For imposing Taxes on us without our Consent;

For depriving us in many cases, of the benefits of Trial by jury:

For transporting us beyond Seas to be tried for pretended offenses:

For abolishing the free System of English Laws in a neighboring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies:

For taking away our Charters, abolishing our most valuable Laws, and altering fundamentally the Forms of our Governments:

For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here, by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to compleat the works of death, desolation, and tyranny, already begun with circumstances of Cruelty & perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow-Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us,

and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions.

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people.

Nor have We been wanting in attentions to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They, too, have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE, THEREFORE, the REPRESENTATIVES of the UNITED STATES OF AMERICA, IN GENERAL CONGRESS, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by authority of the good People of these Colonies, solemnly PUBLISH and DECLARE, That these United Colonies are, and of Right ought to be FREE AND INDEPENDENT STATES; that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as FREE AND INDEPENDENT STATES, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which INDEPENDENT STATES may of right do. And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, We mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

(The foregoing declaration was, by order of Congress, engrossed, and signed by the following members:)

JOHN HANCOCK.

<i>New Hampshire.</i>	
JOSIAH BARTLETT,	MATTHEW THORNTON.
WM. WHIPPLE,	
<i>Massachusetts Bay.</i>	
SAML. ADAMS,	ROBT. TREAT PAINE,
JOHN ADAMS,	ELBRIDGE GERRY.
<i>Rhode Island, etc.</i>	
STEP. HOPKINS,	WILLIAM ELLERY.
<i>Connecticut.</i>	
ROGER SHERMAN,	WM. WILLIAMS,
SAM'L HUNTINGTON,	OLIVER WOLCOTT.
<i>New York.</i>	
WM. FLOYD,	FRANS. LEWIS,
PHIL. LIVINGSTON,	LEWIS MORRIS.
<i>New Jersey.</i>	
RICH'D. STOCKTON,	JOHN HART,
JNO. WITHERSPOON,	ABRA. CLARK.
FRAS. HOPKINSON,	
<i>Pennsylvania.</i>	
ROBT. MORRIS,	JAS. SMITH,
BENJAMIN RUSH,	GEO. TAYLOR,
BENJA. FRANKLIN,	JAMES WILSON,
JOHN MORTON,	GEO. ROSS.
GEO. CLYMER,	
<i>Delaware.</i>	
CESAR RODNEY,	THO. M'KEAN.
GEO. READ,	
<i>Maryland.</i>	
SAMUEL CHASE,	THOS. STONE,
WM. PACA,	CHARLES CARROLL of Carrollton.
<i>Virginia.</i>	
GEORGE WYTHE,	THOS. NELSON, jr.,
RICHARD HENRY LEE,	FRANCIS LIGHTFOOT LEE,
TH. JEFFERSON,	CARTER BRAXTON.
BENJA. HARRISON,	
<i>North Carolina.</i>	
WM. HOOPER,	JOHN PENN.
JOSEPH HEWES,	
<i>South Carolina.</i>	
EDWARD RUTLEDGE,	THOMAS LYNCH, jr.,
THOS. HEYWARD, jr.,	ARTHUR MIDDLETON.
<i>Georgia.</i>	
BUTTON GWINNETT,	GEO. WALTON.
LYMAN HALL,	

Delaware. The first Constitution, adopted in 1776, was followed by those of 1792, 1831, and 1897, the last named being still in force. Constitutional amendments, proposed in either House of the Legislature, agreed to by a two-thirds vote of both Houses, and by a similar vote of the next Legislature, become law. The Legislature consists of a Senate of seventeen members, elected for four years and a House of Representatives of thirty-five members, elected for two years, the two Houses being known as the General Assembly. Senators must be 27 years of age, and Representatives 24; both must be citizens who have resided three years in the State, and one year in the electoral district immediately preceding the election. Money bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the House of Representatives. The principal executive officer of the State is the governor, who is elected for four years and is not eligible for a third term. He is commander-in-chief of the military and naval forces of the State, and, with the consent of the Senate, appoints to various offices of State. He may call special sessions of the legislature, and has power to pardon, limited by the authority of the board of pardons, of which he is a member. He has a veto on legislation, which may be overridden by a three-fifths vote of each house. The secretary of state is appointed by the governor with the consent of the Senate. Other State officials are the lieutenant-governor, the treasurer, and the auditor.

Denmark. Under the Constitution of 1849 (modified in 1855, 1863, 1865, and 1866), the executive power is vested in king and ministers, the legislative in the Rigsdag or Diet acting jointly with the sovereign. The Rigsdag is composed of the Landsting (or upper house of sixty-six members—twelve Crown nominees appointed for life, and fifty-four indirectly elected by electoral bodies, in which large taxpayers are well represented, for eight years), and the Folkething (or house of commons of 114 members directly elected by universal suffrage for three years). Members of both houses are paid about three dollars a day while the Rigsdag is sitting and their traveling expenses. The Rigsdag must meet every October, and all money bills be submitted first to the Folkething. For local government the country is divided into eighteen counties, each under a governor, and these are subdivided into hundreds and parishes. The towns are administered by mayors.

District of Columbia. The municipal government of the District of Columbia is vested by act of Congress approved June 11, 1878, in three commissioners, two of whom are appointed by the president from citizens of the District having had three years' residence therein immediately preceding that appointment, and confirmed by the Senate. The other commissioner is detailed by the President of the United States from the Corps of Engineers of the United States Army, and must have lineal rank senior to captain, or be a captain who has served at least fifteen years in the Corps of Engineers of the Army. The commissioners appoint the subordinate official service of said government,

except the board of education which is appointed by the Supreme Court of the District of Columbia. Congress makes all laws for the District, but has intrusted to the commissioners authority to make police, building, and plumbing regulations, and others of a municipal nature.

Dominican Republic, or San Domingo, is the Republic which occupies the eastern end of the island of Hayti, and was founded in 1844, after a revolution which overthrew the Spanish rule. It is divided into six states or provinces, and six maritime districts, and is governed by a President, chosen by an electoral college for a term of four years, and a National Congress of twenty-four members elected for four years. A convention was drawn up on February 8, 1907, and approved February 25th, by the American Senate, and by the San Domingo Congress on May 3d. The chief creditors of the Republic had agreed to accept 50 to 55% for cash payment of their claims. It was estimated that \$17,000,000 were required for the purpose, and a New York bank agreed to find the sum of \$20,000,000 (the balance being for the extinction of certain concessions and harbor monopolies, and for the construction of railways and other public improvements) on the basis of an issue of 5% bonds payable in fifty years, and redeemable after seventy years at 102½. The bank thus became the sole creditor of the government. The receiver-general of customs was appointed by the United States Government under the new convention, and the customs duties are applied in the first instance to the payment of the annual sums for amortization of the bonds, the balance going to the Dominican Government. The Dominican Republic further pledged itself not to increase its public debt till the whole of the bonds had been paid off, nor to modify its import duties without the consent of the United States.

Ecuador is a Republic of equatorial South America, constituted in 1830, by separation from the original Republic of Colombia. Under the Constitution of 1834, modified in 1887, and 1897, it is governed by a President elected for four years, with the assistance of a Congress composed of a Senate of thirty-two members, elected for two years, representing the sixteen provinces, and a Chamber of forty-two Deputies, representing the people, which is elected every two years. The electors to both chambers must be adults able to read and write.

Florida. The original Constitution, framed in 1838, was succeeded by others in 1865, 1868, and 1885. That of 1885, amended in 1894, 1896, and 1904, is now in force. Amendments may be proposed in either House of the Legislature; if approved by a three-fifths vote of all the members of each House, they are submitted to the people and, if accepted by a majority of those voting on them, they become part of the Constitution. The State Legislature consists of a Senate of thirty-two members, and House of Representatives with sixty-eight members. Senators are elected for four years, Representatives for two, the Senate being renewed by one-half every two years. Any bill may originate in either House. The House of Representatives has the sole power of impeachment, but a two-

thirds vote of all members present is necessary to impeach. Impeachment cases are tried by the Senate. Legislators must be qualified electors in the counties they represent. The chief executive officer of the State is the governor, who is elected for four years, and is not eligible for the next term of office. He has the usual powers of State governors, including a veto on legislation which may be overridden by a two-thirds vote of the members present in each House. Other State officers elected for four years are the attorney-general, the comptroller, the treasurer, the superintendent of public instruction, and the commissioner of agriculture.

France is a Republic, governed by the Constitution of 1875, modified in 1879, 1884, 1885, and 1899. The Legislature consists of the Assembly, sitting in two Houses, viz: the Senate of 300 members, indirectly elected for nine years (one-third retiring every three years) by delegates chosen by the municipal councils and the senators, deputies, councilors-general, and district councilor of the departments (there are a number of Senators originally elected for life by the two chambers, but as these die the vacancies are filled up by the election of Senators for a period of nine years only); and the Chamber of Deputies of 594 members, elected for four years by universal suffrage. Voters are required to be over 21 and to have a six months' residential qualification. Both Houses can initiate and frame laws, except in the case of financial laws, which must first be presented to and voted by the Chamber of Deputies. Deputies and Senators are both paid at the rate of 15,000 francs a year. The presidents of the two chambers each receive in addition 72,000 francs a year for the expense of entertainment. Members of both chambers travel free on all railways on making a small annual payment. The executive power is confided to the President, who is elected for seven years by the two Houses united in National Assembly, and receives 600,000 francs a year, and a further allowance of 600,000 francs for expenses. He appoints the ministers and makes all civil and military appointments. War can be declared by the President only with consent of the two Houses, and his every act must be countersigned by a minister. The colonies are looked upon as being politically part of France, and are represented in the Senate by four Senators and in the Chamber by ten Deputies.

Georgia. Georgia entered the Union as one of the original States and its first Constitution, adopted in 1777, was succeeded by those of 1789, 1798, 1865, and 1877. The last has been amended seven times, most recently in 1904. Amendments proposed in either House and approved by a two-thirds vote of the members of each House, must be submitted to the people; if ratified by a majority of those who vote, they become part of the Constitution. The Legislature consists of a Senate of forty-four members and a House of Representatives of 175 members, known collectively as the General Assembly. Both Senators and Representatives are elected for two years. Senators must be citizens of the United States, 25 years old, resident in the State four years preceding election and one year in the district for

which elected. Representatives must be citizens of the United States, 21 years old, resident in the State two years and in the county one year next preceding election. The seat of a member of either House is vacated on his removal from the district or county from which he was elected. The House of Representatives has sole power of impeachment, and the Senate tries impeachment cases. All bills to raise money must originate in the House of Representatives. The chief executive officer of the State is the governor, who is elected for two years. He has the usual limited powers of pardon and veto. He has power to fill vacancies not otherwise provided for by law, and is required to see that the laws of the State are faithfully executed. He is commander-in-chief of the State militia. Other elective officials are the secretary of state, the comptroller, the treasurer, the attorney-general, and the superintendent of education. Georgia is divided into 137 counties.

German Empire. The Constitution of the German Empire is based upon the decree of the 16th of April, 1871, which took effect on the 4th of May following. The presidency of the empire belongs to the Crown of Prussia, to which is attached the hereditary title of Emperor of Germany. The prerogatives of the emperor are to represent the empire in its relation to other states, to declare war if defensive, and conclude peace in name of the empire, to contract alliances, etc. The emperor has also the supreme command of the army and the navy, appoints and dismisses officials of the empire, appoints consuls, and superintends the entire consulate of the empire. The legislative authority is vested in the Bundesrath (Federal Council) and the Reichstag (Imperial Diet), the former consisting of fifty-eight representatives of the different states of the empire, seventeen from Prussia, six from Bavaria, four each from Saxony and Württemberg, three each from Baden and Hesse, one from Saxe-Weimar, etc. The Reichstag consists of 397 deputies elected by secret voting in all the states of the empire. As a rule, one member is returned to the Reichstag for every 131,604 of the inhabitants of each state. The election of Wilhelm I., King of Prussia, as German Emperor in 1871, was by the vote of the Reichstag of the North German Confederacy, and upon his acceptance of the dignity the imperial office became hereditary in the House of Hohenzollern. Wilhelm, "Der Grosse," reigned until 1888, when he was succeeded by his son, Frederick, who lived but a few weeks. Frederick's eldest son, the present emperor, Wilhelm II., was born January 27, 1859. On February 27, 1881, he married Princess Victoria of Schleswig-Holstein-Sonderburg-Augustenburg (born October 22, 1858), daughter of the late Duke Frederick.

The Heir Apparent.—The heir apparent to the German throne is Prince Frederick William, born May 6, 1882, the eldest son of the present Emperor-King.

The Ministry.—The Imperial Secretaries of State of Germany do not form a ministry or cabinet, but act independently of each other under the general direction of the Chancellor of the Empire. They are as follows:

1. *Chancellor of the Empire.*
2. *Ministry for Foreign Affairs.*
3. *Imperial Home Office and "Representative of the Chancellor."*
4. *Imperial Admiralty.*
5. *Imperial Ministry of Justice.*
6. *Imperial Treasury.*
7. *Imperial Post-office.*
8. *Secretary for the Colonies.*

And, in addition, the following presidents of imperial bureaux:

9. *Railways.*
10. *Imperial Exchequer.*
11. *Imperial Invalid Fund.*
12. *Imperial Bank.*
13. *Imperial Debt Commission.*
14. *Administration of Imperial Railways.*
15. *Imperial Court Martial.*

Greece. The Kingdom of Hellas, as it is correctly styled, includes the three provinces of Northern Greece, the five of Peloponnesus, the three of Thessaly, and five islands. According to the present Constitution the throne is hereditary in the family of King George (second son of the King of Denmark). The legislative authority is vested in a single Chamber, called the *Boule*, the members of which (proportioned in number to the amount of the population) are elected for four years by ballot by manhood suffrage. The executive power rests with the king and ministry. The Greek Church alone is established, but all forms of religion enjoy toleration. Justice is administered, on the basis of the French civil code, by a supreme court (*Areios Pagos*), at Athens; four royal courts (*Ephiteia*), at Athens, Nauplia, Patras, and Corfu; sixteen courts of primary resort (*Protodokeia*), one in each principal town.

The regulations provide for an army of from 120,000 to 130,000 men on a war footing, but there are officers only for about 75,000. The armament is to be changed, the guns being replaced by quick-firers, and the present Gras rifle by a magazine rifle. A contract for the supply of 60,000 Mannlicher-Schönauer rifles by 1908, and 40,000 subsequently, was signed in November 1905. The navy consists of three small battleships, of about 4,800 tons displacement, and a few gunboats and torpedo craft of no large fighting value.

The Ministry.—The Ministry is constituted as follows: President of the Council and Minister of Finance; Minister of Interior; Minister of Worship and Public Instruction; Minister of Marine; Minister of War; Minister of Foreign Affairs, and Minister of Justice. The present ruler, George I., is the second son of the present King of Denmark. He was born December 24, 1845. After the expulsion of the late ruler, the Greeks, meeting in National Assembly, elected him King of the Hellenes, on March 18, 1863, and on June 4th of the same year he accepted the crown, his father acting as his guardian, as he was not then of age. On October 27, 1867, he was married to Grand Duchess Olga, the eldest daughter of Grand Duke Constantine of Russia, brother of the late emperor. She was born August 22, 1851.

The Heir Apparent.—Prince Constantine, Duke of Sparta, is heir apparent to the throne. He was born August 2, 1868, and was married to Princess Sophie of Prussia, the sister of Emperor William II., on October 27, 1889. They have had four children.

Hayti. The Republic of Hayti was originally a French colony, but was proclaimed independent in 1804, and is governed under a Constitution drawn up in 1889. The executive power is in the hands of a President, elected for seven years by the Senate and Chamber of Representatives, who receives a salary of \$24,000. The Chamber of ninety-five members is elected directly for three years by all male citizens, and the Senate of thirty-nine members indirectly for six years. The religion is Roman Catholic, and elementary education is free. There is an army of 18,916 men, and a navy of six small vessels.

Idaho. The original Constitution, adopted in 1889, is still in force. Amendments may be proposed in either House of the Legislature, and, if approved by a two-thirds vote of all the members of each House, are submitted to the popular vote for ratification. The Legislature consists of a Senate of twenty-one members, and a House of Representatives of fifty-one members, all the Legislators being elected for two years. The chief executive officer is the governor, who is elected for two years, and has the powers usually vested in State governors, including a limited veto. The board of pardons, of which he is a member, may pardon or grant reprieves. Other State officials elected for two years are the lieutenant-governor, auditor, treasurer, attorney-general, and superintendent of public instruction.

Illinois. The Constitution adopted in 1818 was superseded by that of 1848, which gave place to the Constitution adopted in 1870. This, with several amendments, is now in force. Amendments proposed in either House of the Legislature, approved by a two-thirds majority of all the members of each House, and ratified by a majority of the electors voting at the next general election, become part of the Constitution. Provision is also made for Constitutional amendments by means of a convention called for the purpose. The Legislature consists of a Senate of thirty-one members elected for four years (about half of whom retire every two years), and a House of Representatives of 153 members elected for two years. The two Houses have equal rights in introducing and passing bills. Senators and Representatives must be citizens, not holding any State or Federal office to which payment is attached. Senators must be 25 and Representatives 21 years of age; both must have resided in the State five, and in the district two, years next before election. The chief executive officer is the governor, elected for four years. He must be 30 years of age, and must have been a citizen for five years. He appoints many State officials and has the powers and duties which usually belong to State governors, including limited pardoning power and a limited veto. Other members of the executive, elected for four years, are the lieutenant-governor, the auditor, the superintendent of public instruction, and the attorney-general. The treasurer is elected for two years.

IMPORTANT FACTS CONCERNING

COUNTRIES	AREA AND POPULATION			STOCK OF MONEY		
	AREA PER SQ. MILES	POPULATION	POPULATION PER SQ. MILE	TOTAL DOLLARS	PER CAPITA DOLLARS	STANDARD CURRENCY
Abyssinia,	350,000	4,000,000	.....	.....	.....	.....
Argentina,	1,135,840	4,794,000	4.22	315,600,000	65.83	Gold
Australia,	2,972,573	3,772,000	1.27	134,700,000	29.54	Gold
New Zealand,	104,751	788,000	7.52	.....	.....	Gold
Austria-Hungary,	241,333	45,405,000	188.14	410,700,000	9.04	Gold
Austria,	115,903	26,151,000	225.63	.....	.....	Gold
Hungary,	125,430	19,254,000	153.51	.....	.....	Gold
Belgium,	11,373	6,694,000	588.59	149,900,000	22.40	Gold
Bolivia,	703,604	1,816,000	2.58	4,200,000	2.31	Silver
Brazil,	3,219,000	14,334,000	4.45	369,800,000	25.80	Gold
Bulgaria,	38,080	3,744,000	98.33	6,900,000	1.85	Gold
Canada,	3,745,574	6,504,000	1.79	97,400,000	17.85	Gold
Costa Rica,	23,000	313,000	13.61	.....	.....	Gold
Guatemala,	46,774	1,647,000	35.21	.....	.....	Silver
Honduras,	46,250	775,000	16.76	39,200,000	9.24	Silver
Nicaragua,	49,200	500,000	10.16	.....	.....	Silver
San Salvador,	7,225	1,007,000	139.38	.....	.....	Silver
Chile,	279,901	3,051,000	10.90	43,100,000	14.12	Gold
China,	1,532,420	407,253,000	265.76	750,000,000	1.84	Silver
Colombia,	504,773	4,000,000	7.92	372,000,000	93.00	Gold
Cuba,	43,000	1,573,000	36.58	3,500,000	2.22	Gold
Denmark,	15,360	2,465,000	160.48	29,200,000	11.84	Gold
Ecuador,	116,000	1,204,000	10.38	4,200,000	3.48	Gold
Egypt,	383,900	9,734,000	25.36	36,400,000	3.74	Gold
Finland,	144,255	2,744,000	19.02	13,800,000	5.03	Gold
France,	207,054	38,962,000	188.17	1,525,700,000	39.15	Gold
German Empire,	208,830	58,549,000	280.36	1,155,100,000	19.73	Gold
Greece,	25,014	2,434,000	97.31	50,400,000	20.71	Gold
Haiti,	10,204	1,294,000	126.81	6,700,000	5.17	Gold
India, British,	1,766,642	294,361,000	166.62	611,400,000	2.07	Gold
Italy,	110,646	32,475,000	293.50	316,700,000	9.75	Gold
Japan,	147,655	45,862,000	310.60	154,300,000	3.36	Gold
Corea,	84,400	12,000,000	142.18	.....	.....	.....
Mexico,	767,060	13,545,000	17.65	168,600,000	12.45	Gold
Netherlands,	12,563	5,347,000	425.61	98,700,000	18.46	Gold
Norway,	124,130	2,263,000	18.23	19,600,000	8.66	Gold
Paraguay,	97,722	636,000	6.51	10,600,000	16.67	Silver
Persia,	628,000	9,500,000	15.13	.....	.....	Silver
Peru,	713,859	4,610,000	6.46	6,800,000	1.48	Gold
Portugal,	36,038	5,429,000	150.65	74,800,000	13.78	Gold
Roumania,	50,700	5,913,000	116.63	23,200,000	3.92	Gold
Russia,	8,660,395	146,796,600	16.28	850,800,000	6.03	Gold
Santo Domingo,	18,045	610,000	33.80	6,400,000	10.49	Gold
Servia,	18,630	2,536,000	136.12	7,900,000	3.12	Gold
Siam,	236,000	5,000,000	21.19	196,600,000	39.32	Gold
Spain,	194,783	18,618,000	95.58	392,400,000	21.08	Gold
Sweden,	172,876	5,199,000	30.07	53,800,000	10.35	Gold
Switzerland,	15,976	3,356,000	210.07	61,300,000	18.27	Gold
Turkey,	1,115,046	24,932,000	22.36	90,000,000	3.61	Gold
United Kingdom,	121,371	41,961,000	345.73	782,800,000	18.65	Gold
United States,	3,025,600	80,372,000	26.56	2,368,700,000	29.47	Gold
Uruguay,	72,210	959,000	13.28	29,500,000	30.76	Gold
Venezuela,	593,940	2,445,000	4.12	23,800,000	9.73	Gold

THE COUNTRIES OF THE WORLD

APPROXIMATE DEBT DOLLARS	RULER	TITLE	CAPITAL	COUNTRIES
.. .. .	Menelik II.,	Emperor,	Adis Ababa,	Abyssinia.
479,765,265	Jose F. Alcorta,	President,	Buenos Ayres,	Argentina.
1,084,605,444	Lord Northcote,	Governor-General, . .	Melbourne,	Australia.
275,439,126	Lord Plunket,	Governor,	Wellington,	New Zealand.
1,107,464,025	Franz Josef I.,	Emperor,	Vienna,	Austria-Hungary.
739,020,208	Franz Josef I.,	Emperor,	Vienna,	Austria.
1,038,585,000	Franz Josef,	King,	Budapest,	Hungary.
544,052,979	Leopold, II.,	King,	Brussels,	Belgium.
6,180,602	Senor Montes,	President,	La Paz,	Bolivia.
540,693,936	Moreira Penna,	President,	Rio de Janeiro, . . .	Brazil.
62,428,200	Ferdinand,	Prince,	Sofia,	Bulgaria.
271,829,090	Earl Grey,	Governor-General, . .	Ottawa,	Canada.
14,603,556	C. Gonzalez Viquez, . .	President,	San Jose,	Costa Rica.
12,142,334	Manuel Ecabresa, . . .	President,	New Guatemala, . . .	Guatemala.
96,249,771	Gen. Terencia Sierra, . .	President,	Tegucigalpa,	Honduras.
5,590,636	Jose Santos Zelaya, . .	President,	Managua,	Nicaragua.
3,696,472	Tomas Regalado,	President,	San Salvador,	San Salvador.
107,304,151	Pedro Montt,	President,	Santiago,	Chile.
613,140,000	Kuang Asu,	Emperor,	Peking,	China.
14,494,792	Gen. Reyes,	In Charge,	Bogota,	Colombia.
.. .. .	C. E. Magoon,	Prov. President, . . .	Havana,	Cuba.
66,033,849	Frederiek VIII.,	King,	Copenhagen,	Denmark.
5,746,628	Eloy Alfaro,	President,	Quito,	Ecuador.
500,743,871	Abbas II.,	Khedive,	Cairo,	Egypt.
25,897,277	Emperor of Russia, . . .	Grand Duke,	Helsingfors,	Finland.
5,656,706,403	Armand Fallieres,	President,	Paris,	France.
698,849,400	William II.,	Emperor,	Berlin,	German Empire.
159,787,136	George,	King,	Athens,	Greece.
27,961,249	Nord Alexis,	President,	Port au Prince,	Haiti.
1,102,905,139	Edward VII. of England, .	Emperor,	Caleutta,	India, British.
2,560,605,000	Victor Emmanuel III., . .	King,	Rome,	Italy.
1,157,346,228	Mutsuhito,	Mikado,	Tokio,	Japan.
.. .. .	Li Hsi,	Emperor,	Seoul,	Corea.
175,945,345	Porfirio Diaz,	President,	Mexico,	Mexico.
463,150,904	Wilhelmina,	Queen,	The Hague,	Netherlands.
70,376,355	Haakon VII.,	King,	Christiania,	Norway.
11,223,805	Gen. Berrigno Ferreira, . .	President,	Asuncion,	Paraguay.
16,737,500	Mohammed Ali Mirza, . .	Shah,	Teheran,	Persia.
23,159,700	Jose Pardo,	President,	Lima,	Peru.
819,886,580	Manual II.,	King,	Lisbon,	Portugal.
272,774,501	Carol (Charles),	King,	Bucharest,	Roumania.
4,038,199,722	Nicholas II.,	Emperor (Czar), . . .	St. Petersburg,	Russia.
26,219,449	Ramon Caceres,	President,	Santo Domingo,	Santo Domingo.
80,806,223	Peter,	King,	Belgrade,	Servia.
.. .. .	Chulalongkorn,	King,	Bangkok,	Siam.
2,061,389,972	Alphonso XIII.,	King,	Madrid,	Spain.
92,833,336	Gustave V.,	King,	Stockholm,	Sweden.
17,400,567	H. Ernest Brenner, . . .	President,	Berne,	Switzerland.
458,125,400	Abdul Hamid II.,	Sultan,	Constantinople,	Turkey.
3,885,166,333	Edward VII.,	King,	London,	United Kingdom.
925,011,637	Theodore Roosevelt, . . .	President,	Washington,	United States.
127,362,827	Claudio Williman,	President,	Montevideo,	Uruguay.
49,335,647	Cipriano Castro,	President,	Caracas,	Venezuela.

India. The present form of government of the Indian Empire is established by the Government of India, act of 1858. By this act, all the territories, theretofore, under the government of the East India Company are vested in the King of Great Britain, and all its powers are exercised in his name; all territorial and other revenues, and all tributes and other payments, are likewise received in his name, and disposed of for the purposes of the government of India alone. The secretary of state for India is invested with all the powers formerly exercised by the company or by the board of control. The administration of the Indian Empire in England is entrusted to a secretary of state for India, assisted by a council of not less than ten members, vacancies in which are filled by the secretary of state for India. The duties of the council, which has no initiative authority, are, under the direction of the secretary of state for India, to conduct the business transacted in the United Kingdom in relation to the Government of India. The supreme executive authority in India is vested in the governor-general in Council, often styled the Government of India. The governor-general, who since 1858 has also been viceroy, is appointed by the Crown, and usually holds office for five years. The salary of the governor-general is \$83,250 a year.

Indiana. The Constitution of 1816 was superseded by that of 1851 which, as amended in 1873 and 1881, is still in force. Amendments proposed in and approved by the Legislature require the approval of the succeeding General Assembly; if then passed by a majority vote, they become part of the Constitution. The State Legislature consists of a Senate of fifty members elected for four years, and a House of Representatives of 100 members elected for two years, the two Houses together being called the General Assembly. Special sessions, called by the governor, are limited to forty days. Bill for raising revenue may originate only in the House of Representatives. Eligible to sit in either House are all citizens of the United States who have resided in the State two years, and in their county or district one year next preceding the election; but Senators must be 25, and Representatives 21 years of age. The chief executive officer of the State is the governor, who is elected for four years. He may call special sessions of the Legislature, and he has a veto which may be overridden by a majority vote of the two Houses. He appoints to offices not otherwise provided for by law, is commander-in-chief of the militia, and may pardon or reprieve in all cases of crime except treason or where the accused has been impeached. Other elective officials are the auditor, the treasurer, and the attorney-general.

Iowa. The original Constitution of 1846 was, in 1857, superseded by a new Constitution, which, amended five times since 1868, is still in force. The Legislature, known as the General Assembly, consists of a Senate of fifty, and a House of Representatives of 100 members, meeting every two years or an unlimited session. Senators are elected for four years, half of them retiring every second year; Representatives for two years. Any bill may originate in either House. The House of Representatives alone

can impeach; the Senate tries impeachments. Amendments to the Constitution may be proposed in either House, but to become law they must be sanctioned by a majority vote of both Houses of the then sitting and next succeeding Assembly, followed by a majority vote of the people. The executive power is vested in a governor, elected for two years. He has the powers usually entrusted to State governors, including limited pardoning power and a veto which may be overridden by a two-thirds majority of all the members of each House. Other State officials are a lieutenant-governor, an auditor, a treasurer, an attorney-general, and a superintendent of public instruction, all elected for two years.

Ireland. The head of the executive in Ireland is the viceroy or lord-lieutenant, who is assisted by a chief secretary, the lord chancellor of Ireland, the attorney-general for Ireland, the permanent officials, and a privy council (which is a separate and distinct body from the privy council of Great Britain); but the government of the country is in all essential points carried on under the direction of or in concert with the ministry of the day in London. The lord-lieutenant is charged with the maintenance of law and order; the Irish constabulary are under his control, and he may, if he think it to be necessary, direct the commander of the forces to send troops to their aid. He has power to commute sentences and pardon criminals. There are, however, more agreeable and less anxious functions attaching to the office; for as representing his majesty, the viceroy, assisted by his wife, holds courts, drawing-rooms, levées, and maintains in Dublin an establishment of a semi-regal character. On occasions he confers the honor of civil knighthood with the approval of his majesty. During his absence the duties of chief governorship are performed by one or more lord justice or lord justices, those who act in this capacity being usually the lord chancellor of Ireland, the commander of the forces, and some of the judges. The lord chancellor of Ireland is head of the Irish judicial establishment, principal legal adviser of the lord-lieutenant, and exercises in Ireland many of the powers which in England are vested in the lord high-chancellor. The office may be held by a Roman Catholic. The chief secretary to the lord-lieutenant, or chief secretary for Ireland as he is usually called, has been described as prime minister to the viceroy. His office is at Dublin Castle; but he has also an office in London, which remains open during the sitting of parliament. He is directly responsible to the House of Commons for the acts of the Irish administration. He is assisted by a permanent under-secretary, and other officials. There is a separate local government board; a board of public works, which is the great financial agent of the Government in Ireland; a board of national education, by which the grant made by parliament for public education is administered, and a department of agriculture and other industries and technical instruction which was created in 1899. There are also many other government departments in Ireland directly responsible to the Irish Government.

Italy is a constitutional monarchy. Under the constitution of 1848, as subsequently modified and expanded, the executive is vested in the king, and exercised through his ministers. The legislative authority is exercised by the king in conjunction with a senate of about 363 members in 1906 (composed of the princes of the royal house who are of age, and of an unlimited number of members selected by the ministry and nominated by the king for life, who have rendered eminent services to the country, are upwards of forty years of age, and pay taxes to an annual amount of \$600); and a chamber of 508 deputies, elected by conditional universal suffrage for a period of five years, though the king can dissolve the chamber at any time. All money bills must be initiated in the chamber. Senators and deputies are unpaid, but travel free.

Japan. The Empire of Japan consists of the Archipelago of Nippon, which includes the four large islands of Honshiu, Kiushiu, Shikoku, and Hokkaido, together with Formosa and the Pescadores, ceded by China in 1895, and nearly 4,000 smaller islands. Although Japan is regarded as one of the absolute monarchies of the world, it possesses a Constitution which was adopted in 1889. It provides that the Emperor shall be the head of the empire, with all the rights of the sovereign and exercising full executive power, with the advice and assistance of the Cabinet Ministers who are appointed by himself. There is also a Privy Council and a House of Diet, consisting of two branches, a House of Peers, and a House of Representatives. The House of Peers is composed of members of the imperial family, counts, viscounts, and barons, and an indefinite number of persons appointed by the Emperor for meritorious service to the state or for erudition, and persons elected by each Fu and Ken. The total membership of the House of Peers is 364. According to the Constitution the membership of the House of Representatives shall be 369, a fixed number being returned from each electoral district. Voting is by secret ballot and the proportion of members to the population is one to each 126,000. Under the Constitution absolute freedom of religious belief and practice is assured so long as it does not interfere with general peace and order. There is no state religion, but the mass of the people follow one of the eleven sects of Shintoism, or one of the sixteen sects and twenty-five creeds of Buddhism. The present Mikado is Mutsuhito, who was born at Kyoto on November 3, 1852. He succeeded his father, Komei Tenno, February 13, 1867, and was married to Princess Haruko, the daughter of Prince Ichijo, on February 9, 1869. She was born May 28, 1850, and their issue has been: Prince Yoshihito, Prince Hirohito, Prince Yasuhito, Princess Masako, Princess Fusako, Princess Nobuko, Princess Toshiko.

The Heir Apparent.—The Imperial House law, which was passed February 11, 1889, definitely fixes the succession to the throne upon the next male descendant of the sovereign. As the result, Prince Yoshihito, the oldest son of the Mikado, is the heir apparent. He was born

August 31, 1879, and was proclaimed Kotaishi, or Crown Prince, November 3, 1889. On May 10, 1900, he was married to Princess Sadako, the daughter of Prince Kujo. They have had two children.

The Ministry.—The Ministry, or Cabinet, comprises the following departments: President or Premier; Minister of Foreign Affairs, Minister of Finance, Minister of the Interior, Minister of Justice, Minister of War, Minister of the Navy, Minister of Public Instruction, Minister of Agriculture and Commerce, Minister of Communications.

Kansas. Successive Constitutions were framed in 1857, 1858, 1859, and 1861, the last of which, amended nine times up to 1897, is still in force. Amendments, proposed in either House of the Legislature, and agreed to by a two-thirds majority of each House, are submitted to the people, and, if approved by a majority of those who vote, become part of the Constitution. The Legislature consists of a Senate of forty members, elected for four years, half their number retiring every two years, and a House of Representatives of 125 members, elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Legislators must be voters, resident in the county for which they are elected. The chief executive officer of the State is the governor, elected for two years. He has the power usually invested in State governors, including authority to call special sessions of the Legislature, a limited pardoning power and a veto which may be overridden by a two-thirds majority of each House. Other officials elected for two years are the lieutenant-governor, auditor, treasurer, attorney-general, and superintendent of public instruction.

Kentucky. The Constitution adopted in that year was succeeded by other Constitutions in 1799, 1850, and 1891, that of 1891 being still in force. Amendments of the Constitution, proposed in either House of the Legislature and agreed to by a three-fifths vote of all the members of each House, are submitted to the popular vote and, if then approved, become part of the Constitution. The Legislature, known as the General Assembly, consists of a Senate of thirty-eight members elected for four years, one-half retiring every two years, and a House of Representatives of 100 members elected for two years. Bills for raising money must originate in the House of Representatives. In order to become law any bill at its final passage must have a majority voting for it not less than two-fifths of the members elected to each House. The House of Representatives can impeach; the Senate tries impeachments. Eligible to the Senate are all citizens 30 years of age who have resided in the State six years and in the district one year next before the election. Representatives must be 24 years of age and must have resided in the State two years, and in the county or district one year next before election. The chief executive authority resides in the governor, elected for four years. He has the powers usually vested in State governors, including a veto which may be overridden by a majority of all the members elected to each House. Other

officials elected for four years are the lieutenant-governor, treasurer, auditor, attorney-general, and superintendent of public instruction.

Liberia is a negro Republic on the coast of West Africa. Founded in 1822, by American philanthropists for the settlement of freed slaves. It was declared independent in 1847, was recognized as a sovereign state by Great Britain in 1848, and by the United States in 1862. The Constitution is on the model of that of the United States. The President is elected for four years, the House of Representatives (fourteen members) for two years, and the Senate (nine members) for six. The Liberian Development Chartered Company (British) in 1906, advanced £100,000 to the government, with which a government bank was founded, roads were built, other public works were commenced, and a military constabulary force was established. In addition two British officials were appointed to reorganize the customs service and the country's finance.

Louisiana. The Constitution of 1812 was succeeded by those of 1845, 1852, 1864, 1868, 1879, and 1898; the last-named was amended in 1900, in 1902, and in 1904, and is still in force. Amendments proposed in the General Assembly and approved by a two-thirds vote of each House are submitted to the popular vote for ratification. The Legislature consists of a Senate of forty-one members and a House of Representatives of 115 members, Senators and Representatives being chosen for four years. The powers of the two Houses are similar, but bills for raising money must originate in the House of Representatives, and the Senate tries cases of impeachment brought by the other House. Senators must be at least 25 and Representatives 21 years of age; both must have been citizens of the State for five years and residents in the State for two years next before their election. The chief executive officer is the governor, who is elected for four years, and has the powers usually entrusted to State governors, including the limited veto. Other officials elected for four years are the lieutenant-governor, the treasurer, the secretary of state, the auditor, the attorney-general, and the superintendent of education.

Maine. The first Constitution of Maine, adopted in 1819, was frequently altered by amendments, which, to the number of twenty-one, were in 1776 incorporated in the document. Between 1876 and 1898 nine amendments were adopted. Proposed amendments, passed by a two-thirds vote of both Houses of the Legislature, are submitted to the voters at the next election, and, if then passed by a majority of those voting, they become part of the Constitution. For extensive revision a constitutional convention may be, but never has been, called by a two-thirds vote of both Houses of the Legislature. The Constitution provides for a Legislature of two Houses, the Senate, consisting of thirty-one members, and the House of Representatives with 151 members, both Houses being elected at the same time for two years. Senators are elected in districts formed of groups of towns, and Representatives are chosen by cities, towns, and plantations according to population. Senators must be 25 and Representatives

21 years of age; members of both Houses must be citizens of the United States, resident in Maine for one year, and in the district or town for three months before the election. But no member of Congress, no office holder of the Federal Government, except a postmaster, no paid officer of the State, except justices of the peace, notaries public, coroners, and militia officers, may sit in either House. The powers of the two Houses are similar, but money bills must originate in the House of Representatives. The chief executive authority resides in the governor, who is elected for two years by popular vote. He must be 30 years of age, born in the United States, resident in the State for five years next before election, and he may not hold any other office, either under the United States or under the State of Maine. He recommends legislative measures, and has a veto which lapses if unused for five days, and which may be overridden by a two-thirds vote of each House. He is commander-in-chief of the military forces and he along with the council, appoints many State officers. He may grant pardons, etc., but has to report to the Legislature on each case of his exercise of this power. The governor has an advisory council consisting of seven members chosen every two years by joint ballot of Senators and Representatives. The council's advice and consent are required for appointments, and its warrant for payment of money from the treasury. The secretary of state, treasurer, and attorney-general are appointed by joint ballot of the Legislature. Other officers are the superintendent of schools, various commissioners (for labor statistics, insurance, land, etc.), and also boards and commissions for State institutions, railways, assessment, health, fisheries, etc. For local government the State is divided into sixteen counties, subdivided into towns, cities, plantations, and various unincorporated places. Counties are administered by boards of commissioners elected for six years, one commissioner retiring every year. These boards have elective officers and supervise county finance, property, jails, roads, etc.

Maryland. The first Constitution of Maryland was succeeded by others in 1857, 1864, and 1867, that of 1867, amended ten times (last in 1901), being still in force. Amendments proposed in the General Assembly must obtain a three-fifths vote of all the members elected to each House; they must then be submitted to the people, and, if approved by a majority of those voting, they become part of the Constitution. The Legislature consists of a Senate and a House of Delegates, the two bodies together being known as the General Assembly. There are twenty-seven Senators and 101 Delegates. The Senators serve for four years, and the Senate is renewed to the extent of half every two years. The Delegates are elected for two years. Senators must be 25 years of age, and Delegates 21. Clergy, members of Congress, and federal officials are ineligible for either Senate or House of Delegates. No person is eligible who has not lived in the State three years next preceding election. Any bill may originate in either House and be altered, amended, or rejected by the other. The House of Delegates

has sole power of impeachment, and impeachment cases are tried by Senate. The highest officer of the State is the governor, elected for four years. He is commander-in-chief of the State militia, and, with consent of Senate, appoints all civil and military officers of State whose appointment or election is not otherwise provided for by law. He may remove for incompetency or misconduct civil officers who received appointment from the executive for a term of years. He may convene the Legislature or Senate alone for special sessions. He has a veto which may be overcome by a three-fifths vote of the members elected to both Houses. He may grant pardons and reprieves except in cases of impeachment, but must report his action to the Legislature whenever required. Other officers are the secretary of state, treasurer, the comptroller, the adjutant-general, the attorney-general, and the superintendent of education. The State is divided into twenty-four counties.

Massachusetts. The first Constitution of the State, after having been submitted to and accepted by the people, was formally adopted at a Convention held at Boston on June 15, 1780. It has been amended from time to time, the earliest amendments having been made in 1821 and the most recent in 1894. The Constitution provides for a legislative body consisting of a Senate and a House of Representatives, styled collectively the General Court of Massachusetts. The Senate consists of forty members elected annually by popular vote, the State being divided into forty senatorial districts, each of which returns one Senator. The House of Representatives consists of 240 members, elected in 164 districts, each of which returns one, two, or three representatives, according to population. There is an annual session of the Legislature and special sessions may be called by the governor in case of exigency. Money bills must originate in the House of Representatives, but may be amended in the Senate. If the subjects under consideration are of public interest, hearings are advertised and the people have a right to appear and speak in support of or against the passing of certain laws. Amendments of the Constitution must be proposed in the General Court, and agreed to by a majority of the Senate and two-thirds of the House of Representatives present and voting thereon; they must be referred to the General Court next elected, and if then agreed to by similar majorities, they are submitted to the people, and, if approved and ratified by a majority of the qualified voters voting thereon at meetings legally held for the purpose, they become part of the Constitution. The executive power of the State resides in the governor, assisted by a council. He is chosen by popular vote and holds office for one year, but no one is eligible who has not resided within the State for the seven years last past. He has power to adjourn or prorogue (for not more than ninety days), or to summon the General Court. He is commander-in-chief of the State's army and navy. He may, with the advice of his council, pardon convicted offenders, but not those convicted before the Senate on

impeachment by the House. He appoints (with the consent of his council) the judges, the solicitor-general, and many other officials, and he has general supervision of the administration of affairs in the State. The council with which he acts consists of eight councillors elected by popular vote in the eight districts into which the State is, for this purpose, divided. The lieutenant-governor, who becomes acting governor in case of the death of the governor, or of his absence from the State, is similarly elected by the people, and holds office for one year. The secretary of the commonwealth is also elected by the people for one year. Other officials elected by the people for a year are the treasurer and receiver-general, who is ineligible for more than five successive years of office; the State auditor, and the attorney-general. There are fourteen counties in the State, thirty-three cities and 321 towns. The cities are granted charters by the State Legislature. The mayor is the executive officer in each city, and the legislative bodies are usually a board of aldermen and a common council. The counties are administered by officers styled the county commissioners.

Mexico. Under the present Constitution, which bears date of February 5, 1857, Mexico is a federative Republic. It was originally divided into nineteen States, but at this time there are twenty-seven, with two Territories, and the Federal District, and, while each manages its own local affairs, they are bound together as an inseparable body by the constitutional laws. The form of government in Mexico is broadly similar to that of the United States, the executive vesting in a President, who is elected for a term of four years, and who is assisted by a Cabinet, while the legislative power is conferred upon a Congress, which is composed of two Houses—a Senate and a House of Representatives. The President may serve any number of terms, and the present Executive, General G. Porfirio Diaz, is now in his sixth term, as he had already served five four-year terms when he was inaugurated December 11, 1900. Under the direction of the President and a Council, the administration is carried on by the Secretaries of State in charge of the following portfolios: Foreign Affairs, Interior, Justice and Public Instruction, Agriculture and Colonization, Finance, Communications and Public Works, War and Navy. The Senate consists of fifty-six members, two from each State, who must be at least 30 years of age. They are elected by the ballots of all respectable males and serve for a term of two years. Representatives must be 25 years of age. They are elected for an equal term with the Senators and in a similar manner. The President is elected by electors popularly chosen at a general election. There is no state religion in Mexico, and all religious sects are equal before the law. The prevailing religion, of course, is Roman Catholic, but no ecclesiastical body can own realty, and since 1863, when all the churches were closed and the lands confiscated, many of the buildings have been assigned to serve as hospitals, schools, etc. The judicial power in Mexico is entirely distinct from that of the executive. It includes a Supreme Court,

consisting of fifteen judges, who are chosen for a term of six years; Circuit Courts, with three judges, and District Courts, with thirty-two judges. The chief sources of Mexican revenue are the internal taxation and the customs, less than fifteen per cent. being obtained from other sources.

Michigan. Its first Constitution was framed and adopted in 1835, and Congress passed the Act admitting it into the Union as a State on January 26, 1837. In 1850 a new Constitution was adopted which with little alteration is still in force. The legislative authority is vested in a Senate of thirty-two members elected by the counties or groups of counties for two years, and a House of Representatives of from sixty-four to 100 members, the electoral districts being rearranged according to population every five years. Senators and Representatives must be citizens of the United States and qualified electors of the districts for which they are chosen. Any bill may originate in either House. The Constitution was amended in 1870, 1875, 1887, and 1904. Amendments may be proposed in either House; if approved by a two-thirds vote of each House they are submitted for the approval of the people in manner prescribed, and, if this approval be given, the amendments become part of the Constitution. For a complete or extensive revision a Convention is required and the question is submitted to the electors. If the majority of those who vote are on the affirmative side, the Legislature makes provision for a Convention. The executive power is vested in the governor, elected for two years. He has the powers usually entrusted to State governors, including a limited veto, and he makes administrative appointments, many of which require the approval of the Senate. The secretary of state, State treasurer, auditor-general, and attorney-general are elected by popular vote. The lieutenant-governor, elected for two years, presides over the Senate, and in case of the death, absence, or default of the governor, succeeds to the governor's authority. For local government the State is organized in counties, cities, towns, and villages. There are eighty-five counties, each of which is a corporate body with a board of supervisors as its administrative authority. Cities must have each a population of not less than 3,000, but a few which have been long incorporated have a smaller population. Cities are classified in four groups, according to population, and are divided into three or more wards.

Minnesota. The State Legislature consists of a Senate of sixty-three members, one being elected in each of the legislative districts, and a House of Representatives of 119 members elected in the same districts in numbers proportioned to population. Eligible for either House are all male citizens of the United States, 21 years of age, who have resided one year in the State and six months in the district just before election; but no office-holder under the Federal or State government, except a postmaster, may belong to either House. The two Houses have similar powers, but money bills must originate in the House of Representatives. No special laws relating to personal or local

affairs or corporations can be enacted. The House of Representatives can impeach State officers before the Senate, which by a two-thirds majority of members present may convict and deprive of office. Some changes have been made in the Constitution, chiefly, as in 1896 and 1898, affecting the regulations for local organization. Amendments proposed in either House and supported by a two-thirds vote of each and subsequently approved by the people in manner prescribed, become part of the Constitution. For an extensive revision, the proposal, after being approved by a two-thirds vote of each House, must be submitted to the electors; if approved, the Legislature provides for the holding of a convention; delegates are elected, meet together, and make the revision which is then referred to the people and, if approved, becomes law. The chief executive officer of the State is the governor, who is elected by the people for two years. He must be a citizen of the United States, 25 years of age, and resident in the State for one year before election. In legislation he has a limited veto and other powers usually entrusted to State governors. The lieutenant-governor presides over the Senate and, on the death or absence of the governor, he acts as governor. The secretary of state is elected for two years; the auditor (elected for four years) audits State accounts and superintends State lands; the treasurer and attorney are elected for two years. Several important officials, boards, and commissioners, with duties relating to health, equalization, charities, insurance, railways, etc., are appointed by the governor. The State is organized in counties (usually under special acts), and in townships, villages, and cities (usually under general acts). There are eighty-two counties.

Mississippi. The Constitution of 1817 was followed by others in 1832, 1868, and 1890. Proposed amendments of the Constitution approved by two-thirds of the members of each House voting on them on three several days, and ratified by a majority of the qualified electors voting on them, become part of the Constitution. The Legislature consists of a Senate and a House of Representatives, both elected for four years. Ordinary sessions, unrestricted in length, are held once in four years. Special sessions, limited to thirty days, unless extended by proclamation by the governor, are held alternately with regular sessions, so that the Legislature in fact meets biennially. Bills for raising revenue and bills providing for assessment of property must be approved by three-fifths of the members of each House present and voting. The chief executive officer of the State is the governor, who is elected for four years, and is not eligible for the succeeding term. He has a limited veto, and the other powers usually vested in State governors. Other officials elected for four years are the secretary of state, the lieutenant-governor, the treasurer, and the auditor. Neither treasurer nor auditor is eligible for the succeeding term, nor can the one succeed the other. Mississippi is divided into seventy-six counties.

Missouri. The original Constitution, adopted in 1820, was followed by those of 1865

and 1875, the latter of which, as amended in 1884, 1890, 1900, and 1902, is still in force. Amendments proposed in either House of the Legislature, and supported by a majority of the members of each, are submitted to the popular vote and, if approved, become part of the Constitution. The Legislature, called the General Assembly, consists of a Senate of thirty-four members elected for four years (half their number retiring every two years), and House of Representatives of 142 members elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Senators must be at least 30 years of age, electors in the State three years and resident in the district one year next before election. Representatives must be 24 years of age, citizens, electors in the State two years, and resident in the county or district one year next before election. The chief executive official is the governor, who is elected for four years, and possesses the powers usually entrusted to State governors, including a limited pardoning power and a veto which may be overridden by a two-thirds majority of all the members of each House. Other State officials are the secretary of state, lieutenant-governor, auditor, treasurer, attorney-general, and superintendent of public instruction, all elected for four years. The retiring governor and treasurer are not eligible for the succeeding term. The State is divided into 115 counties.

Monaco. Monaco is a small Principality in the Mediterranean, surrounded by the French Department of Alpes Maritimes, excepting on the side towards the sea. From 968 it belonged to the House of Grimaldi. In 1715, it passed into the female line, Louise Hippolyte, daughter of Antony I., heiress of Monaco, marrying Jacques de Goyon Matignon, Count of Thorigny, who took the name and arms of Grimaldi. Antony I. died in 1731, Louise Hippolyte only reigning ten months and dying in 1732. She was succeeded by her husband under the name of Jacques I., who also succeeded Antony I. as Duc de Valentinois, who was in his turn succeeded by his son Honorius III. This prince was dispossessed by the French Revolution in 1792, and died in 1795. In 1814, the Principality was reestablished, but placed under the protection of the Kingdom of Sardinia by the Treaty of Vienna (1815). In 1848, Mentone and Roquebrune revolted, and declared themselves free towns; in 1861, Charles III. ceded his rights over them to France, and the Principality thus became geographically an *enclave* of France, when the Sardinian garrison was withdrawn and the protectorate came to an end. The Prince is an absolute ruler, there being no elective representation within the Principality. The administration is entrusted to a Governor-General with a Secretary-General and a Secretary of State. There is a consultative State Council of five members appointed by the Prince. Municipal administration is in the hands of a *maire* and two assistants with a Commission of five members, all appointed by the Prince. In 1819, the Government adopted the French Codes and a Court of First Instance, as well as

a Judge de Paix's Court. A Court of Appeals is constituted by the Prince's appointment of two Paris judges who act as such when necessary. The Principality has its own coinage, which is current since 1876 in all the States of the Latin Union; it also issues its own separate postage-stamps.

Montana adopted its first and present Constitution in 1889. The legislative power is vested in a Senate and a House of Representatives, which meet in regular session on the first Monday of January in each odd-numbered year. There are twenty-six Senators, elected for four years in such a manner that the Senate is renewed to the extent of one-half at each biennial election. The members of the House of Representatives, seventy-two in number, are elected for two years. Elective State officials are the governor, lieutenant-governor, secretary of state, State treasurer, attorney-general, State auditor, and superintendent of public instruction. The governor has the right of appointment to various offices, including those of State land agent, commissioner of the bureau of agriculture, labor and industry, and inspector of mines. For local administrative purposes the State is divided into twenty-six counties, and into twelve judicial districts.

Montenegro. Under the Constitution granted by the Prince of Montenegro on December 19, 1905, the form of government has been changed. It is now an hereditary Constitutional monarchy with popular representation. A National Assembly or Skupshtina was convoked for a short term in 1905 to receive communication of the Constitution. An electoral law has been framed under which elections took place in September, 1906, for the present Skupshtina. That assembly is, in future to be convoked yearly, on October 31st, by the Prince. Its members are elected by universal suffrage for a period of four years. Each of the fifty-six districts or capitanats of Montenegro, and each of the six provincial towns, Cetinje, Podgoritz, Niksic, Kolashin, Antivari, and Dulcigno, elect one representative. There are also twelve *ex-officio* members, including the Montenegrin Orthodox Metropolitan, the Roman Catholic Archbishop of Antivari, the Montegrin Mussulman Mufti, six high officials of the state, and three generals, nominated by the Prince. There are thus seventy-four members in all. Besides the Prime Minister, there are Ministries of the Interior, Justice, Agriculture, War, Foreign Affairs, Finance and Public Works, Worship and Public Instruction.

Morocco. The form of government of the Sultanate, or Empire of Morocco, is in reality an absolute despotism, unrestricted by any laws, civil or religious. The Sultan is chief of the state, as well as head of the religion. As spiritual ruler, the Sultan stands quite alone, his authority not being limited, as in Turkey and other countries following the religion of Mohammed, by the expounders of the Koran, the class of "Ulema," under the "Sheik-ul-Islam." The Sultan has six ministers, whom he consults if he deems it prudent to do so; otherwise they are merely the executive of his unrestricted will. They are the Grand Vizier, the Ministers for

Foreign Affairs, Home Affairs, and War, Chief Chamberlain, Chief Treasurer, and Chief Administrator of Customs. The unsettled condition of affairs in Morocco rendered it necessary that other countries interested should come to an understanding regarding their respective rights. By the Anglo-French Convention of April, 1904, Great Britain recognizes that it appertains to France to assist in the administrative, economic, financial, and military forms in Morocco, but reserves the rights which by treaties or usage she now enjoys. Both governments agree not to allow fortifications on the Moorish coast between Melilla and the heights dominating the right bank of the Sebu, but this arrangement does not apply to points held by Spain on that coast. Neither government will lend itself to any inequality in taxation or railway rates, and reciprocal engagements with respect to trade are to last for thirty years with prolongation for periods of five years, failing denunciation a year in advance. Roads, railways, harbor works, etc., are to remain under State control. These arrangements were accepted also by Spain in a Franco-Spanish convention. Germany, however, expressed dissatisfaction with this arrangement, and a conference of thirteen delegates, representing Morocco, the European Powers interested, and the United States of America, was held at Algeciras for the settlement of disputed matters, from January 16th to April 7, 1906, when an agreement, embodied in a General Act, was signed by all the delegates. The Sultan signed the agreement on June 18th, and ratifications of the agreement were deposited at Madrid by the other powers, December 31, 1906. Under this agreement there will be a Moorish police force commanded by Moorish Kaids, assisted by French and Spanish instructors and officers, and the force will be inspected by a Swiss Inspector-General, the arrangement to continue for five years. The force will be from 2,000 to 2,500 strong, and will be distributed among the eight ports of Morocco. A state bank is to be instituted with a concession for forty years. It will, to begin with, have a capital of from fifteen to twenty million francs; it will issue bank notes, will act as Treasurer and Paymaster of Morocco, and be the financial agent of the government at home and abroad. It will be required to rehabilitate the currency. Its working will be observed, but not directed, by four censors appointed by the Imperial Bank of Germany, the Bank of England, the Bank of Spain, and the Bank of France. Other provisions deal with the acquisition of land by foreigners, the imposition and collection of taxes, and the authority of the state over the public services and public works. Mulai-Abd-el-Aziz, born February 24, 1878, son of Sultan Mulai-Hassan; succeeded on the death of his father, being proclaimed Sultan in the Sherifian Camp, June 7, 1894; his son, Prince Hassan, was born July, 1899. The present Sultan of Morocco—known to his subjects under the title of "Emir-al-Mumenin," or Prince of True Believers—is the fifteenth of the dynasty of the Alides, founded by Mulai-Ahmed, and the thirty-sixth lineal descendant of Ali, uncle and son-in-law of the Prophet.

Nebraska. The first Constitution, adopted in 1867, was succeeded in 1875 by that which as amended in 1886, is still in force. Amendments proposed in either House of the Legislature, agreed to by a two-thirds majority of each House, and approved by a majority of the electors voting on them at a general election, become part of the Constitution. The Legislature consists of a Senate of thirty-three members and a House of Representatives of 100 members. The Legislators are elected for two years. Money bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House, but if the person impeached is a justice of the Supreme Court, the trial takes place before a court of impeachment consisting of the District Courts judges. Legislators must be citizens resident in the district for one year next preceding election. The franchise extends not only to citizens but also to aliens who, thirty days before the election, have declared their intention of becoming citizens. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia, and, with advice and consent of the Senate, appoints to various offices, and may grant pardons, etc. He may call special sessions of the Legislature, and he has a veto which may be overridden by a three-fifths vote of each House. Other officials elected for two years, besides those named, are the lieutenant-governor, auditor, treasurer, superintendent of public instruction, attorney-general, and commissioner of public lands and buildings. The treasurer is not eligible for a third consecutive term.

Netherlands. The Constitution of 1848, revised in 1887, vests the executive in the sovereign, and the legislative authority in the sovereign and the states-general, the latter sitting in two chambers: the first, consisting of fifty members, elected for nine years (one-third retiring every three years) by the provincial states from among the most highly-assessed inhabitants and from among a number of specified officials; the second of 100 members, elected for four years by all male citizens of 25 years or more who pay a direct tax to the state, or are householders or own boats of not less than twenty-four tons, or receive a minimum wage or salary of about \$115, or give other evidence of their ability to support themselves and their families. The government and the second chamber alone possesses the initiative in legislation; the upper house having the right of approval or rejection, but not of amendment. Alterations in constitution are made by a two-thirds vote of both houses, followed by a general election, and confirmation by a similar vote of the new states-general. A state council of fourteen members appointed by the sovereign is consulted on all legislative and on most executive matters.

Nevada. The original Constitution adopted in 1864, is in force as amended in 1880 and 1889. Amendments proposed in and approved by the Legislature are submitted to the next Legislature and if then approved are referred to the people for ratification. The Legislature consists of a Senate of seventeen members elected for four years, about half their number retiring every two years, and a House of Representatives

of thirty-nine members elected for two years. Any bill may originate in either house. The Senate tries cases of impeachment brought by the House of Representatives. The chief executive officer is the governor, elected for four years. He has the powers and duties usually entrusted to State governors, except that he has not pardoning power, this authority being vested (apart from impeachment cases) in the board of pardons of which he is a member. He has the usual limited veto. Elective officers are the lieutenant-governor, secretary of state, treasurer, comptroller, surveyor-general, and attorney-general.

New Hampshire. The Constitution of 1783, was amended in 1792, in 1852, in 1889, and in 1903. The sense of the people as to the calling of a convention for the revision of the Constitution must be taken every seven years. If a convention is held the amendments to the Constitution which it proposes must be laid before the towns, and approved by two-thirds of the qualified voters present and voting on the subject. The State Legislature, consisting of a Senate and a House of Representatives, meets once in two years and remains in session until prorogued by the governor, generally about three months. The Senate consists of twenty-four members, elected for two years. It cannot originate money bills. Any qualified elector is eligible to sit in the Senate. The House of Representatives consists of from 390 to 400 members, the number varying slightly with each session, as representation is on the basis of population. The House has the power of impeachment and of originating money bills. The governor is chosen by popular election, and holds office for two years. He has the nomination of all judicial officers, the attorney-general, coroners, and all officers of the navy and general and field-officers of the militia. His appointments require the approval of the council. He has the other powers usually entrusted to State governors, including a limited veto and limited pardoning power. The secretary of state is elected by joint ballot of the senators and representatives. The other important State officials are the state treasurer, adjutant-general, and commissioners of labor, immigration, railroads, banks, education, health, agriculture.

New Jersey. The Constitution now in force was ratified on August 13, 1844, amended in 1875 and in 1897. The legislative power is vested in a Senate and a General Assembly, the members of which are chosen by the people, all male citizens (with necessary exceptions) 21 years of age, resident in the State for a year, and in the county for five months preceding the election, having the right of suffrage. The Senate consists of twenty-one Senators, one for each county, elected by the voters for three years, in such manner that the Senate is renewed to the extent of one-third annually. Senators must be 30 years of age, and must have resided, just before their election, four years in New Jersey, and one year in the county for which they are elected. The General Assembly consists of sixty members elected by the voters of the counties in numbers proportioned to the population of the counties as determined by the decennial

Federal census. Money bills must originate in the Assembly, but the Senate may propose amendments. Every bill passed by both Houses requires the assent of the governor, who may within five days remit it for reconsideration to the House in which it originated; if then the bill be approved by a majority of each House it becomes law. The executive of the State is vested in a governor, elected for three years by the legal voters. He must be not less than 30 years of age, have been twenty years a citizen and seven years resident in the State immediately before election. He is not eligible for the next term of the office. His duties include the military command-in-chief, the summoning of the Legislature when necessary, the recommendation of legislation, the granting of commissions, and the supervision of the execution of the laws. The State secretary is appointed for five years by the governor with the advice and consent of the Senate. The treasurer and the comptroller are appointed for three years by the Senate and General Assembly in joint session.

New Mexico. Within the limits assigned by the organic act, legislative authority is vested in a legislative assembly, consisting of a Council and a House of Representatives. The Council has twelve members, one or more for each of nine districts; the House of Representatives has twenty-four members representing fifteen districts, the members for each house being elected for two years. The Legislature meets for sixty days once in two years. The United States Congress may annul acts passed by the Territorial Legislature. To the Federal Congress the Territory sends one delegate, who sits and may speak but not vote in the House of Representatives. The Territory has no vote in the election of the Federal President. The executive authority is vested in a governor, appointed for four years by the Federal President with the advice and consent of the Federal Senate. He has a veto in legislation, but his veto may be overridden by a two-thirds majority in each house. He is commander-in-chief; has power of pardoning, and appoints certain territorial officials with the advice and consent of the Council. The territorial secretary is appointed for four years by the Federal President and Senate. Besides discharging secretarial duties, he succeeds to the position of acting-governor in case of the death, removal, or incapacity of the governor. For local government the Territory is divided into twenty-five counties, each of which is administered by a board of three commissioners, elected for two years by the county voters. There are also, for each county, a sheriff, treasurer, assessor, surveyor, and other officials. Cities (population over 3,000) have a mayor and a board of aldermen; towns (population under 3,000) have a mayor, four trustees, and a recorder.

New York. From 1609 to 1664 the region now called New York was under the sway of the Dutch; then it came under the rule of the English who governed the country till the outbreak of the War of Independence. Between July 9, 1776, and April 20, 1777, a Convention framed a Constitution under which New York was transformed into an independent State, after-

wards, in 1788, entering the Union as one of the thirteen original States. A new Constitution, framed on a wider basis, was ratified by the people in 1822. A third Constitution was enacted in 1846, and a fourth in 1894. The legislative authority is vested in a Senate of fifty members elected every two years, and an Assembly of 150 members elected annually. The senatorial electoral districts are counties, either singly or grouped according to population; the Assembly districts are either counties or parts of counties, the various districts having approximately equal population. Each senatorial and each Assembly district elects one member. Senators and representatives must be citizens of the United States 21 years of age. No member of Congress or Federal officer or officer of any city government, nor any person who within 100 days of the election has held such office, can sit in either house. The two Houses have equal powers, even with respect to money bills. Every law must be passed by both Houses with the assent of the majority of the members of each. Bills appropriating money for local or private purposes require a two-thirds majority. The Legislature is by the Constitution prevented from enacting special laws in numerous matters, and there are important restrictions respecting financial legislation. The principal executive officer of the State is the governor, elected by the people for two years. He must be a citizen of the United States, 30 years of age, and resident in the State for five years next preceding the election. He has a veto in legislation, provided it be exercised within ten days; but it may be overridden by a two-thirds majority of each House. He is commander-in-chief of the military and naval forces; with the assent of the Senate, he appoints many State officers; he may convene the Senate or the Legislature if necessary; he recommends legislative measures and sees that the laws are faithfully executed. He may reprieve or pardon criminals, but not in cases of treason or impeachment. Elective officers are the state secretary who keeps the State records and seal; the comptroller who audits accounts and issues warrants for payments; the treasurer who pays money on warrants; the attorney-general who is law officer of the State; the State engineer and surveyor who has charge of public lands and the construction of canals. The administrative boards (civil service commissioners, railroad commissioners, and many others) are generally appointed by the governor with the assent of the Senate.

New Zealand. The present form of government for New Zealand was established in 1852. By this act the colony was divided into six provinces, afterwards increased to nine, each governed by a superintendent and provincial council, elected by the inhabitants according to a franchise practically amounting to household suffrage. By a subsequent act of the colonial legislature, in 1875, the provincial system of government was abolished, and the powers previously exercised by superintendents and provincial officers were ordered to be exercised by the governor or by local boards. By the terms of this and other amending statutes, the legisla-

tive power is vested in the governor and a general assembly, consisting of two chambers—the first called the legislative council, and the second the house of representatives. The governor has the power of assenting to or withholding consent from bills, or he may reserve them. He summons, prorogues, and dissolves the parliament. He can send drafts of bills to either house for consideration, but in case of appropriations of public money must first recommend the house of representatives to make provision accordingly before any appropriations can become law. He can return bills for amendment to either house. The legislative council consists at present of thirty-eight members, who are paid at the rate of £200 per annum. Those appointed before September 17, 1891, are life members, but those appointed subsequently to that date hold their seats for seven years only, though they are eligible for reappointment. By an act passed in 1900, the number of members of the house of representatives was increased to eighty, including four Maoris, elected by the people for three years. They are paid at the rate of £300 per annum.

North Carolina. The Constitution of 1776, was succeeded by that of 1868, which, amended in 1872, 1875, 1879, 1888, and 1899, is still in force. Amendments proposed in either House, and agreed to by a three-fifths vote of each House of the Legislature, require ratification by a majority vote of the people. The State Legislature, known as the General Assembly, consists of a Senate of fifty members, and a House of Representatives of 120 members, elected for two years. Senators must be United States citizens, 25 years of age, resident in the State for two years next preceding the election; Representatives must be 21 years of age, citizens, and resident in the State one year next before the election. Any bill may originate in either House. The chief executive official is the governor, elected for four years. He is commander-in-chief of the militia; has power to pardon, etc., except in cases of impeachment, but must report to the General Assembly on his exercise of this power; he appoints, with the consent of the Senate, to offices not otherwise provided for. He has no veto. Officials elected for four years are the lieutenant-governor, secretary of state, auditor, treasurer, superintendent of public instruction, and attorney-general.

North Dakota, with its present boundaries, was admitted as a State into the Union in 1889, and the original Constitution is still in force. It may be altered by amendment proposed in either House of the Legislature, agreed to by a majority of all the members of each House, and finally approved by a popular vote. The Legislature, called the Legislative Assembly, consists of a Senate of forty members, elected for four years, and a House of Representative of 100 members elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Senators must be 25 years of age; Representatives, 21; both must be citizens resident in the State for two years next before election. At the head of the executive is the governor, elected for two years. He

has the powers usually vested in State governors, including limited pardoning power, and a veto which may be overridden by a two-thirds majority of all the members of each House. Officials elected for two years are the lieutenant-governor, secretary of state, auditor, treasurer, and superintendent of public instruction.

Norway. The union with Sweden, which had endured from 1814 to 1905, was dissolved by the action of the Norwegian Storting on June 7, 1905, following a protracted dispute between the two countries as to their diplomatic representation abroad; and the Karlsbad Convention was signed September 24, 1905, settling the details of a mutual agreement for the repeal of the union. King Oscar declined the offer of the throne to a prince of his house, and after a plebiscite it was offered to and accepted by Prince Charles of Denmark, who became King as Haakon VII. The Norwegian Constitution of 1814, several times modified since, vests the legislative power in the Storting, which has 123 members (forty-one from urban and eighty-two from rural districts), who are elected for three years. Every male citizen of 25 who has resided in the country for five years is qualified as an elector, except for legal disabilities. For business purposes it is divided into the Odels-thing, composed of three-fourths of the members, and the Lagthing, consisting of the remainder; all new bills originate in the former. The king has the right of vetoing the laws passed by the Storting, but if the same bill pass three Storthings separately and subsequently elected, his veto is overridden. The executive power is in the hands of the king with a council of state composed of a minister of state and eight councilors.

Ohio. The Constitution of 1802 was superseded by that of 1851, which, with amendments adopted in 1875, 1883, 1885, and 1903, is still in force. Amendments of the Constitution, proposed in either House of the Legislature and agreed to by a three-fifths majority of the members of each House, must be published in prescribed manner in the counties for six months before the next election of members of the Legislature, and at that election they must be submitted to the electors; if approved by a majority of those who vote, they become part of the Constitution. The question of a general revision of the Constitution is submitted to the people every twenty years, provision being made for the appointment of a convention to draft alterations. The Legislature consists of a Senate of thirty-four members, and a House of Representatives of 118 members, both Houses being elected for two years. Any bill may be proposed in either House and is subject to amendment or rejection in the other. Eligible to either House are all male citizens 21 years of age, resident in the State and in the district one year next before the election, but paid office-holders of the Union or of the State are not eligible. The chief executive authority is vested in the governor, elected for two years (the present governor for three years). He has the powers usually entrusted to State governors, including limited pardoning power and the veto, which may be overridden by a two-thirds majority of

all the members of each House. Officials elected for two years are the lieutenant-governor, secretary of state, attorney-general, treasurer, and a dairy and food commissioner. The common schools commissioner is elected for three years, and the State auditor for four years. Ohio is divided into eighty-eight counties.

Oklahoma. The President of the United States on November 16, 1907, signed the Constitution of Oklahoma and issued a proclamation announcing its admission as a State into the Union. The Census Bureau on September 19, 1907, reported the result of a special census taken of the population of the new State, to be 1,414,042.

The most notable feature of the State Constitution was its provisions for the regulation of corporations. In line with its other corporation provisions were the adoption of 2-cent passenger fares, electric lines not included, and the abolition of the doctrine of the fellow-servant.

The initiative and referendum was given a prominent place in the constitution, but the right of recall usually regarded as practically a parallel proposition, was rejected.

Separate schools for white and negro children were provided; all other races than negroes being classed as "white."

The State was given the right to engage in any business or occupation, but the grant was limited by the qualification that it shall be "for public purposes."

Trial by jury was granted in contempt cases for violations of injunctions or orders of restraint, and an opportunity to be heard must be given on all contempts before punishment is imposed. Three-fourths jury verdicts were provided for in civil cases and criminal cases less than felony. The grand jury system was not made mandatory. Persons were granted immunity from prosecution if their testimony incriminated themselves.

Records, books and films of all corporations shall be subject to full visitation and inquisition, notwithstanding the immunities and privileges conferred by the bill of rights.

For every sale, the applicant must make a sworn statement as to the purpose for which the liquor is to be used, and each sale must be registered.

The control of all public-service corporations was vested in a corporation commission of three members, elected by the people for six-year terms. Commissioners are required to take an oath that they are not interested directly or indirectly in any company which may come under their supervision. All railroads, oil, pipe, car, express, telephone or telegraph lines are required to receive and transport each other's business without delay or discrimination. All railroads were declared public highways. Public service corporations and their officials were prohibited from consolidating with or owning stock in any competing corporation.

"Transportation companies" were defined as including railroads, street railways, canals, steamboat lines, freight car companies or car associations, express companies and sleeping-car companies. "Transportation companies" include telegraph and telephone lines, and both of these classes were rated as common carriers.

The common law doctrine of fellow-servant was abrogated as to all railroad, street or interurban electric lines and mining companies, and recovery may be had as fully in cases where death occurs as where it does not.

Campaign contributions by corporations were forbidden and it was sought to prevent the issuance of watered stock by providing that no stock shall be issued except for money, labor done or property actually received to the amount of the par value of the stock.

Oman. An independent state in South-eastern Arabia extending along a coast line—southeast and southwest—of almost 1,000 miles from the Gulf of Ormuz and inland to the deserts. Area, 82,000 square miles; population, estimated at 800,000, chiefly Arabs. The capital, Maskat, and the adjacent town of Matra have together about 25,000 inhabitants. Maskat was occupied by the Portuguese till the Seventeenth Century. After various vicissitudes it was taken in the Eighteenth Century by Ahmed

bin Sa'eed, of Yemenite origin, who was elected Imam in 1741. His family have since ruled. The present Sultan is Seyyid Feysil bin Turki, second son of the late Seyyid Turki bin Sa'eed bin Sultan, who succeeded his father June 4, 1888, and was formally recognized by the British Government. In the beginning of the present century the power of the Imam of Oman extended over a large area of Arabia, the islands in the Persian Gulf, a strip on the Persian coast, and a long strip of the African coast south of Cape Guardafui, including Socotra and Zanzibar. On the death of Sultan Sa'eed in 1856, one son proclaimed himself Sultan in Zanzibar and another in Muscat. Eventually the rivals agreed to submit their claims to the arbitration of Lord Canning, Viceroy of India, who formally separated the two sultanates. Subsequent troubles curtailed the area of the state in Asia. The closest relations have for years existed between the Government of India and Oman and a British consul and political agent resides at Maskat. The revenue of the Sultan amounts to about \$250,000. The population is poor; inland the Sultan's authority is merely nominal and there is little security for life and property.

Oregon. The Constitution adopted in 1859 is still in force, except as stated below. Amendments proposed in and approved by the Legislature are submitted to the next elected Legislature, and if then approved are formally submitted to the people for ratification; but this method of ratification is not exclusive (see below). The Legislature or Legislative Assembly, consists of a Senate of thirty members, chosen for four years (half their number retiring every two years), and a House of sixty Representatives, elected for two years. Members of either House must be 21 years of age and must have resided in their county or district for one year next before election. Bills for raising revenue must originate in the House of Representatives. The Constitution was amended in 1902, under the terms of which amendment the people reserve to themselves the power to propose laws and amendments to the Constitution and to enact or reject the same at the polls independent of the Legislative Assembly, and also reserve the power at their own option to approve or reject at the polls any act of the Legislative Assembly. This is known as the initiative and referendum. Not more than eight per cent. of the legal voters are required to propose any measure to be voted upon by the people at the next ensuing general election. Measures thus initiated are enacted or rejected at the polls independently of the Legislative Assembly. Under the referendum, any bill passed by the Legislative Assembly, except such as are for the preservation of the public peace, health, and safety, may, by petition signed by five per cent. of the legal voters, be referred to the people to be voted on for approval or rejection at the next ensuing general election. By virtue of this provision several amendments to the Constitution have been voted on, some of which have been rejected and some adopted. A number of laws have been enacted under the initiative covering different subjects. The chief executive officer of the State is the gov-

ernor, who is elected for four years and exercises the powers usually entrusted to governors, including the pardoning power, and a limited veto which does not extend to acts referred to the people. Elective officers are the secretary of state, treasurer, attorney-general, and superintendent of public instruction, State printer, and labor commissioner. There are thirty-three counties in the State.

Panama. The Republic of Panama was constituted on November 3, 1903, having previously been a department of the Republic of Colombia. The inhabitants of the Isthmus of Panama being strongly in favor of the acquisition of the Panama Canal Concession by the United States and the construction by them of the canal, declared their independence. The United States Government at once recognized the new Republic, and concluded with it a treaty on November 18, 1903, guaranteeing and agreeing to maintain its independence. Panama then ratified the treaty. There is a President elected for four years. The Chamber of Deputies consists of thirty-two members elected for two years. The Republic is divided into seven provinces, each under a governor, with other subordinate officials.

Paraguay is a Republic, and is governed, under a Constitution proclaimed in November, 1870, by a President elected for four years, a Congress consisting of a Senate and a Chamber Deputies, both elected by universal suffrage, and five Ministers of State chosen by the President. The President has a salary of \$9,500, ministers of \$3,000, and the Senators and Deputies each receive \$1,000. The state religion is Roman Catholic, but all others are tolerated. Education is free and nominally compulsory. The army numbers about 1,500 men, but every citizen between 20 and 35 is liable to military service.

Pennsylvania. New Constitutions were adopted in 1790 and 1838 and the one now in force was adopted 1873, and amended 1901. The legislative power is vested in a General Assembly consisting of a Senate and a House of Representatives. General elections are held biennially. The Senate consists of fifty members chosen for four years, twenty-five Senators being elected at each General Assembly election. The House of Representatives consists of 204 members chosen for two years. Members of the General Assembly must have been citizens and inhabitants of the State four years and inhabitants of their respective districts one year next before their election. Amendments to the Constitution agreed to by a majority of each House, approved by a majority in each House of Legislature next elected, and ratified by the electors at a special election held for the purpose, become part of the Constitution. The supreme executive power is vested in a governor who is elected at the general election and holds office for four years. He is not eligible for election for the next succeeding term. He must be not less than 30 years of age and have been seven years resident in the State immediately before election; he must not be a member of Congress nor can he hold any office under the United States. His duties include the command of the military and

naval forces of the State, except when these are called into the actual service of the United States, the summoning of the Legislature when necessary, the granting of commissions, and the supervision of the execution of the laws. Every bill passed by both Houses requires the assent of the governor, who may within ten days remit it for consideration to the House in which it originated; if then the bill be approved by a two-thirds majority of each House it becomes law. A lieutenant-governor is chosen at the same time, in the same manner, and for the same term as the governor. A secretary of the commonwealth and an attorney-general are appointed by the governor, by and with the advice and consent of two-thirds of all the members of the Senate, during pleasure, and a superintendent of public instruction is similarly appointed for four years. The qualified electors choose at each general election a secretary of internal affairs for a period of four years, an auditor-general for a period of three years, and a state treasurer for a period of two years.

Persia. The form of government in Persia up to the year 1906 was, in the most important features, similar to that of Turkey. The Shâh, within the limitations imposed by the Mohammedan religion, was an absolute ruler, generally regarded by the people as the vice-gerent of the Prophet. In 1905, however, the Persian people demanded representative institutions, and in January, 1906, the government announced that the Shâh had given his consent to the establishment of a national council. Under the rescript of August 5, 1906, it was decided that the national council should consist of and be elected by members of the reigning dynasty, clergy, chiefs, nobles, landowners, merchants, and tradesmen. An ordinance of September 10, 1906, fixed the number of members at 156, and early in October elections were held. On October 12th, the national council (or as many of its members as could be got together) met, chose a president, and was welcomed by the shâh, whose speech was read before it. The constitution of January 1, 1907, signed by Muzaffer-addin, the late shâh, and countersigned by the Vali Ahd, the present shâh, and by the grand vizier, deals with the decree of August 5, 1906, and states the powers and duties of the national council, besides making provision for the regulation of its general procedure by the national council itself. The number of members is at present limited to 162, but may be raised to 200; members will be elected for two years; will meet annually, and will have immunity from prosecution, except with the knowledge of the national council. The publicity of their proceedings (except under conditions accepted by the national council) is secured. Ministers (or their delegates) may appear and speak in the national council, and will be responsible to that body which will have special control of financial affairs and internal administration. Its sanction will be required for all territorial changes, for alienation of state property, for the granting of concessions, for the contracting of loans, for the construction of roads and railways, and for the ratification of all treaties, except such as in the interest of the state require secrecy. There is to

be a senate of sixty members, of whom thirty are to be appointed to represent the shâh, and thirty to be elected on behalf of the national council, fifteen of each class being from Teheran, and fifteen from the provinces. Provision is made as to procedure in case of difference of opinion between the national council and the senate. The executive government is carried on under a ministry, the chief departments of which are: minister for war, minister for foreign affairs, minister for finance and treasury, and minister for interior.

Peru. The present Constitution, proclaimed October 16, 1856, was revised November 25, 1860. The legislative power is vested in a senate and a house of representatives. Both senators and deputies are elected by a direct vote. There are fifty-one senators and 116 deputies, and there are as many *suplentes*, or substitutes, as there are members in each chamber. Every two years one-third of the members of each chamber, as decided by lot, retire. Congress meets annually on July 28th, and sits for ninety days only. It may be summoned as often as necessary, but no extraordinary session may last more than forty-five days. The executive power is entrusted to a president, elected for four years, and not re-eligible till after another four years. He receives \$15,000 a year and \$9,000 for expenses. There are two vice-presidents, who take the place of the president only in case of his death or incapacity, and they are elected for four years. The vice-presidents receive no salary as such. The president and vice-presidents are elected by direct vote. The president exercises his executive functions through a cabinet of six ministers, holding office at his pleasure. The ministers are those of the interior, war and marine, foreign affairs, justice, with worship and instruction, finance and public works. Each minister receives \$3,000 a year. None of the president's acts have any value without the signature of a minister.

Portugal. The Constitution of 1826 (amended in 1852, 1885, and 1895), gives a special moderating power to the king. There are two legislative chambers, the peers and the deputies, collectively called the cortes. In case of a disagreement between the two legislative chambers, a committee of both decides, and if the committee disagree, the king decides. The chamber of peers consists of ninety members nominated for life, in addition to the princes of the blood, the twelve bishops of the continental dioceses, and fifty-two hereditary peers. The chamber of deputies is composed of members elected under a system of universal suffrage every four years, to the number of 155, of whom seven are elected by Portuguese colonies. The king has no veto on a law twice passed by both houses.

Prussia. The present Constitution of Prussia was drawn up by the government of King Friedrich Wilhelm IV., with the co-operation of a constituent assembly, sitting August-December, 1849, and was proclaimed January 31, 1850; but subsequently modified by a number of royal decrees. These fundamental laws vest the executive and part of the legislative authority in a king, who attains his majority upon accom-

plishing his eighteenth year. The Crown is hereditary in the male line, according to primogeniture. In the exercise of the government, the king is assisted by a council of ministers, appointed by royal decree. The legislative authority the king shares with a representative assembly, the landtag, composed of two chambers, the first called the "Herrenhaus," or house of lords,

and the second the "abgeordnetenhaus," or chamber of deputies. The assent of the king and both chambers is requisite for all laws. Financial projects and estimates must first be submitted to the chamber of deputies, and be either accepted or rejected *en bloc* by the Herrenhaus. The right of proposing laws is vested in the government and in each of the chambers.

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO 1904

Strictly speaking, there is no popular vote for President and Vice-President; the people vote for electors, and those chosen in each State meet therein and vote for the candidates for President and Vice-President. The record of any popular vote for electors prior to 1824 is so meager and imperfect that a compilation would be useless. In most of the States, for more than a quarter century following the establishment of the Government, the State Legislatures "appointed" the Presidential electors, and the people therefore voted only indirectly for them, their choice being expressed by their votes for members of the Legislature. In this tabulation only the aggregate electoral votes for candidates for President and Vice-President in the first nine quadrennial elections appears.

YEAR	PRESIDENTIAL CANDIDATES	STATE	PARTY	VOTE				CANDIDATES FOR VICE-PRESIDENT		
				States Voting	Total Vote	Electoral Vote	Popular Vote	Name	State	Electoral Vote
1789*	George Washington, . . .	Va.	.....	10†	73	69	.....	John Adams, . . .	Mass.	34
	John Adams, . . .	Mass.	.....			34				
	John Jay, . . .	N. Y.	.....			9				
	R. H. Harrison, . . .	Md.	.....			6				
	John Rutledge, . . .	S. C.	.....			6				
	John Hancock, . . .	Mass.	.....			4				
	George Clinton, . . .	N. Y.	.....			3				
	Samuel Huntington, . . .	Conn.	.....			2				
	John Milton, . . .	Ga.	.....			2				
	James Armstrong, . . .	Ga.	.....			1				
	Benjamin Lincoln, . . .	Mass.	.....			1				
	Edward Telfair, . . .	Ga.	.....			1				
	Vacancies, . . .		.....			4				
1792	George Washington, . . .	Va.	Fed., . . .	15	135	132	.....	John Adams, . . .	Mass.	77
	John Adams, . . .	Mass.	Fed., . . .			77				
	George Clinton, . . .	N. Y.	Rep., . . .			50				
	Thomas Jefferson, . . .	Va.	.....			4				
	Aaron Burr, . . .	N. Y.	.....			1				
	Vacancies, . . .		.....			3				
1796	John Adams, . . .	Mass.	Fed., . . .	16	138	71	.....	Thomas Jefferson, . . .	Va.	68
	Thomas Jefferson, . . .	Va.	Rep., . . .			68				
	Thomas Pinckney, . . .	S. C.	Fed., . . .			59				
	Aaron Burr, . . .	N. Y.	Rep., . . .			30				
	Samuel Adams, . . .	Mass.	Rep., . . .			15				
	Oliver Ellsworth, . . .	Conn.	Ind., . . .			11				
	George Clinton, . . .	N. Y.	Rep., . . .			7				
	John Jay, . . .	N. Y.	Fed., . . .			5				
	James Iredell, . . .	N. C.	Fed., . . .			3				
	George Washington, . . .	Va.	Fed., . . .			2				
	John Henry, . . .	Md.	Fed., . . .			2				
	S. Johnson, . . .	N. C.	Fed., . . .			1				
	C. C. Pinckney, . . .	S. C.	Fed., . . .			1				
1800	Thomas Jefferson, . . .	Va.	Rep., . . .	16	138	73½	.....	Aaron Burr, . . .	N. Y.	73
	Aaron Burr, . . .	N. Y.	Rep., . . .			73½				
	John Adams, . . .	Mass.	Fed., . . .			65				
	C. C. Pinckney, . . .	S. C.	Fed., . . .			64				
	John Jay, . . .	N. Y.	Fed., . . .			1				
1804	Thomas Jefferson, . . .	Va.	Rep., . . .	17	176	162	.....	George Clinton, . . .	N. Y.	162
	C. C. Pinckney, . . .	S. C.	Fed., . . .			14		Rufus King, . . .	N. Y.	14
1808	James Madison, . . .	Va.	Rep., . . .	17	176	122	.....	George Clinton, . . .	N. Y.	113
	C. C. Pinckney, . . .	S. C.	Fed., . . .			47		Rufus King, . . .	N. Y.	47
	George Clinton, . . .	N. Y.	Rep., . . .			6		John Langdon, . . .	N. H.	9
	Vacancy, . . .		.....			1				
								James Madison, . . .	Va.	3
								James Monroe, . . .	Va.	3
1812	James Madison, . . .	Va.	Rep., . . .	18	218	128	.....	Elbridge Gerry, . . .	Mass.	131
	De Witt Clinton, . . .	N. Y.	Fed., . . .			89		Jared Ingersoll, . . .	Pa.	86
1816	James Monroe, . . .	Va.	Rep., . . .	19	221	183	.....	D. D. Tompkins, . . .	N. Y.	183
	Rufus King, . . .	N. Y.	Fed., . . .			34		John E. Howard, . . .	Md.	22
	Vacancies, . . .		.....			4				
								James Ross, . . .	Pa.	5
								John Marshall, . . .	Va.	4
1820	James Monroe, . . .	Va.	Rep., . . .	24	235	231	.....	Robert G. Harper, . . .	Md.	3
	John Q. Adams, . . .	Mass.	Rep., . . .			1		D. D. Tompkins, . . .	N. Y.	218
	Vacancy, . . .		.....							1
								Richard Stockton, . . .	N. J.	8

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO 1904—Continued

YEAR	PRESIDENTIAL CANDIDATES	STATE	PARTY	VOTE				CANDIDATES FOR VICE-PRESIDENT		
				States Voting	Total	Electoral Vote	Popular Vote	Name	State	Electoral Vote
1824	John Q. Adams, . . . Andrew Jackson, . . . Henry Clay, . . . W. H. Crawford, . . .	Mass. Tenn. Ky. Ga.	Rep., . . . Dem., . . . Rep., . . . Rep., . . .	24	261	84§ 99§ 37 46	108,740 153,544 47,136 46,618	Daniel Rodney, . . . Robert G. Harper, . . . Richard Rush, . . . John C. Calhoun, . . . Nathan Sanford, . . . Nathaniel Macon, . . . Andrew Jackson, . . . Martin Van Buren, . . . Henry Clay, . . .	Del. Md. Pa. S. C. N. Y. N. C. Tenn. N. Y. Ky.	4 1 1 182 30 24 13 9 2 1
1828	Vacancy, . . . Andrew Jackson, . . . John Q. Adams, . . .	Tenn. Mass.	Dem., . . . Nat. Rep.	24 .. .	261 .. .	178 83	647,286 508,064	John C. Calhoun, . . . Richard Rush, . . . William Smith, . . .	S. C. Pa. S. C.	171 83 7
1832	Andrew Jackson, . . . Henry Clay, . . . John Floyd, . . . William Wirt, . . . Vacancies, . . .	Tenn. Ky. Ga. Md.	Dem., . . . Nat. Rep. Ind., . . . Anti-M., . . .	24	288 219 49 11 2	219 49 11 7	687,502 530,189	Martin Van Buren, . . . John Sergeant, . . . Henry Lee, . . . Amos Ellmaker, . . . William Wilkins, . . .	N. Y. Pa. Mass. Pa. Pa.	189 49 11 7 30
1836	Martin Van Buren, . . . Wm. H. Harrison, . . . Hugh L. White, . . . Daniel Webster, . . . W. P. Mangum, . . .	N. Y. Ohio Tenn. Mass. N. C.	Dem., . . . Whig, Whig, Whig, Whig,	26	294 170 73 26 14 11	170 73 26 14 11	762,678 .. . 735,651	R. M. Johnson, . . . Francis Granger, . . . John Tyler, . . . William Smith, . . .	Ky. N. Y. Va. Ala.	147 77 47 23
1840	Wm. H. Harrison, . . . Martin Van Buren, . . . James G. Birney, . . .	Ohio N. Y. N. Y.	Whig, Dem., . . . Lib., . . .	26	294 234 60	234 60	1,275,016 1,129,102 7,069	John Tyler, . . . R. M. Johnson, . . . L. W. Tazewell, . . . James K. Polk, . . . Thomas Earle, . . .	Va. Ky. Va. Tenn. Pa.	234 48 11 1 170
1844	James K. Polk, . . . Henry Clay, . . . James G. Birney, . . .	Tenn. Ky. N. Y.	Dem., . . . Whig, Lib., . . .	26	275 105 114	170 105 114	1,337,243 1,299,062 62,300	George M. Dallas, . . . T. Frelinghuysen, . . . Thomas Morris, . . .	N. J. Ohio Ohio	105 105 105
1848	Zachary Taylor, . . . Lewis Case, . . . Martin Van Buren, . . .	Ia. Mich. N. Y.	Whig, Dem., . . . F. S., . . .	30	290 163 127	163 127	1,360,099 1,220,544 291,263	Millard Fillmore, . . . Wm. O. Butler, . . . Chas. F. Adams, . . .	N. Y. Ky. Mass.	163 127 254
1852	Franklin Pierce, . . . Winfield Scott, . . . John P. Hale, . . . Daniel Webster, . . .	N. H. N. J. N. H. Mass.	Dem., . . . Whig, Fed. D., . . . Whig,	31	296 254 42 174	254 42 174	1,601,274 1,386,580 155,825 1,670	William R. King, . . . Wm. A. Graham, . . . George W. Julian, . . .	Ala. N. C. Ind.	254 42 .. .
1856	James Buchanan, . . . John C. Fremont, . . . Millard Fillmore, . . .	Pa. Cal. N. Y.	Dem., . . . Rep., . . . Amer., . . .	31	296 114 8	174 114 8	1,838,169 1,341,264 874,534	J. C. Breckenridge, . . . Wm. L. Dayton, . . . A. J. Donelson, . . .	Ky. N. J. Tenn.	174 114 8
1860	Abraham Lincoln, . . . J. C. Breckenridge, . . . Stephen A. Douglas, . . . John Bell, . . .	Ill. Ky. Ill. Tenn.	Rep., . . . Dem., . . . Union D., . . . Amer., . . .	33	303 180 72 39	303 180 72 39	1,866,452 847,953 1,375,157 250,635	Hannibal Hamlin, . . . Joseph Lane, . . . H. V. Johnson, . . . Edward Everett, . . .	Me. Ind. Ga. Mass.	180 72 39 12
1864	Abraham Lincoln, . . . Geo. B. McClellan, . . . Ulysses S. Grant, . . .	N. J. Ill. N. Y.	Rep., . . . Dem., . . . Rep., . . .	36	314 212 21	212 21	2,219,623 2,012,237 1,802,633	Andrew Johnson, . . . G. H. Pendleton, . . . Schuyler Colfax, . . .	Tenn. Ohio Ind.	212 21 21
1868	Horatio Seymour, . . . Ulysses S. Grant, . . . Horace Greeley, . . . Charles O'Connor, . . . James Black, . . .	N. Y. Ill. N. Y. N. Y. Pa.	Dem., . . . Rep., . . . D. & L., . . . Dem., . . . Temp., . . .	37	366 286 11 42 18	366 286 11 42 18	2,703,249 3,597,132 2,834,125 29,489 5,608	F. P. Blair, Jr., . . . Henry Wilson, . . . B. Gratz Brown, . . . John Q. Adams, . . . John Russell, . . .	Mo. Mass. Mo. Mass. Mich.	80 286 47
1872	Thos. A. Hendricks, . . . B. Gratz Brown, . . . Charles J. Jenkins, . . . David Davis, . . . Not counted, . . .	Ind. Mo. Ga. Ill.	Dem., . . . Dem., . . . Dem., . . . Ind., . . .	.. . .. . .. . .. . .. .	.. . .. . .. . .. . .. .	.. . .. . .. . .. . .. .	.. . .. . .. . .. . .. .	Geo. W. Julian, . . . A. H. Colquitt, . . . J. M. Palmer, . . . T. E. Bramlette, . . . W. S. Grobeck, . . . W. B. Machen, . . . N. P. Banks, . . .	Ind. Ga. Ill. Ky. Ohio Ky. Mass.	5 5 3 3 1 1 1
1876	Ruth'd B. Hayes, . . . Samuel J. Tilden, . . . Peter Cooper, . . . Green Clay Smith, . . . James B. Walker, . . .	Ohio N. Y. N. Y. Ky. Ill.	Rep., . . . Dem., . . . Grb., . . . Pro., . . . Amer., . . .	38	369 185 184	185 184	4,036,298 4,300,590 81,737 9,522 2,636	Wm. A. Wheeler, . . . T. A. Hendricks, . . . Samuel F. Cary, . . . G. T. Stewart, . . . D. Kirkpatrick, . . .	N. Y. Ind. Ohio Ohio N. Y.	185 184
1880	James A. Garfield, . . . Win'd S. Hancock, . . . James B. Weaver, . . . Neal Dow, . . . John W. Phelps, . . .	Ohio Pa. Iowa Me. Vt.	Rep., . . . Dem., . . . Grb., . . . Pro., . . . Amer., . . .	38	360 214 155	214 155	4,454,416 4,444,952 308,578 10,305 7,707	Chester A. Arthur, . . . Wm. H. English, . . . B. J. Chambers, . . . H. A. Thompson, . . . S. C. Pomeroy, . . .	N. Y. Ind. Tex. Ohio Kan.	214 135
1884	Grover Cleveland, . . . James G. Blaine, . . . John P. St. John, . . . Benjamin F. Butler, . . . P. D. Wigginton, . . .	N. Y. Me. Kan. Mass. Ind.	Dem., . . . Rep., . . . Pro., . . . People's., . . . Amer., . . .	38	401 219 182	219 182	4,874,986 4,851,981 150,369 175,370 .. .	T. A. Hendricks, . . . John A. Logan, . . . William Daniel, . . . A. M. West, . . .	Ind. Ill. Md. Miss.	219 182
1888	Benjamin Harrison, . . . Grover Cleveland, . . . Clinton B. Fisk, . . . Alson J. Streeter, . . . R. H. Cowdry, . . .	Ind. N. Y. N. Y. Ill. Ill.	Rep., . . . Dem., . . . Pro., . . . U. L., . . . N'd L., . . .	38	401 168	233 168	5,439,853 5,540,309 249,506 146,935 2,808	Levi P. Morton, . . . G. A. Thurman, . . . John A. Brooka, . . . C. E. Cunningham, . . . W. H. Wakefield, . . .	N. Y. Ohio Mo. Ark. Kan.	233 168

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO 1904—Continued

YEAR	PRESIDENTIAL CANDIDATES	STATE	PARTY	VOTE				CANDIDATES FOR VICE-PRESIDENT		
				States Voting	Total Vote	Electoral Vote	Popular Vote	Name	State	Electoral Vote
1892	James L. Curtis, . .	N. Y.	Amer., . .	44	444	277	1,591	James B. Greer, . .	Tenn.	
	Grover Cleveland, .	N. Y.	Dem., . .			145	5,554,437	A. F. Stevenson, . .	Ill.	277
	Benjamin Harrison, .	Ind.	Rep., . .			22	5,175,287	Whitlaw Reid, . .	N. Y.	145
	James B. Weaver, . .	Iowa	People's, .				1,041,028	James G. Field, . .	Va.	22
	John Bidwell, . . .	Cal.	Pro., . . .				204,133	James R. Cranfill, .	Texas	
1896	Simon Wing, . . .	Mass.	S. L., . . .				21,164	C. H. Matchett, . .	N. Y.	
	William McKinley, .	Ohio	Rep., . . .	45	447	271	7,102,272	Garret A. Hobart, .	N. Y.	271
	William J. Bryan, .	Neb.	Dem., . .			176	6,273,624	Arthur Sewall, . .	Me.	176
	William J. Bryan, .	Neb.	People's, .					Th. E. Watson, . .	Iowa	
	John M. Palmer, . .	Ill.	Nat. Dem.,				133,148	Sim. B. Buckner, . .	Ky.	
1900	Joshua Levering, .	Md.	Pro., . . .				132,007	Hale Johnson, . .	Ill.	
	Chas. H. Matchett, .	N. Y.	So. L., . .				36,274	Matthew McGuire, .	N. J.	
	Chas. E. Bentley, .	Neb.	Nat., . . .				13,969	J. H. Southgate, . .	N. C.	
	William McKinley, .	Ohio	Rep., . . .	45	447	292	7,219,101	Theo. Roosevelt, . .	N. Y.	
	William J. Bryan, .	Neb.	Dem.&P., .			155	6,357,054	A. E. Stevenson, . .	Ill.	292
1904	James G. Woolley, .	Ill.	Pro., . . .				208,187	Henry B. Metcalf, .	R. I.	155
	Eugene V. Debs, . .	Ind.	S. D., . . .					Job Harriman, . .	Cal.	
	Wharton Barker, . .	Pa.	M. R. P., .				51,585	Ignatius Donnelly, .	Minn.	
	Jos. F. Malloney, .	Mass.	S. L., . . .				99,613	Val. R Emmell, . .	Pa.	
	Seth H. Ellis, . . .	Ohio	U. R., . . .				33,413	Sam T. Nicholson, .	Pa.	
1904	J. F. R. Leonard, .	Iowa	U. C., . . .				1,059	John G. Woolley, . .	Ill.	
	Theodore Roosevelt, .	N. Y.	Rep., . . .	45	476	336	7,623,486	Charles W. Fairbanks,	Ind.	336
	Alton B. Parker, . .	N. Y.	Dem., . . .			140	5,077,971	Henry G. Davis, . .	W. Va.	140
	Eugene V. Debs, . .	Ind.	Soc., . . .				402,283	Benjamin Hanford, .	N. Y.	
	Silas C. Swallow, . .	Pa.	Pro., . . .				258,536	George W. Carroll, .	Texas	
	Thomas E. Watson, .	Ga.	People's, .				117,183	Thomas H. Tibbles, .	Neb.	
	Charles H. Corrigan, .	N. Y.	Soc. L., . .				31,249	William W. Cox, . .	Ill.	

* Prior to 1804 each elector was entitled to vote for two candidates for President. The candidate receiving the greatest number of votes was declared elected, while the candidate receiving the next highest vote was declared Vice-President. † Three States not voting. ‡ It is claimed that the first Republican party was the progenitor of the present Democratic party. § As there was no election the choice was decided by the House of Representatives. || Owing to the death of Horace Greeley the Democratic electors scattered their vote.

Rhode Island. On May 29, 1790, the State accepted the Federal Constitution and entered the Union as one of the thirteen original States. The charter of 1663, however, continued to be the constitutional law of the State down to 1842. In that year a new Constitution was adopted, which, with amendments, accepted between 1854 and 1903, provides for a Legislature called the General Assembly, consisting of a Senate and a House of Representatives. The Senate has thirty-eight members, one from each of the cities and towns, besides the governor who is *ex-officio* president, and the lieutenant-governor who is *ex-officio* a senator. The House of Representatives consists of seventy-two members, twelve of whom are from the city of Providence and the remainder from the other cities and towns according to population. Concurrent action between the two legislative bodies is necessary for the enactment of laws. Senators and Representatives are elected at town, ward, and district meetings annually in November, and hold office for a year, commencing on the first Tuesday in January. The governor is the chief executive officer of the State, and his duty is to see that the laws are faithfully executed. He has no power to veto in legislation; most of the appointments he makes require the consent of the Senate. The governor, lieutenant-governor, secretary of state, attorney-general, and the general treasurer are elected annually in the same manner, and at the same time, as the Senators and Representatives. Amendments of the Constitution may be proposed by the votes of a

majority of all the members elected to each House. The propositions must be published and read to the electors at town and ward meetings before the next election of Senators and Representatives. If approved by a majority of the members of each House next elected, the proposed amendments are submitted to the electors, and, if approved by three-fifths of those voting thereon at town and ward meetings held for the purpose, they become part of the Constitution. The State is divided into five counties and thirty-eight cities and towns. The county divisions are now recognized only for the holding of courts and the jurisdiction of sheriffs. In the cities only certain property-holders and tax-payers can vote for members of councils.

Rumania. The Constitution now in force in Rumania was voted by a Constituent Assembly, elected by universal suffrage, in the summer of 1866. It has twice been modified, viz: in 1879, and again in 1884. The Senate consists of 120 members, elected for eight years, including two for the universities, and eight bishops. The heir to the crown is also a Senator. The Chamber of Deputies consists of 183 members, elected for four years. A Senator must be 40 years of age, and a Deputy 25. Members of either House must be Rumanians by birth or naturalization, in full enjoyment of civil and political rights, and domiciled in the country. For the Senate an assured income of 9,400 lei (\$1,880) is required. All citizens of full age, paying taxes, are electors, and are divided into three electoral colleges. For the Chamber

of Deputies, electors who are in possession of property bringing in \$250 or upwards per annum vote in the first college. Those having their domicile and residence in an urban commune, and paying direct taxes to the state of \$4 or upwards annually, or being persons exercising the liberal professions, retired officers, or State pensioners, or who have been through the primary course of education, vote in the second college. The third college is composed of those who, paying any tax, however small, to the State, belong to neither of the other colleges; those of them who can read and write and have an income of 300 lei (\$60) from rural land, vote directly, as do also the village priests and schoolmasters, the rest vote indirectly. For each election every fifty indirect electors choose a delegate, and the delegates vote along with the direct electors of the colleges. For the Senate there are only two colleges. The first consists of those electors having property yielding annually at least \$400; the second, of those persons whose income from property is from \$160 to \$400 per annum. At the election of 1905 there were altogether 93,622 enrolled electors for the Chamber of Deputies, and 64,086 voted; for the Senate there were 24,571 enrolled electors, and 16,648 voted. Both Senators and Deputies receive 20 lei (\$4) for each day of actual attendance, besides free railway passes. The king has a suspensive veto over all laws passed by the Chamber of Deputies and the Senate. The executive is vested in a council of eight ministers, the president of which is prime minister, and may or may not have a special department.

Russian Empire. The Government of Russia is a constitutional hereditary monarchy, but, in fact, the whole legislative, executive, and judicial power is united in the Emperor, whose will alone is law. On August 6 (19), 1905, however, an elective State Council (*Gosudarstvennaya Duma*) was created, and on October 17 (30) a law was promulgated granting to the population the firm foundations of public liberty, based on the principles of the real inviolability of the person, and of freedom of conscience, speech, assembly, and association, and establishing as an unalterable rule that no law shall come into effect without the approval of the Duma, and that to the elected of the people shall be guaranteed the possibility of a real participation in the control of the legality of the acts of such authorities as are appointed by the Emperor. The Duma consists of members elected for five years and representing the governments or provinces and the greatest cities (St. Petersburg, Moscow, and twenty-six others). The election of the Deputies is indirect, and is made by electoral bodies of the chief towns of governments or provinces and of the greatest cities, composed of delegates chosen by the district or town elective assemblies. In towns, all lodgers occupying for twelve months lodging let to them, may vote in these assemblies, also salaried clerks of state, or of municipal or railway administration; in the country, all owners of a determinate area of land, different in different districts, or of non-industrial estate more than 50,000 roubles in value, are electors; the *volosts* or peasant communities and manufac-

tories with more than fifty work people are represented in the electoral assemblies by delegates, two for each *volost*, and one for each thousand workmen. Students, soldiers, governors of provinces (in provinces governed by them), and police-officers (in the localities for which they act) may not vote. Under a manifesto and ukases published on March 6, 1906 (N. S.), the Council of the Empire is reorganized and changes are made in the constitution of the Duma. The Council of the Empire is to consist of an equal number of elected members and members nominated by the Emperor, and will be convoked and prorogued annually by imperial ukase. The Council of the Empire and the Duma will have equal legislative powers and the same right of initiative in legislation and of addressing questions to ministers. Every measure, before being submitted for the imperial sanction, must be passed by both the Duma and the Council of the Empire, and all such as are rejected by one of the two legislative institutions will not be laid before the Tsar at all. Both the Duma and the Council have the right to annul the election of any of their members. The elective members of the Council will be eligible for nine years, a third of the number being elected every three years. Each assembly of the Zemstvo of each government will elect one member. Six members will be returned by the synod of the Orthodox Church, six by the representatives of the Academy of Sciences and the Universities, twelve by the representatives of the bourses of commerce and of industry, eighteen by the representatives of the nobility, and six by the representatives of the landed proprietors of Poland, assembled in congress at Warsaw. The congress of the representatives of the Academy of Sciences, the nobility, and the commercial and industrial communities for the election of their members to the Council of the Empire will meet in St. Petersburg. In those provinces of European Russia which have no Zemstvo, a congress of the representatives of the landed proprietors will assemble in the chief town of their province to elect one member for each province to the Council of the Empire. All members of the Council must have attained their 40th year and have an academical degree. The president and vice-president will be appointed by the Tsar. The elective members of the Council will receive an honorarium of 25 roubles (\$12.50) a day during the session. The sittings of both the Duma and the Council of the Empire will be public. The closure of a debate may be voted by a simple majority. Neither the Council of the Empire nor the Duma is empowered to receive deputations or petitions. Ministers will be eligible for the Duma and, in the capacity of elected members, qualified to vote. Members of the Duma are paid 10 roubles (\$5) per day during session, and once a year traveling expenses to and from St. Petersburg at the rate of 5 kopecks per verst (40c. per mile). Laws voted by the two Houses will be submitted for the imperial sanction by the president of the Council of the Empire. The members of both institutions will have the privilege of personal immunity during the session. They will only be liable to arrest with the permission

of the Duma or the Council of the Empire, as the case may be, except in cases of flagrant offences or offences committed in the exercise of their duties. The ukases further provide that bills rejected by the Tsar cannot be brought forward again in the course of the same session, while bills rejected by one of the legislative bodies cannot be brought forward again without the imperial consent. The administration of the empire is still entrusted to great boards, or councils, possessing separate functions. One of the great colleges, or boards of government, is the Ruling Senate or "Pravitelstvuyushchiy Senat," established by Peter I. in the year 1711. The functions of the Senate are partly of a deliberative and partly of an executive character. To be valid, a law must be promulgated by the Senate. It is also the high court of justice for the empire. The Senate is divided into six departments or sections, which all sit at St. Petersburg, two of them being Courts of Cassation. Each department is authorized to decide in the last resort upon certain descriptions of cases. The Senators are mostly persons of high rank, or who fill high stations; but a lawyer of eminence presides over each department, who represents the emperor, and without whose signature its decisions would have no force. In the *plenum*, or general meeting of several sections, the minister of justice takes the chair. A special department consisting of six members is entrusted with disciplinary judgments against officials of the Crown. Another is the college, established by Peter I. in the year 1721, the Holy Synod, and to it is committed the superintendence of the religious affairs of the empire. It is composed of the three metropolitans (St. Petersburg, Moscow, and Kiev), the archbishop of Georgia (Caucasus), and several bishops sitting in turn. All its decisions run in the emperor's name, and have no force till approved by him. A third board of government is the committee of ministers, reorganized by a decree of October 19 (November 1), 1905. The fourth board of government, the most important since the decree for its reorganization issued October 19 (November 1), 1905, is the council of ministers. It consists of all the ministers, and of the general directors of the most important administrations.

Local Government.—The empire is divided into governments or provinces (*oblast*), and districts (*uyezd* or *okrug*). There are seventy-eight governments (forty-nine in European Russia proper, ten in Poland, eight in Finland, seven in Caucasus, four in Siberia); nineteen provinces (one in European Russia, five in Caucasus, nine in Central Asia, four in Siberia, and one section (*otdyel*)—the north part of the island of Sakhalin. Some of the governments or provinces are united into general governments. At the head of each general government is a governor-general, the representative of the emperor, who as such has the supreme control and direction of all affairs, whether civil or military. In Siberia the governors-general are each assisted by a council, which has a deliberative voice. A civil governor assisted by a council of regency, to which all measures must be submitted, is established in each government, and a military

governor in seventeen provinces, one town (Kronstadt) and the island of Sakhalin. A vice-governor is appointed to fill the place of the civil governor when the latter is absent or unwell. There is, also, in each government a council of control under the presidency of a special officer, depending directly on the department of control. Each government is divided into from five to fifteen districts (815 in all Russian Empire), having each several administrative institutions. The townships (*gradonachalstvo*) of St. Petersburg, Moscow, Odessa, Kereh, Nikolayev, and Rostov-on-Don, are administered by special governors (*gradonachalnik*); Cronstadt is under a separate military governor.

Scotland. By the local government act of Great Britain, in 1894, a local government board for Scotland was constituted. It consists of the secretary for Scotland as president, the solicitor general of Scotland, the under secretary for Scotland, and other three members nominated by the Crown. The local government act which was passed for Scotland in 1889, followed in its main outlines the English Act of the previous year. The powers of local administration in counties formerly exercised by the commissioners of supply and road trustees were either wholly or in part transferred to the new councils, which took over their duties and responsibilities in 1890. The act of 1894, provided that a parish council should be established in every parish to take the place of the parochial boards and to exercise powers similar to those of the parish councils in England. Municipal bodies exist in the towns of Scotland, as in those of England, but instead of their magistrates being called aldermen, they are called bailies, and instead of their chief magistrates being called mayors they are called provosts. There are in Scotland five kinds of burghs—(1) burghs of barony; (2) burghs of regality (no practical distinction between these two); the councils of these two classes of burghs ceased to exist in 1893, by statutory enactment; (3) royal burghs, representatives of which meet together annually in a collective corporate character, as the "convention of royal burghs," for the transaction of business; (4) parliamentary burghs, which possess statutory constitutions almost identical with those of the royal burghs; (5) police burghs, constituted under the burgh police (Scotland) act, 1892, in which the local authority are the police commissioners. These two latter burghs, by acts passed in 1879 and 1895, are enabled to send representatives to the convention.

Servia. The independence of Servia, which, was formerly an autonomous province of Turkey, was established by the Treaty of Berlin, 1878. The constitution, voted by the national assembly of 1889, was abrogated by the king in May, 1894, and an older constitution of 1869, temporarily revived; but in 1903 the 1889 constitution was restored. The executive is vested in the king and his ministers, and the legislative authority in the king in conjunction with the national assembly or *narodna-skupstschina* and a state council. The former consists of 160 deputies elected by universal suffrage for four years; the latter of sixteen members, eight nom-

inated by the king and eight elected by the assembly.

Siam. The executive power is exercised by the king advised by a cabinet (*senabodi*) consisting of the heads of the various departments of the government: foreign affairs, interior, justice, finance, public instruction, public works, war, marine, police, etc. Most of the portfolios are held by the king's half-brothers and sons. The law of 1874, constituting a council of state, has now been superseded by the royal decree of 1895, creating a legislative council. The latter is composed of the ministers of state and others, not less than twelve in number, appointed by the Crown. The total membership is now fifty-one. In the preamble of the royal decree it is stated that the object of this body is to revise, amend, and complete the legislation of the kingdom. It is to meet at least once a week, and it may appoint committees of three or four members, with the addition of competent outsiders who must not outnumber the members. An important article gives the legislative council power to promulgate laws without the royal assent in the event of any temporary disability of the Crown. At other times the royal signature is indispensable. This council has shown considerable legislative activity. The Siamese Malay States are administered by the rajahs mostly under the control of commissioners sent from Bangkok.

South Carolina. The first Constitution, adopted in 1776, was succeeded by others in 1778, 1790, 1865, 1868, and 1895, the last-named being still in force. Amendments proposed in either House of the Legislature, and approved by a two-thirds vote of each House, are submitted to the popular vote; if approved by a majority of the voters, and by a majority of each House of the next Legislature they become part of the Constitution. The Legislature, called the General Assembly, consists of a Senate of forty-one members, elected for four years (half retiring biennially), and a House of Representatives of 124 members, elected for two years. Senators must be 25, and Representatives 21 years of age, and all the Legislators must be duly qualified electors of the State. Revenue bills must originate in the House of Representatives. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia; has power to pardon or reprieve, and has a veto which may be overcome by a two-thirds vote of both Houses. He may call special sessions of the Legislature. Other State officials are the lieutenant-governor, the treasurer, the attorney-general, the comptroller-general, the adjutant general, and the superintendent of education.

South Dakota. Under the Constitution of South Dakota, adopted in 1889, the legislative power is vested in a Senate and a House of Representatives; but to the people is reserved the right that not less than 5 per cent. of the electors may (1) propose measures which the Legislature shall enact and submit to a vote of the general body of electors; (2) demand a referendum in respect of laws enacted by the Legislature, before such laws take effect, save in cases of urgency. The Constitution provides that the Senate shall consist of not less than twenty-five and not more

than forty-five members, and the House of Representatives of not less than seventy-five, nor more than 135 members. Both Senators and Representatives must, among other qualifications have reached the age of 25 years, and have resided in the State for two years immediately preceding election. The term of office of both is two years. Any bill may originate in either House. The House of Representatives has the sole power of impeachment; impeachments must be tried by the Senate. The chief executive authority is in the hands of a governor, elected for two years. He himself must be a qualified elector and a citizen of the United States, must have attained the age of 30 years, and have resided in the State during the two years immediately preceding his election. He has the powers usually resident in State governors, including the limited veto and pardoning powers. At the same time as the governor, and for the same period, there are elected a lieutenant-governor, who acts as president of the Senate; a secretary of state, an auditor, a treasurer (who may not hold office for more than two terms consecutively), a superintendent of public instruction, a commissioner of schools and public lands, and an attorney-general.

Spain. By the constitution of 1876, Spain is declared a constitutional monarchy, with the executive power vested in the king, and the legislative power in the cortes with the king. The cortes consists of senate and congress. The senate is composed of three classes: those who sit by right of royal or noble birth or official position, 100 members nominated by the Crown (these two classes not numbering more than 180 together), and 180 elected by the communal and provincial states, the church, the universities, and the largest taxpayers of the kingdom. The elected senators must be renewed by one half every five years, and altogether whenever the cortes are dissolved. The congress contains 406 deputies, elected for five years by citizens of 25 years of age who have enjoyed full civil rights in any municipality for two years. There is some provision for minority representation, and for the election of ten deputies, who, though not returned in any single district, yet receive a cumulative vote of more than 10,000 in several districts. The senate and congress are equal in authority, and either of them, or the king, can introduce new laws. Each of the forty-nine provinces has its own parliament, and each commune its own elected *ayuntamiento*, presided over by the *alcalde*, for municipal and provincial administration; and by the constitution neither the executive nor the cortes can (although they do) interfere in municipal or provincial administration, except for the protection of national and permanent interests. The state religion is the Roman Catholic, and the public worship of any other creed is forbidden.

In 1903, the army was reorganized on the basis of an effective of 80,000 men; the second battalions of the infantry regiments and the fourth squadrons of the cavalry being reduced. In 1907 the effective was raised to 100,000 owing to increased establishments at Ceuta, Melilla, and Minorca, the strengthening of infantry battalions in the Peninsula, and other increases.

STATE STATISTICS—HISTORICAL

STATES	ORIGIN AND MEANING OF NAME	DATE OF ADMISSION INTO UNION	SETTLEMENT				POPULATION, 1900
			WHERE	WHEN	BY WHOM	AREA SQUARE MILES	
Alabama, . . .	Indian — Here we rest, . . .	1819	Mobile Bay, . .	1702	French,	52,250	1,828,600
Arkansas, . . .	From a tribe of Indians, . . .	1836	Arkansas Post, .	1685	French,	53,850	1,311,500
California, . . .	From an old Spanish romance,	1850	San Diego, . . .	1769	Spanish,	158,360	1,483,000
Colorado, . . .	Spanish — Red, or Ruddy, . .	1876	Aurora, . . .	1859	American,	103,925	539,700
Connecticut, . .	Indian — Long River, . . .	*1788	Windsor, . . .	1633	English,	4,990	908,420
Delaware, . . .	In honor of Lord Delaware, . .	*1787	Wilmington, . .	1638	Swedes,	2,050	184,780
Florida, . . .	Spanish — Blooming, . . .	1845	St. Augustine, .	1565	Spanish,	58,680	528,500
Georgia, . . .	In honor of George II., . . .	*1788	Savannah, . . .	1733	English,	59,475	2,216,300
Idaho, . . .	Indian — Gem of the Mountains,	1890	Cœur d'Alene, . .	1842	American,	84,800	161,170
Illinois, . . .	Indian — The Men, . . .	1818	Kaskaskia, . . .	†1682	French,	56,650	4,821,500
Indiana, . . .	Indian's Ground, . . .	1816	Vincennes, . . .	†1702	French,	36,350	2,516,400
Iowa, . . .	Indian — Drowsy Ones, . . .	1846	Burlington, . . .	1833	American,	56,025	2,231,800
Kansas, . . .	Indian — Smoky Water, . . .	1861	Leavenworth, . .	1854	American,	82,080	1,470,400
Kentucky, . . .	Indian — Dark and Bloody Ground,	1792	Boonesboro, . . .	1775	English,	40,400	2,147,170
Louisiana, . . .	In honor of Louis XIV., . . .	1812	New Orleans, . .	1718	French,	48,720	1,381,600
Maine, . . .	The Main Land, . . .	1820	Saco, . . .	†1623	English,	33,040	694,400
Maryland, . . .	In honor of Queen Henrietta Maria,	*1788	St. Mary's, . . .	1634	English,	12,210	1,188,000
Massachusetts, .	The place of great hills, . . .	*1788	Plymouth, . . .	1620	English,	8,315	2,805,300
Michigan, . . .	Indian — Great Lake, . . .	1837	Sault Ste. Marie, .	1668	French,	58,915	2,420,000
Minnesota, . . .	Indian — Cloudy Water, . . .	1858	St. Paul, . . .	1838	American,	83,365	1,751,300
Mississippi, . . .	Indian — Great River, or Father of Waters,	1817	Biloxi, . . .	1699	French,	46,810	1,551,200
Missouri, . . .	Indian — Great Muddy, . . .	1821	St. Genevieve, . .	1755	French,	69,415	3,106,600
Montana, . . .	Spanish — A Mountain, . . .	1889	Yellowstone River	1809	American,	146,080	243,300
Nebraska, . . .	Indian — Shallow Water, . . .	1867	Bellevue, . . .	1847	American,	75,510	1,066,300
Nevada, . . .	Spanish — Snow-covered, . . .	1864	Genoa, . . .	1850	American,	110,700	42,300
New Hampshire, .	Hampshire, England, . . .	*1788	Portsmouth, . . .	1623	English,	9,305	411,500
New Jersey, . . .	In honor of governor of Jersey Island,	*1787	Elizabethtown, . .	1664	English,	7,815	1,883,600
New York, . . .	In honor of Duke of York, . . .	*1788	New York, . . .	†1613	Dutch,	49,170	7,268,800
North Carolina, .	In honor of Charles II., . . .	*1789	Albemarle Sound, .	1653	English,	52,250	1,893,800
North Dakota, . .	Indian — Allied, . . .	1889	Pembino, . . .	1812	English,	70,795	319,100
Ohio, . . .	Indian — Beautiful River, . . .	1803	Marietta, . . .	1788	American,	41,060	4,157,500
Oklahoma, . . .	Indian — Beautiful Land, . . .	1907	Guthrie, . . .	1890	American,	70,430	1,400,000
Oregon, . . .	Spanish — Wild Marjoram, . . .	1859	Astoria, . . .	1811	American,	96,030	413,500
Pennsylvania, . .	Latin — Penn's Woods, . . .	*1787	Chester, . . .	1682	English,	45,215	6,302,100
Rhode Island, . .	Rhodes, an island in the Ægean Sea,	*1790	Providence, . . .	1636	English,	1,250	428,500
South Carolina, .	In honor of Charles II., . . .	*1788	Ashley River, . . .	1670	English,	30,570	1,340,300
South Dakota, . .	Indian — Allied, . . .	1889	Southeast part, . .	1859	American,	77,650	401,500
Tennessee, . . .	Indian — River with the great bend, . . .	1796	Fort Loudon, . . .	1757	English,	42,050	2,020,600
Texas, . . .	From tribe of Indians, . . .	1845	San Antonio, . . .	1692	Spanish,	265,780	3,048,700
Utah, . . .	Indian — Mountain Dwellers, . .	1896	Salt Lake City, . .	1847	American,	84,970	276,700
Vermont, . . .	French — Green Mountain, . . .	1791	Fort Dummer, . . .	1724	English,	9,565	343,600
Virginia, . . .	In honor of Elizabeth, the Virgin Queen,	*1788	Jamestown, . . .	1607	English,	42,450	1,854,100
Washington, . . .	After George Washington, first President of United States, . .	1889	Columbia River, . .	1811	English,	69,180	518,100
West Virginia, . .	From Virginia, . . .	1863	Upshur County, . .	1764	American,	24,780	958,800
Wisconsin, . . .	Indian — Wild Rushing Channel,	1848	Green Bay, . . .	1745	French,	56,040	2,069,000
Wyoming, . . .	Indian — Extensive Plain, . . .	1890	Cheyenne, . . .	1867	American,	97,890	92,500

* Dates of ratifying the Constitution by the Thirteen Original States. † Doubtful.

TERRITORIES AND INSULAR POSSESSIONS

TERRITORIES AND INSULAR POSSESSIONS	DATE OF SETTLEMENT	PLACE OF SETTLEMENT	BY WHOM SETTLED	CAPITALS	ORGANIZED	POPULATION, 1900
New Mexico, . . .	1582	Santa Fé, . .	Spaniards, . . .	Santa Fé, . . .	1850	61,540
Arizona, . . .	1783	Kodiak, . . .	Spaniards, . . .	Phoenix, . . .	1863	9,650
Alaska, . . .	1820	Honolulu, . .	Russians, . . .	Sitka, . . .	1900	29,090
Hawaiian Islands, .	1509	Cebu, . . .	Americans, . . .	Honolulu, . . .	1900	154,000
Porto Rico, . . .	1565		Spaniards, . . .	San Juan, . . .	1900	154,000
Philippine Islands, .			Spaniards, . . .	Manila, . . .	1900	154,000

GEOGRAPHICAL, AND INDUSTRIAL

ORIGINAL NAMES, OR TERRITORY FROM WHICH DERIVED	POPULATION WHEN ADMITTED	MILES OF RAILROAD IN 1905	COLORADO POPULATION, 1900	FOREIGN POPULATION, 1900	NATIVE POPULATION, 1900	STATES
Alabama and Georgia, Mississippi Territory, Alabama Territory,	127,901	4,854	827,307	14,592	1,814,105	Alabama.
Alabama, Louisiana Territory, Missouri Territory, Arkansas Territory,	97,574	4,229	366,856	14,289	1,297,275	Arkansas.
Albion, Upper California,	92,597	6,507	11,045	367,240	1,117,813	California.
Alabama and Mexican cession, Colorado Territory,	39,864	5,207	8,570	91,155	448,545	Colorado.
North Virginia, New England,	237,946	1,018	15,226	238,210	670,210	Connecticut.
Sweden, New Netherland, three lower counties on the Delaware,	59,098	335	30,697	13,810	170,925	Delaware.
Florida Territory,	87,445	3,628	230,730	23,832	504,710	Florida.
of the Original Thirteen States,	82,748	6,513	1,034,813	12,403	2,203,928	Georgia.
Idaho Territory, Washington Territory, Idaho Territory,	113,777	1,465	293	24,604	137,168	Idaho.
Illinois Territory, Indiana Territory, Illinois Territory,	55,211	11,832	85,078	966,747	3,854,803	Illinois.
Illinois, Missouri, Michigan, Wisconsin, and Iowa Territories,	147,178	6,928	57,505	142,121	2,374,341	Indiana.
Alabama, Kansas Territory,	192,214	9,893	12,693	305,920	1,925,933	Iowa.
Alabama, Kansas Territory,	107,206	8,841	52,003	126,685	1,343,810	Kansas.
Alabama,	73,077	3,335	284,706	50,249	2,096,925	Kentucky.
Alabama, Territory of Orleans,	76,556	4,136	650,804	52,903	1,328,722	Louisiana.
New England, Laconia, and Massachusetts,	298,335	2,028	1,319	93,330	601,136	Maine.
of the original States,	319,728	1,441	235,064	93,934	1,094,110	Maryland.
North Virginia, New England, Massachusetts Territory,	475,327	2,119	31,974	846,324	1,959,022	Massachusetts.
Illinois Territory, Indiana Territory, Michigan Territory,	212,267	8,794	15,816	541,653	1,879,329	Michigan.
Alabama and Northwest Territory, Minnesota Territory,	172,793	8,065	4,959	505,318	1,246,076	Minnesota.
Alabama and Georgia, Mississippi Territory,	75,448	3,708	907,630	7,981	1,543,289	Mississippi.
Alabama, Louisiana Territory, Missouri Territory,	66,586	8,045	161,234	216,379	2,890,286	Missouri.
Alabama, Nebraska Territory, Idaho Territory, Dakota Territory, Montana Territory,	175,000	3,309	1,523	67,067	176,262	Montana.
Alabama, Nebraska Territory,	122,993	5,833	6,269	177,347	888,953	Nebraska.
Upper California, Utah Territory, Nevada Territory,	42,491	1,180	134	10,093	32,242	Nevada.
North Virginia, New England, Laconia,	141,885	1,267	662	88,107	323,481	New Hampshire.
New Netherland,	184,139	2,274	69,844	431,884	1,451,785	New Jersey.
New Netherland,	340,120	8,336	99,232	1,900,425	5,368,469	New York.
Marble Colony,	393,751	4,256	624,469	4,492	1,889,318	North Carolina.
Alabama, Minnesota, and Nebraska Territory, Dakota Territory,	415,610	3,233	286	113,091	206,055	North Dakota.
Northwest Territory,	45,365	9,269	96,901	458,734	3,698,811	Ohio.
Idaho Territory, Oklahoma Territory, . . . . .	.....	4,898	55,684	20,538	769,853	Oklahoma.
Oregon Territory,	52,566	1,812	1,105	65,748	347,788	Oregon.
Original State,	434,373	11,155	156,845	985,250	5,316,865	Pennsylvania.
North Virginia, New England, Aquiday, Providence and Rhode Island Plantations,	69,110	212	9,092	134,519	294,037	Rhode Island.
Marble Colony,	249,073	3,180	782,321	5,528	1,334,788	South Carolina.
Alabama, Minnesota, and Nebraska Territories, Dakota Territory,	508,477	3,067	465	88,508	313,062	South Dakota.
North Carolina, Territory south of the Ohio River,	30,791	3,576	480,243	17,746	2,002,870	Tennessee.
Utah Territory,	212,592	12,048	620,722	179,357	2,869,353	Texas.
Ocean Cession, Utah Territory,	207,905	1,805	672	53,777	222,972	Utah.
New Netherland, New Hampshire Grants,	85,416	1,062	826	44,747	298,894	Vermont.
North Virginia,	748,308	3,972	660,722	19,461	1,834,723	Virginia.
Oregon Territory, Washington Territory,	143,669	3,388	2,514	111,364	406,739	Washington.
Alabama,	376,688	2,988	43,499	22,451	936,349	West Virginia.
Northwest Territory, Illinois Territory, Michigan Territory, Wisconsin,	305,391	7,211	2,542	515,971	1,553,071	Wisconsin.
Alabama (chiefly), Nebraska Territory, Dakota Territory, Idaho Territory, Wyoming Territory,	100,000	1,247	940	17,415	75,116	Wyoming.

SESSIONS OF THE UNITED STATES

POPULATION IN 1900	AREA IN SQ. MILES	MILES OF RAILROAD IN 1900	FOREIGN POPULATION	COLORADO POPULATION	NATIVE POPULATION	TERRITORIES AND INSULAR POSSESSIONS
195,310	122,580	1,753	13,625	1,610	181,685	New Mexico.
122,931	113,020	1,512	24,233	1,848	98,698	Arizona.
63,592	590,884	22	12,661	168	50,931	Alaska.
154,001	6,740	71	90,780	233	63,221	Hawaiian Islands.
953,243	3,600	.....	.....	.....	.....	Porto Rico.
8,000,000	127,800	.....	.....	.....	.....	Philippine Islands.

SUFFRAGE REQUIREMENTS THROUGHOUT

"Citizen of the United States" means, unless otherwise stated, a male of twenty-one years and over. Women

STATES	CAPITALS	REQUIREMENTS AS TO CITIZENSHIP	PREVIOUS RESIDENCE REQUIRED				PERSONS EXCLUDED FROM SUFFRAGE	GOVERNORS	
			In State	In County	In Town	In Precinct		Salaries	Term
Alabama, . . .	Montgomery,	Citizen of United States or alien who has declared intentions.	2 years	1 year	3 mos.	3 mos.	Convicted of treason or other felonies, idiots, or insane.	\$5,000	
Arkansas, . . .	Little Rock,	Citizen of United States or alien who has declared intentions.	1 year	6 mos.	30 days	30 days	Idiots, insane, convicted of felony, failure to pay poll-tax, U. S. soldiers, or mariners.	3,000	
California, . .	Sacramento,	Citizen by nativity, naturalization (90 days prior to election), or treaty of Queretaro.	1 year	90 days	....	30 days	Chinese, idiots, insane, embezzlers of public moneys, convicted of infamous crime.†	6,000	
Colorado, . . .	Denver, . .	Citizen, native or naturalized, male or female, who is duly registered.	1 year	90 days	....	10 days	While confined in public prison, under guardianship, <i>non compos mentis</i> , insane.	5,000	
Connecticut, . .	Hartford, . .	Citizen of United States who can read English language.	1 year	....	6 mos.	....	Convicted of heinous crime, unless pardoned.	4,000	
Delaware, . . .	Dover, . . .	Citizen who shall have paid a registration fee of \$1.	1 year	3 mos.	....	30 days	Insane persons and paupers, or persons convicted of felony.	2,000	
Florida,	Tallahassee,	Citizen of United States.	1 year	6 mos.	6 mos.	....	Idiots, duellists, convicted of felony or any infamous crime.	5,000	
Georgia,	Atlanta, . .	Citizen of United States who has paid all his taxes since 1877.	1 year	6 mos.	....	....	Convicted of felony, bribery, or larceny, unless pardoned, idiots, and insane.	5,000	
Idaho,	Boisé City, .	Citizen of United States, male or female.	6 mos.	30 days	....	....	Idiots, insane, convicted of felony, bigamists, polygamists, under guardianship.	5,000	
Illinois,	Springfield, .	Citizen of United States (b).	1 year	90 days	30 days	30 days	Convicted of felony or bribery in elections, unless restored to citizenship.	12,000	
Indiana,	Indianapolis,	Citizen or alien who has declared intention and resided one year in United States.	6 mos.	60 days	60 days	30 days	United States soldiers, sailors, and marines, and persons convicted of infamous crime.	8,000	
Iowa,	Des Moines,	Citizen of United States.	6 mos.	60 days	....	....	Idiots, insane, convicted of infamous crime, U. S. soldiers (j).	5,000	
Kansas,	Topeka, . . .	Citizen of United States or alien who has declared intention (b).	6 mos.	30 days	30 days	10 days	Convicted of treason or felony, insane, under guardianship. (k)	5,000	
Kentucky, . . .	Frankfort, . .	Citizen of United States (b).	1 year	6 mos.	60 days	60 days	Convicted of treason, felony, or bribery in an election, idiots, and insane (j).	6,500	
Louisiana, . . .	Baton Rouge,	Citizen of United States (m).	2 years	1 year	....	6 mos.	Idiots, insane, felons under indictment, inmates of prison or charitable institution except Soldiers' Home.	5,000	
Maine,	Augusta, . . .	Citizen of United States.	3 mos.	3 mos.	3 mos.	3 mos.	Paupers and Indians not taxed.	3,000	
Maryland, . . .	Annapolis, . .	Citizen of United States.	1 year	6 mos.	6 mos.	1 day	Felons not pardoned, lunatics, <i>non compos mentis</i> , bribery.	4,500	
Massachusetts, .	Boston, . . .	Citizen who can read and write (b).	1 year	6 mos.	6 mos.	6 mos.	Paupers and persons under guardianship.	8,000	
Michigan,	Lansing, . . .	Citizen of United States or alien who declared intention 2 years and 6 months prior to November 8, 1894 (b).	6 mos.	20 days	20 days	20 days	Indians with tribal relations, duellists, and accessories.	4,000	

THE UNITED STATES

entitled to vote at school elections in several States, and have full suffrage in Colorado, Idaho, Utah, and Wyoming.

LEGISLATURES			MEM'S TERMS		ELEC. VOTE, 1908	TOTAL ASSESSED VALUATION	PER CT. ACTUAL VALUE	TAX RATE PER \$1,000	VOTING POPULATION		
Ann. or Bien.	Limit of Session	Salaries of Members	Sena- tors	Repre- sent- atives					Total	Whites	Negroes
Quad.	60 days	\$4 per diem	4	2	11	\$ 344,224,221	40	\$6.50	413,862	232,294	181,471
Bien.	60 days	6 per diem	4	2	9	249,779,108	....	5.34	313,836	226,597	87,157
Bien.	60 days	8 per diem	4	2	10	1,594,781,905	....	4.76	544,087	489,545	3,711
Bien.	90 days	7 per diem	4	2	5	465,000,000	....	4.50	185,708	181,616	3,215
Bien.	None	300 per annum	2	2	7	712,519,166	80	....	280,340	275,126	4,576
Bien.	60 days	5 per diem	4	2	3	76,000,000	....	....	54,018	45,592	8,374
Bien.	60 days	6 per diem	4	2	5	131,436,593	....	6.50	139,601	77,962	61,417
Annual	50 days	4 per diem	2	2	13	577,840,282	Full	4.80	500,752	277,496	223,073
Bien.	60 days	5 per diem	2	2	3	80,707,903	40	....	53,932	50,328	130
Bien.	None	1,000 per sess'n	4	2	27	1,083,050,979	20	5.20	1,401,456	1,370,209	29,762
Bien.	60 days	6 per diem	4	2	15	1,360,445,139	....	0.90	720,206	701,761	18,186
Bien.	None	550 per term	4	2	13	634,733,822	25	3.50	635,298	630,065	4,441
Bien.	50 days	3 per diem	4	2	10	378,335,401	25	5.20	413,786	398,552	14,695
Bien.	60 days	5 per diem	4	2	13	644,489,000	....	5.00	543,996	469,206	74,728
Bien.	60 days	5 per diem	4	4	9	459,271,270	Full	5.00	325,943	177,878	147,348
Bien.	None	300 per annum	2	2	6	366,514,014	Full	2.50	217,663	216,856	445
Bien.	90 days	5 per diem	4	2	8	643,812,408	....	1.70	321,903	260,979	60,406
Annual	None	750 per annum	1	1	16	4,222,281,054	Full	....	843,465	830,049	10,456
Bien.	None	3 per diem	2	2	14	1,506,431,914	85	1.95	719,478	712,245	5,193

SUFFRAGE REQUIREMENTS THROUGHOUT

STATES	CAPITALS	REQUIREMENTS AS TO CITIZENSHIP	PREVIOUS RESIDENCE REQ'D				PERSONS EXCLUDED FROM SUFFRAGE	GOVERNOR	
			In State	In County	In Town	In Precinct		Salaries	L'g Term Yr
Minnesota, . .	St. Paul, . .	Citizen of United States who has been such for 3 months preceding election (b).	6 mos.	30 days	30 days	30 days	Convicted of treason or felony, unpardoned, under guardianship, insane, Indians lacking customs of civilization.	\$7,000	2
Mississippi, . .	Jackson, . .	Citizen of United States who can read or understand Constitution.	2 years	1 year	1 year	1 yr. (ll)	Insane, idiots, Indians not taxed, felons, persons who have not paid taxes, bigamists.	4,500	4
Missouri, . . .	Jefferson City,	Citizen of United States or alien who has declared intention not less than 1 year or more than 5 before election.	1 year	60 days	60 days	20 days	Persons in poor-houses or asylums at public expense, those in prison, or convicted of infamous crimes (n).	5,000	4
Montana, . . .	Helena, . .	Citizen of United States (b).	1 year	30 days	30 days	30 days	Felons not pardoned, idiots, insane, U. S. soldiers, seamen, and marines, Indians.	5,000	4
Nebraska, . . .	Lincoln, . .	Citizen of United States or alien who has declared intention 30 days before election (b).	6 mos.	40 days	30 days	10 days	Convicted of treason or felony, unless restored to civil rights, persons non compos mentis (j).	2,500	2
Nevada, . . .	Carson City,	Citizen of United States.	6 mos.	30 days	30 days	30 days	Idiots, insane, unpardoned convicts, Indians, Chinese.	4,000	4
New Hampshire,	Concord, . .	Citizen of United States (b).	6 mos.	6 mos.	6 mos.	6 mos.	Paupers (h).	2,000	2
New Jersey, . .	Trenton, . .	Citizen of United States.	1 year	5 mos.	....	....	Idiots, paupers, insane, convicted of crime, unless pardoned or restored by law (j).	10,000	2
New York, . .	Albany, . .	Citizen who shall have been a citizen for ninety days prior to election.	1 yr. (k)	4 mos.	(l)	(l)	Offenders against elective franchise rights, guilty of bribery, betting on elections, and persons convicted of bribery or infamous crime and not restored to citizenship by the Executive. Convicts in House of Refuge or Reformatory not disqualified.	10,000	2
North Carolina,	Raleigh, . .	Citizen of United States.	2 years	6 mos.	....	4 mos.	Convicted of felony or infamous crime, idiots, lunatics.	4,000	4
North Dakota, .	Bismarck, .	Citizen of United States and civilized Indian. ‡ (b).	1 year	6 mos.	....	90 days	Under guardianship, persons non compos mentis, or convicted of felony and treason, unless restored to civil rights.	3,000	4
Ohio,	Columbus, .	Citizen of United States (b).	1 year	30 days	20 days	20 days	Idiots, insane, and felons, persons in U. S. military and naval service on duty in Ohio.	10,000	4
Oklahoma, . .	Guthrie, . .	Citizen of United States.	6 mos.	60 days	60 days	30 days	Felons, idiots, insane.	4,500	4
Oregon,	Salem, . . .	Citizen of United States or alien who has declared intention more than 1 year prior to election (b).	6 mos.	None	None	None	Idiots, insane, convicted of felony, Chinese.	5,000	4
Pennsylvania, .	Harrisburg,	Citizen of United States at least one month and if 22 years old or more must have paid tax within two years.	1 year	....	....	2 mos.	Convicted of perjury and fraud as election officers, or bribery of voters.	10,000	4

THE UNITED STATES—Continued

LEGISLATURES			MEM'S TERMS		ELEC. VOTE, 1908	TOTAL ASSESSED VALUATION	PER CT. ACTUAL VALUE	TAX RATE PER \$1,000	VOTING POPULATION		
Ann. or Bien.	Limit of Session	Salaries of Members	Sena- tors	Repre- sent- atives					Total	Whites	Negroes
Bien.	90 days	\$5 per diem	4	2	11	\$871,270,822	40	\$1.50	506,794	502,384	2,168
Bien.	None	400 per annum	4	4	10	222,847,525	....	6.00	349,177	150,530	197,936
Bien.	70 days	5 per diem	4	2	18	1,489,390,319	33½	1.70	856,684	809,797	46,418
Bien.	60 days	6 per diem	4	2	3	234,070,663	Full	2.50	101,931	94,873	711
Bien.	60 days	500 per annum	2	2	8	313,060,301	20	7.00	301,091	297,817	2,298
Bien.	50 days	8 per diem	4	2	3	28,391,252	..	8.00	17,710	14,652	70
Bien.	None	200 per annum	2	2	4	231,641,571	Full	....	130,987	130,648	230
Annual	None	500 per annum	3	1	12	918,418,741	....	....	555,608	532,750	21,474
Annual	None	1,500 per annum	2	1	39	8,015,090,722	....	1.54	2,184,965	2,145,057	31,425
Bien.	60 days	4 per diem	2	2	12	461,520,668	66	4.30	417,578	289,263	127,114
Bien.	60 days	5 per diem	4	2	4	196,462,584	25	5.30	95,217	93,237	115
Bien.	None	1,000 per annum	2	2	23	2,113,806,168	60	1.35	1,212,223	1,180,599	31,235
.....	....	6 per diem	4	2	7	96,625,604	25	6.50	1,414,042	.....	.....
Bien.	40 days	3 per diem	4	2	4	188,058,281	33½	5.45	144,446	131,261	560
Bien.	None	1,500 per annum	4	2	34	4,405,378,339	....	....	1,817,239	1,763,482	51,668

SUFFRAGE REQUIREMENTS THROUGHOUT

STATES	CAPITALS	REQUIREMENTS AS TO CITIZENSHIP	PREVIOUS RESIDENCE REQ'D				PERSONS EXCLUDED FROM SUFFRAGE	GOVERNMENT	
			In State	In County	In Town	In Precinct		Salaries	Liability
Rhode Island, .	Providence, .	Citizen of United States.	2 yr.(z)	....	6 mos.	....	Paupers, lunatics (g).	\$3,000	
South Carolina, .	Columbia, .	Citizen of United States (e).	2 yr.(c)	1 year	4 mos.	4 mos.	Felons, bribery, unless pardoned, insane, paupers.	3,000	
South Dakota, .	Pierre, . . .	Citizen of United States or alien who has declared intention, Indian who has severed tribal relations (b).	6 mos.§	30 days	10 days	10 days	Under guardianship, insane, convicted of treason or felony unless pardoned, U. S. soldiers, seamen, and marines.	3,000	
Tennessee, . .	Nashville, .	Citizen of United States who has paid poll-tax of preceding year.	1 year	6 mos.	....	....	Convicted of bribery or other infamous offense.	4,000	
Texas,	Austin, . . .	Citizen of United States or alien who has declared intention six months prior to election.	1 year	6 mos.	6 mos.	(d)	Idiots, lunatics, paupers convicted of felony, United States soldiers, marines, and seamen.	4,000	
Utah,	Salt Lake City, .	Citizen of United States, male or female.	1 year	4 mos.	....	60 days	Idiots, insane, convicted of treason or crime against elective franchise, unless pardoned.	4,000	
Vermont, . . .	Montpelier, .	Citizen of United States.	1 year	3 mos.	3 mos.	3 mos.	Those who have not obtained the approbation of the local board of civil authority.	1,500	
Virginia, . . .	Richmond, .	All persons who six months before the election have paid their State poll-taxes for the three preceding years. Also any person who served in time of war in the army or navy of the United States, of the Confederate States, or of any State of the United States or of the Confederate States.	2 years	1 year	1 year	30 days	Idiots, lunatics, paupers (f) (j).	5,000	
Washington, .	Olympia, . .	Citizen of United States and all residents of Territory prior to Statehood (b).	1 year	90 days	30 days	30 days	Idiots, lunatics, convicted of infamous crimes, Indians not taxed.	4,000	
West Virginia, .	Charleston, .	Citizen of the State.	1 year	60 days	6 mos.	(d)	Paupers, idiots, lunatics, convicted of treason, felony, or bribery at elections.	5,000	
Wisconsin, . .	Madison, . .	Citizen of United States or alien who has declared intention and civilized Indians (b)	1 year	10 days	10 days	10 days	Under guardianship, insane, convicted of crime or treason, betting on elections.	5,000	
Wyoming, . . .	Cheyenne, .	Citizen of United States, male or female.	1 year	60 days	10 days	10 days	Idiots, insane, felons, unable to read State Constitution in the English language.	2,500	

* Australian Ballot law or a modification of it in force. † Or a person unable to read the Constitution in English to write his name. (a) Or citizens of Mexico who shall have elected to become citizens under the treaties of 1848 and 1850. (b) Poll-tax must be paid for current year. (c) Clergymen are qualified after six months' residence in precinct. (d) Also paupers, embezzlers, persons guilty of bribery, or dishonorably discharged soldiers from the United States service, unless reinstated. (e) Those able to read and write or who own \$300 worth of property assessed in their name, or whose father or grandfather was entitled to vote on January 1, 1867. (f) Also soldiers, sailors, and marines in United States service. (g) No soldier, seaman, or marine deemed a resident because stationed in the State. (h) The Australian system sometimes prevails in municipal primaries in Georgia, but same is made applicable by rule of party ordering primary and not by the law. (i) One year must have severed tribal relations. (j) One year's residence in the United States prior to election required. (k) Women

THE UNITED STATES—Continued

LEGISLATURES			MEM'S TERMS			TOTAL ASSESSED VALUATION	PER CT. ACTUAL VALUE	TAX RATE PER \$1,000	VOTING POPULATION		
Ann. or Bien.	Limit of Session	Salaries of Members	Sena- tors	Repre- sent- atives	ELEC. VOTE, 1908				Total	Whites	Negroes
Annual	60 days	\$5 per diem	1	1	4	\$477,892,908	75	\$1.80	127,144	124,001	2,765
Annual	40 days	4 per diem	4	2	9	210,331,854	60	5.00	283,325	130,375	152,860
Bien.	60 days	5 per diem	2	2	4	173,206,733	....	3.20	112,681	107,353	184
Bien.	75 days	4 per diem	2	2	12	351,762,769	75	3.50	487,380	375,046	112,236
Bien.	None	5 per diem	4	2	18	1,139,022,730	....	3.80	737,768	599,961	136,875
Bien.	60 days	4 per diem	4	2	3	146,204,050	60	5.00	67,172	65,205	358
Bien.	None	3 per diem	2	2	4	187,931,820	Full	1.30	108,356	108,027	289
Bien.	60 days	4 per diem	4	2	12	423,842,680	....	4.00	447,815	301,379	146,122
Bien.	60 days	5 per diem	4	2	5	530,209,882	60	5.40	195,572	183,999	1,230
Bien.	45 days	4 per diem	4	2	7	875,089,593	85	0.85	247,970	233,129	14,786
Bien.	None	500 per annum	4	2	13	1,384,580,755	75	11.27	570,715	567,213	1,006
Bien.	40 days	5 per diem	4	2	3	51,223,203	25	5.87	37,898	36,262	481

in school elections. (x) Owners of real estate, one year. (e) Ministers in charge of an organized church and teachers of public schools are entitled to vote after six months' residence in the State. (d) Actual residence in the precinct or district required. (e) Who has paid six months before election any poll-tax then due, and can read and write any section of the State Constitution, or can show that he owns, and has paid all taxes due the previous year on property in the State valued at \$300 or more. (f) Or convicted of bribery, embezzlement of public funds, treason, forgery, perjury, felony, and larceny, duellists and abettors, unless pardoned by Legislature. (g) Or persons *non compos mentis*, convicted of bribery or infamous crime, until restored to right to vote, under guardianship. (h) Also persons excused from paying taxes at their request, and those unable to read the State Constitution in English, or write. (k) Inhabitant not residence. (l) Thirty days in election district.

Sweden. Under the Swedish Constitution of 1809, with subsequent amendments, the executive power is lodged in the king, who also possesses legislative power in matters of political administration; in all other respects such power is exercised jointly by the Diet, which alone may impose taxes. Every new law must have the assent of the king. The Diet consists of two chambers, the first of 150 members (elected by provinces and municipalities for nine years), the second of 230 members (150 representing rural and eighty urban constituencies), elected directly for three years. Members of the second chamber are paid \$330 per session.

Switzerland is a confederation of nineteen entire and six half cantons, which have been united for federal purposes since 1848. The Constitution of 1874 vests supreme legislative and executive authority in two chambers — viz: (1) a state council of forty-four members, chosen two for each canton and one for each half-canton for three years; and (2) a national council of 167 delegates of the Swiss people (of whom twenty-nine are sent by Berne and twenty-two by Zurich), chosen also for three years, directly by manhood suffrage, one deputy for every 20,000 of the population. The united chambers form the federal assembly, to which is confided the supreme government. The executive authority is deputed to a federal council of seven members, elected for three years by the assembly, the president and vice-president of which are elected annually, and are the first magistrates of the republic. The council sits at Berne, which is the headquarters of the federal administration. The principles of the referendum and of the initiative are in force. The latter signifies the right of any 50,000 citizens to demand a direct popular vote on any constitutional question. The federal government can alone contract treaties or declare war. The army, postal system, finance, and customs are also under its control. Civil and criminal law, justice, police, public works, and schools are all left under the jurisdiction of the cantonal authorities, while labor legislation may be initiated either by the confederation or by the cantons. The neutrality of the country is guaranteed by the treaty of Vienna, 1815.

Tennessee. The Constitution adopted in 1796, was superseded by that of 1834, which gave place to that of 1870, now in force. Constitutional amendments proposed in either House of the Legislature and agreed to by a majority of all the members of each are referred to the Legislature next elected. If they are then passed by a two-thirds majority of the members elected to each House, they are submitted to the popular vote, and, if ratified by a majority of those who vote, become part of the Constitution. Amendments, however, may not be proposed in the Legislature oftener than once in six years. The legislature, known as the General Assembly, consists of a Senate of thirty-three members, elected for two years, and a House of Representatives of ninety-eight members elected also for two years. Any bill may originate in either House. Senators must be 30 years of age, and representatives 21; both must have resided in the State three years and in the county or dis-

trict one year next before election. No clergyman of any denomination is eligible to either House. The chief State officer is the governor, who is elected for two years. "He shall not be eligible more than six years of any term of eight." He has the usual powers of State governors, including limited pardoning powers and a veto which may be overridden by a majority of the members of each House. Other State officers are the treasurer, comptroller, adjutant-general, attorney-general, and superintendent of public instruction.

Texas. The Constitution of 1845 was succeeded by new Constitutions in 1866, 1868, and 1876. That of 1876, amended seven times (last in 1904), is still in force. Amendments proposed in either House of the Legislature, approved by a two-thirds majority of the members of each House, and ratified by a majority of the electors voting on them, become part of the Constitution. The Legislature consists of a Senate of thirty-five members, elected for four years (about half their number retiring every two years), and a House of Representatives of 108 members. Bills for raising revenue must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House. Eligible as Senators are citizens 26 years of age, resident in the State five years next before the election; as Representatives, citizens 21 years of age, resident in the State two years next before the election. The chief executive officer is the governor, elected for two years. He has the authority usually vested in State governors, including the limited veto and pardoning powers. With the advice and consent of the Senate he appoints the State secretary, and also fills vacancies not otherwise provided for. State officials elected for two years are the lieutenant-governor, comptroller, treasurer, commissioner of the general land office, and attorney-general.

Turkey. The commands of the sultan are absolute, unless opposed to the express directions of the Koran, a legal and theological code upon which the fundamental laws of the empire are based. The legislative and executive authority is exercised through the grand vizier and the Sheik-ul-Islam, who are appointed by the sultan, the latter with the nominal concurrence of the ulema or general body of lawyers and theologians, over which the Sheik-ul-Islam, as head of the Church, presides. The grand vizier, as head of the temporal government, is assisted by the medjliss-i-hass or cabinet of ministers, of whom there are twelve, including the grand vizier and the Sheik-ul-Islam. The ten other ministers each take charge of a department, *e. g.*, the interior, war, foreign affairs, finance, justice, etc.

United States. The Declaration of Independence was adopted by the First Congress of the United States, July 4, 1776. On November 30, 1782, Great Britain acknowledged the independence of the colonies, and on September 3, 1783, the treaty of peace was concluded. The form of government is based on the Constitution adopted September 17, 1787, to which ten amendments were added, December 15, 1791; an eleventh amendment, January 8, 1798; a twelfth amendment, September 25, 1804; a thirteenth, December 18, 1865; a fourteenth,

July 28, 1868; and a fifteenth, March 30, 1870. The government is entrusted to three separate authorities—the Executive, the Legislative, and the Judicial. The Executive is vested in the President, who holds his office during the term of four years. He is commander-in-chief of the army and navy and of the militia in the service of the United States. The Vice-President is, *ex-officio*, president of the Senate, and, in case of the death or resignation of the President, he becomes President for the remainder of the term. Electors for President and Vice-President are chosen in all States the Tuesday after the first Monday in November of every fourth year (leap year), and the President is inaugurated on the 4th of March next following. By an act which became a law January 19, 1886, in case of the removal, death, resignation, or inability of both President and Vice-President, the Secretary of State succeeds, and after him other members of the Cabinet in this order: Secretary of Treasury, Secretary of War, Attorney-General, Postmaster-General, Secretary of the Navy, Secretary of the Interior (the Secretary of Agriculture cannot succeed, as his office was created after the passage of the Acts of the Forty-ninth Congress, Chapter IV). The incumbent shall act as President until the disability of the President is removed or a new President shall be elected. In case of death or removal of the Vice-President the duties of the office shall fall upon the pro tempore president of the Senate, who receives the salary of Vice-President. Members of the Cabinet are appointed by the President, but are confirmed by the Senate. The legislative power is vested in a Congress, which consists of a Senate and a House of Representatives. The judicial power is vested in a Supreme Court consisting of a chief justice and eight associate justices, appointed by the President and approved by the Senate. The United States is composed of thirteen original States, seven States which were admitted without having been organized as Territories, and twenty-six States which have been Territories. States are admitted into the Union by special acts of Congress, either in the form

of “enabling acts,” providing for the drafting and ratification of a State Constitution, in which case the Territory becomes a State as soon as the conditions are fulfilled, or by accepting a Constitution already framed, and at once gaining admission. In four of the six Territories, including Hawaii, there are local Legislatures, the form of which has been prescribed by the Federal Government. Acts made by the Legislatures may be modified or annulled by the Federal Congress. Territorial governors are appointed by the President for terms of four years. The unit of local government in New England is the township, governed directly by the voters. In large cities the city government takes its place. Townships are united to form counties. In the South the unit is the county. In the Middle and Northwestern States the two systems of local government are mixed. In the West the township system is used and public lands are divided into townships six miles square. Representatives to the Federal Congress must not be less than 25 years of age and must have been citizens of the United States for seven years, and residents of the State in which they are elected. In addition to the Representatives from the States, each Territory is allowed a “delegate,” who has a right to speak on any subject and make motions, but not to vote. Senators must be 30 years of age, must have been citizens of the United States for nine years and residents of the State in which they are chosen. The franchise is not absolutely universal. In most States residence for at least one year is necessary; in Kentucky and Rhode Island two years’ residence is necessary; in Michigan and Maine three months is the minimum. In some of the Western States unnaturalized persons who have declared their intention of becoming citizens are admitted to the franchise. Four States admit women to the franchise on equal terms with men. Untaxed Indians are excluded from the right to vote, and in some States convicts, duellists, and fraudulent voters are debarred. The following is a synoptical outline of the main features of the constitutional government of the United States:

THE LEGISLATIVE DEPARTMENT

THE SENATE

Number.—Two Senators from each State.

Elected.—By the State Legislatures.

Term.—Six years; one-third of the Senate being elected every two years.

Eligibility.—Citizen of the United States nine years; resident of the State; minimum age, 30 years.

Salary.—Fixed by law at \$7,500 per year.

President of the Senate.—The Vice-President.

Powers of the Senate:

Confirms or rejects nominations of the President.

Ratifies or rejects treaties with Foreign Powers.

Elects President *pro tempore* of the Senate, and its other officers.

Elects Vice-President of the United States if regular election fails.

Acts as a Court for the Trial of Impeachments.

THE HOUSE OF REPRESENTATIVES

Number.—Three hundred and eighty-six members, according to the present apportionment.*

Elected.—By the voters of the Congressional Districts.

Term.—Two years,—the entire House being elected every two years.

Eligibility.—Citizen of the United States seven years; resident of the State; minimum age, 25 years.

* There are, besides, two Territorial Delegates from the Philippines, and one each from Porto Rico, Hawaii, and Alaska.

Salary.— Fixed by law at \$7,500 per year; the Speaker, \$12,000 per year.

Powers of the House of Representatives:—

Elects its Speaker (presiding officer) and its other officers.

Elects President of the United States if the regular election fails.

Prosecutes Impeachments before the Senate.

Originates all bills for raising revenue.

THE CONGRESS

Consisting of both the Senate and the House of Representatives as coördinate bodies.

Duration.— The term of each Congress is for two years, commencing March 4th of the odd years.

Regular Sessions.— Annual, beginning the first Monday in December.

Special Sessions.— At the call of the President.

Membership.— Each House is the judge of the elections and qualifications of its own members.

Congress has General Powers of Legislation:—

To provide for the raising and disbursement of revenue.

To borrow money; to coin money and to regulate its value; and to fix the standard of weights and measures.

To regulate foreign and interstate commerce.

To declare war, and to maintain an army and navy.

To establish post-offices and post roads.

To enact patent and copyright laws.

To enact uniform naturalization and bankruptcy laws.

To provide for the punishment of crimes against the United States.

To establish courts inferior to the Supreme Court.

To provide for organizing and calling out the militia.

To admit new States into the Union.

To provide for the government of the Territories.

To exercise exclusive jurisdiction over the District of Columbia, public lands, public buildings, forts, and navy yards.

To enact all laws necessary and proper for carrying into execution all the powers vested by the Constitution in the government of the United States.

THE EXECUTIVE DEPARTMENT

THE PRESIDENT

How Elected.— The several steps in the election of the President are:

State Electors are chosen at a General Election held on the *Tuesday following the first Monday of November* of every fourth year; the number of Electors of each State being equal to the number of Senators and Representatives to which the State is entitled in Congress.

The Electors meet in their respective States on the *second Monday in January* following their election, and vote by ballot for President and Vice-President; and at the same time make certificates of their vote and transmit the same to the President of the Senate.

The Senate and House of Representatives meet together on the *second Wednesday of February* next ensuing, and count the votes of the State Electors, when, if there is an election, the President of the Senate declares who is elected President and Vice-President.

In case there is no choice by the State Electors, the President is elected by the House of Representatives from the three candidates who received the most electoral votes for President; in which election the vote is taken by States, each State having but one vote, and a majority of all the States being necessary to a choice.

Term of Office.— Four years.

Eligibility.— A natural born citizen; resident of the United States fourteen years; minimum age. 35 years.

Salary.— Fixed by law at \$50,000 per year.

Powers and Duties of the President:—

Commander-in-Chief of the Army and Navy.

Communicates with Congress by message.

Approves or disapproves Acts of Congress.

Makes treaties with advice and consent of the Senate.

Appoints Public Officers with the advice and consent of the Senate.

Commissions Public Officers of the United States.

Grants reprieves and pardons for offenses against the United States.

The Vice-President:—

Elected by State Electors the same as the President; or

By the Senate, in case there is no choice by the State Electors.

Term of Office,— same as for the President.

Eligibility,— same as required of the President.

Salary,— fixed by law at \$12,000 per year.

The Presidential Succession:— In case of the removal, death, resignation, or inability

Of the President, the Vice-President takes the President's place.

Of both President and Vice-President, the heads of the Executive Departments succeed to

the Presidency in the order in which the Executive Departments are named below; but such officer must be constitutionally eligible to the Presidency, and not under impeachment.

THE EXECUTIVE DEPARTMENTS

- Department of State.*— Has charge of foreign affairs.
Treasury Department.— Has charge of fiscal affairs.
Department of War.— Has charge of the Army and military affairs.
Department of Justice.— Has charge of the legal affairs of the Government.
Post-office Department.— Has charge of postal affairs.
Navy Department.— Has charge of the Navy and naval affairs.
Department of the Interior.— Has charge of domestic affairs, including public lands, pensions, patents, Bureau of Education, etc.
Department of Agriculture.— Has charge of agricultural affairs, including Weather Bureau, etc.
Department of Commerce and Labor.— Has charge of domestic and foreign affairs, relating to commerce, transportation, Department of Labor, etc.

THE CABINET

- Composed of the Heads of the Executive Departments.*
Appointed by the President with the advice and consent of the Senate.
Salary.— Fixed by law at \$12,000 per year for each member of the Cabinet.

THE PRESIDENT AND LEGISLATION

- Acts of Congress become laws:* —
 When signed (approved) by the President; or,
 By his failure to make objections in writing (veto) within ten days after any act is submitted to him, unless Congress by adjournment within that time prevents its return; but
Congress has power to pass a law over the President's veto by a vote of two-thirds of each House.

THE JUDICIAL DEPARTMENT

JUDGES OF THE UNITED STATES COURTS

- Appointed by the President with the advice and consent of the Senate.*
Tenure of Office.— During life or good behavior; but may retire on full salary after reaching the age of seventy years, and after ten years' service on the bench.

THE SUPREME COURT OF THE UNITED STATES

- Members.*— A Chief Justice and Eight Associate Justices.
Salaries.— Chief Justice, \$13,000; Associate Justices, each \$12,500.
Terms of Court.— One each year, beginning on the second Monday in October.
Original Jurisdiction: —
 In all cases affecting Ambassadors, Ministers, and Consuls.
 In all cases in which a State is a party.
Appellate Jurisdiction: — In cases of law and equity where the Inferior Courts have original jurisdiction, with such exceptions and regulations as Congress has made.
The Chief Justice.— Presides over the Senate when it sits as a Court of Impeachment for the trial of the President.

INFERIOR COURTS

- Jurisdiction:* —
 In cases between citizens of different States.
 In cases in which the United States is a party.
 In cases of admiralty and maritime jurisdiction.
 In trials for crimes against the United States; but the trial of crimes must be by jury, and must be held in the State where the crime was committed.
Appeals to the Supreme Court may be had in all cases of law and equity, with such exceptions and regulations as Congress has made.

KINDS OF INFERIOR COURTS

- United States Circuit Courts of Appeals:* —
 Organized in 1891 to relieve the United States Supreme Court in Appellate Cases.
 Number.— One in each Judicial Circuit.
 Members.— Three judges selected from the Circuit and District Courts.
United States Circuit Courts: —
 Number of Circuits.— Nine.
 Number of Judges.— Each Circuit has two, three, or four Circuit Judges, and a Justice of the Supreme Court is assigned to each Circuit. The District Judge also may sit in a Circuit Court.
 Salary of Circuit Judges.— Fixed by law at \$7,000 per year.
United States District Courts: —
 Number of Districts.— One or more in each State. At present (1908) there are seventy-three Judicial Districts.
 Salary of District Judge.— Fixed by law at \$6,000 per year.

United States Court of Claims:—

Jurisdiction.—Claims against the United States, including all claims which may be referred to it by Congress.

Members.—One Chief Justice and four Associate Justices.

Salaries.—Chief Justice, \$6,500; Associate Justices, each \$6,000.

In addition to the above named Courts, Congress has established courts of local jurisdiction in the District of Columbia and in the Territories, viz:

Court of Appeals of the District of Columbia.—One Chief Justice and two Associate Justices.

Supreme Court of the District of Columbia.—One Chief Justice and five Associate Judges.

United States Courts in Organized Territories.—One Chief Justice and several Associate Judges, appointed by the President for four years.

District Court of Alaska.—Consisting of three Judges.

United States Courts (special) in Hawaii, Porto Rico, and the Philippines.

Department of State. The Secretary of State is charged, under the direction of the President, with the duties appertaining to correspondence with the public ministers and the consuls of the United States, and with the representatives of foreign powers accredited to the United States; and to negotiations of whatever character relating to the foreign affairs of the United States. He is also the medium of correspondence between the President and the chief executives of the several States of the United States; he has the custody of the Great Seal of the United States, and countersigns and affixes such seal to all executive proclamations, to various commissions, and to warrants for the extradition of fugitives from justice. He is regarded as the first in rank among the members of the Cabinet. He is also the custodian of the treaties made with foreign States, and of the laws of the United States. He grants and issues passports, and exequaturs to foreign consuls in the United States are issued through his office. He publishes the laws and resolutions of Congress, amendments to the Constitution, and proclamations declaring the admission of new States into the Union.

SECRETARIES OF STATE

PRESIDENTS	CABINET OFFICERS	Residences	Date of Appointment
Washington, .	Thomas Jefferson, . .	Va.	1789
Washington, .	Edmund Randolph, .	Va.	1794
Washington, .	Timothy Pickering, .	Mass.	1795
Adams, . . .	Timothy Pickering, .	Mass.	1797
Adams, . . .	John Marshall, . . .	Va.	1800
Jefferson, . .	James Madison, . . .	Va.	1801
Madison, . .	Robert Smith, . . .	Md.	1809
Madison, . .	James Monroe, . . .	Va.	1811
Monroe, . . .	John Quincy Adams, .	Mass.	1817
J. Q. Adams, .	Henry Clay, . . .	Ky.	1825
Jackson, . . .	Martin Van Buren, . .	N. Y.	1829
Jackson, . . .	Edward Livingston, .	La.	1831
Jackson, . . .	Louis McLane, . . .	Del.	1833
Jackson, . . .	John Forsyth, . . .	Ga.	1834
Van Buren, . .	John Forsyth, . . .	Ga.	1837
Harrison, . .	Daniel Webster, . . .	Mass.	1841
Tyler, . . .	Daniel Webster, . . .	Mass.	1841
Tyler, . . .	Hugh S. Legaré, . . .	S. C.	1843
Tyler, . . .	Abel P. Upshur, . . .	Va.	1843
Polk, . . .	John C. Calhoun, . . .	S. C.	1844
Taylor, . . .	James Buchanan, . . .	Pa.	1845
Fillmore, . .	John M. Clayton, . .	Del.	1849
Fillmore, . .	Daniel Webster, . . .	Mass.	1850
Pierce, . . .	Edward Everett, . . .	Mass.	1852
Buchanan, . .	William L. Marcy, . .	N. Y.	1853
Buchanan, . .	Lewis Cass, . . .	Mich.	1857
Lincoln, . . .	Jeremiah S. Black, . .	Pa.	1860
Johnson, . .	William H. Seward, . .	N. Y.	1861
Grant, . . .	William H. Seward, . .	N. Y.	1865
Grant, . . .	Elihu B. Washburn, .	Ill.	1869
Grant, . . .	Hamilton Fish, . . .	N. Y.	1869

PRESIDENTS	CABINET OFFICERS	Residences	Date of Appointment.
Hayes, . . .	William M. Evarts, . .	N. Y.	1877
Garfield, . .	James G. Blaine, . . .	Me.	1881
Arthur, . . .	F. T. Frelinghuysen, .	N. J.	1881
Cleveland, . .	Thomas F. Bayard, . .	Del.	1885
B. Harrison, .	James G. Blaine, . . .	Me.	1889
B. Harrison, .	John W. Foster, . . .	Ind.	1892
Cleveland, . .	Walter Q. Gresham, .	Ill.	1893
Cleveland, . .	Richard Olney, . . .	Mass.	1895
McKinley, . .	John Sherman, . . .	Ohio	1897
McKinley, . .	William R. Day, . . .	Ohio	1897
McKinley, . .	John Hay, . . .	Ohio	1898
Roosevelt, . .	John Hay, . . .	Ohio	1901
Roosevelt, . .	Elihu Root, . . .	N. Y.	1905

Treasury Department. The Secretary of the Treasury is charged by law with the management of the national finances. He prepares plans for the improvement of the revenue and for the support of the public credit; superintends the collection of the revenue, and directs the forms of keeping and rendering public accounts and of making returns; grants warrants for all moneys drawn from the Treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; and annually submits to Congress estimates of the probable revenues and disbursements of the Government. He also controls the construction of public buildings; the coinage and printing of money; the administration of the Life-Saving, Revenue-Cutter, and the Public Health and Marine-Hospital branches of the public service, and furnishes generally such information as may be required by either branch of Congress on all matters pertaining to the foregoing.

The routine work of the Secretary's office is transacted in the offices of the Supervising Architect, Director of the Mint, Director of Engraving and Printing, Surgeon-General of the Public Health and Marine-Hospital Service, General Superintendent of the Life-Saving Service, and in the following divisions: Bookkeeping and warrants; appointments; customs; public moneys; loans and currency; revenue-cutter; stationery, printing, and blanks; mails and files; special agents, and miscellaneous.

SECRETARIES OF THE TREASURY

PRESIDENTS	CABINET OFFICERS	Residences	Date of Appointment
Washington, .	Alexander Hamilton, .	N. Y.	1789
Washington, .	Oliver Wolcott, . . .	Ct.	1795

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Adams, . . .	Oliver Wolcott, . . .	Ct.	1797
Adams, . . .	Samuel Dexter, . . .	Mass.	1801
Jefferson, . . .	Samuel Dexter, . . .	Mass.	1801
Jefferson, . . .	Albert Gallatin, . . .	Pa.	1801
Madison, . . .	Albert Gallatin, . . .	Pa.	1809
Madison, . . .	George W. Campbell, . . .	Tenn.	1814
Madison, . . .	Alexander J. Dallas, . . .	Pa.	1814
Madison, . . .	William H. Crawford, . . .	Ga.	1816
Monroe, . . .	William H. Crawford, . . .	Ga.	1817
J. Q. Adams, . . .	Richard Rush, . . .	Pa.	1825
Jackson, . . .	Samuel D. Ingham, . . .	Pa.	1829
Jackson, . . .	Louis McLane, . . .	Del.	1831
Jackson, . . .	Roger B. Taney, . . .	N. H.	1833
Jackson, . . .	William J. Duane, . . .	Pa.	1833
Jackson, . . .	Levi Woodbury, . . .	N. H.	1834
Van Buren, . . .	Levi Woodbury, . . .	N. H.	1837
Harrison, . . .	Thomas Ewing, . . .	Ohio	1841
Tyler, . . .	Thomas Ewing, . . .	Ohio	1841
Tyler, . . .	Walter Forward, . . .	Pa.	1841
Tyler, . . .	John C. Spencer, . . .	N. Y.	1843
Polk, . . .	George M. Bibb, . . .	Ky.	1844
Taylor, . . .	Robert J. Walker, . . .	Miss.	1845
Fillmore, . . .	William M. Meredith, . . .	Pa.	1849
Pierce, . . .	Thomas Corwin, . . .	Ohio	1850
Buchanan, . . .	James Guthrie, . . .	Ky.	1853
Buchanan, . . .	Howell Cobb, . . .	Ga.	1857
Buchanan, . . .	Philip F. Thomas, . . .	Md.	1860
Lincoln, . . .	John A. Dix, . . .	N. Y.	1861
Lincoln, . . .	Salmon P. Chase, . . .	Ohio	1861
Lincoln, . . .	William P. Fessenden, . . .	Me.	1864
Lincoln, . . .	Hugh McCulloch, . . .	Ind.	1865
Johnson, . . .	Hugh McCulloch, . . .	Ind.	1865
Grant, . . .	George S. Boutwell, . . .	Mass.	1869
Grant, . . .	Wm. A. Richardson, . . .	Mass.	1873
Grant, . . .	Benjamin H. Bristow, . . .	Ky.	1874
Grant, . . .	Lot M. Morrill, . . .	Me.	1876
Hayes, . . .	John Sherman, . . .	Ohio	1877
Garfield, . . .	William Windom, . . .	Minn.	1881
Arthur, . . .	Charles J. Folger, . . .	N. Y.	1881
Arthur, . . .	Walter Q. Gresham, . . .	Ind.	1884
Arthur, . . .	Hugh McCulloch, . . .	Ind.	1884
Cleveland, . . .	Daniel Manning, . . .	N. Y.	1885
Cleveland, . . .	Charles S. Fairchild, . . .	Ind.	1887
B. Harrison, . . .	William Windom, . . .	Minn.	1889
B. Harrison, . . .	Charles Foster, . . .	Ohio	1891
Cleveland, . . .	John G. Carlisle, . . .	Ohio	1893
McKinley, . . .	Lyman J. Gage, . . .	Ill.	1897
Roosevelt, . . .	Lyman J. Gage, . . .	Ill.	1901
Roosevelt, . . .	Leslie M. Shaw, . . .	La.	1901
Roosevelt, . . .	George B. Cortelyou, . . .	N. Y.	1907

War Department. The Secretary of War is head of the War Department, and performs such duties as are required of him by law or may be enjoined upon him by the President concerning the military service.

He is charged by law with the supervision of all estimates of appropriations for the expenses of the Department, including the military establishment; of all purchases of army supplies; of all expenditures for the support, transportation, and maintenance of the army, and of such expenditures of a civil nature as may be placed by Congress under his direction.

He also has supervision of the United States Military Academy at West Point and of military education in the army, of the Board of Ordnance and Fortification, of the various battlefield commissions, and of the publication of the Official Records of the War of the Rebellion.

He has charge of all matters relating to national defense and seacoast fortifications, army ordnance, river and harbor improvements, the prevention of obstruction to navigation, and the establishment of harbor lines, and all plans and locations of bridges authorized by Congress to be constructed over the navigable waters of the United States require his approval. He also

has charge of the establishment or abandonment of military posts, and of all matters relating to leases, revocable licenses, and all other privileges upon lands under the control of the War Department.

SECRETARIES OF WAR

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Washington, . . .	Henry Knox, . . .	Mass.	1789
Washington, . . .	Timothy Pickering, . . .	Mass.	1795
Washington, . . .	James McHenry, . . .	Md.	1796
Adams, . . .	James McHenry, . . .	Md.	1797
Adams, . . .	John Marshall, . . .	Va.	1800
Adams, . . .	Samuel Dexter, . . .	Mass.	1800
Adams, . . .	Roger Griswold, . . .	Ct.	1801
Jefferson, . . .	Henry Dearborn, . . .	Mass.	1801
Madison, . . .	William Eustis, . . .	Mass.	1809
Madison, . . .	John Armstrong, . . .	N. Y.	1813
Madison, . . .	James Monroe, . . .	Va.	1814
Madison, . . .	William H. Crawford, . . .	Ga.	1815
Monroe, . . .	Isaac Shelby, . . .	Ky.	1817
Monroe, . . .	Geo. Graham (ad. in.), . . .	Va.	1817
Monroe, . . .	John C. Calhoun, . . .	S. C.	1817
J. Q. Adams, . . .	James Barbour, . . .	Va.	1825
J. Q. Adams, . . .	Peter B. Porter, . . .	N. Y.	1828
Jackson, . . .	John H. Eaton, . . .	Tenn.	1829
Jackson, . . .	Lewis Cass, . . .	Ohio	1831
Jackson, . . .	Benjamin F. Butler, . . .	N. Y.	1837
Van Buren, . . .	Joel K. Poinsett, . . .	S. C.	1837
Harrison, . . .	John Bell, . . .	Tenn.	1841
Tyler, . . .	John Bell, . . .	Tenn.	1841
Tyler, . . .	John McLean, . . .	Ohio	1841
Tyler, . . .	John C. Spencer, . . .	N. Y.	1841
Tyler, . . .	James M. Porter, . . .	Pa.	1843
Tyler, . . .	William Wilkins, . . .	Pa.	1844
Polk, . . .	William L. Marcy, . . .	N. Y.	1845
Taylor, . . .	George W. Crawford, . . .	Ga.	1849
Taylor, . . .	Edward Bates, . . .	Mo.	1850
Fillmore, . . .	Charles M. Conrad, . . .	La.	1850
Pierce, . . .	Jefferson Davis, . . .	Miss.	1853
Buchanan, . . .	John B. Floyd, . . .	Va.	1857
Buchanan, . . .	Joseph Holt, . . .	Ky.	1861
Lincoln, . . .	Simon Cameron, . . .	Pa.	1861
Lincoln, . . .	Edwin M. Stanton, . . .	Ohio	1862
Johnson, . . .	Edwin M. Stanton, . . .	Ohio	1865
Johnson, . . .	U. S. Grant (ad. in.), . . .	Ill.	1867
Johnson, . . .	Lor. Thomas (ad. in.), . . .	Ill.	1868
Johnson, . . .	John M. Schofield, . . .	N. Y.	1868
Grant, . . .	John A. Rawlins, . . .	Ill.	1869
Grant, . . .	William T. Sherman, . . .	Ohio	1869
Grant, . . .	William W. Belknap, . . .	La.	1869
Grant, . . .	Alphonso Taft, . . .	Ohio	1876
Grant, . . .	James Don. Cameron, . . .	Pa.	1876
Hayes, . . .	George W. McCrary, . . .	La.	1877
Hayes, . . .	Alexander Ramsey, . . .	Minn.	1879
Garfield, . . .	Robert T. Lincoln, . . .	Ill.	1881
Arthur, . . .	Robert T. Lincoln, . . .	Ill.	1881
Cleveland, . . .	William C. Endicott, . . .	Mass.	1885
B. Harrison, . . .	Redfield Proctor, . . .	Vt.	1889
B. Harrison, . . .	Stephen B. Elkins, . . .	N. Va.	1891
Cleveland, . . .	Daniel S. Lamont, . . .	N. Y.	1893
McKinley, . . .	Russell A. Alger, . . .	Mich.	1897
McKinley, . . .	Elihu Root, . . .	N. Y.	1899
Roosevelt, . . .	Elihu Root, . . .	N. Y.	1901
Roosevelt, . . .	William H. Taft, . . .	Ohio	1904

Department of Justice. The Attorney-General is the head of the Department of Justice and the chief law officer of the Government. He represents the United States in matters involving legal questions; he gives his advice and opinion, when they are required by the President or by the heads of the other Executive Departments, on questions of law arising in the administration of their respective Departments; he appears in the Supreme Court of the United States in cases of especial gravity and importance; he exercises a general superintendence and direction over United States attorneys and marshals in all judicial districts in the States and Territories; and he provides special counsel

for the United States whenever required by any Department of the Government.

ATTORNEYS-GENERAL

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Washington, . .	Edmund Randolph, . .	Va.	1789
Washington, . .	William Bradford, . .	Pa.	1794
Washington, . .	Charles Lee,	Va.	1795
Adams,	Charles Lee,	Va.	1797
Adams,	Theophilus Parsons, . .	Mass.	1801
Jefferson,	Levi Lincoln,	Mass.	1801
Jefferson,	Robert Smith,	Md.	1805
Jefferson,	John Breckinridge, . .	Ky.	1805
Jefferson,	Cesar A. Rodney, . . .	Del.	1807
Madison,	Cesar A. Rodney, . . .	Del.	1809
Madison,	William Pinkney, . . .	Md.	1811
Madison,	Richard Rush,	Pa.	1814
Monroe,	Richard Rush,	Pa.	1817
Monroe,	William Wirt,	Va.	1817
J. Q. Adams, . .	William Wirt,	Va.	1825
Jackson,	John McP. Berrien, . .	Ga.	1829
Jackson,	Roger B. Taney,	Md.	1831
Jackson,	Benjamin F. Butler, . .	N. Y.	1833
Van Buren,	Benjamin F. Butler, . .	N. Y.	1837
Van Buren,	Felix Grundy,	Tenn.	1838
Van Buren,	Henry D. Gilpin,	Pa.	1840
Harrison,	John J. Crittenden, . .	Ky.	1841
Tyler,	John J. Crittenden, . .	Ky.	1841
Tyler,	Hugh S. Legare,	S. C.	1841
Tyler,	John Nelson,	Md.	1843
Polk,	John Y. Mason,	Va.	1845
Polk,	Nathan Clifford,	Me.	1846
Polk,	Isaac Toucey,	Ct.	1848
Taylor,	Reverdy Johnson, . . .	Md.	1849
Fillmore,	John J. Crittenden, . .	Ky.	1850
Pierce,	Caleb Cushing,	Mass.	1853
Buchanan,	Jeremiah S. Black, . . .	Pa.	1857
Buchanan,	Edwin M. Stanton, . . .	Ohio	1860
Lincoln,	Edward Bates,	Mo.	1861
Lincoln,	Titian J. Coffey (<i>ad. in.</i>)	Pa.	1863
Lincoln,	James Speed,	Ky.	1864
Johnson,	James Speed,	Ky.	1865
Johnson,	Henry Stanbery,	Ohio	1866
Johnson,	William M. Evarts, . . .	N. Y.	1868
Grant,	Ebenezer R. Hoar,	Mass.	1869
Grant,	Amos T. Ackerman, . . .	Ga.	1870
Grant,	George H. Williams, . . .	Ore.	1871
Grant,	Edwards Pierrepont, . .	N. Y.	1875
Grant,	Alphonso Taft,	Ohio	1876
Hayes,	Charles Devens,	Mass.	1877
Garfield,	Wayne MacVeagh,	Pa.	1881
Arthur,	Benjamin H. Brewster, .	Pa.	1881
Cleveland,	Augustus H. Garland, . .	Ark.	1885
B. Harrison, . . .	William H. H. Miller, . .	Ind.	1889
Cleveland,	Richard Olney,	Mass.	1893
Cleveland,	Judson Harmon,	Ohio	1895
McKinley,	Joseph McKenna,	Cal.	1897
McKinley,	John W. Griggs,	N. J.	1897
McKinley,	Philander C. Knox, . . .	Pa.	1901
Roosevelt,	Philander C. Knox, . . .	Pa.	1901
Roosevelt,	William H. Moody,	Mass.	1904
Roosevelt,	Charles J. Bonaparte, . .	Md.	1907

Department of the Interior. The Secretary of the Interior is charged with the supervision of public business relating to patents for inventions; pensions and bounty lands; the public lands and surveys; the Indians; education; the Geological Survey and Reclamation Service; the Hot Springs Reservation, Arkansas; Yellowstone National Park, Wyoming, and the Yosemite, Sequoia, and General Grant parks, California, and other national parks; forest reservations; distribution of appropriations for agricultural and mechanical colleges in the States and Territories; the custody and distribution of certain public documents; and supervision of certain hospitals and eleemosynary institutions in the District of Columbia. He also exercises certain powers and duties in relation to the Territories of the United States.

SECRETARIES OF THE INTERIOR

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Taylor,	Thomas Ewing,	Ohio	1849
Fillmore,	James A. Pearce,	Md.	1850
Fillmore,	Thos. M. T. McKernon, .	Pa.	1850
Fillmore,	Alexander H. H. Stuart, .	Va.	1850
Pierce,	Robert McClelland, . . .	Mich.	1853
Buchanan,	Jacob Thompson,	Miss.	1857
Lincoln,	Caleb B. Smith,	Ind.	1861
Lincoln,	John P. Usher,	Ind.	1863
Johnson,	John P. Usher,	Ind.	1865
Johnson,	James Harlan,	Iowa	1865
Johnson,	Orville H. Browning, . .	Ill.	1866
Grant,	Jacob D. Cox,	Ohio	1869
Grant,	Columbus Delano,	Ohio	1870
Grant,	Zachariah Chandler, . . .	Mich.	1875
Hayes,	Carl Schurz,	Mo.	1877
Garfield,	Samuel J. Kirkwood, . . .	Iowa	1881
Arthur,	Henry M. Teller,	Col.	1882
Cleveland,	Lucius Q. C. Lamar, . . .	Miss.	1885
Cleveland,	William F. Vilas,	Wis.	1888
B. Harrison, . . .	John W. Noble,	Mo.	1889
Cleveland,	Hoke Smith,	Ga.	1893
Cleveland,	David R. Francis,	Mo.	1896
McKinley,	Cornelius N. Bliss,	N. Y.	1897
McKinley,	Ethan A. Hitchcock, . . .	Mo.	1899
Roosevelt,	Ethan A. Hitchcock, . . .	Mo.	1901
Roosevelt,	James R. Garfield,	Ohio	1907

Post-office Department. The Postmaster-General has the direction and management of the Post-office Department. He appoints all officers and employees of the Department, except the four Assistant Postmasters-General and the purchasing agent, who are appointed by the President, by and with the advice and consent of the Senate; appoints all postmasters whose compensation does not exceed \$1,000; makes postal treaties with foreign governments, by and with the advice and consent of the President; awards and executes contracts, and directs the management of the domestic and foreign mail service.

POSTMASTERS-GENERAL*

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Washington, . . .	Samuel Osgood,	Mass.	1789
Washington, . . .	Timothy Pickens,	Mass.	1791
Washington, . . .	Joseph Habersham,	Ga.	1795
Adams,	Joseph Habersham,	Ga.	1797
Jefferson,	Joseph Habersham,	Ga.	1801
Jefferson,	Gideon Granger,	Ct.	1801
Madison,	Gideon Granger,	Ct.	1809
Madison,	Return J. Meigs, Jr., . . .	Ohio	1814
Monroe,	Return J. Meigs, Jr., . . .	Ohio	1817
Monroe,	John McLean,	Ohio	1823
J. Q. Adams, . . .	John McLean,	Ohio	1825
Jackson,	William T. Barry,	Ky.	1829
Jackson,	Amos Kendall,	Ky.	1835
Van Buren,	Amos Kendall,	Ky.	1837
Van Buren,	John M. Niles,	Ct.	1840
Harrison,	Francis Granger,	N. Y.	1841
Tyler,	Francis Granger,	N. Y.	1841
Tyler,	Charles A. Wickliffe, . . .	Ky.	1841
Polk,	Cave Johnson,	Tenn.	1845
Taylor,	Jacob Collamer,	Vt.	1849
Fillmore,	Nathan K. Hall,	N. Y.	1850
Fillmore,	Samuel D. Hubbard, . . .	Ct.	1852
Pierce,	James Campbell,	Pa.	1853
Buchanan,	Aaron V. Brown,	Tenn.	1857
Buchanan,	Joseph Holt,	Ky.	1859
Buchanan,	Horatio King,	Me.	1861
Lincoln,	Montgomery Blair,	Md.	1861
Lincoln,	William Dennison,	Ohio	1864
Johnson,	William Dennison,	Ohio	1865
Johnson,	Alexander W. Randall, . .	Wis.	1866
Grant,	John A. J. Cresswell, . . .	Md.	1869

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Grant,	James W. Marshall, . . .	Va.	1874
Grant,	Marshall Jewell, . . .	Ct.	1874
Grant,	James N. Tyner, . . .	Ind.	1876
Hayes,	David McK. Key, . . .	Tenn.	1877
Hayes,	Horace Maynard, . . .	Tenn.	1880
Garfield, . . .	Thomas L. James, . . .	N. Y.	1881
Arthur,	Timothy O. Howe, . . .	Wis.	1881
Arthur,	Walter Q. Gresham, . .	Ind.	1883
Arthur,	Frank Hatton, . . .	Ia.	1884
Cleveland, . . .	William F. Vilas, . . .	Wis.	1885
Cleveland, . . .	Don M. Dickinson, . . .	Mich.	1888
B. Harrison, . .	John Wanamaker, . . .	Pa.	1889
Cleveland, . . .	Wilson S. Bissell, . . .	N. Y.	1893
Cleveland, . . .	William L. Wilson, . . .	W. Va.	1895
McKinley, . . .	James A. Gary, . . .	Md.	1897
McKinley, . . .	Charles Emory Smith, . .	Pa.	1898
Roosevelt, . . .	Charles Emory Smith, . .	Pa.	1901
Roosevelt, . . .	Henry C. Payne, . . .	Wis.	1901
Roosevelt, . . .	Robert J. Wynne, . . .	Pa.	1904
Roosevelt, . . .	George B. Cortelyou, . .	N. Y.	1905
Roosevelt, . . .	George Von L. Meyer, . .	Mass.	1907

* The Postmaster-General was not considered a Cabinet officer until 1829.

Navy Department. The Secretary of the Navy performs such duties as the President of the United States, who is Commander-in-chief, may assign him, and has the general superintendence of construction, manning, armament, equipment, and employment of vessels of war.

SECRETARIES OF THE NAVY

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Adams,	Benjamin Stoddert, . .	Md.	1798
Jefferson, . . .	Benjamin Stoddert, . .	Md.	1801
Jefferson, . . .	Robert Smith, . . .	Md.	1801
Jefferson, . . .	Jacob Crowninshield, . .	Mass.	1805
Madison,	Paul Hamilton, . . .	S. C.	1809
Madison,	William Jones, . . .	Pa.	1813
Madison,	B. W. Crowninshield, . .	Mass.	1814
Monroe,	B. W. Crowninshield, . .	Mass.	1817
Monroe,	Smith Thompson, . . .	N. Y.	1818
Monroe,	Samuel L. Southard, . .	N. J.	1823
J. Q. Adams, . .	Samuel L. Southard, . .	N. J.	1825
Jackson,	John Branch, . . .	N. C.	1829
Jackson,	Levi Woodbury, . . .	N. H.	1831
Jackson,	Mahlon Dickerson, . . .	N. J.	1834
Van Buren, . . .	Mahlon Dickerson, . . .	N. J.	1837
Van Buren, . . .	James K. Paulding, . . .	N. Y.	1838
Harrison,	George E. Badger, . . .	N. C.	1841
Tyler,	George E. Badger, . . .	N. C.	1841
Tyler,	Abel P. Upshur, . . .	Va.	1841
Tyler,	David Henshaw, . . .	Mass.	1843
Tyler,	Thomas W. Gilmer, . . .	Va.	1844
Tyler,	John Y. Mason, . . .	Va.	1844
Polk,	George Bancroft, . . .	Mass.	1845
Polk,	John Y. Mason, . . .	Va.	1846
Taylor,	William B. Preston, . . .	Va.	1849
Fillmore,	William A. Graham, . . .	N. C.	1850
Fillmore,	John P. Kennedy, . . .	Md.	1852
Pierce,	James C. Dobbin, . . .	N. C.	1853
Buchanan, . . .	Isaac Toucey, . . .	Ct.	1857
Lincoln,	Gideon Welles, . . .	Ct.	1861
Johnson,	Gideon Welles, . . .	Ct.	1865
Grant,	Adolph E. Borie, . . .	Pa.	1869
Grant,	George M. Robeson, . . .	N. J.	1869
Hayes,	Richard W. Thompson, . .	Ind.	1877
Hayes,	Nathan Goff, Jr., . . .	W. Va.	1881
Garfield,	William H. Hunt, . . .	La.	1881
Arthur,	William E. Chandler, . . .	N. H.	1882
Cleveland, . . .	William C. Whitney, . . .	N. Y.	1885
B. Harrison, . . .	Benjamin F. Tracy, . . .	N. Y.	1889
Cleveland, . . .	Hilary A. Herbert, . . .	Ala.	1893
McKinley, . . .	John D. Long, . . .	Mass.	1897
Roosevelt, . . .	John D. Long, . . .	Mass.	1901
Roosevelt, . . .	William H. Moody, . . .	Mass.	1902
Roosevelt, . . .	Charles J. Bonaparte, . .	Md.	1906
Roosevelt, . . .	Victor H. Metcalf, . . .	Cal.	1907

Department of Agriculture. The Secretary exercises personal supervision of public business relating to the agricultural industry. He appoints all the officers and employees of the Department with the exception of the Assistant Secretary and the Chief of the Weather Bureau, who are appointed by the President, and directs the management of all the divisions, offices, and bureaus embraced in the Department. He sustains an advisory relation to the agricultural experiment stations deriving support from the National Treasury; has control of the quarantine stations for imported cattle, of interstate quarantine rendered necessary by sheep and cattle diseases, and of the inspection of cattle-carrying vessels; and directs the inspection of domestic meats and of all imported food products. He also is charged with carrying into effect the laws prohibiting the transportation by interstate commerce of game killed in violation of local laws and excluding from importation certain noxious animals, and has authority to control the importation of other animals.

SECRETARIES OF AGRICULTURE

PRESIDENTS	CABINET OFFICERS	Resi- dences	Date of Ap- point- ment
Cleveland, . . .	Norman J. Colman, . .	Mo.	1889
B. Harrison, . .	Jeremiah M. Rusk, . .	Wis.	1889
Cleveland, . . .	J. Sterling Morton, . .	Neb.	1893
McKinley, . . .	James Wilson, . . .	Ia.	1897
Roosevelt, . . .	James Wilson, . . .	Ia.	1901

Department of Commerce and Labor. The Secretary of Commerce and Labor is charged with the work of promoting the commerce of the United States, and its mining, manufacturing, shipping, fishery, transportation, and labor interests. His duties also comprise the investigation of the organization and management of corporations (excepting railroads) engaged in interstate commerce; the gathering and publication of information regarding labor interests and labor controversies in this and other countries; the administration of the Light-House Service, and the aid and protection to shipping thereby; the taking of the census, and the collection and publication of statistical information connected therewith; the making of coast and geodetic surveys; the collecting of statistics relating to foreign and domestic commerce; the inspection of steamboats, and the enforcement of laws relating thereto for the protection of life and property; the supervision of the fisheries as administered by the Federal Government; the supervision and control of the Alaskan fur-seal, salmon, and other fisheries; the jurisdiction over merchant vessels, their registry, licensing, measurement, entry, clearance, transfers, movement of their cargoes and passengers, and laws relating thereto, and to seamen of the United States; the supervision of the immigration of aliens, and the enforcement of the laws relating thereto, and to the exclusion of Chinese; the custody, construction, maintenance, and application of standards of weights and measurements; and the gathering and supplying of information regarding industries and markets for the fostering of manufacturing. He has power to call

upon other Departments for statistical data obtained by them.

It is his further duty to make such special investigations and furnish such information to the President or Congress as may be required by them on the foregoing subject-matters and to make annual reports to Congress upon the work of said Department.

SECRETARIES OF COMMERCE AND LABOR

PRESIDENTS	CABINET OFFICERS	Residences	Date of Appointment
Roosevelt, . . .	George B. Cortelyou, . .	N. Y.	1903
Roosevelt, . . .	Victor H. Metcalf, . . .	Cal.	1904
Roosevelt, . . .	Oscar S. Straus,	N. Y.	1907

Speaker of the House of Representatives. The title of the presiding officer of the House of Representatives. He is elected by the members of that body. Below is given a list of the Speakers who have presided since the first Congress:

SPEAKERS OF THE HOUSE

NAME	State	Born	Died	Congress	YEARS
F. A. Muhlenburg, . . .	Pa.	1750	1801	1	1789-91
Jonathan Trumbull, . .	Conn.	1740	1809	2	1791-93
F. A. Muhlenburg, . . .	Pa.	1750	1801	3	1793-95
Jonathan Dayton, . . .	N. J.	1760	1824	4, 5	1795-99
Theo. Sedgwick,	Mass.	1746	1813	6	1799-01
Nathaniel Macon, . . .	N. C.	1757	1837	7-9	1801-07
Joseph B. Varnum, . . .	Mass.	1750	1821	10, 11	1807-11
Henry Clay,	Ky.	1777	1852	12, 13	1811-14
Langdon Cheves,	S. C.	1776	1857	13	1814-15
Henry Clay,	Ky.	1777	1852	14-16	1815-20
John W. Taylor,	N. Y.	1784	1854	16	1820-21
Philip P. Barbour, . . .	Va.	1783	1841	17	1821-23
Henry Clay,	Ky.	1777	1852	18	1823-25
John W. Taylor,	N. Y.	1784	1854	19	1825-27
Andrew Stevenson, . . .	Va.	1784	1857	20-23	1827-34
John Bell,	Tenn.	1797	1869	23	1834-35
James K. Polk,	Tenn.	1795	1849	24, 25	1835-39
R. M. T. Hunter,	Va.	1809	1887	26	1839-41
John White,	Ky.	1805	1845	27	1841-43
John W. Jones,	Va.	1805	1848	28	1843-45
John W. Davis,	Ind.	1799	1850	29	1845-47
Robert C. Winthrop, . . .	Mass.	1809	1894	30	1847-49
Howell Cobb,	Ga.	1815	1868	31	1849-51
Linn Boyd,	Ky.	1800	1859	32, 33	1851-55
Nathaniel P. Banks, . . .	Mass.	1816	1894	34	1855-57
James L. Orr,	S. C.	1822	1873	35	1857-59
Wm. Pennington,	N. J.	1796	1862	36	1859-61
Calusha A. Grow,	Pa.	1823	1907	37	1861-63
Schuyler Colfax,	Ind.	1823	1885	38-40	1863-69
James G. Blaine,	Me.	1830	1893	41-43	1869-75
Michael C. Kerr,	Ind.	1827	1876	44	1875-76
Samuel J. Randall,	Pa.	1828	1890	44-46	1876-81
Joseph W. Keifer,	Ohio	1836	1891	47	1881-83
John G. Carlisle,	Ky.	1835	1891	48-50	1883-89
Thomas B. Reed,	Me.	1839	1902	51	1889-91
Charles F. Crisp,	Ga.	1845	1896	52, 53	1891-95
Thomas B. Reed,	Me.	1839	1902	54, 55	1895-99
David B. Henderson, . . .	Iowa	1840	1906	56, 57	1899-03
Joseph G. Cannon,	Ill.	1838	1902	59, 60	1903-07

JUSTICES OF THE UNITED STATES SUPREME COURT

(Names of the Chief Justices in italics.)

NAME	SERVICE		Born	Died
	Term	Yrs.		
<i>John Jay</i> , N. Y.	1789-1795	6	1745	1829
John Rutledge, S. C. . . .	1789-1791	2	1739	1800
William Cushing, Mass., . .	1789-1810	21	1733	1810
James Wilson, Pa.,	1789-1798	9	1742	1798
John Blair, Va.,	1789-1796	7	1732	1800
Robert H. Harrison, Md., . .	1789-1790	1	1745	1790
James Iredell, N. C.,	1790-1799	9	1751	1799
Thomas Johnson, Md., . . .	1791-1793	2	1732	1819

NAME	SERVICE		Born	Died
	Term	Yrs.		
William Paterson, N. J., . .	1793-1806	13	1745	1806
<i>John Rutledge</i> , S. C.,	1795-1795	1	1739	1800
Samuel Chase, Md.,	1796-1811	15	1741	1811
<i>Oliver Ellsworth</i> , Ct.,	1796-1800	4	1745	1807
Bushrod Washington, Va., .	1798-1829	31	1762	1829
Alfred Moore, N. C.,	1799-1804	5	1755	1810
<i>John Marshall</i> , Va.,	1801-1835	34	1755	1835
William Johnson, S. C., . .	1804-1834	30	1771	1834
Brook Livingston, N. Y., . .	1806-1823	17	1757	1823
Thomas Todd, Ky.,	1807-1826	19	1765	1826
Joseph Story, Mass.,	1811-1845	34	1779	1845
Gabriel Duval, Md.,	1811-1836	25	1752	1844
Smith Thompson, N. Y., . .	1823-1843	20	1767	1843
Robert Trimble, Ky.,	1826-1828	2	1777	1828
John McLean, Ohio,	1829-1861	32	1785	1861
Henry Baldwin, Pa.,	1830-1844	14	1779	1844
James M. Wayne, Ga., . . .	1835-1867	32	1790	1867
<i>Philip B. Taney</i> , Md.,	1836-1864	28	1777	1864
Roller P. Barbour, Va., . .	1836-1841	5	1783	1841
John Catron, Tenn.,	1837-1865	28	1786	1865
John McKinley, Ala.,	1837-1852	15	1780	1852
Peter V. Daniel, Va.,	1841-1860	19	1785	1860
Samuel Nelson, N. Y., . . .	1845-1872	27	1792	1873
Levi Woodbury, N. H., . . .	1845-1851	6	1789	1851
Robert C. Grier, Pa.,	1846-1870	23	1794	1870
Benj. R. Curtis, Mass., . . .	1851-1857	6	1809	1874
John A. Campbell, Ala., . .	1853-1861	8	1811	1889
Nathan Clifford, Me.,	1858-1881	23	1803	1881
Noah H. Swayne, Ohio, . . .	1861-1881	20	1804	1884
Samuel F. Miller, Iowa, . .	1862-1890	28	1816	1890
David Davis, Ill.,	1862-1877	15	1815	1886
Stephen J. Field, Cal., . . .	1863-1897	34	1816	1899
<i>Salmon P. Chase</i> , Ohio, . . .	1864-1873	9	1808	1873
William Strong, Pa.,	1870-1880	10	1808	1895
Joseph P. Bradley, N. J., . .	1870-1892	22	1813	1892
Ward Hunt, N. Y.,	1872-1882	10	1811	1886
<i>Morrison R. Waite</i> , Ohio, . .	1874-1888	14	1816	1888
John M. Harlan, Ky.,	1877- . . .	1	1833	1887
William B. Woods, Ga., . . .	1880-1887	7	1824	1887
Stanley Matthews, Ohio, . .	1881-1889	8	1824	1889
Horace Gray, Mass.,	1881-1902	21	1828	1902
Samuel Blatchford, N. Y., .	1882-1893	11	1820	1893
Lucius Q. C. Lamar, Miss., .	1888-1893	5	1825	1893
<i>Melville W. Fuller</i> , Ill., . . .	1888- . . .	1	1833	1910
David J. Brewer, Kan., . . .	1889- . . .	1	1837	1910
Henry B. Brown, Mich., . . .	1890-1906	16	1836	1910
George Shiras, Jr., Pa., . . .	1892-1903	11	1832	1910
Howell E. Jackson, Tenn., .	1893-1895	2	1832	1895
Edward D. White, La.,	1893- . . .	1	1845	1921
Rufus W. Peckham, N. Y., . .	1895- . . .	1	1837	1917
Joseph McKenna, Cal., . . .	1898- . . .	1	1843	1926
Oliver W. Holmes, Mass., . .	1902- . . .	1	1841	1935
William R. Day, Ohio,	1903- . . .	1	1849	1923
William H. Moody,	1906- . . .	1	1853	1922

Uruguay. The Republic of Uruguay, formerly a part of the viceroyalty of Spain, and subsequently a province of Brazil, declared its independence, August 25, 1825, which was recognized by the Treaty of Montevideo, signed August 27, 1828. The Constitution of the Republic was sworn July 18, 1830. By the terms of this charter, the legislative power is in a Parliament, composed of two houses, the senate and the chamber of representatives, which meet in annual session, extending from February 15th to July 15th. In the interval of the session, a permanent committee of two senators and five members of the lower house assume the legislative power, as well as the general control of the administration. The representatives are chosen for three years, in the proportion of one to every 3,000 inhabitants, of male adults who can read and write. The senators are chosen by an electoral college, whose members are directly elected by the people. There is one Senator for each department, chosen for six years, one-third retiring every two years. There are sixty-nine representatives and nineteen

senators. The executive is given by the Constitution to the president of the Republic, elected for the term of four years. The president is assisted in his executive functions by a council of ministers divided into five departments, namely, that of the interior, foreign affairs, finance, war and marine, and instruction and public works.

Utah. The original Constitution of 1895 is in force as amended in 1900. The Legislature consists of a Senate and a House of Representatives; but the Constitution provides for the initiation of any desired legislation by the legal voters or such number of them as may be determined by law, and such voters may require any law passed by less than a two-thirds vote of each House of the Legislature to be submitted to the voters of the State before coming into effect. The Senate (in part renewed every two years) consists of eighteen members, elected for four years; the House of Representatives has forty-six members elected for two years. Bills may originate in either House. The House of Representatives may impeach; the Senate tries impeachments. Eligible to either House are citizens 25 years of age, three years resident in the State, and one year in the district next before the election. Amendments to the Constitution may be proposed in either branch of the Legislature, but to be embodied in the Constitution, they must be carried by a two-thirds vote of all the members of each House and ratified by a majority vote of the people. The chief executive power is vested in a governor elected for four years. He is commander-in-chief of the militia. With the consent of the Senate he has the appointment of various officials. The governor, justices of the Supreme Court, and attorney-general constitute a board of pardons. The governor has the power of veto but its exercise may be overridden by a two-thirds vote of all the members of each House. Other State officials are the secretary of state, auditor, the treasurer, the attorney-general, and the superintendent of public instruction; all elected for four years. There are twenty-seven counties in the State.

Venezuela. The Republic of Venezuela was formed in 1830, by secession from the other members of the Republic of Colombia. The Constitution in force is that of 1904. Legislative authority is vested in a congress of two chambers, the senate and the chamber of deputies. The former consists of twenty-six members elected for six years, two for each state, Venezuelans by birth and over 30 years of age. The latter is constituted as follows: Each state chooses by direct election one deputy, a Venezuelan by birth and over 21 years of age, for every 40,000 inhabitants, and one more for an excess of 20,000. The federal district and the territories which are sufficiently populous elect deputies in manner prescribed by law. Deputies are elected for six years. Congress meets biennially and sits for ninety days. Executive power is in the hands of the president and cabinet of ministers. The president holds office for six years and cannot be elected for the following term. He must be a Venezuelan by birth and over 30 years of age. In case of temporary or permanent inability to

act, his place is taken by the first and second vice-presidents. The presidents and vice-presidents are chosen by an electoral body which is itself elected by congress within fifteen days of its assembling, and which consists of a senator or deputy for each of the federal entities and one additional for the federal district. The cabinet consists of the ministers of internal affairs, foreign affairs, finance, and public credit, war, and marine, development, public works, public instruction.

Vermont. The Constitution in force at the time of admission was that of 1786. In 1793, a new Constitution was adopted which, with amendments made in 1828, 1836, 1850, 1870, and 1883, is still in force. The State Legislature consists of a Senate and House of Representatives having, the former thirty and the latter 246 members. Senators must be 30 years of age and Representatives 21. The governor is elected for two years. He exercises the chief executive power and appoints all State officers not otherwise provided for by law. He has power to pardon, or in certain cases only to reprieve; his veto can be overridden by a majority vote of each House. Other important officials are the lieutenant-governor, treasurer, and auditor.

Virginia. The first Constitution of Virginia was adopted on June 29, 1776, and with little change it survived till recent years. The Constitution now in force was adopted by the Convention of 1901-02. It provides for a Legislature called the General Assembly, consisting of a Senate and a House of Delegates, the former containing not more than forty nor less than thirty-three members, and the latter not more than 100 nor less than ninety. Senators are elected for four years, one-half retiring every two years. Eligible to either House are persons resident in the district and qualified to vote for members of the General Assembly, except paid office-holders of the State or of the Union. The executive power resides in a governor, elected for four years by the voters of the State. He must be 30 years of age, must have been a citizen of the United States for ten years, and have resided in the State for five years. He is not eligible for the succeeding term. He is required to take care that the laws are faithfully administered; he recommends the legislative measures which he considers necessary; is commander-in-chief of the military forces; has power to grant reprieves and pardons after conviction, but must report to the Legislature on each case. In legislation he has a limited power of veto, which may be overridden by a two-thirds majority of each House, if such majority includes a majority of the elected members. There is a lieutenant-governor, a secretary of the commonwealth, and a State treasurer, each of whom is elected for the same term and in the same manner as the governor. The auditor is appointed for four years by the two Houses sitting together.

Washington was admitted into the Union as a State in 1889. The Constitution of that year was amended in 1894, 1896, 1900, and 1904. Legislative authority is vested in a Legislature consisting of a Senate and a House of Representatives, the latter composed of not less than sixty-three nor more than ninety-nine

members (actually ninety-five in 1907), the number of Senators being not more than half nor less than one-third of that of members of the House of Representatives (actually forty-two in 1907). The membership of both Houses is apportioned anew every five years according to the results of the federal decennial census and of the intervening decennial State census. Eligible for either house are citizens of the United States who are qualified voters in the districts for which the election is held. But members of the United States Congress and holders of United States or State offices are disqualified. The chief executive authority resides in a governor, chosen by the qualified electors of the State and holding office for four years. He is charged to watch over the faithful execution of the laws; he recommends legislative measures, communicating by message every session with the Legislature. He is commander-in-chief of the State military forces; he has pardoning powers as to the use of which he reports to the Legislature; he has a veto in legislation, but his veto may be overridden by a two-thirds majority of each House. He signs all commissions. The executive department consists of the governor, a secretary of state, treasurer, auditor, attorney-general, superintendent of public instruction, and commissioner of public lands, all elected by the qualified voters for four years.

West Virginia. The present Constitution was framed and adopted in 1872, superseding the Constitution of 1863. It was amended in 1879, 1883, and 1902. The Legislature consists of the Senate and the House of Delegates. The members of both Houses are elected by the general electors. The Senate is composed of thirty members elected for a term of four years in such a manner that half the Senate is renewed biennially. Senators must be at least 25 years of age and have been resident five years in the State and in the senatorial districts for which they are severally chosen. The House of Delegates consists of eighty-six members. Every bill passed by both Houses requires the assent of the governor, but if this is refused the bill may become law on being revoted by a majority in the Legislature. The executive department consists of a governor, secretary of state, superintendent of free schools, auditor, treasurer, and attorney-general, each elected for four years. The governor must be at least 30 years of age and is not eligible for reelection. He is commander-in-chief of the State military establishment, convenes the Legislature in extra session, approves or disapproves all acts of the Legislature, fills vacant State offices by appointment, and is president of the board of public works.

Wisconsin was admitted to the Union in 1848. The Constitution of that year is still in force, but has been frequently amended, first in 1869, and most recently in 1904. The legislative power is vested in a Senate and Assembly. The Senate consists of thirty-three members elected for a term of four years, only about one-half of the members being elected at one time. The Assembly consists of 100 members, elected for a term of two years, all of the members being elected at the same time. The powers of the two Houses as to appropriations and revenue bills are

the same. Eligible to the Legislature are all males who are qualified electors in the district to be represented and who have resided one year within the State, except members of Congress and office holders under the United States. The chief executive authority in the State is vested in the governor, who is elected for two years and has the powers usually resident in State governors, including the limited veto and pardoning power. The secretary of state is elected for two years. Other important elective offices are those of lieutenant-governor, treasurer, attorney-general, superintendent of schools, and insurance commissioner. Among the more important appointive offices are the following: commissioner of labor and industrial statistics, appointed for four years, commissioner of banking, dairy and food commissioner, superintendent of public property, and adjutant-general. The railroad commission consisting of three members is appointed by the governor, with the consent of the Senate, for a term of six years. The tax commission is composed of three members similarly appointed for a term of eight years. The civil service commission is appointed for a term of six years, and the board of control for five years.

Wyoming was admitted into the Union as a State in 1890. The original Constitution, adopted in 1889, is still in force. Constitutional amendments proposed in either House of the Legislature, agreed to by a two-thirds vote of all the members of each House, and approved by a majority vote of the people, become part of the Constitution. The Legislature consists of a Senate of twenty-three members, elected for four years (about one-half retiring every two years), and a House of Representatives of fifty members elected for two years. Legislators must be citizens (Senators 25 and Representatives 21 years of age), and must have resided in the county or district one year next preceding the election. Revenue bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House. The chief executive officer of the State is the governor, elected for four years. He may appoint to offices not otherwise provided for by law, has a limited power of pardoning, etc., may call special sessions of the Legislature, and has a veto which may be overridden by a two-thirds vote of each House. Other officials elected for four years, are the secretary of state, auditor, treasurer, and superintendent of public instruction. The treasurer is not eligible for the succeeding term.

Zanzibar. The dominions of the Sultan of Zanzibar include only the islands of Zanzibar and Pemba, and the coast of the British East Africa up to ten miles inland. The Sultan is still the titular sovereign, under a British Protectorate. In October, 1891, a regular government was formed for Zanzibar. All accounts are now kept in English and Arabic, and are always open to the inspection of the British agent and consul-general, and no new undertakings or additional expenditure can be incurred without his consent. On February 1, 1892, Zanzibar was declared a free port, and it remained so until October 1, 1899.

SEVENTH BOOK

**INDUSTRY, INVENTION, COMMERCE, FINANCE,
PRODUCTION, MANUFACTURES**

UNION STATION, WASHINGTON

INDUSTRY, INVENTION, COMMERCE

Adulteration, a term not only applied in its proper sense to the fraudulent mixture of articles of commerce, food, drink, drugs, seeds, etc., with noxious or inferior ingredients, but also by magistrates and analysts to accidental impurity, and even in some cases to actual substitution. The chief objects of adulteration are to increase the weight or volume of the article, to give a color which either makes a good article more pleasing to the eye, or else disguises an inferior one, to substitute a cheaper form of the article, or the same substance from which the strength has been extracted, or to give it a false strength. Among the adulterations which are practised for the purpose of fraudulently increasing the weight or volume of an article are the following:— Bread is adulterated with alum or sulphate of copper, which gives solidity to the gluten of damaged or inferior flour; with chalk or carbonate of soda to correct the acidity of such flour; and with boiled rice or potatoes, which enables the bread to carry more water, and thus to produce a larger number of loaves from a given quantity of flour. Wheat flour is adulterated with other inferior flours, as the flour from rice, bean, Indian-corn, potato, and with sulphate of lime, alum, etc. Milk is usually adulterated with water. The adulterations generally present in butter consist of an undue proportion of salt and water, lard, tallow, and other fats; when of poor quality it is frequently colored with a little annatto, and, at times, with the juice of carrots. Genuine butter should not contain less than eighty per cent. of butter-fat. Cheese is also colored with annatto and other substances. Tea is adulterated (chiefly in China) with sand, iron-filings, chalk, gypsum, China clay, exhausted tea leaves, and the leaves of the sycamore, horse-chestnut, and plum, whilst color and weight are added by black-lead, indigo, Prussian-blue (one of the deleterious ingredients used by the Chinese in converting the lowest qualities of black into green teas), gum, turmeric, soapstone, catechu, and other substances. Coffee is mingled with chicory, roasted wheat, roasted beans, acorns, mangel-wurzel, rye-flour, and colored with burned sugar and other materials. Chicory is adulterated with different flours, as rye, wheat, beans, etc., and colored with ferruginous earths, burned sugar, Venetian red, etc. Cocoa and chocolate are mixed with the cheaper kinds of arrowroot, animal matter, corn, sago, tapioca, etc. Sugar (moist) may be adulterated to some extent with sand and flour. Tobacco is mixed with sugar and treacle, aloes, liquorice, oil, alum, etc., and such leaves as rhubarb, chicory, cabbage, burdock, coltsfoot, besides excess of salt and water. Snuffs are adulterated with carbonate of ammonia, glass, sand, coloring matter, etc. Confections are adulterated with flour and sulphate of lime. Preserved vegetables are kept green and poisoned by salts of copper. The acidity of mustard is commonly reduced by flour, and the color of the compound is improved by turmeric. Pepper is adulterated with linseed-meal, flour, mustard husks, etc. Color is given to pickles by salts of copper, acetate of

copper, etc. Ale is adulterated with common salt, *Coccilus Indicus*, grains of paradise, quassia, and other bitters, sulphate of iron, alum, etc. Porter and stout are mixed with sugar, treacle, salt, and an excess of water. Brandy is diluted with water, and burned sugar is added to improve the color; sometimes bad whiskey is flavored and colored so as to resemble brandy, and sold under its name. Gin is mixed with excess of water, and flavoring matters of various kinds, with alum and tartar, are added. Rum is diluted with water, and the flavor and color are kept up by the addition of cayenne and burned sugar. For champagne, gooseberry, and other inferior wines are often substituted. Port is manufactured from red Cape and other inferior wines, the body, flavor, strength, and color being produced by gum-dragon, the washings of brandy casks, and a preparation of German bilberries. Cheap brown sherry is mixed with Cape and other low-priced brandies, and is flavored with the washings of brandy-casks, sugar-candy, and bitter almonds. Pale sherries are produced by gypsum, by a process called plastering, which removes the natural acids as well as the color of the wine. Other wines are adulterated with elderberry, logwood, Brazilwood, cudbear, red beetroot, etc., for color; with lime or carbonate of lime, carbonate of soda, carbonate of potash, and litharge, to correct acidity; with catechu, sloe-leaves, and oak-bark for astringency; with sulphate of lime and alum for removing color; with cane-sugar for giving sweetness and body; with alcohol for fortifying; and with ether, especially acetic ether, for giving bouquet and flavor. Medicines, such as jalap, opium, rhubarb, chinchona bark, scammony, aloes, sarsaparilla, squills, etc., are mixed with various foreign substances. Castor-oil has been adulterated with other oils; and inferior oils are often mixed with cod-liver oil. Cantharides are often mixed with golden-beetle and also artificially-colored glass. The adulteration of seeds is largely practiced also, the seed which forms the adulterant being of course of the most worthless kind that can be had. Thus turnip-seed is mixed with rape, wild mustard, or charlock, which are steamed and kiln-dried to destroy their vitality, so as to evade detection in the progress of growth; old and useless turnip-seed is also used fraudulently mixed with fresh seeds. Clover is also much mixed with plantain and mere weeds.

Acts against adulteration have been passed in various countries and at various times. In 1906, the United States Congress passed comprehensive laws against food adulteration, under the titles of the Pure Food Act and the Meat Inspection Act.

Aerial Navigation. The first balloon was sent up by the brothers Stephen and Joseph Montgolfier, paper manufacturers at Annonay, near Lyons, on June 5, 1783, and reached an altitude of nearly a mile. It was inflated with heated air, for which hydrogen gas was soon substituted. The modern balloon is but a slight improvement on that invented by Montgolfier.

In place of heated air or hydrogen, common coal gas is now used. This improvement was introduced by Mr. Green, the English aéronaut. As gas expands rapidly as the balloon ascends, and the pressure of the external air is diminished, the neck of the balloon is commonly left open, and the machine is also furnished with a safety valve at the top, which can be opened or shut at pleasure. Mr. Glaisher, a noted English aéronaut, is of the opinion that in order to reach great altitudes the balloon must have a capacity of at least 90,000 cubic feet, of which not more than one-third need be inflated with gas, and must carry upward of 600 pounds of ballast. The question of the extreme altitude to which a balloon can ascend can only be theoretically determined, since the vital powers at 37,000 to 40,000 feet of elevation must succumb to the intense cold and the attenuated atmosphere. Mr. Glaisher seriously doubts the practical use of the balloon. He sees no probability that any method of steering it will be invented; but Messrs. Fonvielle and Tissandier believe it possible to devise means for its guidance. Of various plans for aerial ships capable of being steered projected in Europe and America, practically all have failed. Thus far the dirigible balloon of M. Santos-Dumont and the aéronome of the late Professor Langley remain the types of the most nearly successful experiments in this direction.

September 15, 1898, Stanley Spencer, aéronaut, and Dr. Benson made an ascent in a balloon from London. They effectually steered the machine by means of a rudder and drag-ropes, and crossed the English channel, landing safely in France. They reached an altitude of 27,500 feet, the greatest height yet recorded. In September, 1900, Count von Zeppelin made an ascent in an air-ship of his invention, built chiefly of aluminum and driven electrically by four huge propellers, which seemed under perfect control and made an aerial journey of six miles. Count de la Vaulx, in an experiment in 1906 over the English Channel, succeeded in some degree in steering a balloon at an angle to the wind. This was accomplished with a large shutter-like device called a deviator dragged in the water by ropes attached to the car at an elevation of 300 feet.

Another and more modern type of airship is the aeroplane. Since the first aeroplane types of flying machines, designed by Maxim and Lilienthal, the work of inventors and scientists along the line of motor-driven, heavier-than-air flying machines has shown steady progress. The general and most popular design is that of the simple aeroplane, supported by air, through which it is propelled by detached force. There have been many radical but experimental departures from the aeroplane type, none of which, however, have shown any great degree of success. Among these radical types is the Helicopter, the production of Otto Luyties, of Baltimore, Md. The design of the machine embraces several pairs of huge wings and two or more upright revolving propellers, the latter operated by a 100-horse power motor for the purpose of lifting the machine. The entire weight is 1,700 pounds.

Achievements in the form of sustained flight, power to rise and descend without mishap, and to guide the machine in a circular flight are confined to the Wright Brothers, of Dayton, Ohio, and the Brothers Voisin, whose aeroplane constructed on lines laid down by M. Octave Chanute, was driven in a successful flight on November 9 and 11, 1907, at Paris by M. Henry Farman. The aeroplane on the first attempt rose slowly from the ground, and in one minute and fourteen seconds completed a circle.

This flight, however, is still far behind the achievements of the Wright Brothers in 1905, at Dayton, Ohio, when in the presence of reputable witnesses one of the brothers remained in the air thirty-eight minutes and three seconds, making a circular flight of twenty-four and one-half miles. Officials of the Aéro Club of America, at the International Congress held in New York on October 28, 1907, admitted that in flights of man-carrying gasless machines the Wright Brothers are far ahead of all competitors. What the Wright Brothers have accomplished in the last two years, or since their twenty-four-mile flight, is only problematical. It is conceded that they have made still further progress, and it is not unlikely that before the elapse of another year prolonged flights of motor-driven aeroplanes may be witnessed. The Wright Brothers have established one curious point—that a really successful flying machine will develop speed in excess of anticipations based on the motor's efficiency.

Santos-Dumont, in his helicopter, made the first public demonstration of man-flight without gas support, traveling about 300 yards. His efforts were eclipsed by Mr. Farman in a successful flight on October 26, 1907, near Paris, when he drove his aeroplane nearly half a mile.

Although not a matter of authentic record, it is reported that M. Esnault Pelterie, in a flying machine described as half automobile and half aeroplane, succeeded in making a series of flights near Paris, turning in the air, rising and descending at will. The machine resembles a butterfly, with the wings controlled by means of levers.

Agriculture, the art of farming. From Egypt a knowledge of agriculture extended to Greece, where it flourished 1,000 years before Christ. Hesiod describes a plough consisting of a beam, a share, and handles. The Greek farmers composted with skill, and saved the materials for the compost with care. A high appreciation of agriculture seems to have been a fundamental idea among the early Romans. A tract of land was allotted to every citizen by the state itself, and each one was carefully restricted to the quantity granted. The Roman agriculturists whose works have come down to us are Cato, Varro, Virgil, Columella, Pliny, and Palladius. The difference of soils and their adaptation to particular crops were well understood. Manures were saved with care. Composts were made in suitable places, hollows being scraped out in the form of a bowl to receive the wash from the house, and properly protected from the heat of the sun. But the inhabitants of the East were familiar with many mechanical appliances unknown to the Romans, and proba-

ably their agricultural systems were more complete.—In Britain, the Romans made many improvements during their 400 years of occupation; but the agriculture of the island was extremely rude even when they left it, by far the greater part being covered with forests and marshes. Then the Saxons overran the country, subsisting mainly by the chase and by keeping cattle, sheep, and especially swine, which readily fatten on the mast of the oak and the beech. In general, the only grains raised were wheat, barley, and oats, and they had but small quantities of these. No hoed crops of edible vegetables were cultivated, and even as late as the reign of Henry VIII. Queen Catharine was obliged to send to Flanders or Holland for salad. Neither Indian corn, potatoes, squashes, carrots, cabbages, nor turnips were known in England till after the beginning of the Sixteenth Century. From that time to the present, the gradual elevation of the middle and lower classes has continued, and agriculture has steadily advanced. The first work on agriculture published in England was the "Boke of Husbandrie," in 1523, by Sir Anthony Fitzherbert.

The advance in the art and science of agriculture in the United States during the last half dozen years has been remarkable, and has had a tremendous effect upon the nation's prosperity. The total value of farm products in 1907 exceeded \$7,000,000,000, and in 1906, \$6,800,000,000. The value of the products in 1906 was eight per cent. greater than that of 1905, ten per cent. over 1904, fifteen per cent. over 1903, and forty-four per cent. over 1899.

This marked progress is due to a number of circumstances and conditions, chief of which are our great variety of soil and climate, superior intelligence of the American farmer, improved machinery and implements, scientific education in all branches of agriculture, and increased pride of occupation.

Among the chief improvements we may mention deep plowing and thorough draining. By the introduction of new or improved implements the labor necessary to the carrying out of agricultural operations has been greatly diminished. Science, too, has been called in to act as the handmaid of art, and it is by the investigations of the chemist that agriculture has been put on a really scientific basis. The organization of plants, the primary elements of which they are composed, the food on which they live, and the constituents of soils, have all been investigated, and most important results obtained, particularly in regard to manures and rotations. Artificial manures, in great variety, to supply the elements wanted for plant growth, have come into common use, not only increasing the produce of lands previously cultivated, but extending the limits of cultivation itself. An improvement in all kinds of stock is becoming more and more general, feeding is conducted on more scientific principles, and improved varieties of plants used as field crops have been introduced. One of the recent innovations in the United States is the introduction of the system of *ensilage* for preserving fodder in a green state, which promises to give valuable results, though it has hardly been tested long enough to decide as to its value.

As a result of the new conditions, to be a thoroughly trained and competent agriculturist requires a special education, partly theoretical and partly practical. In particular, no scientific cultivator can now be ignorant of agricultural chemistry, which teaches the constituents of the various plants grown as crops, their relation to the various soils, the nature and function of different manures, etc. In some countries there are now agricultural schools or colleges supported by the state. In the United States nearly all the States have colleges, or departments of colleges, devoted to the teaching of agriculture, and large allotments of public land have been made for their support. In Germany such institutions are numerous and highly efficient. For teaching agriculture practically model farms are commonly established. In many countries, too, there is a ministry of agriculture as one of the chief departments of government. Our own Department of Agriculture has achieved the foremost place in the world, for its scientific work in practical husbandry and its stimulating influence.

AGRICULTURAL IMPLEMENTS, VALUE OF, LAST CENSUS REPORT

STATES AND TERRITORIES	VALUE OF IMPLEMENTS ON FARMS
United States	\$749,776,660
Alabama	\$8,675,900
Alaska	690
Arizona	765,200
Arkansas	8,750,060
California	21,311,670
Colorado	4,746,755
Connecticut	4,948,300
Delaware	2,150,560
District of Columbia	136,060
Florida	1,963,210
Georgia	9,804,010
Idaho	3,295,045
Illinois	44,977,310
Indiana	27,330,370
Indian Territory	3,939,480
Iowa	57,960,660
Kansas	29,490,580
Kentucky	15,301,860
Louisiana	28,536,790
Maine	8,802,720
Maryland	8,611,220
Massachusetts	8,828,950
Michigan	28,795,380
Minnesota	30,099,230
Mississippi	9,556,805
Missouri	28,002,680
Montana	3,671,900
Nebraska	24,940,450
Nevada	888,560
New Hampshire	5,163,090
New Jersey	9,330,030
New Mexico	1,151,610
New York	56,006,000
North Carolina	9,072,600
North Dakota	14,055,560
Ohio	36,354,150
Oklahoma	6,573,015
Oregon	6,506,725
Pennsylvania	50,917,240
Rhode Island	1,270,270
South Carolina	6,629,770
South Dakota	12,218,680
Tennessee	15,232,670
Texas	30,125,705
Utah	2,922,550
Vermont	7,538,490
Virginia	9,911,040
Washington	6,271,630
West Virginia	5,040,420
Wisconsin	29,237,010
Wyoming	1,366,000

AGRICULTURE

From the latest reports

STATE OR TERRITORY	CORN	WINTER WHEAT	SPRING WHEAT	OATS	RYE	BUCK-WHEAT	FLAX-SEED	RICE (ROUGH)
	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value
Maine,	\$ 333,000		\$ 212,000	\$ 2,560,000		\$ 419,000		
New Hampshire,	682,000			258,000		33,000		
Vermont,	1,485,000		23,000	1,671,000	\$ 23,000	123,000		
Massachusetts,	1,888,000			147,000	58,000	30,000		
Rhode Island,	250,000			39,000				
Connecticut,	1,386,000			189,000	146,000	36,000		
New York,	11,502,000	\$ 7,125,000		21,139,000	1,716,000	3,981,000		
New Jersey,	5,517,000	1,958,000		991,000	1,043,000	149,000		
Pennsylvania,	29,390,000	28,891,000		16,032,000	4,337,000	3,192,000		
Delaware,	2,760,000	2,386,000		60,000	14,000	17,000		
Maryland,	11,986,000	14,172,000		404,000	236,000	115,000		
Virginia,	29,456,000	8,024,000		1,431,000	166,000	250,000		
West Virginia,	15,322,000	4,477,000		990,000	106,000	291,000		
North Carolina,	33,358,000	5,692,000		1,797,000	149,000	55,000		\$ 21,000
South Carolina,	23,249,000	3,203,000		2,808,000	48,000			552,000
Georgia,	43,729,000	3,074,000		3,607,000	163,000			85,000
Florida,	5,614,000			308,000				76,000
Ohio,	61,173,000	28,223,000		16,416,000	604,000	191,000		
Indiana,	75,978,000	29,931,000		15,407,000	692,000	45,000		
Illinois,	150,813,000	34,890,000		41,687,000	785,000	54,000		
Michigan,	31,455,000	11,585,000		14,656,000	3,925,000	554,000		
Wisconsin,	25,678,000	856,000	1,863,000	24,299,000	3,431,000	230,000	\$ 516,000	
Minnesota,	21,802,000		62,192,000	25,414,000	1,079,000	54,000	4,878,000	
Iowa,	116,195,000	986,000	5,290,000	41,382,000	606,000	108,000	228,000	
Missouri,	113,282,000	24,538,000		5,844,000	192,000	14,000	275,000	
North Dakota,	1,848,000		47,963,000	12,936,000	227,000		13,058,000	
South Dakota,	21,700,000		28,907,000	12,764,000	366,000		4,512,000	
Nebraska,	73,524,000	33,217,000	3,053,000	19,051,000	886,000	12,000	165,000	
Kansas,	68,262,000	52,306,000	1,493,000	6,879,000	406,000	10,000	485,000	
Kentucky,	49,322,000	8,103,000		1,656,000	108,000			
Tennessee,	44,667,000	7,030,000		1,529,000	72,000	12,000		
Alabama,	34,422,000	935,000		2,579,000	21,000			33,000
Mississippi,	31,875,000	19,000		1,047,000				22,000
Louisiana,	19,600,000			223,000				7,378,000
Texas,	93,353,000	2,784,000		5,700,000	45,000			7,725,000
Oklahoma,	49,837,000	7,164,000		3,009,000	17,000		72,000	
Arkansas,	29,532,000	1,390,000		1,843,000	15,000			180,000
Montana,	61,000		3,243,000	5,410,000	32,000		353,000	
Wyoming,	52,000		658,000	1,177,000	6,000			
Colorado,	1,695,000		6,628,000	2,945,000	29,000			
New Mexico,	877,000		1,027,000	254,000				
Arizona,	270,000		408,000	70,000				
Utah,	202,000		3,431,000	972,000	49,000			
Nevada,			998,000	217,000				
Idaho,	105,000	3,014,000	2,774,000	2,397,000	26,000		171,000	
Washington,	227,000	8,828,000	17,456,000	4,745,000	48,000			
Oregon,	326,000	6,306,000	5,601,000	4,394,000	133,000			
California,	1,561,000	20,110,000		3,235,000	1,063,000			
United States,	\$1,336,901,000	\$361,217,000	\$193,220,000	\$334,568,000	\$23,068,000	\$9,975,000	\$24,713,000	\$16,081,000

THE UNITED STATES

Secretary of Agriculture.

TOBACCO	HAY	POTATOES (IRISH)	BARLEY	VALUE OF DOMESTIC ANIMALS	VALUE OF LIVE STOCK	VALUE OF FOWL	VALUE OF BEES	COTTON (BALES)
Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value					
.....	\$26,250,000	\$ 9,582,000	\$ 175,000	\$ 16,298,422	\$ 17,106,634	\$ 756,153	\$ 51,459	
.....	13,008,000	1,528,000	38,000	10,062,877	10,554,646	467,104	24,665	
.....	18,054,000	1,654,000	299,000	17,373,169	17,841,317	421,195	46,453	
.....	14,440,000	3,024,000	.....	14,730,169	15,798,464	1,018,119	35,751	
.....	1,539,000	614,000	.....	2,281,817	2,593,659	305,047	6,795	
.....	10,829,000	2,464,000	.....	10,247,634	10,932,212	644,050	40,528	
.....	91,388,000	23,796,000	1,580,000	120,673,101	125,583,715	4,310,755	593,784	
.....	10,778,000	6,216,000	.....	16,269,548	17,612,620	1,300,853	39,219	
.....	71,946,000	15,389,000	161,000	97,424,119	102,439,183	4,483,486	531,578	
.....	1,907,000	515,000	.....	3,733,335	4,111,054	357,475	20,244	
1,103,000	6,336,000	1,710,000	20,000	19,636,844	20,855,877	1,158,020	61,013	
7,828,000	9,529,000	3,046,000	36,000	39,831,552	42,026,737	1,886,768	308,417	14,000
346,000	13,485,000	2,258,000	.....	29,231,832	30,571,259	963,805	375,622	
1,096,000	3,135,000	1,579,000	.....	28,242,147	30,106,173	1,434,158	429,868	604,000
2,147,000	1,518,000	693,000	.....	19,167,229	20,199,859	889,953	142,677	1,091,000
1,273,000	2,088,000	830,000	.....	33,490,683	35,200,507	1,458,055	242,769	1,898,000
3,122,000	513,000	.....	.....	10,687,632	11,166,016	394,557	83,827	64,000
.....	47,588,000	8,114,000	549,000	120,673,101	125,954,134	5,085,921	402,561	
1,199,000	37,716,000	4,750,000	124,000	105,048,528	109,550,761	4,222,409	278,864	
79,000	41,030,000	9,647,000	402,000	186,856,020	193,758,037	6,415,033	486,164	
.....	40,575,000	12,109,000	1,002,000	75,997,051	79,042,644	2,685,829	352,460	
.....	35,708,000	10,237,000	13,817,000	93,521,430	96,327,649	2,410,714	377,105	
.....	11,475,000	6,004,000	17,864,000	86,620,643	89,063,097	2,274,649	167,280	
.....	39,200,000	6,592,000	8,507,000	271,844,034	278,830,096	6,535,464	443,923	
136,000	37,555,000	5,136,000	26,000	154,295,363	160,540,336	5,720,359	508,217	40,000
.....	1,547,000	1,490,000	9,075,000	41,951,659	14,055,560	477,358	1,474	
.....	3,850,000	1,638,000	12,276,000	64,287,578	65,173,432	856,966	10,088	
.....	14,062,000	4,497,000	1,206,000	142,769,629	145,349,587	2,374,930	199,563	
.....	14,950,000	4,976,000	2,372,000	186,317,248	190,956,936	4,356,997	277,967	
1,529,000	8,073,000	2,220,000	19,000	70,488,187	73,739,106	2,723,221	527,098	
3,646,000	7,620,000	1,421,000	14,000	58,043,895	60,818,605	2,275,864	486,536	298,000
65,000	3,019,000	1,425,000	.....	34,408,932	36,105,799	1,409,260	287,598	1,216,000
14,000	1,664,000	502,000	.....	40,843,300	42,657,222	1,655,319	158,603	1,536,000
10,000	660,000	724,000	.....	27,757,301	28,869,506	1,057,880	54,316	712,000
105,000	5,310,000	2,529,000	50,000	236,227,934	240,576,655	3,595,243	794,483	2,490,000
.....	3,055,000	1,960,000	327,000	53,921,827	54,829,568	900,743	6,998	919,000
69,000	2,937,000	1,592,000	.....	35,739,425	37,483,771	1,540,006	204,340	796,000
.....	8,075,000	1,350,000	400,000	51,724,113	52,161,833	296,806	8,139	
.....	3,938,000	740,000	87,000	39,080,158	39,145,877	60,397	5,322	
.....	17,306,000	4,653,000	600,000	49,359,781	49,954,311	393,219	195,096	
.....	3,854,000	96,000	18,000	31,644,179	31,727,400	62,419	20,802	
.....	3,654,000	.....	720,000	15,375,286	15,458,717	80,798	66,603	
.....	5,222,000	780,000	249,000	21,175,807	21,474,241	186,922	111,452	
.....	3,180,000	540,000	232,000	12,093,608	12,169,565	55,826	20,131	
.....	8,585,000	1,056,000	1,265,000	21,389,853	21,657,974	203,127	64,994	
.....	11,535,000	3,000,000	3,876,000	21,437,528	22,159,207	614,838	106,841	
.....	8,323,000	2,940,000	1,460,000	33,172,342	33,917,048	582,524	160,382	
.....	13,938,000	6,264,000	23,444,000	65,000,738	67,303,325	1,877,489	363,885	
3,234,000	\$743,507,000	\$183,880,000	\$102,290,000	\$2,938,250,681	\$1,533,942,531	\$85,238,101	\$10,139,463	11,678,000

OTHER FARM PRODUCTS
(From the United States Census Reports.)

PRODUCT	UNIT OF MEASURE	QUANTITY	VALUE	PRODUCT	UNIT OF MEASURE	QUANTITY	VALUE
Beans (caster), . .	Bu's	143,388	\$ 134,084	Persimmons, . .	Lbs.	136,030	.....
Beans (dry), . . .	Bu's	5,064,844	7,634,262	Pineapples, . . .	.....	2,980,240	.....
Broom corn, . . .	Lbs.	90,947,370	3,588,414	Pomeles,	Bxs.	30,791	.....
Butter,	Lbs.	1,071,745,127	1	Unclassified, . .	Lbs.	2,969,239	.....
Cheese,	Lbs.	16,372,330	1	Olive oil,	Gall's	8,643	.....
Chicory,	Lbs.	21,495,870	73,627	Coffee,	Lbs.	2,297,000	\$ 246,181
Clover seed, . . .	Bu's	1,349,209	5,395,578	Grapes,	Cen's	13,010,134	14,090,937
Cotton seed, . . .	Tons	24,566,100	46,950,575	Grass seed, . . .	Bu's	3,515,869	2,868,839
Eggs,	Dozs.	1,293,819,186	144,286,158	Hemp,	Lbs.	11,750,630	546,338
Flowers and plants, . . .	.....	.....	18,759,464	Hops,	Lbs.	49,209,704	4,081,929
Forest products, . . .	.....	.....	109,989,868	Kaffir corn, . . .	Bu's	5,169,113	1,367,040
Fruits (orchard), . .	Bu's	212,366,646	\$3,751,840	Maple sugar, . . .	Lbs.	11,928,770	1,074,260
Apples,	Bu's	175,397,626	.....	Maple syrup, . . .	Gall's	2,056,611	1,562,451
Apricots,	Bu's	2,642,128	.....	Milk,	Gall's	7,266,392,674	1
Cherries,	Bu's	2,873,499	.....	Mohair and goat hair	Lbs.	961,328	267,864
Peaches, etc., . . .	Bu's	15,433,623	.....	Nursery products, . . .	.....	.....	10,123,873
Pears,	Bu's	6,625,417	.....	Nuts, . . . . .	.....	.....	1,950,161
Plums, etc., . . .	Bu's	8,764,032	.....	Onions,	Bu's	11,791,121	6,637,625
Unclassified, . . .	Bu's	630,321	.....	Peanuts,	Bu's	11,964,957	7,271,230
Cider,	Bbls.	1,754,927	.....	Peas (dry), . . .	Bu's	9,440,269	7,909,074
Cider vinegar, . . .	Bbls.	392,497	.....	Peppermint, . . .	Lbs.	187,427	143,618
Fruits (small), . . .	Qts.	431,628,520	25,030,877	Potatoes (sweet), . .	Bu's	42,526,696	19,876,200
Blackberries, . . .	Qts.	62,189,885	.....	Seeds (misc.), . . .	.....	.....	826,019
Currants,	Qts.	18,592,695	.....	Sorghum cane, . . .	Tons	291,703	815,019
Gooseberries, . . .	Qts.	9,320,530	.....	Sorghum syrup, . .	Gall's	16,972,783	5,288,083
Raspberries, . . .	Qts.	76,628,107	.....	Sugar beets, . . .	Tons	793,353	3,323,240
Strawberries, . . .	Qts.	257,437,523	.....	Sugar cane,	Tons	6,441,578	.....
Unclassified, . . .	Qts.	7,459,780	.....	Cane sold,	Tons	1,298,620	4,611,239
Fruits (sub-tropical)	.....	.....	8,549,863	Cane for seed, . .	Tons	1,453,447	5,018,469
Bananas,	B'ches	141,653	.....	Sugar made, . . .	Lbs.	664,020,814	24,584,459
Citrons,	Boxes	90	.....	Molasses made, . .	Gall's	10,379,210	796,990
Figs,	Lbs.	13,016,274	.....	Syrup made, . . .	Gall's	12,293,032	4,293,475
Guava,	Lbs.	1,677,165	.....	Vegetables (misc.), . .	.....	.....	113,871,842
Lemons,	Boxes	876,978	.....	Wax,	Lbs.	1,765,315	.....
Limes,	Boxes	24,375	.....	Willows, . . . . .	.....	.....	36,523
Olives,	Lbs.	5,053,637	.....	Wool,	Lbs.	276,991,812	45,723,739
Oranges,	Boxes	6,171,259	.....				

¹ Includes all milk products, the value of which was \$472,369,255. ² Not including products sold with fiber before ginning. ³ Includes value of cider, etc. ⁴ Amount sold as cane only.

Air-pump, an instrument for removing the air from a vessel. The essential part is a hollow brass or glass cylinder, in which an air-tight piston is made to move up and down by a rod. From the bottom of the cylinder, a connecting tube leads to the space which is to be exhausted, which is usually formed by placing a bell-glass, called the receiver, with edges ground smooth, and smeared with lard, on a flat, smooth plate or table. When the piston is at the bottom of the barrel, and is then drawn up, it lifts out the air from the barrel, and a portion of the air under the receiver, by its own expansive force, passes through the connecting tube, and occupies the space below the piston, which would otherwise be a vacuum. The air in the receiver and barrel is thus *rarefied*. The piston is now forced down, and the effect of this is to close a valve placed at the mouth of the connecting tube, and opening inwards into the barrel. The air in the barrel is thus cut off from returning into the receiver, and, as it becomes condensed, forces up a valve in the piston, which opens outwards, and thus escapes into the atmosphere. When the piston reaches the bottom, and begins to ascend again, this valve closes; and the same process is repeated as at the first ascent. Each stroke thus diminishes the quantity of air in the receiver; but from the nature of the process, it is evident that the exhaustion can never be complete. Even theoretically, there must always be a portion left, though that portion may be rendered

less than any assignable quantity; and practically the process is limited by the elastic force of the remaining air being no longer sufficient to open the valves. The degree of rarefaction is indicated by a *gauge* on the principle of the barometer. The air-pump was invented by Otto Guericke, 1654.

Alcohol, the purely spirituous or intoxicating part of all liquids that have undergone vinous fermentation, extracted by distillation — a limpid colorless liquid, of an agreeable smell and a strong, pungent taste. When brandy, whisky, and other spirituous liquors, themselves distilled from cruder materials, are again distilled, highly volatile alcohol is the first product to pass off. The alcohol thus obtained contains much extraneous matter, including a proportion of water, from the first as high as 20 or 25 per cent., and increasing greatly as the process continues. Charcoal and carbonate of soda put in the brandy or other liquor, partly retain the fusel-oil and acetic acid it contains. The product thus obtained by distillation is called *rectified spirits* or *spirits of wine*, and contains from 55 to 85 per cent. of alcohol, the rest being water. By distilling rectified spirits over carbonate of potassium, powdered quicklime, or chloride of calcium, the greater part of the water is retained, and nearly pure alcohol passes over. It is only, however, by very prolonged digestion with desiccating agents and subsequent distillation that the last traces of water can be removed.

The specific gravity of alcohol varies with its purity, decreasing as the quantity of water it contains decreases. This property is a convenient test of the alcoholic strength of liquors that contain only alcohol and water; but on account of the condensation that invariably takes place on the mixture of these two liquids, it can be applied only in connection with special tables of reference, or by means of an instrument specially adapted for the purpose. Its very low freezing-point renders it valuable for use in thermometers for very low temperatures. Alcohol is extremely inflammable, and burns with a pale-blue flame, scarcely visible in bright daylight. It occasions no carbonaceous deposit upon substances held over it, and the products of its combustion are carbonic acid and water. The steady and uniform heat which it gives during combustion makes it a valuable material for lamps. It dissolves the vegetable acids, the volatile oils, the resins, tan, and extractive matter, and many of the soaps; the greater number of the fixed oils are taken up by it in small quantities only, but some are dissolved largely. When alcohol is submitted to distillation with certain acids a peculiar compound is formed, called *ether*. It is alcohol which gives all intoxicating liquors the property whence they are so called. Alcohol acts strongly on the nervous system, and though in small doses it is stimulating and exhilarating, in large doses it acts as a poison. In medicine it is often of great service.

Annuity, a sum of money paid annually to a person, and continuing either a certain number of years, or for an uncertain period, to be determined by a particular event, as the death of the recipient or annuitant, or that of the party liable to pay the annuity; or the annuity may be perpetual. The payments are made at the end of each year, or semi-annually, or at other periods. An annuity is usually raised by the present payment of a certain sum as a consideration whereby the party making the payment, or some other person named by him, becomes entitled to an annuity, and the rules and principles by which this present value is to be computed have been the subjects of careful investigation. The present value of a perpetual annuity is evidently a sum of money that will yield an interest equal to the annuity, and payable at the same periods; and an annuity of this description, payable quarterly, will evidently be of greater value than one of the same amount payable annually, since the annuitant has the additional advantage of the interest on three of the quarterly payments until the expiration of the year. In other words, it requires a greater present capital to be put at interest to yield a given sum per annum, payable quarterly, than to yield the same annual sum payable at the end of each year. The present value of an annuity for a limited period is a sum which, if put at interest, will at the end of that period give an amount equal to the sum of all the payments of the annuity and interest; and, accordingly, if it be proposed to invest a certain sum of money in the purchase of an annuity for a given number of years the comparative value of the two may be precisely estimated, the rate of interest being given. But annuities for uncer-

tain periods, and particularly life annuities, are more frequent, and the value of the annuity is computed according to the probable duration of the life by which it is limited. Such annuities are often created by contract, whereby the government or a private annuity office agrees, for a certain sum advanced by the purchaser, to pay a certain sum in yearly, quarterly, or other periodical payments, to the person advancing the money, or to some other named by him, during the life of the annuitant. Or the annuity may be granted to the annuitant during the life of some other person, or during two or more joint lives, or during the life of the longest liver or survivor among a number of persons named. If a person having a certain capital, and intending to spend this capital and the income of it during his own life, could know precisely how long he should live, he might lend this capital at a certain rate during his life, and by taking every year, besides the interest, a certain amount of the capital, he might secure the same annual amount for his support during his life in such manner that he should have the same sum to spend every year, and consume precisely his whole capital during his life. But since he does not know how long he is to live he agrees with the government or an annuity office to take the risk of the duration of his life, and agree to pay him a certain annuity, during his life in exchange for the capital which he proposes to invest in this way. The probable duration of his life therefore becomes a subject of computation; and for the purpose of making this calculation tables of longevity are made by noting the proportions of deaths at certain ages in the same country or district. Founding on a comparison of many such tables, the British Government has empowered the postmaster-general to grant annuities, which are probably more closely adjusted to their actual value than those of insurance companies and other dealers in annuities. In the United States the granting of annuities is conducted by private companies or corporations. The following are the approximate rates of the best managed companies: In consideration of \$1,000 paid to a company, the annuity granted to a person aged 40 would be \$52.75; aged 45, \$58.10; aged 50, \$64.70; aged 55, \$73.50; aged 60, \$86.20; aged 65, \$100; aged 70, \$123.45; aged 75, \$145.95; aged 80, \$180.15. The purchase of annuities, as a system, has never gained much foothold in America—the endowment plan of life insurance, by which after the lapse of a term of years the insured receives a sum in bulk, being preferred. Massachusetts, however, passed a law in 1907 with the direct purpose of encouraging annuities.

Automobile, or Motor-Car. An automatic-propelling vehicle, the motive power of which is furnished by coal-oil, gasoline, electric-storage battery, compressed air, etc. They are usually supplied with two gearings, one for a low rate of speed and the second for more rapid movement. They are largely in use in America and Europe, taking the place of the horse-drawn carriages and delivery wagons. In the larger cities they are on hire for public use, and have largely replaced hacks and cabs. The engine or dynamo is usually placed beneath the driver's

seat and connects with chains or cranks to the rear axles, leaving the forecarriage free for steering purposes.

World's Motor-cars.—It is estimated that the total number of motor-cars of all kinds in use in the world to-day is as follows:

America,	90,000	Austria-Hungary,	8,000
Great Britain,	75,000	Italy,	6,000
France,	30,000	Spain,	4,000
Germany,	20,000		
Other European countries, including Russia, 5,000; India, 2,000; Egypt, Canada, Australia, and other British colonies, 2,000; Central and South America, 1,000; China, Japan, and East Asia, 500 — amounting to 248,500 vehicles in all.			

Banking was authorized in the United States during the War of the Revolution, a resolution being adopted in Congress on May 26, 1781, approving a plan for a national bank proposed by Robert Morris, of Philadelphia. As a result the Bank of North America was incorporated on December 31st following, with a capital of \$4,000,000, of which \$254,000 had been subscribed by the United States Government. This bank, rechartered from time to time, continues in existence in Philadelphia, and is one of the national banks of the present. Another bank, known as the Bank of the United States, was projected by Alexander Hamilton when the government had been organized under the Constitution. It was duly established, and continued in existence until 1811, when it went out of existence, owing to the failure to obtain a renewal of its charter. A second Bank of the United States was incorporated on April 3, 1816, and went into operation January 7, 1817. Meanwhile other banks had been established in various parts of the country, and these, driven to suspension of specie payments by the War of 1812, were aided by the operation of the new bank to an extent which enabled them to resume. This bank itself, however, was driven to the wall in 1840, by legislation which compelled it to resume specie payments, which it had suspended. The present system of national banks was inaugurated in 1864, under exigencies created by the Civil War. In towns of a population of 3,000 or less the minimum capital allowed national banks is \$25,000. In towns of between 3,000 and 6,000 people the minimum capital allowed is \$50,000; and in cities and towns having a population of 6,000 or more, but not exceeding 50,000, the minimum capital must be \$100,000; while in cities of over 50,000 people the bank must have a capital of at least \$200,000. There is no limit to the amount of excess capital. Every national bank must purchase and deliver to the treasurer of the United States registered United States bonds to an amount not less than \$50,000, except banks with a capital of \$150,000, or less, the minimum amount of bonds required is one quarter of the capital. The government then issues and delivers to the bank circulating notes in denominations of \$5, \$10, \$20, \$50, \$100, as desired, in total amount equal to the par value of the bonds deposited. A bank may deposit bonds and receive circulating notes to an amount equal to its capital. Each bank is required to make a sworn statement of its condition to the comp-

troller of the currency at Washington at least five times a year, and to publish the same in a newspaper. Two examinations a year are made by capable men employed by the government as national bank examiners, their visits being always without notice. Requirement is made in the national bank act for the accumulation of a surplus by each bank from its earnings as an additional protection above its capital to the depositors. The depositors are further protected against loss by the liability of each stockholder to the payment of an amount equal to the par value of the stock held, in event of failure of the bank.

Canal, an artificial water-course for the transportation of goods or passengers by boats or ships, or for purposes of drainage or irrigation. The canals most familiar to ordinary readers are for navigation. These consist usually of a number of different sections, each on one level throughout its course, but differing in relative height from the others. From one section to another boats are transferred by means of *locks*, or it may be by *inclines* or *lifts*. The lock is a water-tight inclosure with gates at either end, constructed between two successive sections of a canal. When a vessel is descending, water is let into the lock till it is on a level with the higher water, and thus permits the vessel to enter; the upper gates are then closed, and by the lower gates being gradually opened, the water in the lock falls to the level of the lower water, and the vessel passes out. In ascending the operation is reversed. The *incline* conveys the vessel from one reach to another, generally on a specially-constructed carriage running on rails, by means of drums and cables. The *lift* consists of two counterbalancing troughs, one going up as the other descends, carrying the vessel from the higher to the lower level, or *vice versa*. Works of great magnitude in the way of cuttings, embankments, aqueducts, bridges, tunnels, reservoirs, for water-supply, etc., are often necessary in constructing canals. Canals have been known from remote times, Egypt being intersected at an early period by canals branching off from the Nile to distant parts of the country, for purposes of irrigation and navigation. Under the Ptolemies, before the Christian era, there existed a canal between the Red Sea and the Nile. In China, also, canals were early made on a very large scale. In Holland, where the country is flat and water abundant, canals were constructed as early as the Twelfth Century. The lock, however, was not invented until the Fifteenth Century, both the Dutch and the Italians claiming the honor. Since then Europe has been provided with numerous canals, which being connected usually with navigable rivers, give access by water to most parts of its interior. Among the numerous canals of Holland, the most important is now the great ship canal, from 200 to 300 feet wide and twenty-three feet deep, which connects Amsterdam with the North Sea. In France there are many canals and canalized rivers, the principal being the Canal du Midi, branching off from the Garonne at Toulouse, and falling into the Gulf of Lyons at Narbonne, thus connecting the Bay of Biscay and Mediterranean, and

three canals connecting the basins of the Rhone, Loire, Seine, and Rhine. The canals of France have a total length of 3,000 miles. In Belgium there is the Ghent-Terneuzen Canal, which allows large vessels to sail to Ghent from the Scheldt estuary. The chief canals in Germany are the Ludwigs Canal in Bavaria, connecting (through the Main and Regnitz) the Rhine and the Danube; and the Holstein Canal, connecting the North Sea and Baltic by means of the Eider. The latter will be superseded by the Great Baltic Canal for sea-going vessels, which is to be constructed at a cost of \$40,000,000, starting near the mouth of the Elbe and reaching the Baltic near Kiel. In Russia there is canal and river communication between the Caspian and the Baltic, a large part of the route consisting of the Volga. In Britain one of the

earliest and most celebrated is the Bridgewater Canal (1761-65), in Lancashire and Cheshire, with a length of thirty-eight miles. In Scotland there are the Forth and Clyde Canal, thirty-five miles long, joining these two rivers; and the Caledonian, sixty and one-half miles (including lakes), from the Moray Firth on the east coast to Loch Eil on the west, passing through Loch Ness, Loch Oich, and Loch Lochy. In the British Islands there is a total length of canal of about 3,000 miles; more than five-sixths being in England. The Manchester Ship Canal, a waterway for ocean-going steamers from the estuary of the Mersey, near Runcorn, to Manchester, through a few locks and partly in the beds of the Mersey and the Irwell, was begun in the latter end of 1887; estimated cost, \$26,500,000.

CANALS

Tabulation showing the cost and date of construction, length, number of locks, and navigable depth of the principal canals of the United States used for commercial purposes:

CANALS	COST OF CONSTRUCTION*	WHEN COMPLETED	LENGTH MILES	NO. OF LOCKS	DEPTH FEET†	LOCATION
Albemarle and Chesapeake,	\$1,641,363	1860	44	1	7½	Norfolk, Va., to Currituck Sound, N. C.
Augusta,	1,500,000	1847	9		11	Savannah River, Ga., to Augusta, Ga.
Black River,	3,581,954	1849	35	109	4	Rome, N. Y., to Lyons Falls, N. Y.
Cayuga and Seneca,	2,232,632	1839	25	11	7	Montezuma, N. Y., to Cayuga and Seneca Lakes, N. Y.
Champlain,	4,044,000	1822	81	32	6	Whitehall, N. Y., to West Troy, N. Y.
Chesapeake and Delaware, .	3,730,230	1829	14	3	9	Chesapeake City, Md., to Delaware City, Del.
Chesapeake and Ohio, . . .	11,290,327	1850	184	73	6	Cumberland, Md., to Washington, D. C.
Companies,	90,000	1847	22	1	6	Mississippi River, La., to Bayou Black, La.
Delaware and Raritan, . . .	4,888,749	1838	66	14	7	New Brunswick, N. J., to Trenton, N. J.
Delaware Division,	2,433,350	1830	60	33	6	Easton, Pa., to Bristol, Pa.
Des Moines Rapids,	4,582,009	1877	7½	3	5	At Des Moines Rapids, Mississippi River.
Dismal Swamp,	2,800,000	1822	22	7	6	Connects Chesapeake Bay with Albemarle Sound.
Erie,	52,540,800	1826	387	72	7	Albany, N. Y., to Buffalo, N. Y.
Fairfield, . . . . .	....	....	4½	None	....	Alligator River to Lake Mattimuskeet, N. C.
Galveston and Brazos, . . .	340,000	1851	38	....	3½	Galveston, Texas, to Brazos River, Tex.
Hocking,	975,481	1843	42	26	4	Carroll, O., to Nelsonville, O.
Illinois and Michigan, . . .	7,357,787	1848	102	15	6	Chicago, Ill., to La Salle, Ill.
Illinois and Mississippi, . .	7,250,000	1895	75	3	7	Around lower rapids of Rock River, Ill., connects with Mississippi River.
Lehigh Coal and Navigation Co.,	4,455,000	1821	108	57	6	Coalport, Pa., to Easton, Pa.
Louisville and Portland, . .	5,578,631	1872	2½	2	....	At Falls of Ohio River, Louisville, Ky.
Miami and Erie,	8,062,680	1835	274	93	5½	Cincinnati, O., to Toledo, O.
Morris,	6,000,000	1836	103	33	5	Easton, Pa., to Jersey City, N. J.
Muscle Shoals and Elk River Shoals,	3,156,919	1889	16	11	6	Big Muscle Shoals, Tenn., to Elk River Shoals, Tenn.
Newberne and Beaufort, . .	....	....	3	None	....	Clubfoot Creek to Harlow Creek, N. C.
Ogeechee,	407,810	1840	16	5	3	Savannah River, Ga., to Ogeechee River, Ga.
Ohio,	4,695,204	1835	317	150	4	Cleveland, O., to Portsmouth, O.
Oswego,	5,239,526	1828	38	18	7	Oswego, N. Y., to Syracuse, N. Y.
Pennsylvania,	7,731,750	1839	193	71	6	Columbia, Northumberland, Wilkes-barre, Huntingdon, Pa.
Portage Lake and Lake Superior,	528,892	1873	25	None	15	From Keweenaw Bay to Lake Superior.
Port Arthur, . . . . .	....	1899	7	....	26	Port Arthur, Tex., to Gulf of Mexico.
Santa Fe,	70,000	1880	10	....	5	Waldo, Fla., to Melrose, Fla.
Sault Ste. Marie (ship canal)	4,000,000	1895	3	2	18	Connects Lakes Superior and Huron at St. Mary's River.
Schuylkill Navigation Co., .	12,461,600	1826	108	71	6½	Mill Creek, Pa., to Philadelphia, Pa.
Sturgeon Bay and Lake Michigan,	99,661	1881	1½	None	15	Between Green Bay and Lake Michigan.
St. Mary's Falls,	7,909,667	1896	1½	1	21	Connects Lakes Superior and Huron at Sault Ste. Marie, Mich.
Susquehanna and Tidewater,	4,921,345	1840	45	32	5½	Columbia, Pa., to Havre de Grace, Md.
Wallbonding,	607,269	1843	25	11	4	Rochester, O., to Roscoe, O.
Welland (ship canal), . . .	23,796,353	....	26½	55	14	Connects Lake Ontario and Lake Erie.

* And improvements. † Navigable depth.

The Harlem River Ship Canal, connecting the Hudson River and Long Island Sound, by way of Spuyten Duyvil Creek and Harlem River, was opened for traffic on June 17, 1895, and cost about \$2,700,000.

THE GREAT SHIP CANALS OF THE WORLD

CANAL	COM- PLETED	CONNECTING	LENGTH MILES	WIDTH FEET*	DEPTH FEET	NO. OF LOCKS	COST†
Suez,	1869	Mediterranean and Red Seas,	90	108	31	None	\$100,000,000
Cronstadt and St. Petersburg,	1890	Bay of Cronstadt and St. Petersburg,	6	220	20½	None	10,000,000
Corinth,	1893	Gulfs of Corinth and Ægina,	4	72	26½	None	5,000,000
Manchester,	1894	Manchester, England, and the Mersey,	35.50	120	26	5	75,000,000
Kaiser Wilhelm,	1895	Baltic and North Seas, . .	61	72	29½	..	40,000,000
Elbe and Trave,	1900	Baltic and North Seas, . .	41	72	10	..	25,200,000
Welland,	1833	Lakes Ontario and Erie, . .	27	45	14	26	25,000,000
Sault Ste. Marie (American),	1855	Lakes Superior and Huron,	1.6	160	25	1	6,033,533
Sault Ste. Marie (Canadian),	1895	Lakes Superior and Huron,	1.125	150	22	1	3,770,621

* Minimum width, or width at bottom, given wherever possible. † Cost of construction to state.

Caoutchouc (*koo'chook*), commonly called India rubber, or elastic gum. A highly elastic substance, obtained from the milky sap of the *Siphonia Elastica*, and other aboraceous plants. It is colorless and almost transparent in the pure state, but as ordinarily met with it varies from yellowish-brown to black. It is a non-conductor of electricity. Its composition is not definitely known; it is, nevertheless, a hydrocarbon. From its softness, impermeability to water, etc., it is used in the manufacture of many articles. It is easily dissolved by purified naphtha obtained from coal-tar, which does not change its properties, and the solution has been most extensively employed to give a thin covering to cloth, so as to render it impervious to moisture. It is also used for over-shoes, and, when dissolved in oil, forms a flexible varnish. Caoutchouc is principally obtained from South America, whence it is usually imported in the form of pear-shaped bottles, which are formed by allowing the juice to flow from the tree over a mould of clay, then drying by exposure to the sun or to the smoke of burning fuel, after which the clay in the inside is moistened with water and picked out.—*Vulcanized India rubber*. In its ordinary state, India rubber becomes rigid by cold, and soft by heat; hence it loses its value in hot or cold countries; but when combined with a little sulphur, at a temperature of 320° F. (this process, invented in this country by Mr. Goodyear, being termed *vulcanization*), it becomes highly elastic; it is not affected by the most intense cold, nor by a temperature less than that which is sufficient to char it; moisture, however long continued, seems to produce no action upon it; and it is unaffected by any of the ordinary solvents, such as grease, oils, ether, turpentine, naphtha, or acid solutions. In this state it is very largely employed in the arts. Subjected to a higher degree of heat, and for a longer time, it is converted into Hard India rubber, Ebonite, or Vulcanite, and in this condition it can be employed in the place of bone and wood for a great number of articles, such as knife-handles, combs, cups, and boxes.

Celluloid is an artificial substance extensively used as a substitute for ivory, bone, hard rubber, coral, etc., having a close resemblance to these substances in hardness, elasticity, and texture. It was invented by J. W. and Isaac Hyatt in 1870. It is composed of cellulose or vegetable fibrine reduced by acids to pyroxyline

(or gun-cotton), camphor is then added, and the compound molded by heat and pressure to the desired shape. It is used chiefly for such articles as buttons, handles for knives, forks, and umbrellas, billiard-balls, backs to brushes, piano keys, napkin-rings, opera-glass frames, etc. It can be variously colored. Manufactures of celluloid now run into millions of dollars annually.

Charcoal, a term applied to an impure variety of carbon, especially such as is produced by charring wood. One kind of it is also obtained from bones; lampblack and coke are also varieties. Wood charcoal is prepared by piling billets of wood in a pyramidal form, with vacuities between them for the admission of air, and causing them to burn slowly under a covering of earth. In consequence of the heat, part of the combustible substance is consumed, part is volatilized, together with a portion of water, and there remains behind the carbon of the wood, retaining the form of the ligneous tissue. Another process consists in heating the wood in close vessels, by which the volatile parts are driven off, and a charcoal remains in the retorts, not so dense as that obtained by the other process. Wood charcoal, well prepared, is of a deep-black color, brittle and porous, tasteless and inodorous. It is infusible in any heat a furnace can raise; but by the intense heat of a powerful galvanic apparatus it is hardened, and at length is volatilized, presenting a surface with a distinct appearance of having undergone fusion. Charcoal is insoluble in water, and is not affected by it at low temperatures; hence, wooden stakes which are to be immersed in water are often charred to preserve them, and the ends of posts stuck in the ground are also thus treated. Owing to its peculiarly porous texture, charcoal possesses the property of absorbing a large quantity of air or other gases at common temperatures, and of yielding the greater part of them when heated. Charcoal likewise absorbs the odoriferous and coloring principles of most animal and vegetable substances, and hence is a valuable deodorizer and disinfectant. Water which, from having been long kept in wooden vessels, as during long voyages, has acquired an offensive smell, is deprived of it by filtration through charcoal powder. Charcoal can even remove or prevent the putrescence of animal matter. It is used as fuel in various arts, where a strong heat is required, without smoke,* and in various metal-

lurgic operations. By cementation with charcoal, iron is converted into steel. It is used in the manufacture of gunpowder. In its finer state of aggregation, under the form of ivory-black, lampblack, etc., it is the basis of black paint; and mixed with fat oils and resinous matter, to give a due consistence, it forms the composition of printing-ink.

Clearing-house. The place where is carried on the operation of clearing off balances and adjusting daily accounts between bankers of the same city; thus avoiding the inconvenience of handling large amounts in currency or convertible paper. Each bank, or banker, dispatches a clerk to the clearing-house, who there draws up an abstract of the checks upon other firms, and effects a clearance by exchanging them against those drawn on the bank to which he belongs. The balance is paid over in cash. The first clearing-house in the United States was established in New York in 1833. In England, the railway companies, as well as the banks, make use of the clearing system.

Clay. The name of various earths, which consist of hydrated silicate of aluminium, with small proportions of the silicates of iron, calcium, magnesium, potassium, and sodium. All the varieties are characterized by being firmly coherent, weighty, compact, and hard when dry, but plastic when moist, smooth to touch, not readily diffusible in water, but when mixed not readily subsiding in it. Their tenacity and ductility when moist, and their hardness when dry, has made them from the earliest times the materials of bricks, tiles, pottery, etc. Of the chief varieties, *porcelain-clay*, *kaolin*, or china-clay, a white clay with occasional gray and yellow tones, is the purest. *Potter's-clay* and *pipe-clay*, which are similar but less pure, are generally of a yellowish or grayish color, from the presence of iron. Fire-clay is a very refractory variety, always found lying immediately below the coal; it is used for making fire-bricks, crucibles, etc. *Loam* is the same substance mixed with sand, oxide of iron, and various other foreign ingredients. The *boles*, which are of a red or yellow color from the presence of oxide of iron, are distinguished by their conchoidal fracture. The *ochres* are similar to the boles, containing only more oxide of iron. Other varieties are *fuller's earth*, *Tripoli*, and *boulder-clay*, the last a hard clay of a dark-brown color, with rounded masses of rock of all sizes embedded in it, the result of glacial action. The distinctive property of clays as ingredients of the soil is their power of absorbing ammonia and other gases and vapors generated on fertile and manured lands; indeed no soil will long remain fertile unless it has a fair proportion of clay in its composition. The best wheats both in Britain and the European continent are grown on calcareous clays, as also the finest fruits and flowers of the rosaceous kind. See the separate articles on the chief varieties.

Coal. A solid, opaque, inflammable substance, mainly consisting of carbon, found in the earth, largely employed as fuel, and formed from vast masses of vegetable matter deposited through the luxuriant growth of plants in former epochs of the earth's history. In the varieties

of coal in common use the combined effects of pressure, heat, and chemical action upon the substance have left few traces of its vegetable origin; but in the sandstones, clays, and shales accompanying the coal, the plants to which it principally owes its origin are presented in a fossil state in great profusion, and frequently with their structure so distinctly retained, although replaced by mineral substances, as to enable the microscopist to determine their botanical affinities with existing species. The *sigillaria* and *stigmara*, the *lepidodendron*, the *calamite*, and tree-ferns are amongst the commoner forms of vegetable life in the rocks of the coal formation. Trees of considerable magnitude have also been brought to light, having a recognizable relation to the modern *araucaria*. The animal remains found in the coal-measures indicate that some of the rocks have been deposited in fresh water, probably in lakes, whilst others are obviously of estuarine origin, or have been deposited at the mouths of rivers alternately occupied by fresh and salt-water. The great system of strata in which coal is chiefly found is known as the carboniferous. There are many varieties of coal, varying considerably in their composition, as *anthracite*, nearly pure carbon, and burning with little flame, much used for furnaces and malt kilns; *bituminous* (popularly so called) or "household coal"; and *cannel*, or "gas-coal," which burns readily like a candle, and is much used in gas-making. All varieties agree in containing from sixty to over ninety per cent. of carbon, the other elements being chiefly oxygen and hydrogen, and frequently a small portion of nitrogen. *Lignite*, or *brown coal*, may contain only fifty per cent. carbon. For manufacturing purposes coals are generally considered to consist of two parts, the volatile or bituminous portion, which yields the gas used for lighting, and the substance, comparatively fixed, usually known as *coke*, which is obtained by heating the coals in ovens or other close arrangements.

China and Japan contain about 200,000 square miles of coal-fields; United States, 194,000; India, 35,000; Russia, 27,000; Great Britain, 9,000; Germany, 3,600; France, 1,800; Belgium, Spain, and other countries, 1,400. Total, 471,800.

DISTRIBUTION OF COAL IN THE UNITED STATES

Coal is found in commercial quantities in twenty-seven of the States and Territories of the United States and in Alaska. The following table shows the area of coal-bearing formations in the several States and the rank of the coal-producing States in area and production:

STATES AND TERRITORIES	AREA OF COAL-BEARING FORMATIONS (Sq. Mls.)	TONS
BITUMINOUS		
Alabama,	8,500	12,851,775
Arkansas,	1,728	1,875,567
California,	280	80,000
Colorado,	18,100	10,308,421
Georgia and N. Carolina,	967	363,463
Illinois,	42,900	38,317,581
Indiana,	9,300	11,422,000

STATES AND TERRITORIES	AREA OF COAL-BEARING FORMATIONS (Sq.Mls.)	TONS
BITUMINOUS		
Indian Territory, . . .	14,848	2,980,600
Iowa,	20,000	7,017,485
Kansas,	20,000	6,010,858
Kentucky,	15,800	9,740,420
Maryland,	510	5,014,995
Michigan,	11,300	1,370,860
Missouri,	23,000	3,860,000
Montana,	13,000	1,787,934
New Mexico,	2,890	1,973,658
North Dakota,		300,998
Ohio,	12,000	27,213,495
Oregon,	320	79,731
Pennsylvania,	15,800	129,532,991
Tennessee,	4,400	6,210,000
Texas,	11,300	1,290,600
Utah,	2,000	1,839,219
Virginia,	1,850	4,546,040
Washington,	450	3,293,098
West Virginia,	17,280	46,452,000
Wyoming,	7,500	5,805,322
Alaska and Nevada, . . . . .	.....	90,000
		341,629,113
ANTHRACITE		
Colorado and N.Mexico, . . . . .	.....	70,000
Pennsylvania,	484	72,139,566
		72,209,566

Coal-tar, or Gas-tar, a substance obtained in the distillation of coal for the manufacture of illuminating gas, a dark-colored more or less viscid mass, consisting principally of oily hydrocarbons. It passes over with the gas into the condensers along with ammonia liquor, but being heavier than the latter, it is easily separated from it when the whole is allowed to stand. It was formerly of comparatively little use; but in recent years a great number of valuable products have been derived from it by distillation, such as ammonia, naphtha, creasote, carbolic acid, and benzine, while it is also the source of the whole series of aniline colors, and other dyes, of alizarine, salicylic acid, etc.

Coins and Coinage. Coins were probably used as early as the Eighth Century B. C., and by the Fourth Century every civilized state had its proper coinage. Most of the commoner metals have in turn been used for making coins. The early coins of Asia Minor were of electrum, a mixture of gold and silver, in the proportion of three of the former to one of the latter. Lycurgus made the money of Sparta of iron. Copper formed the early money of the Romans; and when Cæsar landed in Britain, coins of brass and iron were found in use. Tin was coined by Charles II., and James II. even resorted to gun metal and pewter. At the present day, gold and silver, with copper for the lowest denomination, are almost universally employed. Coins of platinum were formerly struck in Russia. Although in a few countries coins have been issued of almost absolute purity, such as the gold sequins of Tuscany, yet for the most part the gold and silver are alloyed with some other metal, generally copper, in definite proportions fixed by law. In the United States an alloy of about nine-tenths copper and one-tenth silver is used with gold. The proportion of alloy varies in different countries. In Great Britain it is one-twelfth; while in the United States, France, Belgium, and some other coun-

tries, one-tenth has been adopted. In the United States the power to coin money is vested by the Constitution in Congress, and is expressly withheld from the States. The earliest colonial coinage was in Massachusetts, in pursuance of an order of the General Court, passed May 27, 1652, which required the coinage of "12 pence, 6 pence, and 3 pence pieces." From 1778 to 1787 the power of coinage was exercised not only by the confederation in Congress, but also by several of the individual States. In Vermont a mint was established in 1785, and copper cents were issued; a few half cents were also coined. Connecticut the same year established a mint at New Haven, and copper coins were issued. New Jersey authorized a copper coinage in 1786. In 1788 cents and half cents were coined by Massachusetts. In 1787 copper cents were coined under authority of Congress. On April 2, 1792, a code of laws was enacted for the establishment and regulation of the mint, under which, with slight amendments, the coinage was executed for forty-two years. The act of February 12, 1873, known as the coinage act of 1873, consolidated the regulations governing the coinage of the United States. The following table gives a complete exhibit of the coinage of the United States from the organization of the mints, 1792 to 1907:

DENOMINATIONS	PIECES	VALUES
GOLD		
Double eagles, . . .	96,599,669	\$1,931,993,380.00
Eagles,	38,679,807	386,798,070.00
Half eagles,	61,629,741	308,148,705.00
Three-dollar pieces (coinage discontinued under act of September 26, 1890), . . .	539,792	1,619,376.00
Quarter eagles, . . .	12,251,564	30,628,910.00
Dollars (coinage discontinued under act of September 26, 1890),	19,499,337	19,499,337.00
Dollars, Louisiana Purchase Exposition (act of June 28, 1902),	250,258	250,258.00
Dollars, Lewis & Clark Exposition,	60,069	60,069.00
Total gold,	229,510,237	\$2,678,998,105.00
SILVER		
Dollars (coinage discontinued, act of February 12, 1873, resumed, act of February 28, 1878), . . .	578,303,848	\$578,303,848.00
Trade dollars (discontinued, act of February 19, 1887), . .	35,965,924	35,965,924.00
Dollars (Lafayette souvenir, act of March 3, 1899),	50,000	50,000.00
Half dollars,	326,267,284	163,133,642.00
Half dollars (Columbian souvenir), . . .	5,002,105	2,501,052.50
Quarter dollars, . . .	325,999,446	81,499,361.50
Quarter dollars (Columbian souvenir), . . .	40,023	10,005.75
Twenty-cent pieces (coinage discontinued, act of May 2, 1878),	1,355,000	271,000.00
Dimes,	474,974,190	49,497,419.00
Half dimes (coinage discontinued, act of February 12, 1873), . .	97,604,388	4,880,219.40

DENOMINATIONS	PIECES	VALUES	DENOMINATIONS	PIECES	VALUES
Three-cent pieces (coinage discontinued, act of February 12, 1873), . . .	42,736,240	\$ 1,282,087.20	One-cent pieces, cop- per (coinage discon- tinued, act of Febru- ary 21, 1857), . . .	156,288,744	\$ 1,562,887.44
Total silver, . . .	1,888,296,448	\$917,394,559.35	One-cent pieces, nickel (coinage discontinued, act of April 22, 1864), . . .	200,772,000	2,007,720.00
MINOR			One-cent pieces, bronze, . . .	1,438,643,495	14,486,434.97
Five-cent pieces, nickel, . . .	513,343,039	\$25,667,051.95	Half-cent pieces, cop- per (coinage discon- tinued, act of Febru- ary 21, 1857), . .	7,985,222	39,926.11
Three-cent pieces, nickel (coinage dis- continued, act of September 26, 1890)	31,378,316	941,349.48	Total minor, . . .	2,394,011,828	\$44,517,489.93
Two-cent pieces, bronze (coinage dis- continued, act of September 26, 1890)	45,601,000	912,020.00	Total coinage, . .	4,412,018,501	\$3,642,410,154.28

VALUE OF FOREIGN COINS IN UNITED STATES MONEY

The appended table relating to coins of foreign countries is taken from the report of the director of the mint.

COUNTRY	STANDARD	MONETARY UNIT	VALUE IN U. S. GOLD DOLLAR	COINS
Argentine R.,	Gold, . .	Peso,	\$0.96,5	Gold: argentine (\$4.82,4) and $\frac{1}{2}$ argentine. Sil- ver: peso and divisions.
Austria-H.,	Gold, . .	Crown,	.20,3	Gold: 10 and 20 crowns. Silver: 1 and 5 crowns.
Belgium, . .	Gold, . .	Franc,	.19,3	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia, . .	Silver, . .	Boliviano,	.49,9	Silver: boliviano and divisions.
Brazil, . . .	Gold, . .	Milreis,	.54,6	Gold: 5, 10, and 20 milreis. Silver: $\frac{1}{2}$, 1, and 2 milreis.
Canada, . . .	Gold, . .	Dollar,	1.00	Silver: peso and divisions.
Central Am.,	Silver, . .	Peso*,	.49,9	Gold: escudo (\$1.82,5), doubloon (\$3.65), and condor (\$7.30). Silver: peso and divisions.
Chile, . . .	Gold, . .	Peso,	.36,5	
China, . . .	Silver, . .	Tael, (Shanghai, Haikwan, Canton,	.74,7 .83,2 .81,5	
Colombia, . .	Gold, . .	Dollar,	1.00	Gold: condor (\$9.64,7) and double-condor. Sil- ver: peso.
Costa Rica, .	Gold, . .	Colon,	.46,5	Gold: 2, 5, 10, and 20 colons (\$9.30,7). Silver: 5, 10, 25, and 50 centimos.
Denmark, . .	Gold, . .	Crown,	.26,8	Gold: 10 and 20 crowns.
Ecuador, . .	Gold, . .	Suere,	.48,7	Gold: 10 sueres (\$4.86,65). Silver: suere and divisions.
Egypt, . . .	Gold, . .	Pound (100 piasters),	4.94,3	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
France, . . .	Gold, . .	Franc,	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Germany, . .	Gold, . .	Mark,	.23,8	Gold: 5, 10, and 20 marks.
Gt. Britain, .	Gold, . .	Pound Sterling, . .	4.86,6 $\frac{1}{2}$	Gold: sovereign (pound sterling and $\frac{1}{4}$ sovereign).
Greece, . . .	Gold, . .	Drachma,	.19,3	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Hayti, . . .	Gold, . .	Gourde,	.96,5	Gold: 1, 2, 5, and 10 gourdes. Silver: gourde and divisions.
India, . . .	Gold, . .	Pound Sterling†, . .	4.86,6 $\frac{1}{2}$	Gold: sovereign (\$4.86,65). Silver: rupee and divisions.
Italy, . . .	Gold, . .	Lira,	.19,3	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan, . . .	Gold, . .	Yen,	.49,8	Gold: 1, 2, 5, 10, and 20 yen. Silver: 10, 20, and 50 sen.
Mexico, . . .	Gold, . .	Peso‡,	.49,8	Gold: 5 and 10 pesos. Silver: dollar (or peso)§ and divisions.
Netherlands,	Gold, . .	Florin,	.40,2	Gold: 10 florins. Silver: $\frac{1}{2}$, 1, and 2 $\frac{1}{2}$ florins.
Newfoundland,	Gold, . .	Dollar,	1.01,4	Gold: 2 dollars (\$2.02,7).
Norway, . . .	Gold, . .	Crown,	.26,8	Gold: 10 and 20 crowns.
Panama, . . .	Gold, . .	Balboa,	1.00,0	Gold: 1, 2 $\frac{1}{2}$, 5, 10, and 20 balboas. Silver: peso and divisions.
Peru, . . .	Gold, . .	Libra,	4.86,6 $\frac{1}{2}$	Gold: $\frac{1}{2}$ and 1 libra. Silver: sol and divisions.
Portugal, . .	Gold, . .	Milreis,	1.08	Gold: 1, 2, 5, and 10 milreis.
Russia, . . .	Gold, . .	Ruble,	.51,5	Gold: 5, 7 $\frac{1}{2}$, 10, and 15 rubles. Silver: 5, 10, 15, 20, 25, 50, and 100 copeks.
Spain, . . .	Gold, . .	Peseta,	.19,3	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden, . . .	Gold, . .	Crown,	.26,8	Gold: 10 and 20 crowns.
Switzerland, .	Gold, . .	Franc,	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Turkey, . . .	Gold, . .	Piaster,	.04,4	Gold: 25, 50, 100, 250, and 500 piasters.
Uruguay, . .	Gold, . .	Peso,	1.03,4	Gold: peso. Silver: peso and divisions.
Venezuela, . .	Gold, . .	Bolivar,	.19,3	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

* Not including Costa Rica. † The sovereign is the standard coin of India, but the rupee (\$0.44,8) is the money of account, current at 15 to the sovereign. ‡ Seventy-five centigrams fine gold. § Value in Mexico 49,8.

Coke, the carbonaceous residue of coal which has been heated in an oven or retort, or in any way by which little air is admitted, until all volatile matter has been expelled. The simplest method of producing coke is based on the preparation of wood charcoal, the coal being arranged in heaps which are smothered with clay or coal-dust, and then set on fire, sufficient air being admitted to keep the mass at the proper temperature for decomposition without wasting the coke. After the volatile portions are got rid of, the heap is allowed to cool, or is extinguished with water, and the coke is then ready. Methods of heating the coal in close or open ovens until the gaseous and fluid products are driven off are also commonly used. Gas-coke is that which remains in the retorts after the gas has been given off. Good oven-coke has an iron-gray color, sub-metallic luster, is hard, and somewhat vesicular; but gas-coke has rather a slagged and cindery look, and is more porous. Coke contains about ninety per cent. of carbon, and is used where a strong heat is wanted without smoke and flame, and it is accordingly largely consumed in drying malt and similar purposes. It used to be burned regularly in locomotive-engines, but raw coal is now commonly substituted. The largest quantities are consumed in smelting operations.

Cold Storage. A system for the preservation of fruits, meats, and other food stuffs, in which the air of the storage chambers is kept near or below the freezing temperature by refrigerating methods similar to those employed in making artificial ice. By this means food can be kept in an unchanged state for an indefinite period. The system is widely applied both on land and in ocean steamers.

Copper, one of the most anciently known metals, deriving its name from *Cyprus*, large supplies having in Greek and Roman times come from that island. Next to gold, silver, and platinum it is the most ductile and malleable of metals; it is more elastic than any metal except steel, and the most sonorous of all except aluminium. Its conducting power for heat and electricity is inferior only to that of silver. It has a distinct odor and a nauseous metallic taste. It is not altered by water, but tarnishes by exposure to the air, and becomes covered with a green carbonate. It occurs native in branched pieces, dendritic, in thin plates, and rarely in regular crystals, in the primitive and older secondary rocks. Blocks of native copper have sometimes been got weighing many tons. Its ores are numerous and abundant. All the compounds of copper are poisonous. It is found in most European countries, in Australia and Japan, in Africa and in North and South America (especially in the vicinity of Lake Superior). In Britain the mines of Cornwall are the richest.

Copper is extracted from its ores either by the dry or the wet process. For the former, what is known as the Welsh process is most common in Great Britain. It consists in alternately roasting the ore, and then smelting it in a furnace with a suitable slag, until impure or blister copper is obtained. Before this stage is reached a metallic compound of copper, sulphur, and

iron has been produced, technically known as matt, regulus, or coarse metal, and subsequently a tolerably pure sulphide of copper called fine metal. The blister copper is refined by burning off the sulphur, arsenic, and other volatile impurities, and by melting it along with wood charcoal and stirring it with a wooden pole. The quality is then tested, and, if found satisfactory, the copper is cast into ingots. In extracting the metal from pyrites by the wet process, the ore is first roasted to get rid of the larger proportion of sulphur, then the calcined residue still containing sulphur is mixed with common salt, ground and heated in ovens. The copper is thus converted into chloride, part of which volatilizes, but is condensed, along with arsenic and other substances, by passage through flues and water-condensers. After some hours the calcined mixture is raked out of the ovens, cooled, and transferred to tanks, where it is exhausted by successive treatment with water. The solution, containing chloride of copper, sulphate and chloride of sodium, and iron salts, is next heated along with scrap-iron. Copper precipitates in the form of a ruddy, lustrous, tolerably compact mass, with a crystalline appearance, and mixed with metallic-iron and oxide. The larger pieces of iron are picked out, the precipitate washed and drained, and then rendered compact by heating in a furnace. A slag containing the oxide of iron forms, and the copper, when judged sufficiently pure, is run into moulds. Afterwards this crude metal is refined and toughened.

Some of the alloys of copper, especially those containing tin and zinc, are of considerable importance, e. g., bronze, an alloy of copper with about eight or ten per cent. of tin; bell-metal composed of eighty parts of copper and twenty of tin; British bronze coinage, copper ninety-five, tin four, zinc one.

Copper is applied to a great many useful purposes. In sheets it is used for sheathing the bottoms of ships, covering roofs and domes, the constructing of boilers and stills of a large size, etc. It is also used in electrotyping and engraving, for various household utensils and fittings; but its use for household utensils is by no means free from danger on account of the action of acids on it, which produces verdigris.

The copper production in the world, in 1906, was as follows: United States, 416,226 tons; Spain and Portugal, 50,109; Chile, 26,157; Japan, 40,528; Germany, 20,665; Mexico, 62,690; Australasia, 36,830; Canada, 19,106; other localities, 36,312.

In the United States, Montana, Arizona, and Michigan are the chief copper producing States.

Cotton. A soft, downy substance, consisting of fine hair growing round the seeds of plants belonging to the genus *Gossypium*, *O. Malvacea*. The genus is indigenous to both the American and Asiatic continents, but it has been so extensively spread by means of cultivation that it is now found throughout all parts of the world, within the limits of 36° north and south of the equator. All the species and varieties form herbaceous or shrubby perennial plants, varying in height according to the climate and soil in which they grow, some not exceeding two or three

feet, while others reach a height of fifteen or twenty feet. Their leaves grow upon stalks placed alternately upon the branches, and are generally heart-shaped, and most commonly either three- or five-lobed, with the lobes sharp or rounded. The flowers are usually large and showy, and grow singly upon stalks in the axils of the leaves. They have a cup-shaped shortly five-toothed calyx, surrounded by a larger outer calyx or involucre of three broad deeply-cut segments, joined together and heart-shaped at the base; a corolla of five petals; many stamens united into a central column; and a three or five-celled ovary. The fruit is a three- or five-celled capsule, which bursts open through the middle of each cell when ripe, exposing the numerous seeds covered with the beautiful cellular filaments known under the name of cotton. The seeds themselves contain a considerable quantity of bland oil, which has been brought greatly into use during the last few years; and the cake formed by pressing the decorticated seeds has proved a valuable food for cattle. *G. Barbadosense* is the species cultivated in the United States, where two well-marked varieties are recognized. First, the Sea Island or long-staple cotton, which was introduced from the Bahamas in 1785, and is only grown on the low islands and sea-coast of Georgia and South Carolina; it is the most valuable kind, having a fine, soft, silky staple from one and one-half to one and three-fourths inches long, and is easily separated from the seed. Second, Upland, Georgian, Bowed, or short-staple cotton, which forms the bulk of American cotton, and is the produce of the upland or inland districts of the Southern States; the staple is only one or one and one-fourth inches long, and it adheres firmly to the seed, which is also covered with short down. Egyptian cotton, and the kind called Bourbon, are likewise referable to this species. *G. herbaceum* is the indigenous Indian species, and yields the bulk of the cotton of that country; it is also grown in the south of Europe and other countries bordering on the Mediterranean, Persia, etc. Its seeds are woolly and yield a very short-stapled cotton. *G. peruvianum* yields the cotton exported from Pernambuco, Bahia, and other parts of Brazil, from Peru, etc. It is sometimes called kidney cotton, on account of its seeds adhering firmly together in the form of a kidney. The harvest of this country commences in August, and lasts till December. After being picked and dried, the cotton is separated from the seeds by means of machines called *gins*, and is then tightly compressed into bales averaging about 500 pounds in weight. Two kinds of gins are used: the *saw-gin*, invented by Eli Whitney in 1793, and the *roller-gin*,—the first consisting of numerous circular saws revolving between iron grids, being used for the short-staple variety; and the latter, which is merely a pair of rollers, for the long-staple. The production of cotton in the United States has grown from 1,038,848 bales in 1831 to 13,551,000 in 1907.

Cotton-spinning, a term employed to describe in the aggregate all the operations involved in transforming raw cotton into yarn. The word "spinning" has also a more limited signification, being used to denote the conclud-

ing process of the series. The following affords a general notion of the nature and order of the successive operations carried on in the manufacture of cotton yarn:—(1) *Mixing*, the blending of different varieties of raw cotton, in order to secure economical production, uniform quality and color, and an even thread in any desired degree. (2) *The willowing, scratching, or blowing*, an operation which cleans the cotton and prepares it in the form of a continuous lap or rolled sheet for the next process. (3) *Carding*, an operation in which the material is treated in its individual fibers, which are taken from the lap, further cleansed, and laid in a position approximately parallel to each other, forming a thin film, which is afterwards condensed into a sliver—a round, untwisted strand of cotton. (4) *Drawing*, the drawing out of several slivers to the dimensions of one, so as to render the new sliver more uniform in thickness, and to place the fibers more perfectly in parallel order. (5) *Slubbing*, the further drawing or attenuation of the sliver, and slightly twisting it, in order to preserve its cohesion and rounded form. (6) *Intermediate or second slubbing*, a repetition of the former operation and further attenuation, not necessary in the production of coarse yarns. (7) *Roving*, a continuation of the preceding, its principal object being to still further attenuate the sliver, and give it a slight additional twist. (8) *Spinning*, which completes the extension and twisting of the yarn. This is accomplished either with the throstle or the mule. By means of the former machine the yarn receives a hard twist, which renders it tough and strong. By means of the latter yarns of less strength are produced, such as warps of light fabrics and wefts of all kind. Up to the middle of the Eighteenth Century the only method of spinning known was that by the hand-wheel, or the still more primitive distaff and spindle. In 1767, a poor weaver of the name of Hargreaves, residing at Stanhill, near Blackburn, in Lancashire, invented a machine for spinning cotton, which he named a *spinning-jenny*. It consisted at first of eight spindles, turned by a horizontal wheel, but was afterwards greatly extended and improved, so as to have the vertical substituted for the horizontal wheel, and give motion to from fifty to eighty spindles. In 1769, Arkwright, originally a barber's apprentice, took out a patent for spinning by rollers. From the circumstances of the mill erected by Arkwright at Cromford, in Derbyshire, being driven by water-power, his machine received the name of the *water-frame*, and the thread spun on it that of *water-twist*. The next important invention in cotton-spinning was that of the mule, introduced by Mr. Samuel Crompton of Bolton, in 1775, and so called from it combining the principle of the spinning-jenny of Hargreaves with the roller-spinning of Arkwright. Numerous improvements in cotton-spinning have been introduced up to the present day, but they are all modifications of the original inventions. Among these is the *throstle*, an extension and simplification of the original spinning-frame, introduced about the year 1810. The first machines set up in the United States were at East Bridgewater, Mass., in 1786, by two Scotchmen. In 1812, Francis C. Lowell

introduced the Cartwright power-loom at Lowell, Mass., which is now the largest cotton-manufacturing center in America. There are also extensive mills in active operation in Alabama, Georgia, and other Southern States. In 1907, Great Britain had 52,000,000 spindles in operation; the continent of Europe, 35,800,000; United States, 25,924,000; and the East Indies, 5,400,000.

Credit, in finance, is the postponement agreed on by the parties of the payment of a debt to a future day. It implies confidence of the creditor in the debtor; and a "credit system" is one of general confidence of people in each other's honesty, solvency, and resources. By means of a credit system a comparatively small stock of money can be made to do duty for carrying on a number of different transactions; but it is indispensable for every good system of credit that money must be instantly available when required, and this principle applies to every species of transaction where postponed payment is concerned. Public credit is the confidence which men entertain in the ability and disposition of a nation to make good its engagements with its creditors; or the estimation in which individuals hold the public promises of payment, whether such promises are expressed or implied. The term is also applied to the general credit of individuals in a nation; when merchants and others are wealthy and punctual in fulfilling engagements; or when they transact business with honor and fidelity; or when transfers of property are made with ease. So we speak of the credit of a bank when general confidence is placed in its ability to redeem its notes, and the credit of a mercantile house rests on its supposed ability and probity, which induce men to trust to its engagements. When the public credit is questionable it raises the premium on loans.

Cutlery. A term comprising all cutting instruments made of steel, but more particularly confined to the manufacture of knives, scissors, razors, surgical instruments, and swords. Those articles which require the edge to possess great tenacity, at the same time that superior hardness is not required, are made from sheer steel. The finer kinds of cutlery are made from steel which has been in a state of fusion, and which is termed *cast-steel*, no other being susceptible of a fine polish and very keen edge. Razors are made of cast-steel, the edge of the razor requiring the combined advantages of great hardness and tenacity. After the razor-blade is formed, it is hardened by gradually raising it to a bright-red heat, and plunging it into cold water. It is tempered by heating it afterwards till a brightened part appears of a straw color. But the beauty and elegance of polished steel is displayed to great advantage in the manufacture of the finer kinds of scissors. Damascus was anciently famed for its razors, sabers, and swords — the latter especially, which possessed all the advantages of flexibility, elasticity, and hardness, while they presented a beautiful wavy appearance called the *water*. It is not known how this effect is produced; but it is well imitated in Europe by scooping hollows in the blade and filling them up; also by welding together a

bundle of steel bars, cutting and rewelding them, etc. In recent times, the English and German cutlery has been long celebrated for excellence and cheapness. The manufacture of table cutlery in the United States was introduced in 1834 by Mr. John Russell, of Greenfield, Mass., and has assumed such an importance as to command a large export.

Forestry is the act, occupation, or art of forming and cultivating forests; the systematic utilization, reproduction and improvement in productive capacity of trees in masses, including the planting and culture of new forests. The usefulness of forests to man lies: (1) in their furnishing him with timber for fuel and for manufacturing and building purposes as well as with other serviceable products, such as their bark, their sap (by distillation), turpentine, creosote, wood alcohol, vanilin, etc.; also fertilizers, fodders, materials for textile fabrics, dyes, inks, etc. (2) in their influence on climate, by furnishing large tracts of superior coolness, by conserving humidity, decreasing evaporation, breaking the force of winds, etc. (3) In their influence on the waterflow, by keeping the ground more moist, conserving the springs, making the outflow of water more steady and regular, and causing the snow within them to melt more slowly, thus preventing dangerous floods; causing the rainfall to sink slowly into the soil rather than to flow in torrents over the surface; also by holding the soil together with their roots, so keeping the hillsides from being denuded and preventing their soil from being carried down over the cultivable fields below, sanding over valleys and silting up streams. This being the case, not only private interest exists in forests but a public interest, which necessitates at times governmental action — an action to which in the United States we have but recently awaked. Such action rests on the following principles: (1) The widest scope should be allowed to private enterprise in production, care being taken that abundant statistics in regard to supply and demand and opportunity for education on the subject be furnished. (2) Adequate legal protection should be given to forest property. (3) Whenever improper management threatens damage to neighboring property the State should interfere to enforce proper management. (4) Wherever public welfare demands the reforestation of denuded tracts the State should assist individual or communal enterprise in performing this, or else do the reforesting as a work of internal improvement. (5) In cases where a permanent forest is desirable and private interest can not be relied on for its proper management, the State should own and manage it.

The total woodland area in the United States is estimated at 1,094,514 square miles, or about 699,500,000 acres, which is thirty-six and one-half per cent. of the total land area, Alaska not included. The total annual consumption of manufactured forest products in the United States, according to the figures of the census of 1890, is more than 18,000,000,000 cubic feet, divided approximately as follows: Lumber market and manufactures, 2,250,000,000 cubic feet; fuel, 15,000,000,000 cubic feet; railroad ties,

27,000,000 cubic feet; fencing, 30,000,000 cubic feet; other items, 1,000,000,000 cubic feet. The amount of cubic feet of standing timber necessary to produce these quantities of usable material is immensely greater, probably almost double. The value of the annual products of our forests was estimated by the census of 1890, at \$1,038,616,947. At the present rate of cutting,

the forest land of the United States cannot long meet the enormous demand made upon it. By far the greater part of the white pine has been cut, and vast inroads have been made into the supply of other valuable timbers. In many sections of the country more timber falls by fire than by the axe. The average annual loss from fire is not less than \$20,000,000.

GREAT INDUSTRIES OF UNITED STATES

ACCORDING TO THE LATEST CENSUS

INDUSTRY	NUMBER OF ESTABLISHMENTS	CAPITAL	AVERAGE NUMBER OF WAGE EARNERS	WAGES	VALUE OF PRODUCTS		
					Net	Gross	Rank
Iron and steel,	668	\$573,391,663	222,490	\$120,820,276	\$432,687,119	\$803,968,273	1
Slaughtering and meat packing, not including retail butchering,	1,134	190,706,927	69,441	33,923,253	684,119,221	790,252,586	2
Foundry and machine shop products,	9,324	665,058,245	350,327	182,232,009	377,812,876	644,990,999	3
Lumber and timber products,	33,010	611,429,574	283,179	104,563,603	307,838,590	566,621,755	4
Flouring and grist mill products,	25,258	218,714,104	37,073	17,703,418	540,052,649	560,719,063	5
Clothing, men's,	28,014	173,034,543	191,043	79,434,932	220,140,823	415,256,391	6
Printing and publishing,	22,312	292,517,072	162,992	84,249,954	264,859,062	347,055,050	7
Cotton manufactures,	1,055	467,240,157	302,861	80,689,752	296,633,150	339,200,320	8
Carpentering,	21,315	71,327,047	123,985	71,049,737	176,611,706	316,101,758	9
Woolen manufactures,	1,414	310,179,749	159,108	57,933,817	218,637,292	296,990,484	10
Boots and shoes, factory product,	1,600	101,795,233	142,922	59,175,883	93,701,767	261,028,580	11
Sugar and molasses, refining,	832	184,245,519	14,262	6,945,811	49,216,847	240,969,905	12
Liquors, malt,	1,509	415,284,468	39,532	25,826,211	202,582,268	237,269,713	13
Cars and general shop construction and repairs by steam railroad companies,	1,295	119,473,042	173,595	96,006,570	111,622,240	218,113,658	14
Leather, tanned, curried, and finished,	1,306	173,977,421	52,109	22,591,091	186,389,057	204,038,127	15
Masonry, brick and stone,	8,333	48,070,239	93,568	53,152,258	125,356,555	203,593,634	16
Bread and other bakery products,	14,917	81,049,553	60,271	27,893,170	89,262,303	175,657,348	17
Lead, smelting and refining,	39	72,148,933	8,319	5,088,684	97,425,341	175,466,304	18
Lumber, planing mill products, including sash, doors, and blinds,	4,204	119,271,631	73,627	32,685,210	74,205,166	168,343,003	19
Copper, smelting and refining,	47	53,063,395	11,324	8,529,021	76,502,702	165,131,670	20
Tobacco, cigars, and cigarettes,	14,539	67,706,493	103,462	40,925,596	152,300,012	160,223,152	21
Clothing, women's, factory product,	2,701	48,431,544	83,739	32,586,101	75,315,179	159,339,539	22
Furniture, including cabinet-making, repairing, and upholstering,	7,972	117,982,091	100,018	42,638,810	91,151,488	153,168,309	23
Plumbing, and gas and steam fitting,	11,876	47,111,264	53,916	31,873,866	68,035,688	131,852,567	24
Cheese, butter, and condensed milk,	9,355	36,508,015	12,865	6,170,670	124,008,573	131,199,277	25
Paper and wood pulp,	763	167,507,713	49,646	20,746,426	77,954,480	127,326,162	26
Petroleum refining,	67	95,327,892	12,199	6,717,087	107,512,092	123,929,384	27
Carrriages and wagons,	7,632	118,187,838	62,540	29,814,911	67,172,479	121,537,276	28
Silk and silk goods,	483	81,082,201	65,416	20,982,194	86,483,994	107,250,258	29
Cars, railroad and street, and repairs, not including establishments operated by steam railroad companies,	193	106,721,188	44,063	23,342,763	39,326,856	107,186,359	30
Tobacco, chewing, smoking, and snuff,	437	43,856,570	29,161	7,109,821	92,915,542	103,754,362	31
Agricultural implements,	715	157,707,951	46,582	22,450,880	60,535,599	101,207,428	32
Tinsmithing, coppersmithing, and sheet-iron working,	12,466	55,703,509	45,575	22,155,039	51,638,038	100,310,720	33
Liquors, distilled,	967	32,551,604	3,722	1,733,218	91,451,293	96,798,443	34
Hosiery and knit goods,	921	81,860,604	83,387	24,358,627	54,544,999	95,482,566	35
Electrical apparatus and supplies,	580	83,130,943	40,800	20,190,344	44,583,830	91,348,880	36
Painting and paper hanging,	16,939	27,217,086	59,101	34,822,819	62,541,861	88,396,852	37
Blacksmithing and wheelwrighting,	51,771	54,976,341	36,193	17,974,264	63,764,914	85,971,630	38
Marble and stone work,	6,070	67,509,533	54,370	28,663,241	69,097,079	85,101,591	39
Confectionery,	4,297	35,155,361	33,583	10,867,687	44,179,706	81,290,543	40
Gas, illuminating and heating,	877	567,000,506	22,459	12,436,296	64,276,431	75,716,693	41
Shipbuilding,	1,116	77,362,701	46,781	24,839,163	42,492,618	74,678,158	42
Millinery, custom work,	16,151	27,740,386	33,298	9,570,536	34,529,813	70,363,762	43

GREAT INDUSTRIES OF UNITED STATES—Continued

INDUSTRY	NUMBER OF ESTABLISHMENTS	CAPITAL	AVERAGE NUMBER OF WAGE EARNERS	WAGES	VALUE OF PRODUCTS		
					Net	Gross	Rank
Coffee and spice, roasting and grinding,	458	\$28,436,897	6,387	\$ 2,486,759	\$64,741,832	\$69,527,108	44
Chemicals,	459	89,091,430	19,054	9,401,467	36,918,124	62,676,730	45
Saddlery and harness,	12,934	43,354,136	24,123	10,725,647	30,677,173	62,630,902	46
Patent medicines and compounds,	2,026	37,209,793	11,809	4,407,988	43,819,968	59,611,335	47
Oil, cottonseed and cake,	369	34,451,461	11,007	3,143,459	43,196,446	58,726,632	48
Fruits and vegetables, canning and preserving,	1,808	27,743,067	36,401	8,050,793	36,668,635	56,668,313	49
Glass,	355	61,423,903	52,818	27,084,710	43,905,999	56,539,712	50
Ironwork, architectural and ornamental,	672	33,062,409	20,646	11,111,226	23,398,179	53,508,179	51
Soap and candles,	558	38,068,334	9,487	3,754,767	24,228,062	53,231,017	52
Rubber and elastic goods,	262	39,304,853	20,405	8,082,738	35,278,808	52,627,030	53
Brick and tile,	5,423	82,086,438	61,979	21,883,333	50,312,022	51,270,476	54
Paints,	419	42,501,782	8,151	3,929,787	18,545,525	50,874,995	55

IMPORTS AND EXPORTS OF UNITED STATES

FROM THE LATEST STATISTICS

EXPORTS

ARTICLES	QUANTITIES	VALUES	ARTICLES	QUANTITIES	VALUES
<i>Domestic Merchandise</i>			Marble, Stone, and Manufactures of,		\$ 1,433,123
Agricultural Implements,		\$26,936,456	Musical Instruments,		3,256,063
Aluminum and Manufacturers of,		442,987	Naval Stores,		21,686,752
Animals,		41,203,080	Nickel, Nickel Oxide and Matte,		3,218,862
Books, Maps, Engravings, and other Printed Matter,		5,813,107	Oil Cake, Oil Cake Meal, pounds,	2,063,732.272	26,415,607
Brass, and Manufactures of,		4,580,455	Oils: Animal, gallons,	1,687,126	655,261
Breadstuffs: Corn, bushels,	83,300,708	44,261,816	Oils: Mineral, Crude, gallons,	128,175,737	6,626,896
Breadstuffs: Oats, bushels,	4,014,042	1,670,881	Oils: Mineral, Refined or Manufactured,		78,228,819
Breadstuffs: Wheat, bushels,	76,569,426	60,214,388	Oils: Vegetable,		19,550,514
Breadstuffs: Wheat, Flour, barrels,	15,584,667	62,175,397	Paints, Pigments, and Colors,		3,931,899
Cars, Carriages, and other Vehicles and parts of,		20,513,407	Paper, and Manufactures of Paraffine, Paraffine Wax, pounds,	185,511,773	9,030,992
Chemicals, Drugs, Dyes, and Medicines,		20,373,036	Provisions: Beef Products, pounds,	489,017,635	39,013,951
Clocks and Watches and parts of,		3,169,272	Provisions: Hog Products, pounds,	1,348,212,273	130,432,473
Coal: Anthracite, tons,	2,481,920	12,154,640	Provisions: Oleomargarine, pounds,	200,734,785	17,340,339
Coal: Bituminous, tons,	8,812,332	22,573,122	Provisions: Other Meat Products,		8,972,519
Copper Ore, tons,	62,843	1,838,588	Provisions: Dairy Products,		6,633,226
Copper Manufactures of,		94,762,110	Seeds: Clover, pounds,	3,989,798	420,104
Cotton, Unmanufactured pounds,	4,518,217,220	481,277,797	Seeds: All other,		9,674,505
Cotton, Manufactures of,		32,305,412	Soap,		3,806,097
Earthen, Stone, and China Ware,		1,097,000	Spirits, Distilled, proof gallons,	1,700,309	1,827,757
Fertilizers,		8,596,711	Starch, pounds,	51,334,580	1,126,465
Fibers, Vegetables, and Textile Grasses, Manufactures of,		8,308,112	Molasses, and Syrup, gallons,	17,309,241	2,348,457
Fish,		5,536,856	Sugar, pounds,	21,237,603	831,162
Fruit, Apples, green or ripe, barrels,	1,539,267	4,652,966	Tobacco, Unmanufactured, pounds,	340,742,864	33,377,398
Fruits and Nuts, all other,		12,935,466	Tobacco, Manufactures of Vegetables,		5,735,613
Furs and Fur Skins,		7,139,221	Wood, and Manufactures of Wool, and Manufactures of,		4,007,833
Glass and Glassware,		2,604,717			83,349,575
Glucose or Grape Sugar,		3,017,527			2,287,926
Gunpowder and other Explosives,		4,082,402			90,582,570
Hay, tons,	58,602	976,287	Total Exports, Domestic Mdse.,		\$1,853,718,034
Hops, pounds,	16,809,534	3,531,972	Exports, Foreign Merchandise,		27,133,044
India Rubber Manufactures,		7,428,714	Total Exports, Domestic and Foreign,		\$1,880,851,078
Instruments for Scientific Purposes,		13,661,455	Specie: Gold,		\$51,399,176
Iron and Steel, Manufactures of,		181,530,871	Specie: Silver,		56,739,073
Leather, and Manufactures of,		45,476,969	Total Exports, Domestic and Foreign,		\$1,988,989,337
Malt Liquors,		1,215,340			

IMPORTS AND EXPORTS OF UNITED STATES—Continued

IMPORTS

ARTICLES	QUANTITIES	VALUES	ARTICLES	QUANTITIES	VALUES
<i>Merchandise</i>					
Animals,	P.	\$ 4,344,282	Jewelry and Precious Stones,		\$ 44,247,549
Art Works,		5,867,265	Lead, Ore, and Base Bul-		
Books, Maps, Engrav-			lions, pounds,	127,196,540	3,352,534
ings, etc.,		6,451,309	Leather, and Manufac-		
Bristles,		3,261,877	tures of,		20,393,533
Cement, Portland, Hy-			Malt Liquors, gallons,	7,207,617	3,408,763
draulic, pounds,	1,123,763,604	3,669,926	Meats and Dairy Prod-		
Chemicals, Drugs, Dyes,			ucts,		6,768,432
and Medicines,		82,997,914	Oils,		17,068,777
Clocks and Watches, and			Paper, and Manufac-		
parts of,		3,593,173	tures of,		10,727,885
Coal, Bituminous, tons,	1,689,869	4,184,541	Paper, Stock, Crude,		5,580,528
Cocoa, Crude, and Shells			Rice, pounds,	209,603,190	4,302,146
of, pounds,	92,249,819	13,376,562	Silk, Unmanufactured,		71,411,899
Coffee, pounds,	985,321,473	78,231,902	Silk, Manufactures of,		38,653,251
Copper, and Manufac-			Spices,		5,113,000
tures of (not ore),		39,428,687	Spirits, Distilled,		6,886,691
Cork Wood, and Manu-			Sugar, pounds,	4,391,839,975	92,806,253
factures of,		4,063,982	Tea, pounds,	86,362,490	13,915,544
Cotton, Unmanufact-			Tin, in Bars, Blocks, or		
ured, pounds	104,791,784	19,930,988	Pigs, pounds,	96,003,005	38,117,459
Cotton, Manufactures of			Tobacco, Unmanufact-		
Earthen, Stone, and		73,704,636	ured, pounds,	39,540,321	26,055,248
China Ware,		13,706,790	Tobacco, Manufactures		
Feathers, Flowers, etc.,		9,505,515	of,		4,137,127
Fertilizers,		5,341,480	Toys,		6,993,561
Fibers, Vegetable, Un-			Vegetables,		5,728,472
manufactured,		42,239,358	Wines,		11,808,781
Fibers, Vegetable, Manu-			Wood, and Manufac-		
factures of,		67,422,458	tures of,		42,969,133
Fruits and Nuts,		35,807,527	Wool, Unmanufactured,		
Furs, and Manufactures			pounds,	203,847,545	41,534,028
of,		21,883,667	Wool, Manufactures of,		22,321,237
Glass and Glassware,		7,596,631	All other Articles,		139,649,091
Hair Unmanufactured,		3,038,996			
Hats, Bonnets, and Ma-			Total Merchandise,		\$1,434,421,425
terials for,		6,820,259			
Hides and Skins, other			Specie: Gold,		114,510,249
than Fur, pounds,	370,983,815	83,206,545	Specie: Silver,		42,946,624
India Rubber and Gutta-					
percha, Crude, pounds,	105,948,388	70,206,418	Total Imports,		\$1,591,878,298
Iron and Steel, and Manu-					
factures of,		40,587,865			

IMPORTS AND EXPORTS OF PRINCIPAL COUNTRIES

COUNTRIES	IMPORTS	EXPORTS	COUNTRIES	IMPORTS	EXPORTS
Argentina,	\$ 260,522,000	\$ 282,025,000	India, British,	\$ 334,379,000	\$ 513,186,000
Australia,	186,614,000	276,617,000	Italy,	466,740,000	354,319,000
Austria-Hungary,	456,709,000	469,521,000	Japan,	208,554,000	208,754,000
Belgium,	644,024,000	517,499,000	Mexico,	109,884,000	135,027,000
Bulgaria,	25,594,000	28,556,000	Netherlands,	1,038,576,000	801,493,000
Canada,	287,207,000	235,484,000	Norway,	89,995,000	60,313,000
Cape of Good Hope,	83,012,000	192,858,000	Portugal,	65,543,000	31,396,000
Chile,	71,868,000	103,223,000	Russia,	319,255,000	514,673,000
China,	335,191,000	193,185,000	Spain,	169,641,000	195,315,000
Denmark,	150,000,000	158,897,000	Sweden,	153,780,000	120,657,000
Egypt,	118,685,000	122,968,000	Switzerland,	273,792,000	207,450,000
France,	1,009,279,000	973,427,000	United Kingdom,	2,958,289,000	1,827,737,000
Germany,	1,868,426,000	1,457,750,000	United States,	1,320,502,000	1,772,716,000
Greece,	27,686,000	22,785,000	Uruguay,	21,938,000	39,764,000

IMPORTS AND EXPORTS OF UNITED STATES BY COUNTRIES

COUNTRIES	IMPORTS	EXPORTS	COUNTRIES	IMPORTS	EXPORTS
Austria-Hungary,	\$ 13,865,433	\$ 14,800,019	Russia, Baltic, and		
Azores and Madeira			White Seas,	\$ 10,463,057	\$ 13,704,491
Islands,	26,391	196,882	Russia, Black Sea,	3,073,448	2,297,479
Belgium,	28,411,318	50,021,107	Servia,	34,609	1,873
Denmark,	1,256,663	22,943,926	Spain,	10,680,653	19,099,336
France,	108,415,350	97,892,480	Sweden,	3,899,481	7,437,160
Germany,	135,142,996	234,742,102	Switzerland,	23,421,243	399,366
Gibraltar,	14,002	306,224	Turkey in Europe,	6,508,518	874,449
Greece,	2,032,408	239,726	Great Britain and Ire-		
Greenland, Iceland, etc.	102,054	3,511	land,	210,019,336	583,103,322
Italy,	40,697,556	48,081,740	Bermuda,	410,771	1,138,249
Malta, Gozo, etc.,	25,363	285,809	British Honduras,	789,422	1,094,224
Netherlands,	27,007,107	95,471,593	British North America:		
Norway,	3,132,464	6,016,269	Nova Scotia, New		
Portugal,	5,139,708	1,462,763	Brunswick, etc.,	9,927,380	7,600,910
Roumania,	4,026	617,608	Quebec, Ontario,		

IMPORTS AND EXPORTS OF UNITED STATES BY COUNTRIES

(CONTINUED)

COUNTRIES	IMPORTS	EXPORTS	COUNTRIES	IMPORTS	EXPORTS
Manitoba, etc.	\$47,242,763	\$141,131,444	Aden,	\$ 2,312,238	\$ 1,708,789
British Columbia,	11,078,907	8,004,321	Chinese Empire,	28,531,207	43,774,375
Newfoundland and Labrador,	1,364,944	2,964,297	British China,	7,109	307
Cent'l American States:			French China,	7,771	228,743
Costa Rica,	4,622,426	2,337,188	German China,	21,548	21,512
Guatemala,	3,386,317	2,908,655	Russian China,	67,176,839	7,454,702
Honduras,	1,724,865	1,642,251	British East Indies,	20,575,521	1,766,159
Nicaragua,	1,478,408	1,870,852	Dutch East Indies,	12,073	8,672
Panama,	1,065,887	12,460,289	French East Indies,	1,829,040	7,034,907
Salvador,	1,131,734	1,401,276	Hong Kong,	52,551,520	38,464,952
Mexico,	50,965,177	58,182,278	Japan,	218	1,065,294
Miquelon, Langley, etc.	255	105,096	Korea,	282,207	2,813,544
West Indies:			Russia, Asiatic,	63,244	355,471
British,	10,259,253	9,706,654	Siam,	6,485,749	645,578
Cuba,	84,979,821	47,763,688	Turkey in Asia,	239,387	98,185
Danish,	366,361	726,810	All other Asia,	11,515,413	29,001,147
Dutch,	278,171	751,453	British Australasia,	79,944	270,690
French,	20,042	1,265,946	British Oceania,	835,112	339,147
Hayti,	1,185,477	3,301,840	French Oceania,	1,262	69,116
San Domingo,	3,086,338	2,018,248	German Oceania,	12,337,927	5,459,444
Argentine Republic,	18,379,063	32,673,359	Philippine Islands,	7,407	1,857,940
Bolivia,	80,416,524	14,530,471	British West Africa,	981,808	11,704,668
Brazil,	16,945,476	8,667,227	British South Africa,	717,507	523,815
Chile,	7,084,487	3,491,420	British East Africa,	169,429	359,919
Colombia,	2,632,206	2,009,861	Canary Islands,	743,582	1,334,033
Ecuador,	1,016,405	1,740,609	French Africa,	483	67,695
Guianas:			German Africa,	2,112	17,600
British,	708,368	572,463	Italian Africa,	58,056	45,578
Dutch,	38,383	268,213	Liberia,	9,391,621	1,240
French,	750	51,917	Madagascar,	556,730	2,420,891
Paraguay,	2,454,706	4,833,307	Portuguese Africa,		1,163,128
Peru,	2,711,807	2,905,573	Egypt,		65,794
Uruguay,	8,034,701	3,258,133	All other Africa,		
Venezuela,			Total,	\$1,226,563,843	\$1,717,953,382

India-rubber. A peculiar elastic substance composed of carbon and hydrogen, found in suspension in the milky juice of many different families of plants. (See *Caoutchouc*.) The crude rubber is usually prepared where the juice is collected, by drying the juice over a fire or in the sun on molds of clay, paddles, or lasts; by evaporating the juice in the sun and removing the successive pellicles formed on the surface; or by coagulating the juice, as in Nicaragua, by an application of the juice of the bejuca vine, and kneading and rolling the coagulated mass. Most of the rubber of commerce is derived from South America, from Pará, Central America, Mexico, Carthagená, etc.; smaller quantities from Java, Penang, Singapore, Assam, and South Africa. The purest comes from Pará in large bottles and thick plates. Prior to the introduction of rubber into Europe in the early part of the Eighteenth Century it had already been turned to various domestic and industrial uses, such as the making of bottles, syringes, boots, and waterproofing, by the natives and residents along the banks of the Amazon. In Europe the first important practical applications of it are associated with the names of Mackintosh, the patentee in 1823 of a waterproofing process by the solution of the gum in oil of turpentine and alcohol, and in coal-tar, naphtha; Hancock, the inventor of the "masticator," a machine for the condensation of crude lumps or shreds of caoutchouc, as imported, into compact homogeneous blocks for subsequent division into cakes, sheets, rollers, etc.; and Goodyear, the inventor of the vulcanizing process, patented in 1844. Since then its uses have multiplied so rapidly that it is em-

ployed in every department of industry. Thus apart from its use in blocks and sheets, etc., in tapes or threads for weaving into elastic tissues, and as varnish for waterproofing, it is employed, in combination with other resinous materials in a solvent such as naphtha, as a cement or marine glue. When combined with a small quantity of sulphur, etc., it is used for the manufacture of overshoes, boots, gloves, life-preservers, gas-bags, steam and water packing, belting, fire-hose, tubing, springs, tires, artificial sponges, etc. With a larger proportion of sulphur, and cured or vulcanized by exposure to a high temperature, it is used for the manufacture of combs, pen and pencil holders, rulers, inkstands, buttons, canes, syringes, jewelry, and, when colored with vermilion, for mountings for artificial teeth, etc. In combination with asphalts, oils, and sulphur, etc., and vulcanized (*kerite*) it is used for covering telegraph wires.

Insurance. The act of providing against a possible loss, by entering into a contract with one who is willing to give *assurance*; that is, to bind himself to make good such possible loss, should it occur. The instrument by which the contract is made is denominated a *policy*, and the stipulated consideration is called the *premium*. In this country, Fire and Marine insurance are almost invariably effected by joint-stock companies, whose modes of operations are too well known to call for expatiation here. Life Insurance (to which the word "assurance" is now more generally applied) is a contract by which a party, for a certain premium, agrees to pay a certain sum, should a person, to whose life it relates, die within a time specified; or to pay the executors of the insured a certain sum

at the time of his death. Such policies, however, usually make an exception in the case of death by suicide. By this means, a family may be furnished with means of support in case of the death of its head. According to general practice, a life insurance is seldom made by the payment of a single sum at the time it is effected, but almost always by the payment of an annual premium during its continuance. An individual, therefore, who has insured a sum on his own life, would forfeit all the advantages of the insurance were he not to continue regularly to make his periodical payments. Life insurance is conducted by several kinds of societies; as the *proprietary*, *mutual insurance*, and *mixed societies*. The *proprietary*, or joint-stock companies, are formed of persons who have subscribed a capital, on the insurance of which the business of the company is carried on, and who divide the profits entirely among themselves. In the mutual insurance societies, on the other hand, there is no proprietary, the assured being likewise the assurers, and dividing the profits among themselves, after deducting the expenses of management, and reserving a guaranty fund. In the mixed class of offices, which is the most numerous in the United States, there is a proprietary, but, at the same time, the assured are allowed to participate largely in the profits of the society, which are usually divided in the form of bonuses at stated periods. The premiums to be paid are adjusted according to the age of the party on whose life the insurance is made; being lowest on young lives, and increasing from year to year as the expectancy of life diminishes.

It is within the past sixty years that the vast business of life insurance in the United States has been developed. The experimental stage was ended and the era of advance was opened when, in 1843, the Mutual Life Insurance Company of New York began business, its first policy having been issued on February 1st of that year. Since then a large number of life insurance companies have been established. The following list includes those now transacting business which had their inception between 1843 and 1860 inclusive, arranged according to the date of the first policy issued:

Mutual Life Insurance Company, 1843; New England Mutual Life Insurance Company (1), 1844; New York Life Insurance Company, Mutual Benefit Life Insurance Company, State Mutual Life Assurance Company (3), 1845; Connecticut Mutual Life Insurance Company, 1846; Penn Mutual Life Insurance Company, 1847; Union Mutual Life Insurance Company, 1849; National Life Insurance Company of Vermont, United States Life Insurance Company, Aetna Life Insurance Company, Manhattan Life Insurance Company, 1850; Massachusetts Mutual Life Insurance Company, Phoenix Mutual Life Insurance Company, Berkshire Life Insurance Company (4), 1851; Northwestern Mutual Life Insurance Company, 1858; Equitable Life Assurance Society, 1859; Washington Life Insurance Company, Home Life Insurance Company, Germania Life Insurance Company, 1860.

How life insurance has progressed since the early part of 1843 is shown in the subjoined

table by periods of years as indicated, assessment insurance not being included:

YEAR	AMOUNT OF OUTSTANDING INSURANCE	AMOUNT OF ASSETS
1843,	\$6,500,000	\$1,000,000
1867,	1,235,000,000	124,534,000
1897,	4,898,000,000	907,441,000
1899,	6,266,000,000	1,576,000,000
1906,	13,706,797,784	2,924,253,848

The following is the table of expectation of life usually recognized by American life insurance companies:

EXPECTATION OF LIFE

AGE	EXPECTA- TION IN YEARS	AGE	EXPECTA- TION IN YEARS	AGE	EXPECTA- TION IN YEARS	AGE	EXPECTA- TION IN YEARS	AGE	EXPECTA- TION IN YEARS
0	28.15	20	34.22	40	26.04	60	15.45	80	5.85
1	36.78	21	33.84	41	25.61	61	14.86	81	5.50
2	38.74	22	33.46	42	25.19	62	14.26	82	5.16
3	40.01	23	33.08	43	24.77	63	13.66	83	4.87
4	40.73	24	32.70	44	24.35	64	13.05	84	4.66
5	40.88	25	32.33	45	23.92	65	12.43	85	4.57
6	40.69	26	31.93	46	23.37	66	11.96	86	4.21
7	40.47	27	31.50	47	22.83	67	11.48	87	3.90
8	40.14	28	31.08	48	22.27	68	11.01	88	3.67
9	39.72	29	30.66	49	21.72	69	10.50	89	3.56
10	39.23	30	30.25	50	21.17	70	10.06	90	3.43
11	38.64	31	29.83	51	20.61	71	9.60	91	3.32
12	38.02	32	29.43	52	20.05	72	9.14	92	3.12
13	37.41	33	29.02	53	19.49	73	8.69	93	2.40
14	36.79	34	28.62	54	18.92	74	8.25	94	1.98
15	36.17	35	28.22	55	18.35	75	7.83	95	1.62
16	35.76	36	27.78	56	17.78	76	7.40		
17	35.37	37	27.34	57	17.20	77	6.99		
18	34.98	38	26.91	58	16.63	78	6.59		
19	34.59	39	26.47	59	16.04	79	6.21		

Interest is the allowance made for the loan or retention of a sum of money which is lent for, or becomes due at, a certain time; this allowance being generally estimated at so much per cent. per annum, that is, so much for the use of \$100 for a year. The money lent or forborne is called the *principal*; the sum paid for the use of it, the *interest*. The interest of \$100 for one year is called the *rate per cent.*, and the sum of any principal and its interest together, the *amount*. Interest is either *simple* or *compound*. Simple interest is that which is allowed upon the principal only, for the whole time of the loan or forbearance. Compound interest is that which arises from any sum or principal in a given time by increasing the principal, at fixed periods, by the interest then due, and hence obtaining interest upon both interest and principal. The rate of interest, supposing the security for the principal to be equal, depends obviously upon what may be made by the employment of money in various industrious undertakings, or on the rate of profit. Where profits are high, interest is high, and vice versa; in fact, the rate of interest is simply the net profit on capital. Besides this, however, the interest on each particular loan must further vary according to the supposed risk of the lender, etc. Bills and notes, by the usage of trade, carry interest from the date they become due; such interest being recoverable as damages, but the jury are not bound to give it. In the United States interest is generally awarded by the courts on overdue debts.

STATES AND TERRITORIES	INTEREST LAWS			DAYS OF GRACE
	LEGAL RATE PER CENT.	ALLOWED BY CONTRACT PER CENT.	PENALTY FOR USURY	
Alabama,	8	8	Forfeit interest,	3
Arizona,	6	Any	No provision,	0
Arkansas,	6	10	Forfeit principal and interest,	3
California,	7	Any	No provision,	0
Colorado,	8	Any	No provision,	0
Connecticut,	6	Any	No penalty,	0
Delaware,	6	6	Principal forfeited,	0
District of Columbia,	6	10	Forfeit interest,	0
Florida,	8	10	Forfeit interest,	0
Georgia,	7	8	Forfeit excess of interest,	3
Idaho,	7	12	Forfeit interest and 10% of principal,	0
Illinois,	5	7	Forfeit interest,	0
Indiana,	6	8	Excess interest forfeited,	3
Iowa,	6	8	Forfeit interest and costs,	3
Kansas,	6	10	Forfeit of double amount of usurious interest,	3
Kentucky,	6	6	Forfeit of excess interest,	0
Louisiana,	5	8	Forfeit interest,	3
Maine,	6	Any	No provision,	0
Maryland,	6	6	Forfeit interest,	0
Massachusetts,	6	Any	No provision,	0
Michigan,	5	7	Forfeit interest,	3
Minnesota,	6	10	Forfeit principal and interest,	3
Mississippi,	6	10	Forfeit interest,	3
Missouri,	6	8	Forfeit of lien,	3
Montana,	8	Any	No provision,	0
Nebraska,	7	10	Forfeit interest,	3
Nevada,	7	Any	No provision,	3
New Hampshire,	6	6	Forfeit three times excess,	0
New Jersey,	6	6	Forfeit interest and costs,	0
New Mexico,	6	12	Forfeit of twice the amount of interest,	3
New York,	6	6	Forfeit of principal and interest,	0
North Carolina,	6	6	Forfeit interest,	3
North Dakota,	7	12	Forfeit excess interest,	0
Ohio,	6	8	Forfeit interest over 6%,	0
Oklahoma,	7	12	No penalty,	0
Oregon,	6	10	Forfeit principal and interest,	0
Pennsylvania,	6	6	Forfeit excess of interest,	0
Rhode Island,	6	Any	No provision,	0
South Carolina,	7	8	Forfeit interest,	3
South Dakota,	7	12	Forfeit interest,	3
Tennessee,	6	6	Forfeit of excess interest,	0
Texas,	6	10	Forfeit interest,	3
Utah,	8	Any	No provision,	0
Vermont,	6	6	Forfeit of excess interest,	0
Virginia,	6	6	Forfeit interest,	0
Washington,	6	12	Forfeit of double accrued interest and costs,	0
West Virginia,	6	6	Forfeit excess interest,	0
Wisconsin,	6	10	Forfeit treble amount of usurious interest paid,	0
Wyoming,	8	12	Forfeit interest,	0

NOTE.—In many of the States it is impossible to place a fixed amount on personal property exempt.

COMMERCIAL LAW

STATUTES OF LIMITATION			ARREST FOR DEBT	EXEMPTION LAWS		JURISDICTION OF JUSTICES OF THE PEACE	STATES AND TERRI- TORIES
JUDG- MENTS, YEARS	NOTES, YEARS	OPEN ACCOUNTS, YEARS		PERSONAL PROPERTY, EXEMPT	HOMESTEAD, EXEMPT		
20	5	6	No	\$1,000	\$2,000	\$100	Alabama.
5	4	3	No	1,000	4,000	300	Arizona.
10	5	3	No	500	2,500	300	Arkansas.
5	4	2	No	....	5,000	300	California.
20	6	6	No	....	2,000	300	Colorado.
7	6	6	No	....	1,000	100	Connecticut.
10	6	3	No	200	....	200	Delaware.
12	3	3	No	300	....	300	District of Columbia.
20	5	2	No	1,000	160 Acres	100	Florida.
7	6	4	No	1,600	or 1,600	100	Georgia.
6	5	4	No	....	5,000	300	Idaho.
20	10	5	No	400	1,000	200	Illinois.
20	10	6	No	600	or 600	200	Indiana.
20	10	5	No	200	or 40 Acres	100	Iowa.
5	5	3	No	....	160 Acres	300	Kansas.
15	15	5	No	....	1,000	100	Kentucky.
10	5	3	No	....	Total, 2,000	100	Louisiana.
20	20	6	No	....	500	20	Maine.
12	3	3	No	100	....	100	Maryland.
20	6	6	Yes	....	800	1,000	Massachusetts.
6 and 10	6	6	No	400	1,500	300	Michigan.
10	6	6	No	500	80 Acres	100	Minnesota.
7	6	3	No	....	2,000	200	Mississippi.
10	10	5	No	300	3,000	250	Missouri.
10	8	5	No	....	2,500	300	Montana.
5	5	4	No	500	2,000	200	Nebraska.
6	4	4	No	....	5,000	300	Nevada.
20	6	6	No	....	500	13½	New Hampshire.
20	6	6	No	200	1,000	200	New Jersey.
7	6	4	No	500	1,000	100	New Mexico.
20	6	6	No	250	1,000	200	New York.
10	3	3	No	500	1,000	200	North Carolina.
10	6	6	No	1,500	5,000	200	North Dakota.
5	15	6	No	100	1,000	300	Ohio.
							Oklahoma.
10	6	6	No	....	1,500	250	Oregon.
5	6	6	No	300	....	300	Pennsylvania.
20	6	6	Yes	300	....	....	Rhode Island.
20	6	6	No	500	1,000	100	South Carolina.
10	6	6	No	750	5,000	100	South Dakota.
10	6	6	No	....	1,000	500	Tennessee.
10	4	2	No	....	5,000	200	Texas.
8	6	4	No	....	1,500	300	Utah.
8	6	6	No	200	500	200	Vermont.
20	6	2	No	....	2,000	100	Virginia.
6	5	1	No	500	2,000	100	Washington.
10	10	5	No	200	1,000	300	West Virginia.
20	6	6	No	200	40 Acres	200	Wisconsin.
5	5	8	Yes	500	1,500	200	Wyoming.

In the table above these States have no amount given in the personal property column.

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

INVENTIONS	DATE	INVENTOR	NATIVITY
Discoveries of electrical phenomena,	{ 1560	William Gilbert, . . .	England
Won the title of "founder of the science of electricity,"	{ 1603		
Screw printing-press,	1620		
Spirally grooved rifle barrel,	1620	Blaew,	Germany
Iron furnaces,	1621	Koster,	England
The use of steam,	1630	Lord Dudley,	England
The first authentic reference in English literature to the use of steam in the arts.		David Ramseye,	England
Bay Psalm Book, first book published in the colonies,	1640		Massachusetts
Barometer,	1643	Torricelli,	Italy
Steam engine, atmospheric pressure,	1663	Thomas Newcomen,	England
Machine for generating electricity,	1681-6	Otto von Guericke,	Germany
First newspaper in America, "Public Occurrences,"	1690		
First paper mill in America,	1690	William Rittenhouse,	Pennsylvania
First steam engine with a piston,	1690	Denys Papin,	France, France
The manufacture of plate glass established,	1695		
First to discover difference between electric conductors and insulators,	{ 1696		
The first practical application of the steam engine,	{ 1736	Stephen Gray,	England
First to produce electric spark,	1702	Thomas Savery,	England
	{ 1708	Dr. J. Wall,	England
	{ 1716		
Thermometer,	1709	Fahrenheit,	Danzig
Electrometer, the well-known pith ball,	{ 1718	John Cantor,	England
	{ 1772		
The "Franklin" printing-press,	1725	Benjamin Franklin,	United States
Electrical glass plate machine,	{ 1727	Martin de Planta,	France
	{ 1772		
Stereotyping,	1731	William Ged,	Scotland
First to discover that electricity is of two kinds,	1733-9	Cisternay du Fay,	France
Flying shuttle in weaving,	1733	John Kay,	England
Rotary 3-color printing-press (multi-color),	1743	Platt & Keen,	England
Electric or Leyden Jar,	1745	Kleist,	Germany
Substitution of coke for coal in melting iron,	1750	Abraham Darby,	England
Lightning conductor,	1752	Benjamin Franklin,	United States
Spinning jenny,	1763	James Hargreaves,	England
Pianoforte, played in public in England in,	1767		England
Drawing rolls in a spinning machine,	1769	Richard Arkwright,	England
The introduction of the "Hollander" or beating engine for pulping rags in the manufacture of paper,	1773		
The mule spinner,	1774	Samuel Crompton,	England
Cut nails,	1775	Jeremiah Wilkinson,	United States
Circular wood saw,	1777	Miller,	England
Embryo bicycle,	1779	Branchard & Magurier,	France
Steam engine, the basis of the modern engine,	1782	James Watt,	Scotland
Gas balloon,	1783	J. E. & J. M. Montgolfier,	France
Puddling iron,	1783-4	Henry Cort,	England
Plow, with cast-iron mold board, and wrought and cast-iron shares,	1784	James Small,	Scotland
Power loom,	1785	James Cartwright,	England
First steamboat in the United States,	1786	John Fitch,	United States
Steam road wagon (first automobile),	1787	Oliver Evans,	United States
Grain threshing machine,	1788	Andrew Meikle,	England
Hobby horse, forerunner of bicycle,	1790		England
Rotary steam power printing-press, the first idea of,	1790	Wm. Nicholson,	England
Wood planing machine,	1791	Samuel Bentham,	England
Gas first used as an illuminant,	1792	Wm. Murdoch,	England
Cotton gin,	1794	Eli Whitney,	United States
Art of lithography,	1796	Alois Senefelder,	Germany
Machine for making continuous webs of paper,	1800	Louis Robert,	France
Electric battery discovered,	1800	Volta,	Italy
Steam coach,	1801	Richard Trevithick,	England
Wood mortising machine,	1801	M. J. Brunel,	England
Pattern loom,	1801	M. J. Jacquard,	France
First fire-proof safe,	1801	Richard Scott,	England
Steamboat on the Clyde, "Charlotte Dundas,"	1802	William Symington,	England
First photographic experiments,	1802	Wedgwood & Davy,	England
Planing machine,	1802	J. Bramah,	England
The application of steam to the loom,	1803	William Horrocks,	England
Steel pen,	1803	Wise,	England
Steam locomotive on rails,	1804	Richard Trevithick,	England
Application of twin-screw propellers in steam navigation,	1804	John Stevens,	United States
Process of making malleable-iron castings,	1804	Lucas,	England
First life preserver,	1805	John Edwards,	England
Electro-plating,	1805	Luigi Brugnatelli,	Italy
Knitting machine, the latch needle in the,	1806	Jeandean,	France
Steamboat navigation on the Hudson River,	1807	Robert Fulton,	United States
Percussion or detonating compound,	1807	A. J. Forsyth,	Scotland
First street gas lighting in England,	1807	F. A. Winsor,	England
Band wood saw,	1808	Newberry,	England
Voltaic arc,	1808	Sir Humphry Davy,	England
First steamboat to make a trip to sea, the "Phoenix,"	1808	John Stevens,	United States
Multi-wire telegraphy,	1809	Sommering,	Germany
Revolving cylinder printing-press,	1810	Frederick Koenig,	Germany
Breech-loading shotgun,	1811	Thornton & Hall,	United States
Storage battery,	1812	J. B. Ritter,	Germany
Dry pile (prototype of dry battery),	1812	Zamboni,	Italy
First practical steam rotary printing-press, paper printed on both sides,	1814	Frederick Koenig,	Germany

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

INVENTIONS	DATE	INVENTOR	NATIVITY
First locomotive in United States,	1814	George Stephenson,	England
First circular wood saw made in this country,	1814	Benjamin Cummings,	United States
Heliography,	1814	Jos. N. Niece,	France
Kaleidoscope,	1814	Sir David Brewster,	England
Miners' safety lamp,	1815	Sir Humphry Davy,	England
Dry gas meter,	1815	S. Clegg,	England
Knitting machine,	1816	Brunel,	England
"Draisine" bicycle,	1816	Baron von Drais,	Germany
"Columbian" press, elbowed pulling bar, number of im- pressions per hour, 50,	1817	George Clymer,	United States
Stethoscope,	1819	Laënnec,	France
Electro-magnetism discovered,	1819	H. C. Oersted,	Denmark
Lathe for turning irregular wood forms,	1819	Thomas Blanchard,	United States
The theory of electro-dynamics first propounded,	1820	Andre Ampère,	France
Electroscope,	1820	Bohenberg,	Germany
The conversion of the electric current into mechanical mo- tion,	1821	Michael Faraday,	England
Galvanometer,	1822	Schweigger,	Germany
Multi-color printing,	1822	P. Force,	United States
Calculating machine,	1822	Charles Babbage,	England
Discovery of thermo-electricity,	1823	Professor Seebeck,	England
Liquefaction and solidification of gas,	1823	Michael Faraday,	England
Water gas, discovery of,	1823	Ibbetson,	England
Portland cement,	1825	Joseph Aspdin,	England
Electro-magnet,	1825	Sturgeon,	England
First passenger railway, opened between Stockton and Dar- lington, England,	1825		
Electrical spur wheel,	1826	Barlow,	England
First railroad in United States, near Quincy, Mass.,	1826		
The law of galvanic circuits formulated,	1827	George S. Ohm,	Germany
Friction matches,	1827	John Walker,	United States
The reduction of aluminum,	1827	Friedrich Wohler,	Germany
Law of electrical resistance,	1827	George S. Ohm,	Germany
Improved rotary printing-press, "London Times," 5,000 impressions per hour,	1827	Cowper & Applegarth,	England
Hot air blast for iron furnaces,	1828	J. B. Neilson,	Scotland
Wood planing machine,	1828	William Woodworth,	United States
Spool electro-magnet,	1828	Joseph Henry,	United States
Tubular locomotive boiler,	1828	Séquin,	France
Spinning ring frame,	1828	John Thorp,	England
The "Washington" printing-press, lever motion and knuckle joint for a screw, number of impressions per hour, 200,	1829	Samuel Rust,	United States
First steam locomotive in United States, "Stourbridge Lion,"	1829		
Double fluid galvanic battery,	1829	A. C. Becquerel,	France
First portable steam fire engine,	1830	Brathwaite & Ericsson,	England
Magneto-electric induction,	1831	Michael Faraday,	England
Chloroform,	1831	G. J. Guthrie,	Scotland
First conception of electric telegraph,	1832	Professor S. F. B. Morse,	United States
First magneto-electric machines,	1832	Saxton,	United States
Rotary electric motor,	1832	Wm. Sturgeon,	England
Chloral-hydrate,	1832	Justus von Liebig,	Germany
Locomotive, "Old Ironsides," built,	1832	M. W. Baldwin,	United States
Link-motion for locomotives,	1832	Sir Henry James,	England
Adoption of steam whistle for locomotives,	1833	George Stephenson,	England
Reciprocating saw-tooth cutter within double guard fingers for reapers,	1833	Obed Hussey,	United States
"McCormick" reaper,	1834	Cyrus H. McCormick,	United States
Rotary electric motor,	1834	M. H. Jacobi,	Russia
Carbolic acid discovered,	1834	Runge,	Germany
Horseshoe machine,	1835	H. Burden,	United States
Constant electric battery,	1836	J. P. Daniell,	England
Acetylene gas discovered,	1836	Edmund Davy,	England
The revolver; a device "for combining a number of long barrels so as to rotate upon a spindle by the act of cock- ing the hammer,"	1836	Samuel Colt,	United States
The screw applied to steam navigation,	1836	John Ericsson,	United States
The galvanizing of iron,	1841		
Indicator-telegraph,	1837	Henry Craufurd,	England
Photographic carbon printing,	1837	Cooke & Wheatstone,	England
Babbitt metal,	1838	Mungo Ponton,	France
Vulcanization of rubber,	1839	Isaac Babbitt,	United States
The first boat electrically propelled,	1839	Charles Goodyear,	United States
Daguerreotype,	1839	Jacobi,	Germany
(First to produce a direct photographic positive in the camera by means of highly polished silver surfaced plate exposed to the vapors of iodine and subsequent development with mercury vapor.)	1839	Louis Daguerre,	France
Making photo-prints from paper negatives,	1839	Fox Talbot,	England
(First production of positive proofs from negatives.)	1839		
Photographic portraits (Daguerreotype process),	1839	Profs. Draper & Morse,	United States
First incandescent electric lamp,	1840	Grove,	England
Celestial photography,	1840	Draper,	United States
Artesian well,	1840		Paris
Pneumatic caissons,	1841	M. Triger,	France

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

INVENTIONS	DATE	INVENTOR	NATIVITY
Pianoforte automatically played,	1842	M. Seytre,	France
Water gas, utilization of,	1842	Selligne,	France
Steam hammer,	1842	James Nasmyth,	Scotland
Typewriting machine,	1843	Charles Thurber,	United States
First telegram sent,	1844	Professor S. F. B. Morse,	United States
The use of nitrous oxide gas as an anæsthetic,	1844	Dr. Horace Wells,	United States
The electric arc light (gas retort carbon in a vacuum),	1844	Léon Foucault,	France
First telegraphic message, Washington, Baltimore,	1844	Professor S. F. B. Morse,	United States
Automatic adjustment of electric arc light carbons,	1845	Thomas Wright,	England
Double cylinder printing-press,	1845	R. Hoe & Co.,	United States
Pneumatic tire,	1845	R. W. Thompson,	England
Sewing machine,	1846	Elias Howe,	United States
Printing telegraph,	1846	House,	United States
Suez canal started,	1846	De Lesseps,	France
Ether as an anæsthetic,	1846	Dr. Morton,	United States
Electric cautery,	1846	Crusell,	Russia
Artificial limbs,	1846		
Gun cotton,	1846	Schönbein,	Germany
First pianoforte keyboard player,	1846	Debain,	France
Chloroform in surgery,	1847	Dr. Simpson,	Scotland
Nitro-glycerine,	1847	Sobrero,	
Time-lock,	1847	Savage,	United States
Hoe's lightning press, capable of printing 20,000 impressions per hour,	1847	Richard M. Hoe,	United States
Match-making machinery,	1848	A. L. Dennison,	United States
Breech gun-lock, interrupted thread,	1849	Chambers,	United States
Magazine gun,	1849	Walter Hunt,	United States
Steam pressure gauge,	1849	Bourdon,	France
Lenticular stereoscope,	1849	Sir David Brewster,	England
Latch needle for knitting machine,	1849	J. T. Hibbert,	United States
"Corliss" engine,	1849	G. H. Corliss,	United States
Printing-press, curved plates secured to a rotating cylinder,	1849	Jacob Worms,	France
Mercerized cotton,	1850	John Mercer,	England
Collodion process in photography,	1850	Scott Archer,	England
American machine-made watches,	1850		United States
Electric locomotive,	1851	Dr. Page,	United States
Self-raker for harvesters,	1851	W. H. Seymour,	United States
Breech-loading rifle,	1851	Maynard,	United States
Icemaking machine,	1851	J. Gorrie,	United States
Ophthalmoscope,	1851	Helmholtz,	Germany
The Ruhmkorff coil,	1851	Ruhmkorff,	Germany
Fire-alarm telegraph,	1852	Channing & Farmer,	United States
Reticulated screen for half-tone photographic printing,	1852	Fox Talbot,	England
Soda process of making pulp from wood,	1853	Watt & Burgess,	United States
Laws of magneto-electric induction,	1853	Michael Faraday,	England
Laws of electro-statics,	1853	Michael Faraday,	England
Electrolysis,	1853	Michael Faraday,	England
Duplex telegraph,	1853	Gintl,	Austria
Photographic roll films,	1854	Melhuish,	England
Diamond rock drill,	1854	Herman,	United States
Four-motion feed for sewing machines,	1854	A. B. Wilson,	United States
Magazine firearm,	1854	Smith & Wesson,	United States
Fat decomposed by water or steam at high temperature, since largely used in soap making,	1854	R. A. Tilghman,	United States
Safety matches,	1855	Lundstrom,	Sweden
Iron-clad floating batteries first used in Crimean War,	1855		
Cocaine,	1855	Gaedeke,	Germany
Process of making steel, blowing air through molten pig iron,	1855	Sir Henry Bessemer,	England
Dryplate photography,	1855	Dr. J. M. Taupenot,	
Bicycle,	1855	Ernst Michaux,	France
Sleeping car,	1856	Woodruff,	United States
Aniline dyes,	1856	Perkins,	England
Printing machine for the blind (contains elements of the present typewriting machine),	1856	Alfred E. Beach,	United States
Regenerative furnace,	1856	Wm. Siemens,	England
Refining engine in paper pulp making,	1856	T. Kingsland,	United States
Coal-oil first sold in the United States,	1857	Messrs. Stout & Hand,	United States
First sea-going iron-clad war vessel, the "Glorie,"	1857		France
Ground wood pulp,	1858	Henry Voelter,	Germany
Inclined elevator and platform in the reaper,	1858	J. S. Marsh,	United States
Cable car,	1858	E. A. Gardner,	United States
Breech-loading ordnance,	1858	Wright & Gould,	United States
Feed injector for boilers,	1858	Giffard,	France
First Atlantic cable,	1858	Cyrus Field,	United States
"Great Eastern" launched,	1859		
Storage or secondary battery,	1860	Gaston Planté,	France
Singing telephone,	1860	Philip Reis,	Germany
Ammonia absorption ice machine,	1860	F. P. E. Carré,	France
Improved stereotyping process,	1861	Charles Craske,	United States
Shoe-sewing machine,	1861	George McKay,	United States
Driven well, a tube with a pointed perforated end driven into the ground,	1861	Col. N. W. Green,	United States
Passenger elevator,	1861	E. G. Otis,	United States
Barbed-wire fence introduced,	1861		United States
Calcium carbide produced,	1862	Frederich Woehler,	Germany

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

INVENTIONS	DATE	INVENTOR	NATIVITY
Revolving turret for floating battery,	1862	Theodore Timby,	United States
First iron-clad steam battery, "Monitor,"	1862	John Ericsson,	United States
Gatling gun,	1862	Dr. R. J. Gatling,	United States
Smokeless gunpowder,	1863	J. F. E. Schultze,	Prussia
Pneumatic pianoforte player (regarded as first to strike keys by pneumatic pockets),	1863	M. Fourneaux,	France
Explosive gelatine,	1864	A. Nobel,	France
Rubber dental plate,	1864	J. A. Cummings,	United States
Automatic grain-binding device,	1864	Jacob Behel,	United States
Process of making fine steel,	1865	Martin,	United States
Antiseptic surgery,	1865	Sir Joseph Lister,	England
Web-feeding printing-press,	1865	William Bullock,	United States
Automatic shell ejector for revolver,	1865	W. C. Dodge,	United States
Open-hearth steel process,	1866	Siemens-Martin,	England
Compressed air rock drill,	1866	C. Burleigh,	United States
Torpedo,	1866	Whitehead,	United States
Dynamo electric machine,	1866	Wilde,	England
Sulphite process for making paper pulp from wood,	1867	Tilghman,	United States
Dynamo electric machine,	1866	Siemens,	Germany
Disappearing gun carriage,	1868	Moncrief,	England
First practical typewriting machine,	1868	C. L. Sholes,	United States
Dynamite,	1868	A. Nobel,	France
Oleomargarine,	1868	H. Mege,	France
Water heater for steam fire engine,	1868	W. A. Brickell,	United States
Sulky plow,	1868	B. Slusser,	United States
Railway air-brake,	1869	George Westinghouse,	United States
Tunnel shield (operated by hydraulic power),	1869	Alfred E. Beach,	United States
A curved spring tooth harrow,	1869	David L. Garver,	United States
Dynamo-electric machine,	1870	Gramme,	France
Celluloid,	1870	J. W. & Isaac Hyatt,	United States
Rebounding gun-lock,	1870	L. Hailer,	United States
The Goodyear welt shoe-sewing machine,	1871	Goodyear,	United States
Photographic gelatino-bromide emulsion (basis of present rapid photography),	1871	R. L. Maddox,	England
Continuous web printing-press,	1871	Hoe & Tucker,	United States
Grain binder,	1871	S. D. Locke,	United States
Compressed air rock drill,	1871	S. Ingersoll,	United States
Positive motion weaving loom,	1872	J. Lyall,	United States
Theory that light is an electric phenomenon,	1872	Clerk Maxwell,	England
Automatic air brake,	1872	George Westinghouse,	United States
Automatic car coupler,	1873	E. H. Janney,	United States
The photographic platinotype process, (Prints by this process are permanent.)	1873	Willis,	England
Quadruplex telegraph,	1873	T. A. Edison,	United States
Twine binder for harvesters,	1873	M. L. Gorham,	United States
Gelatino-bromide photographic emulsion (sensitiveness to light greatly increased by the application of heat),	1873	Charles Bennett,	England
Self-binding reaper,	1873	Locke & Wood,	United States
Barbed-wire machine,	1874	Glidden & Vaughan,	United States
Siphon recorder for submarine telegraphs,	1874	Sir William Thompson,	England
Store cash carrier,	1875	D. Brown,	United States
Illuminating water gas,	1875	T. S. C. Lowe,	United States
Roller flour mills,	1875	F. Wegmann,	United States
Middlings purifier for flour,	1875	Geo. T. Smith,	United States
Ice-making machine,	1875	R. P. Pictet,	Switzerland
Speaking telephone,	1876	Alex. G. Bell,	United States
Electric candle, (The first step towards the division of the electric current for lighting.)	1876	Paul Jablochhoff,	Russia
Continuous machine for making tobacco cigarettes,	1876	Russell,	United States
Steam feed saw mills,	1876	D. C. Prescott,	United States
The first Portland cement plant in United States,	1876		Coplay, Pa.
Phonograph,	1877	T. A. Edison,	United States
Gas engine,	1877	N. A. Otto,	United States
Carbon microphone,	1877	T. A. Edison,	United States
Telephone transmitter of variable resistance,	1877	Emil Berliner,	United States
Carbon filament for electric lamp, (Beginning of the incandescent vacuum electric light.)	1878	T. A. Edison,	United States
Rotary disk cultivator,	1878	Mallon,	United States
Decided advance in the "expression" of self-playing pianofortes,	1878	Gally,	United States
Automatic grain binder,	1879	J. F. Appleby,	United States
Cathode rays discovered,	1879	Sir Wm. Crookes,	England
Electric railway,	1879	Siemens,	Germany
Steam plow,	1879	W. Foy,	United States
Magazine rifle,	1879	Lee,	United States
"Blake" telephone transmitter,	1880	Blake,	United States
Hammerless gun,	1880	Greener,	United States
Storage battery or accumulator,	1880	Camille A. Faure,	France
Typhoid bacillus isolated,	1880	Eberth & Koch,	Germany
Pneumonia bacillus isolated,	1880	Sternberg,	United States
Button-hole machine,	1881	Reece,	United States
Improvement in "expression" of self-playing pianofortes,	1882	Schmaele,	United States
Hand photographic camera for plates,	1881	Wm. Schmid,	United States
Tuberculosis bacillus isolated,	1882	Robert Koch,	Germany
Hydrophobia bacillus isolated,	1882	Louis Pasteur,	France

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

INVENTIONS	DATE	INVENTOR	NATIVITY
Cholera bacillus isolated,	1884	Robert Koch,	Germany
Diphtheria bacillus isolated,	1884	Loeffler,	Germany
Lockjaw bacillus isolated,	1884	Nicolaier,	France
Antipyrine,	1884	Kuno,	United States
Linotype machine,	1884	Ottmar Mergenthaler,	Germany
The rear-driven chain safety bicycle,	1884	George W. Marble,	United States
Chrome tanning of leather,	1884	Schultz,	United States
Process of reducing aluminum,	1885	Cowles,	England
Gas burner,	1885	Carl Welsbach,	Germany
Hydraulic dredge,	1885	Bowers,	United States
First electric railway in United States, Hampden and Baltimore, Md.,	1885		
Contact device for overhead electric trolley,	1885	C. J. Van Depoele,	United States
Graphophone,	1886	Bell & Tainter,	United States
Electric welding,	1886	Elihu Thompson,	United States
Combined harvester and thresher,	1886	Matteson,	United States
Band wood saw,	1887	D. C. Prescott,	United States
Cyanide process of obtaining gold and silver,	1887	McArthur & Forrest,	United States
System of polyphase electric currents,	1887	Nicola Tesla,	United States
Incandescent gas light,	1887	Carl A. Von Welsbach,	Austria
(The formation of a cone-shaped interwoven mantle of thread coated with a refractory rare earth and rendering the same incandescent by the heat rays of a Bunsen gas burner, regardless of how the gas is produced.)			
Process of annealing armor plate,	1888	Harvey,	United States
"Kodak" snap-shot camera,	1888	Eastman & Walker,	United States
(Constructed to use a continuous sensitized ribbon film.)			
Process of making artificial silk,	1888	H. DeChardonnet,	France
Hertzian waves or electric-wave radiation,	1888	Heinrich Hertz,	Germany
First rotary cement kilns in United States,	1889		Coplay, Pa.
Nickel steel,	1889	Schneider,	United States
Process for making aluminum,	1889	Chas. M. Hall,	United States
Electric plow,	1890	W. Stephens,	United States
Improved linotype machine,	1890	Ottmar Mergenthaler,	Germany
Bicycles equipped with pneumatic tires,	1890		
Krag-Jørgensen magazine rifle,	1890	Krag-Jørgensen,	United States
"Cohere" for receiving electric waves,	1891	Edouard Branly,	England
Rotary steam turbine,	1891	C. A. Parsons,	England
Cement-lined paper-pulp digester,	1891	G. F. Russell,	United States
Round bale cotton press,	1891	Brown,	United States
Microphone,	1891	Emile Berliner,	United States
Power loom,	1891	Northrup,	United States
Commercial application of formic-aldehyde,	1892	J. J. A. Trillat,	France
Shoe-last lathe, for different lengths,	1893	Kimball,	United States
Kinetoscope,	1893	T. A. Edison,	United States
Process for making carborundum,	1893	E. G. Acheson,	United States
Calcium carbide produced in electric furnace,	1893	Thos. L. Willson,	United States
Process for liquefying air,	1895	Carl Linde,	Germany
Electric locomotive, B. & O. Bell Tunnel,	1895		United States
X-rays,	1895	Prof. W. C. Roentgen,	Germany
Acetylene gas from calcium carbide,	1895	Thomas L. Willson,	United States
System of wireless telegraphy,	1896	G. Marconi,	Italy
Foundation laid of science of radio-activity, i. e., emanation of penetrating rays from luminescent bodies,	1896	Henri Becquerel,	France
Use of ultra-violet rays in treating diseases,	1896	Niels R. Finsen,	Denmark
Nernst electric light,	1897	Walter Nernst,	Germany
(Method of rendering a clay compound capable of conducting electricity and thence becoming brilliantly incandescent without a vacuum.)			
Mercury vapor electric light,	1900	Peter Cooper Hewitt,	United States
(An artificial light composed strictly of the ultra-blue violet rays of the spectrum obtained by passing an electric current through a partial vacuum tube filled with mercury vapor, the latter acting as a conductor. Possesses remarkable actinic power for photographic purposes.)			
Air-ship,	1901	M. Santos-Dumont,	France
Automobile mower,	1901	Deering Harvester Co.,	United States
The first passenger steam turbine ship, "Edward VII.,"	1901	Denny & Brothers,	England
The first oil-burning steamship built in the United States, "Nevada,"	1902		
English Pacific cable, Canada-Australia,	1902		
American Pacific cable,	1903		United States
Berlin-Zossen Road, 130½ miles an hour,	1903		Germany

Iron. A metallic element very widely diffused in nature, and occurring in great abundance in many parts of the world. Its symbol is Fe, from the Latin word *ferrum*; atmospheric weight, 56. In the perfectly pure state, iron is almost unknown. In the arts, it is met with in the forms of malleable iron, steel and cast iron. The first being iron as free from impurities as it

is possible to get it, and the other two being iron containing carbon in proportions varying from 0.65 to upwards of 5.0 per cent. Good malleable iron, known also as wrought iron, is of a grayish color. Its melting-point approaches that of platinum; although at temperature far below this it assumes a soft, pasty condition, and is capable of being welded together into one mass.

This property of iron is of the greatest value in manufacturing operations. Its hardness and toughness is scarcely altered by heating to redness and cooling suddenly, forming in this respect a striking contrast to steel and cast iron. It is very malleable and ductile, and at a red heat may be hammered and rolled into any desired form. By these operations, it acquires a fibrous texture, and increases greatly in tenacity. The presence of foreign substances modifies the working properties of wrought iron; thus, sulphur in quantities of upwards of 0.01 per cent. renders it what is technically called *red short*—that is, brittle and non-tenacious at a red heat. Phosphorus, if present in quantities of more than 0.5 per cent., renders the iron brittle at the ordinary temperature, or, as it is technically called, *cold short*. In dry air malleable iron is unchanged, but air and moisture quickly oxidize it, forming a red rust, which in time would eat through the whole mass. When heated to whiteness in a current of air, malleable iron burns with vivid scintillations, producing magnetic oxide, and at a red heat decomposes aqueous vapor; forming magnetic oxide and evolving hydrogen. Cast iron, or pig iron, is iron containing the highest amount of carbon. There are two kinds, viz: gray cast iron, which is granular in texture and of a gray color; and white cast iron, which is much whiter, has a crystalline and somewhat conchoidal fracture, and is very hard and brittle. The chief difference between these two kinds of cast iron appears to be due to the state in which the carbon is contained in them. The carbon may be removed from cast iron by heating it to the welding point and stirring it about in the air or with oxide of iron (*Puddling process*), or by blowing air through it in the melted state (*Bessemer process*). In the latter operation the heat produced by the combustion of the carbon is sufficient to raise the temperature to such a degree, that when at last the carbon is all burnt off the resulting malleable iron is still in the liquid state. If these operations are stopped before all the carbon is burnt off, steel of various qualities is produced. Cast iron is the form in which the

metal is almost invariably prepared from its ore, by processes whose description would occupy too much space, the reader being therefore referred to works on metallurgy for further details. The most important iron ores are magnetite, or magnetic iron ore, which has a black metallic luster, sometimes forms mountainous masses, and contains 72.41 per cent. of iron. *Hematite red iron ore*, or *oligistic iron*, which is ferric oxide, occurs either crystalline or massive, and contains 70 per cent. of iron. *Specular iron ore*, or *elba iron ore*, which is also a ferric oxide, and is iron gray and crystalline. *Brown iron ore*, which is a hydrated sesquioxide of iron, contains when pure 59.89 per cent. of iron, and is of a compact earthy appearance. *Spathic iron ore*, or *sparry iron ore*, a native protocarbonate of iron, crystallizing in masses of a light yellowish color, and containing 48.27 per cent. of iron. And *clay iron ore*, which consists of hematite or spathic iron ore with clay.

In 1906, the production of pig iron and steel in the principal producing countries of the world was as follows:

COUNTRIES	PIG IRON, Tons	STEEL, Tons
Austria-Hungary,	1,403,500	1,195,000
Belgium,	1,431,160	1,185,660
Canada,	550,616	
France,	3,319,032	2,371,377
Germany,	12,478,067	11,135,085
Italy,	30,450	409,000
Russia,	2,350,000	1,763,000
Spain,	387,500	251,600
Sweden,	552,250	351,900
United Kingdom,	10,210,178	6,565,670
United States,	25,712,106	23,738,559
All other countries,	650,000	420,000

In the United States, Pennsylvania is still far in advance as a producer of pig iron. Ohio, Illinois, and Alabama follow in the order named. Pennsylvania produces one-half of the Bessemer pig iron, nearly three-fourths of the low phosphorus, nearly three-fourths of the basic, and high percentages of the other grades, as well as fully 50 per cent. of the cast steel and rolled iron and steel products of the country. Ohio ranks second, Illinois third, and New York fourth in mill products.

MERCHANT MARINE OF THE WORLD

From the Latest Lloyd Register.

FLAG		STEAMSHIPS		SAILING-SHIPS		STEAMSHIPS AND SAILING VESSELS	
		No. of Steamers	Tonnage Gross	No. of Ships	Tonnage Net	No. of Ships	Tonnage
British	United Kingdom,	8,202	15,930,368	1,225	1,069,300	9,517	16,999,668
	Colonies,	1,219	1,070,771	781	250,229	2,000	1,321,000
	Total,	9,511	17,001,139	2,006	1,319,529	11,517	18,320,668
American	Sea,	1,029	1,503,059	1,905	1,225,652	2,934	2,728,711
	Northern Lakes,	465	1,618,718	47	119,045	512	1,737,763
	Philippine Islands,	83	39,118	29	6,336	112	45,454
United States	Total,	1,577	3,160,895	1,981	1,351,033	3,558	4,511,928
Argentine,		169	105,916	74	27,155	243	133,071
Austro-Hungarian,		312	677,221	14	11,398	326	688,619
Belgian,		131	191,597	2	1,118	133	192,715
Brazilian,		283	191,088	78	19,597	361	210,685
Chilean,		87	107,727	63	48,589	150	156,316
Chinese,		50	67,634	.....	.....	50	67,634
Cuban,		51	60,645	9	1,625	60	62,270

MERCHANT MARINE OF THE WORLD—Continued

FLAG	STEAMSHIPS		SAILING-SHIPS		STEAMSHIPS AND SAILING VESSELS	
	No. of Steamers	Tonnage Gross	No. of Ships	Tonnage Net	No. of Ships	Tonnage
Danish,	501	650,955	358	77,635	859	728,590
Dutch,	455	776,855	92	36,772	547	813,627
French,	809	1,284,308	674	477,415	1,483	1,761,783
German,	1,713	3,705,700	381	404,862	2,094	4,110,562
Greek,	255	421,743	156	44,789	411	466,532
Haitian,	6	3,956	..	..	6	3,956
Honduras,	6	13,256	1	148	7	13,404
Italian,	397	823,325	710	396,084	1,107	1,219,409
Japanese,	829	1,068,747	6	3,129	835	1,071,876
Mexican,	44	27,025	18	4,021	62	31,046
Montenegrin,	..	..	25	6,299	25	6,299
Norwegian,	1,181	1,264,002	980	654,529	2,161	1,918,531
Peruvian,	12	10,723	38	15,519	50	26,242
Portuguese,	65	62,675	133	38,363	198	101,038
Rumanian,	23	28,949	2	419	25	29,368
Russian,	687	720,198	672	217,713	1,359	937,911
Sarawak,	5	3,717	..	..	5	3,717
Siamese,	6	3,045	..	..	6	3,045
Spanish,	468	673,301	110	35,448	578	708,749
Swedish,	889	686,517	649	191,031	1,538	877,548
Turkish,	132	106,929	170	58,092	302	165,021
Uruguayan,	33	38,146	28	19,301	61	57,447
Venezuelan,	10	4,091	9	1,282	19	5,373
Other countries,	49	27,726	18	6,211	67	33,937
Total,	20,746	33,969,811	9,457	5,469,106	30,203	39,438,917

Radium. A newly discovered element of intense activity, casting off minute corpuscles at a velocity of 130,000 miles per second, and without appreciably diminishing in substance. Radium is exceedingly rare and costly, enormous quantities of pitchblende yielding only a minute amount of the element. M. and Madame Curie, the discoverers of radium, are authority for the statement that a pound of radium, if it could be had, would have a value of nearly a million dollars, and that the thirtieth part of a grain costs five dollars. Many scientists affirm that radium can give light without heat or combustion. Sir William Ramsay has demonstrated that the emanations of radium, under certain conditions, have the power to transmute certain substances. The same claim was made by Prof. McCoy of the University of Chicago, early in 1908.

Railroad. A road constructed of tracks of iron, called rails, on which roll the wheels of carriages drawn either by horses or by steam-engines, and to which they are confined by ledges or flanges raised on the tires of the wheels. Nearly two centuries before the introduction of the locomotive, wooden rails were used at the collieries, in the north of England; their upper surfaces being, at a later period, covered with a plate or bar of iron, to render them more durable; and about the year 1776, flanges being added to them to keep the wagons from running off. The imperfections of plate, or as they were also called tram rails, led, about the year 1801, to the adoption of edge rails, or those at present exclusively used; and, soon after, cast iron was supplanted by wrought iron, in their manufacture. The use of locomotives, instead of animals, was suggested in 1794; but no locomotive seems to have been constructed until 1805. At first cogged wheels, and various kinds of propellers, were employed with locomotives, from an erroneous supposition that there would not be sufficient friction between the driving-wheels

and rails to prevent the former from turning round, without the production of progressive motions; but in 1814, plain wheels were tried and found perfectly efficient. The locomotive did not come into practical use until the opening of the Liverpool & Manchester Railway in 1830; although the first railway Act received the sanction of the British legislature in 1801, by the incorporation of the Surrey Iron Railway Company. This was indeed a comparatively trifling enterprise, for it extended only from Wandsworth to Croydon, and was merely applicable for the carriage of coals, lime, etc., the moving-power being derived from horses alone. In the United States a horse-railroad was completed in 1827, from the granite quarries of Quincy, Mass., a distance of three miles, to the Neponset River. A second road was laid out in January, 1827, from the coal-mines of Mauch Chunk, Penn., to the Lehigh River, a distance of nine miles, and with various ramifications the whole length exceeded thirteen miles. The Delaware and Hudson Canal Company, in 1828, constructed a railroad from their coal-mines to Honesdale, the terminus of their canal, and sent a commissioner to England for the purchase of rail, iron, and locomotives. In the spring of 1829, these locomotives arrived in this country. Of the succeeding great railway enterprises, one of the principal was the Baltimore & Ohio line, commenced in 1828, and originally planned for horse-cars only, but, influenced by the success of steam locomotives in England, their employment was adopted on this road instead of horse-power. In August, 1830, the Hudson & Mohawk Railroad, from Albany to Schenectady, was commenced. Several similar enterprises were undertaken in the Pennsylvania coal region in 1830, and in the legislative session of 1830-31 no fewer than twelve railroad companies were incorporated. In 1831 the Baltimore & Susquehanna Railroad commenced

operations. Such were the beginnings of these vast undertakings which now permeate all portions of the United States, connect the Atlantic and Pacific oceans, and entirely control the traveling interests. All the American lines are constructed and worked by private companies. The following table, from "Poor's Manual for 1907," shows the mileage, assets, liabilities, earnings, expenditures, and traffic of all surface steam railroads in the United States:

RAILROAD STATISTICS

Mileage of Railroads,	218,433.46
Second Tracks and Sidings,	88,569.48
Total Track,	307,002.94
Steel Rails in Track,	297,378.15
Iron Rails in Track,	9,624.79
Locomotives,	55,439
Cars, Passenger,	33,896
Cars, Baggage, Mail, etc.,	12,295
Cars, Freight,	1,979,667
Total Revenue Cars,	2,025,858

LIABILITIES

Capital Stock,	\$7,106,408,976
Bonded Debt,	8,487,139,981
Unfunded Debt,	210,538,466
Current Accounts,	722,023,502
Sinking and Other Funds,	242,256,471
Total Liabilities,	\$16,768,367,396

ASSETS

Cost of Railroad and Equipment,	\$12,719,736,342
Other Investments,	3,305,782,328
Sundry Assets,	488,368,638
Current Accounts,	941,399,320
Total Assets,	\$17,455,286,628

Excess of Assets over Liabilities,	\$686,919,222
Miles of Railroad Operated,	220,633.33
Passenger Train Mileage,	488,554,209
Freight Train Mileage,	608,324,539
Mixed Freight Mileage,	27,711,651

Total,	1,124,590,399
Passengers Carried,	815,774,188
Passenger Mileage,	25,842,462,029
Tons of Freight Moved,	1,610,099,829
Freight Mileage,	216,653,795,696

TRAFFIC EARNINGS

Passengers,	\$ 521,231,337
Freight,	1,659,925,643
Miscellaneous,	165,483,306

Total Traffic Revenue,	\$2,346,640,286
Net Earnings,	\$790,187,712
Receipts from Other Sources,	100,292,369
Total Available Revenue,	\$890,480,081

PAYMENTS

Interest on Bonds,	\$269,926,395
Other Interest,	13,107,169
Dividends on Stocks,	225,601,245
Miscellaneous,	79,806,024
Rentals—Interest,	39,612,179
Dividends,	27,739,680
Miscellaneous,	15,042,783
Taxes,	68,169,833
Total Payments,	\$739,005,308

Surplus, \$151,474,773

* Including, in 1906, 1905, and 1904, real estate mortgages, equipment trust obligations, etc., previously included in item "unfunded debt."

The capital invested in the railways of the world in 1907 is approximately: Europe, \$23,049,778,500; United States, \$17,455,286,628; other parts of the world, \$3,063,834,122.

Telegraph. The term is now usually restricted to the electric telegraph, which stands at the head of all mediums for rapid and elabo-

rate communications. As a system, the electric telegraph involves the following apparatus: (1) of a battery or other source of electric power; (2) of a line-wire or conductor for conveying the electric current from one station to another; (3) of the apparatus for transmitting, interrupting, and, if necessary, reversing the current at pleasure; and (4) of the indicator or signaling instrument. The line-wires for overhead lines are usually of iron, protected from atmospheric influence by galvanizing or by being varnished with boiled linseed-oil, a coating of tar, or other means, and are supported upon posts, to which they are attached by insulators. In underground lines the wires are insulated by a gutta-percha or other non-conducting covering, and inclosed in iron or lead pipes. The battery and line-wire are common to all telegraphic systems; it is in the method of producing the signals that the great variation exists; but in all of them advantage has been taken of one or other of the three following properties of the current: (1) its power of producing the deflection of a magnetic needle, as in the galvanometer (which see); (2) its power of temporarily magnetizing soft iron; and (3) its power of producing chemical decomposition.

The *electro-magnetic* instrument of Professor Morse, which, however, in its perfected form owed much to the genius of Morse's associates, Joseph Henry and Alfred Vail, is an application of the second of the above properties. By means of an electro-magnet, an armature, which is attracted when the magnet is temporarily magnetized, a lever moved by the armature, and a style which moves with the lever, this instrument impresses a message in dots and dashes on a ribbon of moving paper, and by it forty words may be sent in a minute. This "dot and dash" system which was invented by Morse, is now in extensive use. A modification of this instrument, called a sounder, in which the lever makes audible sounds by coming in contact with a brass rod, indicates the message by the length of the strokes produced. Frequently the Morse is simultaneously a recorder and sounder. It being necessary that this instrument should produce sharp and distinct impressions, and the current being weak for stages over fifty miles, a relay, or subsidiary electro-magnetic circuit, is added to it in the case of longer distances. The transmitting instrument is a lever, which, on being pressed, permits the current from the battery to flow into the line-wire during the time the contact is made. Both on account of its intrinsic merits and for the sake of uniformity the Morse is the most extensively used system, being that in use in America and on the continent of Europe, and being also largely employed in Britain. Wheatstone's "universal telegraph" is also one in extensive use. The currents employed are magneto-electric, and are alternately positive and negative. They produce successive reversals of polarity in the delicate *mirror* or *reflecting galvanometer*, which Sir W. Thomson invented in connection with the Atlantic telegraph, that distinguished electrician has invented a self-recording instrument, consisting of a light coil of wire, very delicately suspended in a magnetic field, the motions of which coil, when a

current is passed through it, are the means by which messages are recorded. The coil is attached to a very light glass siphon in the shape of an exceedingly fine capillary tube, through which ink from a reservoir is drawn by electric attraction, the reservoir and the moving paper ribbon upon which the ink falls being oppositely electrified. The extremity of the siphon is not in contact with, but only very near, the paper. When there is no current the ink traces a straight line; when the current is passing the marks or deviations constituting the letters are produced. The delicacy and rapidity of this instrument are even greater than those of the mirror galvanometer, and the siphon recorder accordingly is highly valued. About the year 1837 electric telegraphs were first established as commercial speculations in three different countries. Steinheil's system was carried out at Munich, Morse's in America, and Wheatstone and Cooke's in England. The first telegraphs ever constructed for commercial use were laid down by Wheatstone and Cooke on the London and Birmingham and Great Western Railways. The wires, which were buried in the earth, were five in number, each acting on a separate needle, but the expensiveness of this plan soon led to its being given up. The single-needle and double-needle telegraphs of the same inventors have been more extensively used. Among recent improvements in electric telegraphy the most important are those by which a wire can be used for more than one message at a time. In 1872, a workable method of sending simultaneously two messages in opposite directions on the same line was introduced, and it was also discovered that two messages could be sent in the same direction (duplex telegraphy). The two plans being combined formed quadruplex telegraphy, by which the message-carrying powers of the wires have been greatly multiplied.

Wireless Telegraphy has made use of three different methods, which may be classed as conduction, induction, and wave methods. In the first method currents are sent through the earth from an electrode to another at the sending station. By induction, use is made of the property which alternating currents possess of exciting similar currents in neighboring conductors, the aim being to get as intense current as possible in the secondary circuit. Mr. W. H. Preece, England, by combining the two has signaled forty miles thus. The third method is by electro-magnetic waves which are detected by a *coherer* — a glass tube filled with metallic filings, into the end of which the terminals of a relay circuit enter, sent thereto by a transmitter. The wave falls on other conductors, and, the spark gap being replaced by a coherer, the relay circuit is closed and a signal is made. Signor Marconi, an English naturalized Italian, introduced the latter method, by which he has signaled across the Atlantic. To Marconi is generally ascribed the honor of inventing wireless telegraphy, or the sending of telegraphic messages without the use of other medium than the atmosphere. Trans-Atlantic passenger vessels are now fitted out with wireless telegraphic apparatus, by means of which almost constant communication may be maintained between passing

vessels or either shore. Wireless telegraphy, from the commercial standpoint, has yet to prove its value over the systems at present in vogue. Naval and military strategy have undergone changes since the necessity for wire and cable communication has been removed. In the Russo-Japanese War wireless telegraphy was extensively employed with great precision by the fleets of both powers.

The principal system in America is that of the De Forest Wireless Telegraph Company. The inventor, Dr. de Forest, is a graduate of Yale, and claims that he can syntonise his circuits. The receiver in this system is a telephonic apparatus, and from twenty to thirty words a minute can be transmitted and recorded. The main advantage claimed for it is that its usefulness is not impaired by the presence of other systems unless the transmitting stations are practically in juxtaposition. The De Forest Wireless Telegraph Company transmitted a regular daily news service from the St. Louis Exhibition in 1904 to various newspapers, and messages were sent from the long-distance tower to Chicago, 300 miles away. The speed attained was twenty-five to thirty-five words a minute. The capacity of the De Forest system for operating simultaneously several different transmitters was clearly shown, and the ability of the operator to tune his receivers at will to various transmitters with different wave-lengths. The company has five long-distance naval stations, and powerful land stations at New York, Boston, New Orleans, St. Louis, Chicago, etc.; and it is claimed that these stations are able to operate from 300 to 1,200 miles overland.

Telescope, an optical instrument essentially consisting of a set of lenses fixed in a tube or a number of sliding tubes, by which distant objects are brought within the range of distinct or more distinct vision. The law of action by which the telescope assists human vision is twofold, and that under all the varieties of its construction. A distant object viewed by the unaided eye is placed in the circumference of a large circle, having the eye for its center, and consequently the angle under which it is seen is measured by the minute portion of the circumference which it occupies. Now, when the distance is great, it is found that this angle is too small to convey to the retina any sensible impression — all the light proceeding from the object is too weak to affect the optic nerve. This limit to distinct vision results from the small aperture or pupil of the eye. The telescope substitutes its large object lens or reflector for the human eye, and consequently receives a quantity of light proportioned to its area or surface; hence a distant point, inappreciable by the eye alone, is rendered visible by the aid of the telescope.

The telescope almost universally employed in modern times is the astronomical telescope, made up of two converging lenses, known as the refracting telescope.

The best specimens of the astronomical telescope in existence are the thirty-six-inch glass of the Lick observatory and the forty-inch glass of the Yerkes observatory, both made by the late Alvan G. Clark. On good nights these

instruments permit the use of a magnifying power of from 2,000 to 3,000.

This invention is noticed by Leonard Digges, about 1571. Roger Bacon, about A. D. 1250, described telescopes and microscopes exactly, and yet neither were made till one Metius, at Alkmaar, and Jansen, of Middleburgh, made them about the same time; the latter from an accidental discovery made by his children, 1590-1609. Galileo imitated their invention by its description, and made three in succession, one of which magnified a thousand times. With these he discovered Jupiter's moons and the phases of Venus. Telescopes became very popular, and were improved by Zuechi, Huygens, Gregory, and Newton; and finally by Martin, Hall, Dolland, Herschel, Clark, and others.

THE LARGE REFRACTORS OF THE WORLD

INSTITUTION	APERTURE IN INCHES	FOCAL LENGTH IN FEET	DATE OF ERECTION
Yerkes Observatory, Wisconsin, U. S. A.,	40.0	62.0	1897
Lick Observatory, California, U.S.A.,	36.0	57.8	1888
Lick Observatory, California, U.S.A.,	33.0	49.2	...
National Observatory, Meudon,	32.5	53.0	1891
Astrophysical Observatory, Potsdam,	31.1	39.4	...
Bischoffsheim Observatory, Nice,	30.3	52.6	1889
Imperial Observatory, Poulkova,	30.0	42.0	1882
National Observatory, Paris,	28.9	...	...
Royal Observatory, Greenwich,	28.0	28.0	1894
Imperial Observatory, Vienna,	27.0	34.0	1894
Royal Observatory, Greenwich,	26.0	26.0	1897
Naval Observatory, Washington,	26.0	32.5	1871
Leander McCormick Observatory, Vir- ginia, U. S. A.,	26.0	32.5	1874
Cambridge University Observatory,	25.0	...	1868
National University, Meudon,	24.0	52.2	1891
Harvard College, Cambridge, U. S. A.,	24.0	11.3	1894
Royal Observatory, Cape of Good Hope,	24.0	22.6	1897
Lowell Observatory, Mexico,	24.0	31.0	1895
National Observatory, Paris,	23.6	59.0	1889
Halstead Observatory, Princeton, U. S. A.,	23.0	32.0	1881
Etna,	21.8	...	...
Buckingham Observatory,	21.2	...	...
M. Porro, Private Observatory, Italy,	20.5	...	...
Chamberlin Observatory, Colorado, U. S. A.,	20.0	28.0	1891
Manila Observatory, Philippines,	20.0	...	1892
Astrophysical Observatory, Potsdam,	19.7	41.2	...
Imperial Observatory, Strassburg,	19.1	23.0	1880
Milan Observatory, Italy,	19.1	23.0	...
North-Western Observatory, Illinois, U. S. A.,	18.5	27.0	1863
Dearborn Observatory,	18.5	...	...
National Observatory, La Plata,	18.1	29.5	1890
Lowell Observatory, Mexico,	18.0	26.3	1894
Flower Observatory, Philadelphia, U. S. A.,	18.0	...	1896
Vander Zee Observatory,	18.0	...	...
Royal Observatory, Cape of Good Hope,	18.0	22.6	1897

Trades-unions. A trade society is defined in the report of the Social Science Committee on the subject appointed at Bradford, in 1859, "as a combination of workmen to enable each to secure the conditions most favorable for labor"; and although trades-unions, as they are generally called, almost always have other objects in view in addition to that specified in the definition, that object is their distinguishing one. Combinations of this sort in Great Britain are considerably more than three centuries old, for there is a statute of the year 1548 expressly

directed against them. Trades-unions generally endeavor to regulate the prices and the hours of labor, and in many cases the number of men engaged by an employer, the number of apprentices which may be bound in proportion to the journeymen employed by a master, and the like. As accessories, these unions may collect funds for benefit societies, and undertake the insurance of tools, libraries, and reading-rooms; but their fund, to which every member must regularly contribute a stated sum, is principally reserved for enabling the men to resist, by strikes and otherwise, such action on the part of the employers as would tend to lower the rate of wages or lengthen the hours of labor. That trades-unions enable the men to benefit by the state of trade more than they otherwise would have done would appear from the fact that the worst-paid trades are those without unions. Trades-unions are also said to have furthered the safety of the laborer by producing beneficial modifications of the conditions in which he works. Some hostility against trades-unions has been produced by the outrages of a more or less serious nature of which some of the unions, or members of them, have been guilty, such outrages being directed against the property of employers, or against the persons and tools of non-union men. The trades-unions of the United States embrace over 27,000 local organizations, and about 2,000,000 affiliated members; in late years having increased rapidly. In 1905, there were 1,136 unions in Britain with a membership of 1,887,000.

Trusts. A corporation derives certain benefits from the State, and is in turn subject to certain State control. To avoid this State control, and in order thus to enable the largest firms and corporations in any particular trade to combine, and by combined action to limit production and raise prices while killing off the competition any outsider may dare to offer, what are known as trusts have been devised. A trust is merely the combination for the above purposes of the large interests in any branch of trade. There is no incorporation. There is an agreement between the parties; the profits of all are divided in certain ascertained proportions, and the public cannot from any sensible sign know whether or not such a combination exists. Secrecy and irresponsibility are its objects.

Turbine. a kind of horizontal water-wheel, made to revolve by the escape of water through orifices, under the influence of pressure derived from a fall. Turbines are now made after a vast variety of patterns. The oldest and simplest is the Scotch turbine, or Barker's mill (which see). In another common form the water passes vertically down through the wheel between the fixed screw blades, which give it a spiral motion, and then strike similar blades attached to a movable spindle, but placed in the opposite direction, so that the impact of the water communicates a rotatory motion to the blades and spindles. Or the water may be passed from the center horizontally outwards through fixed curved blades, so as to give it a tangential motion, and thereby cause it to act on the blades of the wheel which revolves outside. The steam turbine has been successfully applied to the pro-

pulsion of vessels, notably in the great ocean liners, "Lusitania" and "Mauretania," and is steadily growing in favor. The number of vessels so fitted is not large, but the development is none the less remarkable when we remember that pleasure, and cross-channel steamers, torpedo-boat destroyers, and yachts are now fitted with these engines, while ten years ago not one turbine vessel was in service. The principal point in favor of a turbine is, that it has no reciprocating motion, like that of the piston of a common engine, and therefore the hull of a vessel is not shaken so much as by reciprocating engines. Turbine engines weigh much less, and occupy less room, than ordinary engines of the same power, so that passenger accommodation can be increased. Usually three sets of engines are employed, each driving a separate propeller shaft, which again conduces to steadiness of motion.

Type. The name given to the stamps or dies which impress the letters on the paper in printing. Printers, in early times, made the letters which they used, but in process of time the necessity for a division of labor created the distinct business of type-founding. The type-metal is a compound of lead and antimony, with a large proportion of tin. The antimony gives hardness and sharpness of edge to the composition, while the tin gives toughness and tenacity, and removes the brittleness which antimony causes when used in a large proportion without tin. The proper proportions of these metals are regulated by the size of the type, a greater quantity of antimony being employed for small letters. A complete assortment of types is called a *font*, which may be regulated to any extent. Every type-founder has a scale showing the proportional quantity of each letter required for a font; and a peculiar scale is required for every language. For the English language, the following is a type-founder's scale for the small letters of a font of types of a particular size and weight:

a	8,500	h	6,400	o	8,000	v	1,200
b	1,600	i	8,000	p	1,700	w	2,000
c	3,000	j	400	q	500	x	400
d	4,400	k	800	r	6,200	y	2,000
e	12,000	l	4,000	s	8,000	z	200
f	2,500	m	3,000	t	9,000		
g	1,700	n	8,000	u	3,400		

Beginning with the largest, the subjoined specimens show the various sizes of type commonly used on book-work..

Eighteen Point.
Fourteen Point. Twelve Point.

Eleven Point. Ten Point. Nine Point.
Eight Point. Seven Point. Six Point.

Five and one-half Point. Five Point. Four and one-half Point.
Three and one-half Point.

Emerald is a type now little used, and in size is between Seven Point and Six Point.

Type-writer, a machine used as a substitute for the pen, and by which the letters are produced by the impression of inked types. The essential elements in such machines are a movement to bring the type into position, an inking device, an impression movement, and means for letter and line spacing. A successful form of the machine has a series of letter keys arranged in rows, to be worked by the fingers of both hands, a letter being imprinted on the paper (which moves automatically) each time a key is struck. In recent years several type-writers have been brought before the public, such as the Remington, Hammond, Bar-Loek etc., and improvements are made from time to time. One of the latest is the "English" type-writer, which has only two rows of keys, numbering twenty-nine in all. Each key works a lever to which is attached a capital letter, an ordinary Roman letter, and a figure. The capital letters and the figures are brought into play by means of two small shift stops, and the printing as it is performed is in full view of the operator.

WORLD'S SUBMARINE CABLES

CABLES OWNED BY GOVERNMENT ADMINISTRATIONS

From the Official Documents issued by the International Bureau of Telegraphic Administrations, Berne, with additions.

COUNTRY	No. OF CABLES WITH ONE OR MORE CORES	LENGTH IN NAUTICAL MILES	
		Of Cables	Of Conductors
Argentine Republic,	13	59.824	138.544
Austria,	47	224.250	235.339
Bahamas,	1	211.000	211.000
Belgium,	12	54.514	279.856
Brazil,	23	37.779	66.414
British Guiana,	5	84.000	95.000
British India, Indo-European Telegraph Department Government Administration,	157	2,168.013	1,711.885
Bulgaria,	1	0.538	0.538
Canada,	26	334.750	334.750
Ceylon and India (Joint),	2	66.300	66.300
China,	1	113.000	113.000
Denmark,	156	171.100	880.300
Dutch Indies,	7	891.490	891.490
France and Algeria,	156	4,913.824	5,847.200
France (West Africa),	3	1,567.238	1,567.238
French Indo-China (Cochin China, Tonquin, and Amoy),	2	1,697.326	1,697.326
Germany,	189	2,796.695	5,654.977
Great Britain and Ireland,	177	2,265.830	7,551.994
Greece,	46	54.931	54.931

WORLD'S SUBMARINE CABLES—Continued

COUNTRY	No. OF CABLES WITH ONE OR MORE CORES	LENGTH IN NAUTICAL MILES	
		Of Cables	Of Conductors
Holland,	32	241,543	780,449
Inter-Colonial System,	5	7,837,770	7,837,770
Italy,	36	1,063,088	1,112,458
Japan,	103	2,154,883	2,851,173
Macao,	1	1,930	1,930
New Caledonia,	1	1,000	1,000
New South Wales,	147	51,789	108,459
New Zealand,	16	285,682	290,466
Norway,	322	291,489	375,787
Portugal,	4	115,050	115,050
Queensland,	19	52,100	67,520
Russia in Europe, and the Caucasus,	12	328,282	408,387
Russia in Asia,	1	70,157	70,157
Senegal,	1	3,000	3,000
South Australia,	3	49,360	49,360
Spain,	15	1,771,346	1,771,346
Sweden,	17	208,488	368,431
Switzerland,	2	9,827	13,400
Tasmania,	4	4,750	19,000
Turkey in Europe and Asia,	21	346,558	368,734
Victoria,	1	4,500	4,500
Western Australia,	1	3,750	3,750
Total,	1,378	32,609,748	44,006,813

Including half of Cables owned jointly with other Administrations.

CABLES OWNED BY PRIVATE COMPANIES

PRIVATE COMPANIES	No. OF CABLES WITH ONE OR MORE CORES	LENGTH OF CABLES IN NAUTICAL MILES
African Direct Telegraph Company,	10	3,031,000
Amazon Telegraph Company,	15	1,326,000
Anglo-American Telegraph Company,	14	9,507,660
Black Sea Telegraph Company,	1	337,147
Canadian Pacific Railroad Company,	9	53,940
Central and South American Telegraph Company,	15	7,500,500
Commercial Cable Company,	11	13,212,310
Commercial Pacific,	4	7,846,747
Compagnie Française des Câbles Télégraphiques,	32	12,102,423
Cuba Submarine Telegraph Company,	10	1,162,000
Deutsch Atlantische Telegraphen-Gesellschaft,	3	6,057,868
Deutsche See-Telegraphen-Gesellschaft,	1	1,111,979
Direct Spanish Telegraph Company,	2	723,460
Direct United States Cable Company,	2	3,099,958
Direct West India Cable Company,	2	1,265,300
Eastern Telegraph Company,	139	39,749,360
Eastern Extension, Australasia and China Telegraph Company,	34	24,802,240
Europe and Azores Telegraph Company,	2	1,053,150
Eastern and South African Telegraph Company,	14	9,068,052
Great Northern Telegraph Company,	28	7,003,000
Halifax and Bermuda Cable Company,	1	849,960
India Rubber, Gutta-Percha and Telegraph Works Company,	2	137,678
Indo-European Telegraph Company,	3	22,000
Mexican Telegraph Company,	3	1,529,000
Pacific and European Telegraph Company,	3	138,000
River Plate Telegraph Company,	2	2,065,224
South American Cable Company,	1	927,770
Spanish National Submarine Telegraph Company,	1	1,389,000
United States and Hayti Telegraph and Cable Company,	6	1,470,867
West African Telegraph Company,	7	1,975,100
West Coast of America Telegraph Company,	24	4,639,000
West India and Panama Telegraph Company,	27	17,283,000
Western Telegraph Company,	8	7,351,000
Western Union Telegraph Company,	8	7,351,000
Total,	437	188,682,693

† Including London Platino-Brazilian and Montevidéan and Brazilian Companies.

GENERAL SUMMARY

OWNERSHIP	No. OF CABLES WITH ONE OR MORE CORES	LENGTH OF CABLES IN NAUTICAL MILES
Government Administrations,	1,378	32,609,748
Private Companies,	437	188,682,693
Total,	1,815	221,292,441

THE WORLD'S STAPLES AND THE COUNTRIES PRODUCING THEM

(From the latest available statistics.)

COUNTRY	WHEAT <i>Bushels</i>	OATS <i>Bushels</i>	POTATOES <i>Bushels</i>	CORN <i>Bushels</i>	SUGAR <i>Tons</i>	RICE <i>Pounds</i>	COTTON <i>Bales</i>	WOOL <i>Pounds</i>	BARLEY <i>Bushels</i>	RYE <i>Bushels</i>
United States,	735,261,000	964,905,000	260,741,000	2,707,994,000	(b) 431,796	378,000,000	10,575,017	291,783,032	178,916,000	33,375,000
Canada,	132,510,000	251,852,000	55,422,000	21,582,000	(b) 243,000	62,000,000	900,000	12,000,000	50,836,000	2,283,000
Mexico,	5,000,000	17,000	6,552,000	89,000,000	113,367	96,700,000	341,559	10,000,000	6,000,000	60,000
South America,	155,337,000	252,320,000	767,528,000	146,125,000	694,000	800,000	.....	510,000,000	.....	.....
Austria-Hungary,	268,690,000	40,000,000	57,159,000	139,304,000	(b) 1,335,000	10,800,000	.....	64,300,000	152,384,000	154,012,000
Belgium,	13,000,000	18,793,000	29,953,000	19,649,000	(b) 280,000	.....	765	.....	5,000,000	22,000,000
Bulgaria,	55,076,000	38,000,000	29,953,000	.....	.....	.....	.....	.....	12,882,000	10,818,000
Denmark,	4,400,000	16,000,000	16,000,000	.....	.....	.....	.....	.....	22,000,000	19,000,000
Finland,	130,000	258,454,000	438,000,000	.....	(b) 755,000	.....	.....	91,000,000	5,000,000	10,000,000
France,	324,725,000	580,875,000	1,775,379,000	24,030,000	(b) 2,250,000	.....	.....	49,590,000	37,004,000	51,095,000
Germany,	144,754,000	18,000,000	.....	97,859,000	(b) 190,000	676,600,000	8,200	21,451,000	142,901,000	378,948,000
Greece,	108,000,000	8,000,000	87,043,000	.....	.....	.....	2,700	.....	8,000,000	4,000,000
Italy,	4,700,000	8,000,000	25,832,000	16,000,000	.....	.....	.....	13,410,000	4,000,000	14,000,000
Netherlands,	800,000	26,165,000	.....	59,275,000	.....	.....	.....	.....	3,000,000	800,000
Norway,	118,867,000	633,265,000	1,032,888,000	33,551,000	.....	.....	.....	.....	33,539,000	8,900,000
Portugal,	450,000,000	1,632,000	.....	21,431,000	(b) 1,450,000	.....	.....	361,100,000	304,290,000	638,400,000
Rumania,	33,011,000	45,632,000	84,000,000	31,900,000	15,000	478,600,000	.....	102,600,000	4,848,000	5,560,000
Russia (European),	154,907,000	68,631,000	74,819,000	.....	.....	.....	.....	8,200	91,185,000	31,828,000
Serbia,	6,277,000	.....	.....	.....	.....	.....	.....	.....	14,942,000	26,247,000
Spain,	4,000,000	187,272,000	268,267,000	.....	.....	.....	7,000	67,500,000	.....	2,000,000
Sweden,	23,000,000	.....	.....	.....	2,223,400	70,691,000,000	3,546,000	133,124,762	69,462,000	.....
Switzerland,	62,354,000	.....	10,000,000	.....	.....	14,538,100,000	142,000	85,000,000	73,050,000	.....
Turkey (European),	318,386,000	.....	.....	.....	.....	.....	72,000	.....	.....	.....
United Kingdom,	18,200,000	79,678,000	18,865,000	.....	.....	.....	612,000	60,000,000	7,750,000	30,500,000
British India,	16,000,000	8,000,000	1,700,000	400,000	.....	.....	60,000	33,000,000	40,000,000	.....
Japanese Empire,	56,000,000	2,000,000	2,000,000	30,000,000	60,000	20,000,000	.....	3,000,000	850,000	.....
Persia,	33,000,000	.....	.....	.....	.....	.....	.....	.....	.....	6,000
Russia (Asiatic),	28,000,000	.....	.....	.....	.....	.....	1,250,173	.....	300,000	.....
Turkey (Asiatic),	12,000,000	9,000	466,000	4,822,000	.....	.....	.....	.....	7,863,000	99,000
Algeria,	4,000	2,411,000	11,071,000	8,374,000	249,000	.....	.....	480,000,000	1,945,000	65,000
Egypt,	409,000	10,805,000	5,025,000	506,000	390,000	33,400,000	1,881	.....	1,056,000	.....
Sudan (Anglo-Egyptian),	70,681,000	13,108,000	.....	.....	225,000	554,000,000	6,098	.....	.....	.....
Tunis,	7,013,000	.....	.....	.....	150,500	9,400,000	.....	.....	.....	.....
New Zealand, . . . . .	.....	.....	.....	.....	19,000	5,000,000,000	.....	.....	.....	.....
Hawaii, . . . . .	.....	.....	.....	.....	.....	6,431,000,000	.....	.....	.....	.....
Porto Rico, . . . . .	.....	.....	.....	.....	.....	558,500,000	324	.....	.....	.....
Philippine Islands, . . . . .	.....	.....	.....	.....	.....	3,200,000,000	1,200,000	35,000,000	.....	.....
Central America, . . . . .	.....	.....	.....	.....	.....	50,000,000,000 (Estimated)	.....	.....	.....	.....
French Indo-China, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Java and Madura, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ceylon, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Korea, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
China, . . . . .	.....	.....	.....	.....	1,250,000	.....	.....	.....	.....	.....
Cuba, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE.—(b) Beet Sugar.

EIGHTH BOOK

SCIENCE, EDUCATION, RELIGION

LELAND STANFORD, JR., UNIVERSITY

SCIENCE, EDUCATION, RELIGION

Acetic Acid. An acid produced by the oxidation of common alcohol, and of many other organic substances. Pure acetic acid has a very sour taste and pungent smell, burns the skin, and is poisonous. From freezing at ordinary temperatures (58° or 59°) it is known as *glacial acetic acid*. Vinegar is simply dilute acetic acid, and is prepared by subjecting wine or weak spirit to the action of the air; also from malt which has undergone vinous fermentation. Acetic acid, both concentrated and dilute, is largely used in the arts, in medicine, and for domestic purposes.

Acetylene. A gaseous hydro-carbon; it is a constituent of coal-gas, and burns with a bright, smoky flame. A method of preparing acetylene in large quantities has been recently devised, by the use of carbide of calcium, formerly a rare and expensive product, but now manufactured cheaply and abundantly in the electric furnace. When this substance is thrown into water a rapid chemical transformation takes place, and acetylene is given off as one of its products. It has also been discovered that if this gas be passed through pipes and burned at a small aperture, like ordinary illuminating gas, it yields an intense white flame, surpassing in brilliancy any light known but the arc electric light. By compression, acetylene can be reduced to the liquid state, and if permitted to escape slowly into pipes, can be burned for house illumination.

Acid. A class of compounds whose general properties are: solubility in water; sour taste; power of reddening litmus; faculty of decomposing carbonates with effervescence; and the power of neutralizing alkalies and bases, forming salts. The progress of modern chemistry is gradually rendering the term *acids* less definite; and it is not improbable that it will be dropped altogether in strictly scientific writing, although in ordinary language it will be retained as a convenient term for expressing a very wide class of substances. All the above characteristics are seldom possessed together, many acids having only one or two of these properties, and some substances which are not acids possessing all of them. Thus, silicic acid is not soluble in water, has no sour taste, and does not redden litmus.

Acoustics (*a-kou'stiks*). The science of sound. It teaches the cause, nature, and phenomena of such vibrations of elastic bodies as affect the organ of hearing; the manner in which sound is produced, its transmission through air and other media, the doctrine of reflected sound or echoes, the properties and effects of different sounds, including musical sounds or notes, and the structure and action of the organ of hearing, etc. The propagation of sound is analogous to that of light, both being due to vibrations which produce successive waves, and Newton was the first to show that its propagation through any medium depended upon the elasticity of that

medium. Regarding the intensity, reflection, and refraction of sound, much the same rules apply as in light. In ordinary cases of hearing the vibrating medium is air, but all substances capable of vibrating may be employed to propagate and convey sound. When a bell is struck its vibrations are communicated to the particles of air surrounding it, and from these to particles outside them, until they reach the ear of the listener. The intensity of sound varies inversely as the square of the distance of the body sounding from the ear. Sound travels through the air at the rate of about 1,090 feet per second; through water at the rate of about 4,700 feet. Sounds may be musical or non-musical. A musical sound is caused by a regular series of exactly similar pulses succeeding each other at precisely equal intervals of time. If these conditions are not fulfilled the sound is a noise. Musical sounds are comparatively simple, and are combined to give pleasing sensations according to easy numerical relations. The *loudness* of a note depends on the *degree* to which it affects the ear; the *pitch* of a note depends on the *number* of vibrations to the second which produce the note; the *timbre*, *quality*, or *character* of a note depends on the *body* or *bodies* whose vibrations produce the sound, and is due to the form of the paths of vibrating particles. The gamut is a series of eight notes, which are called by the names, Do, Re, Mi, Fa, Sol, La, Si, Do₂; and the numbers of vibrations which produce these notes are respectively proportional to 24, 27, 30, 32, 36, 40, 45, 48. The numerical value of the interval between any two notes is given by dividing one of the above numbers corresponding to the higher note by the number corresponding to the lower note. The intervals from Do to each of the others are called a *second*, a *major third*, a *fourth*, a *fifth*, a *sixth*, a *seventh*, and an *octave*, respectively. The interval from La to Do₂ is a *minor third*. An interval of $\frac{2}{3}$ is a *major tone*; $\frac{3}{4}$ is a *minor tone*; $\frac{1}{4}$ is called a *limma*. The properties of sound were mathematically investigated by Bacon and Galileo, but it remained for Newton, Lagrange, Euler, Laplace, Helmholtz, etc., to bring the science to its present state.

Aerolite. A stone falling from the air or atmospheric regions; a meteoric stone; some suppose them to be projected by lunar volcanoes, by others they are thought to be formed in the air by the union of simpler forms of matter volatilized from the earth's surface; but they are doubtless cosmical bodies of the same nature as shooting-stars, revolving round the earth, and falling when they come within its attraction. Analyzed, they are found to consist of twenty-two of the elements found in terrestrial minerals, the most prominent being malleable metallic iron and nickel.

Agricultural Colleges. Educational institutions, chiefly under government patron-

age, for the promotion of scientific farming. In 1862, the United States Congress passed a so-called land grant act, by which land scrip, representing 30,000 acres for every Senator and Representative, was issued to the States and Territories, the object being to provide a special fund for the creation of State and Territorial agricultural colleges. The land granted to the States by the act of 1862 amounted to somewhat more than 10,000,000 acres, which by 1900 had produced a permanent fund of \$10,262,944, with lands still unsold of the estimated value of \$4,062,850, the entire proceeds being in round numbers somewhat over \$14,250,000. To this have been added other land-grant funds amounting to \$1,441,577; other permanent funds, \$14,442,194; farms and grounds, \$5,543,108; buildings, \$16,274,000; apparatus, \$1,955,859; machinery, \$1,373,696; libraries, \$1,854,942; and miscellaneous equipment, \$1,997,690, making a grand total of permanent plant of the value of \$58,944,137. On this basis sixty-five of these institutions have been established.

Three of the land-grant colleges in Southern States (Mississippi, North Carolina, and South Carolina) have recently established courses of study in textile industry, with special reference to the manufacture of cotton goods. These institutions have provided buildings of regular cotton-mill design, equipped with machinery and apparatus for textile work.

The Act of 1862 was supplemented by a second (August 30, 1890), so that under both acts, each State and Territory having an agricultural college receives an appropriation annually from the United States treasury for its support. The past few years have witnessed the establishment of short courses of study in agriculture, dairying, mechanic arts, household economy, etc., for persons who cannot take a regular course.

Albumen or Albumin (L., from *albus*, white). A substance, or rather group of substances, so named from the Latin for the white of an egg, which is one of its most abundant known forms. It may be taken as the type of the protein compounds or the nitrogenous class of food stuffs. One variety enters largely into the composition of the animal fluids and solids, is coagulable by heat at and above 160°, and is composed of carbon, hydrogen, nitrogen, and oxygen, with a little sulphur. It abounds in the serum of the blood, the vitreous and crystalline humors of the eye, the fluid of dropsy, the substance called coagulable lymph, in nutritive matters, the juice of flesh, etc. The blood contains about seven per cent. of albumen. Another variety called vegetable albumen exists in most vegetable juices and many seeds, and has nearly the same composition and properties as egg albumen. When albumen coagulates in any fluid it readily encloses any substances that may be suspended in the fluid. Hence it is used to clarify syrupy liquors. In cookery white of eggs is employed for clarifying, but in large operations like sugar-refining the serum of blood is used. From its being coagulable by various salts, and especially by corrosive sublimate, with which it forms an insoluble compound, white of egg is a convenient antidote in cases

of poisoning by that substance. With lime it forms a cement to mend broken ware.

In botany the name albumen is given to the farinaceous matter which surrounds the embryo, the term in this case having no reference to chemical composition. It constitutes the meat of the cocoanut, the flour or meal of cereals, the roasted part of coffee, etc.

Alchemy (from the Arabic article *al* and *kimia*, secret, hidden), a false science, founded on no true scientific principles, which existed in some form or other from the earliest ages, but which, in Europe at least, was made the subject of considerable study and research during the period extending from the Twelfth to the Seventeenth Century. Although it was unproductive in itself, we are yet indebted to it, if not as the parent of modern chemistry, at any rate as the science out of which chemistry has been largely developed. The enthusiasts who devoted themselves to this subject were styled *Alchemists*, and the task which they set themselves to perform was threefold, viz: (1) to discover the *philosopher's stone*, a mineral that would, by mere contact, transmute the baser metals into gold; (2) to prepare the *elixir of life*, a substance which would prolong life indefinitely; and (3) to discover the *alcahest*, or universal solvent. These three substances, and more especially the first, they firmly believed to be obtainable, and to need only a fortunate combination of materials for the production of each of them; and, accordingly, fortunes were expended, and lives wasted, in these futile endeavors. The history of Alchemy is somewhat obscure and unconnected, owing to the secrecy with which its operations were carried on; but among the most prominent characters connected with it may be mentioned the celebrated English monk, Roger Bacon, to whom the invention of gunpowder is popularly attributed, and who wrote a work entitled "The Mirror of Alchemy."

Alcohol. By this name, when standing alone, is usually understood a highly rectified spirit, the product of vinous fermentation. It is extremely light and inflammable, is colorless and transparent, appearing to the eye as pure water, and boils at 173.1°. To the palate it is exceedingly hot and burning, but without any particular taste. In the diluted state, Alcohol is sometimes called *Spirits of Wine*. It is difficult to render anhydrous; distillation alone will not produce an alcohol containing less than nine per cent. of water, and this remaining quantity must be removed by adding something which unites with the water chemically, such as quick lime. It has never been frozen.

Alexandrian Library, the largest collection of books of the ancient world, founded by Ptolemy Soter in the city of Alexandria towards the beginning of the Third Century B. C. At one time it is said to have contained 700,000 manuscripts, embracing the collected literature of Rome, Greece, India, and Egypt. It was partly destroyed by fire by a mob of fanatic Christians in A. D. 391, and was finally dispersed or destroyed during the siege of Alexandria by the Arabs under Amru (A. D. 638).

Alimentary Canal. Another name for the digestive tract of an animal. It includes the

whole passage traversed by the substances taken in as food, from their entrance into the mouth to the excretion of the indigestible residue from the rectum. In the mammalia it is made up of the following parts, viz: (1) the *mouth*; (2) the *pharynx*, a funnel-shaped cavity at the back of the mouth, which communicates with the nostrils; (3) the *œsophagus* or gullet, a straight and narrow tube which pierces through the diaphragm or midriff; (4) the *stomach*, a bag-pipe shaped cavity, the wide expanded part of which is termed the *cardiac pouch*, and the narrow, tapering part the *pylorus*; (5) the *small intestine*, remarkable for its length and for the manner in which it is necessarily coiled, and divided, for the sake of convenience, into three parts, the *duodenum*, the *jejunum*, and the *ileum*; (6) the *large intestine*, which is thick, and presents externally a peculiar, gathered-up appearance, also divided into three parts, the ascending, transverse, and descending *colon*; (7) the *rectum*, a short, wide, smooth tube, the terminal aperture of which is called the *anus*. A portion of the large intestine which projects beyond the point of its union with the small intestine is called the *cæcum*, and a little worm-like appendage to this cæcum, the function of which has not exactly been determined, is called the *vermiform appendix*. The commencement as well as the end of the small intestine, is guarded by valves—the *pyloric valve*, in the form of a sphincter muscle, separating the pylorus from the duodenum, and the *ileo-cæcal valve*, separating the ileum from the large intestine.

Alkaloids. The name given to a series of bodies derived from the vegetable kingdom, which closely resemble in their chemical action the volatile alkali *ammonia*. They all contain nitrogen, and exert a powerful influence on the ray of polarized light. Like ammonia, they combine directly with acids to form salts. The alkaloids act most powerfully on the animal economy; some, such as strychnine and nicotine, form the most violent poisons with which we are acquainted, while others, such as quinine and morphine, are valuable medicines.

Aluminium (*äl-u-mĭn'e-üm*). A metal of which the earth alumina, the chief constituent of clay, is an oxide. It is only of late years that chemists have succeeded in inventing a process for extracting it in sufficient quantities and sufficiently cheap to enable it to be used for manufacturing purposes. It has a white color somewhat resembling tin; its specific gravity is only 2.6 (about that of common glass), and hence it is frequently used in the construction of articles where lightness is an object. The melting point is much below that of silver. When heated in oxygen it burns with brilliancy and produces alumina. It is not affected by sulphuretted hydrogen like silver. From its sonorosity it will probably be employed in the construction of musical instruments. With from 92½ to 95 per cent. of copper it forms an alloy named *aluminium-bronze*, which is scarcely distinguishable by the eye from gold, whilst it is nearly as hard as iron. This alloy is coming into use in the manufacture of ornamental articles.

Amphibia. A class of vertebrate animals, which in their early life breathe by gills

or branchiæ, and afterwards *partly or entirely* by lungs. The frog, breathing in its tadpole state by gills and afterwards throwing off these organs and breathing entirely by lungs in its adult state, is an example of the latter phase of amphibian existence. The Proteus of the underground caves of Central Europe exemplifies forms in which the gills of early life are retained throughout life, and in which lungs are developed in addition to the gills. A second character of this group consists in the presence of two occipital "condyles," or processes by means of which the skull articulates with the spine or vertebral column; Reptiles possessing one condyle only. The class is divided into four orders: the Ophiomorpha (or serpentiform), represented by the blindworms, in which limbs are wanting and the body is snake-like; the Urodela or "Tailed" Amphibians, including the newts, proteus, siren, etc.; the Anoura, or Tailless Amphibia, represented by the frogs and toads; and the Labyrinthodontia, which includes the extinct forms known as Labyrinthodons.

Aorta. In anatomy, the great artery or trunk of the arterial system, proceeding from the left ventricle of the heart, and giving origin to all the arteries except the pulmonary. It first rises towards the top of the breast-bone, when it is called the *ascending aorta*; then makes a great curve, called the transverse or *great arch of the aorta*, whence it gives off branches to the head and upper extremities; thence proceeding towards the lower extremities, under the name of the *descending aorta*, it gives off branches to the trunk; and finally divides into the two ilia, which supply the pelvis and lower extremities.

Apocrypha (from the Greek *apokruptō*, I conceal). The name given especially to those additional Jewish writings which are not contained in the Hebrew Bible, or the Old Testament, but which were introduced into the Septuagint, from whence they were transferred into the Vulgate, and into many subsequent translations. By the Jews they are not held to be canonical. They are received by the Roman Catholic Church; but by the Church of England, and by other Protestant Churches, though they are held to be of value for historical purposes and for "instruction of manners," they are not used for "establishment of doctrine." Besides the Apocrypha of the Old Testament, which belong to the literature of the later Jews, there are certain apocryphal Christian writings, which are usually described as the Apocrypha of the New Testament.

Apostle. One who is sent off or away from; one sent on some important mission; a messenger; a missionary. The name given, in the Christian Church, to the twelve men whom Jesus selected from His disciples as the best instructed in His doctrines, and the fittest instruments for the propagation of His religion. Their names were as follows: Simon Peter, Andrew, his brother; James the greater, and John, his brother, who were sons of Zebedee; Philip of Bethsaida, Bartholomew, Thomas, Matthew; James, the son of Alphaeus, commonly called James the less; Lebbeus, his brother, who was surnamed Thaddeus, and was called Judas, or Jude; Simon the Canaanite, and

Judas Iscariot. Of this number, Simon Peter, John, James the greater, and Andrew were fishermen; and Matthew, a publican or tax-gatherer. When the apostles were reduced to eleven, by the suicide of Judas, who had betrayed Christ, they chose Matthias by lot, on the proposition of St. Peter. Soon after, their number became thirteen, by the miraculous vocation of Saul, who under the name of Paul became one of the most zealous propagators of the Christian faith.

Arabian Numerals. The numeral characters now used in our arithmetic. They were introduced into Europe (Spain) about the close of the Tenth Century, by the Moors or Arabs; but they were known to the Hindus so early as the Sixth Century, and they might more properly therefore be called *Hindu numerals*. They were brought to England in the Fourteenth or Fifteenth Century, but their use was not general till the introduction of the art of printing. Up to the Sixteenth Century, accounts continued to be kept in the old Roman numerals.

Arian. A follower of Arius, Presbyter of Alexandria in the Fourth Century A. D., or one holding the system of doctrine associated with his name. In the year 317, Alexander, Bishop of Alexandria, having publicly expressed his opinion that the Son of God is not only of the same dignity as the Father, but of the same essence (in Greek, *ousia*). Arius, one of the Presbyters, considered this view as leaning too much to Sabellianism, and, rushing to the other extreme, he declared that the Son of God was only the first and noblest of created beings, and though the universe had been brought into existence through His instrumentality by the Eternal Father, yet to that Eternal Father He was inferior, not merely in dignity, but in essence. The views of Arius commended themselves to multitudes, while they were abhorrent to still more; fierce controversy respecting them broke out, and the whole Christian world was soon compelled to take sides. The Arians greatly weakened themselves by splitting into sects, and the doctrines regarding the relation of the three Divine Personages authoritatively proclaimed at Nice were at last all but universally adopted. They may be found detailed in what are popularly termed the Nicene and the Athanasian Creeds. They were held almost without a dissentient voice through the Middle Ages, and were cordially accepted by the leading reformers.

Arteries. The blood-vessels by which the blood is carried out from the heart, and distributed to the general system and to the lungs. The arteries which proceed to the general system all commence in one large vessel, the *aorta*, which divides and subdivides into a large number of branches, which become, like those of a tree, more and more minute as they are farther removed from the trunk, until they ultimately terminate in what are called the *capillaries*. These arteries all contain pure, oxidized, scarlet blood, which is hence known as *arterial blood*. The arteries which proceed to the lungs, on the other hand,—the *pulmonary arteries*, as they are called,—are two vessels which have their origin in the right ventricle of the heart, and

carry the blood to the right and left lung respectively. They contain unpurified, dark-colored blood, the same as that which is contained in the veins, and hence known as *venous blood*. The principal arteries are the two *carotid* arteries, which supply the head; the two *sub-clavian* arteries, which proceed to the arms or front limbs; the two *iliac* arteries, to the legs or hind limbs; the *celiac axis*, which supplies the liver, spleen, stomach, and intestines; and the *renal* arteries, which supply the kidneys. The arteries and the veins may readily be distinguished from each other in the dead body, the former being round or cylindrical, and having their walls comparatively stiff and thick, while the walls of the latter are collapsed and flaccid. It is owing to this fact that an artery when cut continues to bleed until death ensues, and the only way to arrest the bleeding is to tie the severed end nearest the heart; the flow of blood, too, from a cut artery is of a jet-like nature, owing to the force with which the blood is propelled from the heart, while from a cut vein the blood merely trickles out. The inner lining of the arteries is perfectly smooth, and there are no valves as in the veins. The arteries derived their name from the fact of their having been supposed by the ancients to contain air, being generally found empty after death.

Articles, The Thirty-nine, of the Church of England, a statement of the particular points of doctrine, thirty-nine in number, maintained by the English Church; first promulgated by a convocation held in London in 1562-1563, and confirmed by royal authority; founded on and superseding an older code issued in the reign of Edward VI. The five first articles contain a profession of faith in the Trinity; the incarnation of Jesus Christ, His descent to Hell and His resurrection; the divinity of the Holy Ghost. The three following relate to the canon of the Scripture. The eighth article declares a belief in the Apostles', Nicene, and Athanasian creeds. The ninth and following articles contain the doctrine of original sin, of justification by faith alone, of predestination, etc. The nineteenth, twentieth, and twenty-first declare the Church to be the assembly of the faithful; that it can decide nothing except by the Scriptures. The twenty-second rejects the doctrine of purgatory, indulgences, the adoration of images, and the invocation of saints. The twenty-third decides that only those lawfully called shall preach or administer the sacraments. The twenty-fourth requires the liturgy to be in English. The twenty-fifth and twenty-sixth declare the sacraments effectual signs of grace (though administered by evil men), by which God excites and confirms our faith. They are two: baptism and the Lord's Supper. Baptism, according to the twenty-seventh article, is a sign of regeneration, the seal of our adoption, by which faith is confirmed and grace increased. In the Lord's Supper, according to article twenty-eighth, the bread is the communion of the body of Christ, the wine the communion of His blood, but only through faith (article 29); and the communion must be administered in both kinds (article 30). The twenty-eighth article condemns the doctrine of transubstantia-

tion, and the elevation and adoration of the Host; the thirty-first rejects the sacrifice of the mass as blasphemous; the thirty-second permits the marriage of the clergy; the thirty-third maintains the efficacy of excommunication. The remaining articles relate to the supremacy of the king, the condemnation of Anabaptists, etc. They were ratified anew in 1604 and 1628.

Asteroids, or Planetoids. A numerous group of very small planets revolving round the sun between the orbits of Mars and Jupiter, remarkable for the eccentricity of their orbits and the large size of their angle of inclination to the ecliptic. The diameter of the largest is not supposed to exceed 450 miles, while most of the others are very much smaller. They number over 330, and new members are being constantly discovered. Ceres, the first of them, was discovered January 1, 1801, and within three years more Pallas, Juno, and Vesta were seen. The extraordinary smallness of these bodies, and their nearness to each other, gave rise to the opinion that they were but the fragments of a planet that had formerly existed and had been brought to an end by some catastrophe. For nearly forty years investigations were carried on, but no more planets were discovered till December 8, 1845, when a fifth planet in the same region was discovered. The rapid succession of discoveries that followed was for a time taken as a corroboration of the disruptive theory, but the breadth of the zone occupied makes the hypothesis of a shattered planet more than doubtful. Their mean distances from the sun vary between 200,000,000 and 300,000,000 miles; the periods of revolution between 1,191 days (Flora) and 2,868 (Hilda). Their eccentricities and inclinations are on the average greater than those of the earth, but their total mass does not exceed one-fourth that of the earth.

Athanasian Creed. A formulary or confession of faith, said to have been drawn up by Athanasius, Bishop of Alexandria, in the Fourth Century, to justify himself against the calumnies of his Arian enemies. That it was really composed by this father seems more than doubtful; and modern divines generally concur in the opinion of Dr. Waterland, that it was written by Hilary, Bishop of Arles, in the Fifth Century. It is certainly very ancient; for it had become so famous in the Sixth Century as to be commented upon, together with the Lord's Prayer and Apostles' Creed, by Venantius Fortunatus, Bishop of Poitiers. It was not, however, then styled the Athanasian Creed, but simply the Catholic Faith. It is supposed to have received the name of Athanasius on account of its agreeing with his doctrines, and being an excellent summary of the subjects of controversy between him and the Arians. The true key to the Athanasian Creed lies in the knowledge of the errors to which it was opposed. The Sabellians considered the Father, Son, and Holy Spirit as one in person; this was "confounding the persons"; the Arians considered them as differing in essence; this was "dividing the substance"; and against these two errors was the creed originally framed. This creed was used in France about the year 850; was

received in Spain about 100 years later, and in Germany about the same time. It was both said and sung in England in the Tenth Century; was commonly used in Italy at the expiration of that century, and at Rome a little later. This creed is appointed to be read in the Church of England.

Atom. A part so small as not to be divisible. An ultimate particle of matter. Two opinions, directly opposed to each other, have long had currency with regard to the constituent particles of material things; the one, that matter is composed of an assemblage of minute particles, or atoms, incapable of further division; the other, that there is no limit to its divisibility, the smallest conceivable particle still consisting of an infinity of parts. The first of these theories, which is commonly distinguished by the name of *Atomic Philosophy*, was originated in Greece by Leucippus; it was supported by Democritus, and subsequently improved by Epicurus and his disciples. The Epicureans professed to account for the origin and formation of all things by supposing that these atoms were endued with gravity and motion, and thus came together into the different organized bodies we now see.

Atomic Theory. A theory as to the existence and properties of atoms (see *Atom*); especially, in chemistry, the theory accounting for the fact that in compound bodies the elements combine in certain constant proportions, by assuming that all bodies are composed of ultimate atoms, the weight of which is different in different kinds of matter. It is associated with the name of Dalton, who systematized and extended the imperfect results of his predecessors. On its practical side the atomic theory asserts three *Laws of Combining Proportions*: (1) the Law of Constant or Definite Proportions, teaching that in every chemical compound the nature and proportion of the constituent elements are definite and invariable; thus water invariably consists of eight parts by weight of oxygen to one part by weight of hydrogen; (2) the Law of Combination in Multiple Proportions, according to which the several proportions in which one element unites with another invariably bear towards each other a simple relation; thus one part by weight of hydrogen unites with eight parts by weight of oxygen to form water, and with sixteen parts (*i. e.*, 8×2) of oxygen to form peroxide of hydrogen; (3) the Law of Combination in Reciprocal Proportions, that the proportions in which two elements combine with a third also represent the proportions in which, or in some simple multiple of which, they will themselves combine; thus in olefiant gas hydrogen is present with carbon in the proportion of one to six, and in carbonic oxide oxygen is present with carbon in the proportion of eight to six, one to eight being also the proportions in which hydrogen and oxygen combine with each other. The theory that these *proportional numbers* are, in fact, nothing else but the relative weights of atoms so far accounts for the phenomena that the existence of these laws might have been predicted by the aid of the atomic hypothesis long before they were actually discovered by analysis. In themselves,

however, the laws do not prove the theory of the existence of ultimate particles of matter of a certain relative weight; and, although many chemists, even without expressly adopting the atomic theory itself, have followed Dalton in the use of the terms *atom* and *atomic weight*, in preference to *proportion*, *combining proportion*, *equivalent*, and the like, yet in using the word *atom* it should be held in mind that it merely denotes the proportions in which elements unite. These will remain the same whether the atomic hypothesis which suggested the employment of the term be true or false. Dalton supposed that the atoms of bodies are spherical, and invented certain symbols to represent the mode in which he conceived they might combine together.

Augsburg, Confession of. Name given to the celebrated declaration of faith, compiled by Melancthon, revised by Luther and other reformers, and read before the Diet of Augsburg, June 25, 1530. It consisted of twenty-eight articles, seven of which refuted Roman Catholic errors, and the remaining twenty-one set forth the Lutheran creed. Soon after its promulgation, the last hope of reforming the Roman Catholic Church was abandoned and complete severance followed. An answer by the Roman Catholics was read August 3, 1530; when the Diet declared that it had been refuted. Melancthon then drew up another confession. The first is called the unaltered, and the second, the altered form.

Aurora Borealis, called variously *Northern Lights*, *Polar Lights*, or *Streamers*, a phenomenon which generally appears in the northern parts of the sky, and presents an appearance somewhat resembling the dawn or break of day. It is a luminous meteor, and appears to proceed from a sort of haze or cloud in the northern part of the heavens. The upper edge of the cloud is whitish, the lower often dark or thick, and from the upper part streams of light shoot up in the form of a column, with, in general, a tremulous motion. This phenomenon generally commences two or three hours after sunset, and continues for a few hours, sometimes the whole night; it most frequently occurs in autumn and the early part of winter. Auroras are visible in most countries in high latitudes of the northern hemisphere, and it is asserted that similar appearances have been witnessed in high southern latitudes, but they are not known in tropical regions. No satisfactory answer has yet been furnished as to the cause of these polar lights; there is no doubt, however, that they are the result of electricity in the upper regions of the atmosphere, but how produced we are at present unable to say.

Baptists. A denomination of evangelical Christians, who differ from others in respect to baptism. They baptize all who repent and believe the gospel, at whatever age, and reject the substitution of sprinkling for immersion, which they maintain was originally practiced in the administration of baptism, and (except in the case of the sick) universally observed throughout Christendom for 1,300 years. Open communion the Baptists of the United States generally regard as an anomaly. They believe in the spiritual unity of the whole believing Church

under Christ. Their government is congregational, each church being complete in itself for the management of its internal affairs. They associate, invite councils for advice, and cooperate in benevolent, educational, and missionary enterprises; but all such associations disclaim the slightest jurisdiction over the churches. Baptists make no distinction but that of office between clergymen and laymen. Elders, as evangelists and missionaries, are ordained and sent out to preach the gospel. In the United States the Baptist, with one exception, is now the largest denomination of evangelical Christians. In 1845, the southern Baptists, by mutual consent, formed separate organizations for their benevolent enterprises. As early as 1764, the Baptists founded their first college in Rhode Island. They have publication societies at Philadelphia, Charleston, and Nashville, and maintain about fifty periodical organs, including a quarterly review. The Baptists of the United States also support the American and foreign Bible society, the American Baptist missionary union, the southern Baptist board of foreign and domestic missions, the Baptist home mission society, and in part the "American Bible Union." Their missions are planted in Canada, Oregon, California, New Mexico, Hayti; in France, Spain, Germany, Denmark, Sweden, Norway; in western and central Africa; in southern India, Assam, Burmah, Siam, and China. In doctrine the Baptists of this country are Calvinistic, but with much freedom and moderation. Besides the general body of Baptists, there are in the United States nine smaller bodies agreeing with them in regard to baptism, but differing more or less on other points, viz: the Seventh-day, Free-will, Anti-mission, and General or Six-principle Baptists, Tunkers, Mennonites, Christians, Campbellites, and Winebrennarians. Some Baptists trace their history in a succession of pure churches from the Third Century to the Reformation. Cyril of Alexandria and Innocent I. of Rome began the persecution which they suffered for centuries. In England, from the time of Henry VIII. to William III., the Baptists struggled to gain their footing, and to secure liberty of conscience for all. In the time of Cromwell they first gained a fair hearing. Introduced into Rhode Island with Roger Williams and John Clark in 1638, their history for more than a century, in most of the colonies, is that of proscribed and banished men. Their prosperity dates from the Revolutionary War.

Blood. The nutritive fluid of the tissues, consists of a transparent colorless fluid, the *liquor sanguinis*, and minute solid bodies, the "corpuscles," which float in it. The *liquor sanguinis* consists of water, in which are dissolved fibrine, albumen, chlorides of sodium and potassium, phosphates of soda, lime, and magnesia, together with fatty and extractive matters, the latter the product of the metamorphosis of the tissues. The corpuscles are of two kinds—white and red; the white are larger and less numerous than the red, being in healthy blood in the proportion of two or three to 1,000. In certain forms of disease the number of these white blood-corpuscles is increased. They pre-

sent a granular appearance on the surface, have a nucleolus which is speedily brought into view by the action of dilute acetic acid, and are identical with the lymph-corpuscle. Under the microscope they vary their forms in the same way as the *amæba*; hence these movements are called *amæboid*. The red corpuscles are peculiar to vertebrates, and seem to have their origin in the white corpuscles, are oval and nucleated in fishes, reptiles, and birds, but in man and the mammalia generally they are non-nucleated, and are biconcave, flattened disks, their edges being thicker than the center; hence the dark appearance of the latter when seen under the microscope. The color of the blood varies. In the arteries it is of a bright scarlet color, while in the veins it is of a dark purple color. The chief difference between arterial and venous blood is that the former contains more oxygen and less carbonic acid than the latter. The red blood corpuscles possess great powers of absorbing oxygen. They receive oxygen in the lungs, where they become colored, and carry it all over the body to the tissues to form new combinations. After a time the corpuscles become dissolved in the liquor sanguinis, which fluid they serve to elaborate. The products of the metamorphosis of the tissues are poured into the blood, so that it is really a very complex fluid.

Brahma (*bra'ma*). The religion of the Hindoos, that which is frequently styled *Brahmanism*, or Brahminism, inculcates a belief in a supreme deity under the name of Brahma, who is an impersonal divine substance, the object merely of devout contemplation, not of worship. There is also Brahma, the creator of the universe and the first of the *Trimurti* or triad of divinities; of whom Vishnu, the preserver, and Siva, the destroyer, are the others. In sculpture, Brahma is represented as having four faces. It is said that there are not any temples exclusively dedicated to him in India; but prayers are addressed to him, and he is worshiped along with the other members of the triad. Vishnu and Siva, however, have a great number of worshippers, and the sects who acknowledge each as their chief object of devotion are not to be counted. The greatest confusion exists as to the names and attributes of these deities. Great changes in belief have taken place in the progress of time, and the most learned Brahman is unable to explain the great majority of the rites and articles of belief. Transmigration of souls is the leading tenet of Hindoo belief.

Brah'mans, Brah'mins. (Followers of Brahma.) The highest of the Hindoo castes. To its members belong the exclusive duty of expounding the *Vedas*, and they were formerly considered bound to abstain from all laborious occupations, and to confine themselves to serving the gods and meditating on holy things. Though the members of this caste exact and receive respect from the other Hindoos, as their superiors, they are found following many occupations from which they are in strictness interdicted. The Gurus hold the first rank among them; they are the priests or spiritual advisers, having authority in matters of religion and edu-

cation. To them we are indebted for our knowledge of the Sanskrit, or ancient language of the country, in which their sacred books are written.

Buddhism (*būd'izm*). A system of religion founded by Buddha Gautama, also called *Sakya Muni*, who lived probably in the Sixth Century B. C. His father was King of Bahar, in Hindostan, and was early distinguished for his superior intellect. Becoming a religious teacher, he went through various provinces of India, propagating his doctrines, a kind of reformed Brahmanism. He is said to have lived till his 80th year, and the date usually given for his death is 543 B. C. But his appearance is placed by some as early as the Fourteenth, and by others as late as the Fourth Century B. C. It is certain that his religion was triumphant in Hindostan in the middle of the Third Century B. C. Between the Fifth and Seventh Centuries of our era, Buddhism was expelled from India proper by the persecution of the Brahmins, and nearly every trace of it has now disappeared from there; but under several denominations it has become the prevailing creed of the Peninsula of India beyond the Ganges, Thibet, Ceylon, China, and Japan. In China the name of Buddha has been corrupted into *Fo-ta*, or *Fo*. After the death of Buddha, and to fill his place, a succession of perfectly virtuous souls have descended upon earth, and assumed human forms, for the welfare of mankind; and it is believed in Thibet that the Grand Lama of Thibet is his successor for the time being. The sacred writings of the Buddhists are very numerous; they were originally composed in Sanskrit, from which they were afterwards translated into other tongues. It would seem that there was a belief in a primeval deity named Adi-Buddha, or the First Buddha, and he was the first person of the trinity, the other two persons being Dhurma and Sunga, answering to Brahma, Siva, and Vishnu, of the Brahmins. The trident borne by the priests is emblematical of this trinity. The principal tenets of Buddhism are, that the world and all it contains are manifestations of the Deity, but of a transient and delusive character; that the human soul is an emanation of the Deity, and, after death, will be bound to matter, and subjected to the miseries of life, unless the individual to whom it belongs, by the attainment of wisdom through prayer and contemplation, secures its reabsorption into the Deity. The authority of the *Vedas*, the sacred books of the Brahmins, is rejected, as well as the sacrifices, ceremonies, and other religious observances of the Hindoos. There is no distinction of caste, and the priests, who are not forbidden the use of animal food, are derived from all classes. Monasteries and nunneries abound wherever Buddhism flourishes. The ceremonies have so many resemblances to those of the Roman Catholic Church, as to strike spectators with surprise.

Capillary Action, or Capillarity. In *Physical Science*, the name applied to certain phenomena which are exhibited when liquids are placed in contact with the surfaces of solids. Suppose a glass rod to be dipped for a portion of its length in water; then the liquid, as if not subject to the laws of gravity, is raised upwards

against the sides of the solid, and its surface, instead of being horizontal, becomes slightly concave. If, instead of a solid rod, a hollow tube be immersed in the water, not merely is the liquid raised around the tube, but it rises in the inside to a height which is greater the narrower the tube, and the surface of the liquid inside the tube also assumes a concave form. If a glass tube, however, be immersed in mercury instead of water, the liquid in the tube is depressed instead of being raised, and the surface, which was previously concave, now becomes convex. The reason for this difference of action resides in the fact that mercury will not wet the tube as water does, for, if a metallic tube, such as one of copper, be substituted for the glass tube, the mercury in it will rise and have a concave surface, because it is able to wet the sides of the tube. Hence, whenever a liquid is able to adhere to a solid, it rises in contact with it. It is from capillarity that sap rises in plants, and that oil rises in the wicks of lamps. If the end of a towel be left in a basin of water, it is through capillarity that the basin is soon emptied of its contents. The phenomenon of capillarity is intimately connected with what is known as the surface tension of liquids, and its amount varies with the chemical nature of the particular liquid. The word is derived from the Latin *capillus*, a hair, because these phenomena are best seen in narrow hair-like tubes.

Carbon. One of the elements, existing uncombined in three forms, charcoal, graphite, or plumbago, and the diamond; chemical symbol C, atomic weight twelve. The diamond is the purest form of carbon; in the different varieties of charcoal, in coal, anthracite, etc., it is more or less mixed with other substances. Pure charcoal is a black, brittle, light, and inodorous substance. It is usually the remains of some vegetable body from which all the volatile matter has been expelled by heat; but it may be obtained from most organic matters, animal as well as vegetable, by ignition in close vessels. Carbon being one of those elements which exist in various distinct forms is an example of what is called allotropy. The compounds of this element are more numerous than those of all the other elements taken together. With hydrogen especially it forms a very large number of compounds, called hydrocarbons, which are possessed of the most diverse properties, chemical and physical. With oxygen, again, carbon forms only two compounds, but union between the two elements is easily effected. It is one of the regular and most characteristic constituents of both animals and plants.

Cardinal. An ecclesiastical prince in the Roman Catholic Church, who has a voice in the conclave at the election of a pope, the popes being taken from the cardinals. The cardinals are appointed by the pope, and are divided into three classes or orders, comprising six bishops, fifty priests, and fourteen deacons, making seventy at most. These constitute the Sacred College and compose the pope's council. Originally they were subordinate in rank to bishops; but they now have the precedence. The chief symbol of the dignity of cardinal is a low-crowned, broad-brimmed red hat, with two cords depend-

ing from it, one from either side, each having fifteen tassels at its extremity. Other insignia are a red biretta, a purple cassock, a sapphire ring, etc.

Carnegie Institution. An educational body incorporated January 4, 1902, in Washington, D. C., by John Hay, Secretary of State; Edwin D. White, Justice of the Supreme Court; Daniel C. Gilman, ex-president of Johns Hopkins University; Charles D. Walcott, superintendent of the United States Geological Survey; Dr. John S. Billings, director of the New York Public Library; and Carroll D. Wright, United States Commissioner of Labor. The aims of the institution, as expressed by the founder are: (1) To increase the efficiency of the universities and other institutions of learning throughout the country by utilizing and adding to their existing facilities, and by aiding teachers in the various institutions for the experimental and other work in these institutions as far as may be advisable. (2) To discover the exceptional man in every department of study, whenever and wherever found to enable him by financial aid to make the work for which he seems especially designed his life work. (3) To promote original research, paying great attention thereto as being one of the chief purposes of this institution. (4) To increase the facilities for higher education. (5) To enable such students as may find Washington the best point for their special studies to avail themselves of such advantages as may be open to them in the museums, libraries, laboratories, observatory, meteorological, piscicultural, and forestry schools and kindred institutions of the several departments of the government. (6) To insure the prompt publication and distribution of the results of scientific investigation, a field considered to be highly important.

On January 29, 1902, the institution received from Mr. Carnegie a deed of gift of \$10,000,000. In 1907, the foundation was increased to \$12,000,000.

Carnivora. In *Zoology*, the name applied to the order of mammals which feed mainly upon flesh, and the majority of which are commonly known as Beasts of Prey. They are distinguished by the adaptation of their teeth to an animal diet. The incisors or front teeth are generally six in each jaw; the canines or eye-teeth are two in each jaw, and are always long and pointed; the grinders are mostly furnished with sharp cutting edges, adapted for dividing flesh, but one or more of the hinder ones are generally furnished with a simple crown, adapted for bruising rather than for cutting. The feet in the *Carnivora* are always furnished with strong curved claws, and the collar-bones are quite rudimentary, or are altogether wanting. The order *Carnivora* is divided into the following three sections:—(1) *Digitigrades*, in which the heel is raised from the ground, and the animal walks upon tiptoe: to this section belong the dogs, the hyænas, and the cats. (2) *Plantigrades*, in which the whole or nearly the whole of the foot is applied to the ground, so that the animal walks upon the soles of the feet: to this section belong the bears. (3) *Pinnigrades*, in which the both fore and hind legs are short, and

the feet form broad webbed swimming paddles: this section comprises the seals and the walruses.

Carotid Arteries. The two great arteries which convey the blood from the aorta to the head and brain. The *common carotids*, one on either side of the neck, divide each into an external and an internal branch. The *external carotid* passes up to the level of the angle of the lower jaw, where it ends in branches to the neck, face, and outer parts of the head. The *internal carotid* passes deeply into the neck, and through an opening in the skull behind the ear enters the brain, supplying it and the eye with blood. Wounds of the carotid trunks cause almost immediate death.

Catholic Church, Roman. The community of Christians throughout the world who recognize the spiritual supremacy of the Pope or Bishop of Rome, and are united together by the profession of the same faith and the participation of the same sacraments. Although a few other points of doctrinal differences separate the Roman Church from the Greek, Russian, and Oriental communions, yet the most palpable ground of division lies in the claim of supremacy in spiritual jurisdiction on the part of the Roman bishop. The history of the Roman Church, therefore, in relation to the Oriental Churches, is, in fact, the history of this claim to supremacy.

In the minds of Roman Catholics the claim of supremacy on the part of the Bishop of Rome rests on the belief that Christ conferred on Peter a "primacy of jurisdiction"; that Peter fixed his see and died at Rome; and thus, that the Bishops of Rome, as successors of Peter, have succeeded to his prerogatives of supremacy. The letters of Pope Leo the Great show beyond question that the Bishops of Rome, in the commencement of the Fifth Century, claimed to speak and act with supreme authority; and the first direct challenge to this claim was made by the Patriarch of Constantinople, Acacius; and although Constantinople, in the time of Gregory the Great, and again of Nicholas I., renewed the struggle for supremacy, or even equality, the superior position of Rome continued to be recognized. The separation of the Greek Church and her dependencies, under the patriarch Michael Cerularius, in the year 1054, was but a narrowing of the territorial jurisdiction of Rome; and even Protestants have recognized the Roman Church of the mediæval period as absorbing in itself almost the whole of European Christendom, and as the only public representative of the Church in the West. The modern political institutions which then began to break upon the world so modified the public relations of Church and State as by degrees to undo the condition of society in which the temporal power of the popes had its foundation. The great revolution of the Sixteenth Century completed the process. Nor was the revolution with which the popes thus found themselves face to face without its influence in the external history of the Roman Church. The latter half of the Sixteenth Century was a period of new life in the Roman Church. The celebration of local synods, the establishment of episcopal seminaries, the organization of schools, and other provisions for religious instruction —

above all, the foundation of active religious orders of both sexes — had the effect of arresting the progress of Protestantism, which in many countries had been at first rapid and decisive. From the end of the Sixteenth Century, therefore, the position of the Roman Catholic Church, especially in her external relations, may be regarded as settled. The local distribution of the rival churches in the world has hardly been altered, except by migration, since that time. But in her relations to the state the Roman Church has since passed through a long and critical struggle. The new theories to which the French Revolution gave currency have still further modified these relations; but in most of the European kingdoms they were readjusted after 1815 either by concordat or by some similar mutual agreement. The details of the doctrinal system of the Roman Catholic Church will be best collected and explained from the latest authentic creed, that commonly called "the creed of Pius V.," drawn up as a summary of the authoritative teaching of that ecclesiastical body till the time at which it was written, and published together with certain later doctrinal pronouncements. It is only necessary to premise that, while in the view of Catholics all doctrine must be based on the word of God, written or unwritten, the Church is the only authoritative judge of that rule of faith. The creed of Pius V. is as follows:

"I, N. N., with a firm faith believe and profess all and every one of these things which are contained in that creed which the holy Roman Church maketh use of. To wit: I believe in one God, the Father Almighty, Maker of heaven and earth, of all things visible and invisible, and in one Lord Jesus Christ, the only begotten Son of God, born of the Father before all ages; God of God, Light of Light; true God of the true God; begotten, not made; consubstantial with the Father, by whom all things were made. Who for us men, and for our salvation, came down from heaven, and was incarnate by the Holy Ghost of the Virgin Mary, and was made man. He was crucified also for us under Pontius Pilate, suffered and was buried. And the third day he rose again according to the Scriptures: he ascended into heaven, sitteth at the right hand of the Father, and shall come again with glory to judge the living and the dead; of whose kingdom there shall be no end. I believe in the Holy Ghost, the Lord and life-giver, who proceedeth from the Father and the Son; who, together with the Father and the Son, is adored and glorified; who spake by the prophets; and in one holy, Catholic, and Apostolic Church. I confess one baptism for the remission of sins; and I look for the resurrection of the dead, and the life of the world to come. Amen."

The doctrine of the Immaculate Conception of the Blessed Virgin Mary, and a still more comprehensive body of articles in the memorable *Syllabus* issued by Pope Pius IX. and in the decrees of the Vatican Council, celebrated under the presidency of the same pontiff, have been added to the former creeds. The doctrinal decisions of this latter council are divided into two sections, the first "on the Catholic Faith," the second "on the Church of Christ." Each section contains "a scheme of doctrine," in which the

heads of belief, and the grounds on which they rest, are explained. In the scheme "upon the Church of Christ" are contained, in "an additional chapter," the celebrated declaration regarding the infallibility of the pope.

Under the generic name Roman Catholics are comprised all those Christians who acknowledge the supremacy of the Roman pontiff, even though they be not of the Roman or Latin Rite. Not a few individuals and churches of other rites are included under this designation, Greeks, Slavonians, Ruthenians, Syrians (including Maronites), Copts, and Armenians; and these communities are permitted to retain their own national liturgy and language, and for the most part their established discipline and usages. As regards its organization for the purposes of ecclesiastical government the normal territorial distribution of the Roman Catholic Church of the several rites in the various countries where it exists is into provinces, which are subject to archbishops, and are subdivided into bishoprics, each governed by its own bishop. The following summary shows the statistics of the Church in the United States, for 1907:

Archbishops, 14; Bishops, 89; clergy, secular, 11,135; clergy, religious, 3,958; churches, 12,148; colleges for boys, 198; academies for girls, 678; parishes, with schools, 4,364; parish school population, 1,096,842; orphan asylums, 255; orphans cared for, 40,588; charitable institutions, 992; total Catholic population, 13,089,353.

Celibacy. The state of being celibate or unmarried; specially applied to the voluntary life of abstinence from marriage followed by many religious devotees and by some orders of clergy, as those of the Roman Catholic Church. The ancient Egyptian priests preserved a rigid chastity; the priestesses of ancient Greece and Rome were pledged to perpetual virginity; and celibacy is the rule with the Buddhist priests of the East. Among Christians the earliest aspirants to the spiritual perfection supposed to be attainable through celibacy were not ecclesiastics as such, but hermits and anchorites who aimed at superior sanctity. During the first three centuries the marriage of the clergy was freely permitted, but by the Council of Elvira (305) continence was enjoined on all who served at the altar. For centuries this subject led to many struggles in the Church, but was finally settled by Gregory VII. positively forbidding the marriage of the clergy. The Council of Trent (1593) confirmed this rule. In the Greek Church celibacy is not compulsory on the ordinary clergy. Protestants hold that there is no moral superiority in celibacy over marriage, and that the Church has no right to impose such an obligation on any class of her ministers.

Chemistry. The science which is concerned with the study of the properties of the different forms of matter, and their mutual reactions, just as *Physics* is concerned with the study of force and energy. It has developed from the alchemy of the Middle Ages. The chemist finds by actual experiment that he is able to divide all substances into two great classes, viz., *compounds*, which can be split up into two or more different substances of a sim-

pler nature, and *elements*, which he cannot split up into anything differing from themselves. All the varied forms of matter which we see around us are produced by the combinations of these elementary substances. Combination between different substances is due to the existence of *chemical attraction*, or, as it is often called, *chemical affinity*, between the atoms of which they are composed. The exact nature of this attraction is not understood. It differs from heat, electricity, and other forms of energy, in that it entirely changes the properties of the substances between which it acts, and, moreover, acts only between bodies which are in the most intimate possible contact. Chemical action consequently takes place most rapidly between gases, somewhat less rapidly between liquids, and much less rapidly between solids. Chemical changes may conveniently be classed under three heads: (1) *Combination* or *synthesis*, in which two or more substances combine to form a new compound of more complex composition; (2) *Decomposition* or *analysis*, in which a compound is split up into its constituent elements, or into other compounds of simpler nature; (3) *Double decomposition* or *metathesis*, in which a reaction takes place between two or more compounds, accompanied by a mutual interchange of elements, and ending in the formation of a new series of compounds. The occurrence of chemical change is generally rendered evident by an alteration in the physical properties of the bodies affected by the change. In many cases there is development of heat, sometimes, if the reaction is very energetic, accompanied by the production of light. There may also be production, destruction, or change of color, conversion of solids or liquids into gases, or condensation of gases into solids or liquids, production of solids from liquids, or *vice versa*. The occurrence or non-occurrence of chemical change depends in the first place on the nature of the substances brought into contact, and also on certain physical conditions. In many cases the reaction takes place at ordinary temperatures, in others the substances have to be heated before any change occurs. On the other hand, substances which react on one another at ordinary temperatures are without action at very low temperatures. Further, many compounds are decomposed or split up when heated, and, indeed, heat is one of the main agents which bring about decomposition. Generally speaking, a moderately high temperature is favorable to combination or double decomposition, while a higher temperature tends to produce decomposition. Oxygen and mercury, for example, combine together directly only at a temperature approaching the boiling-point of the latter, but if the oxide of mercury thus formed is still more strongly heated, it splits up again into its constituent elements. If two or more substances are brought together in a state of solution, and by their mutual reaction can produce a new substance insoluble in the particular liquid used, then, with very few exceptions, this compound will be produced and will be *precipitated*, or thrown out of solution. The production or non-production of chemical action is affected also by the relative quantities or masses

in which the different substances are present, by the relative volatility, etc., of the bodies which may be formed, and by various other conditions, for a discussion of which reference must be made to special treatises on chemistry. It is found that, as a general rule, those elements most readily combine together which exhibit the greatest differences in their properties. Chlorine, for example, readily combines with sodium or antimony, but has very little attraction for bromine, which it closely resembles in many of its properties. It is found, moreover, that combination always takes place in certain definite proportions, and not in any haphazard quantities. For example, 16 parts by weight of oxygen always combine with 2 parts of hydrogen to form 18 parts of water, and 35.5 parts of chlorine always combine with 1 part of hydrogen to form 36.5 parts hydrochloric acid. Indeed, it is possible to find by experiment for each element a number which always represents the proportion by weight in which it combines with other elements. This is termed its *combining* or *atomic weight*. Further, it is found that if a piece of iron is placed in a solution of sulphate of copper, metallic copper is deposited on the iron, whilst a portion of the latter is dissolved, and for every 63.4 parts of copper deposited, 56 parts of iron are always dissolved. Again, when iron is placed in dilute sulphuric acid, hydrogen gas is given off and the metal is dissolved, and it is found that for every 1 part of hydrogen given off, 28 parts of iron are dissolved. It follows that 56 parts of iron are capable of replacing, or are chemically equivalent to, 63.4 parts of copper or two parts of hydrogen. Many examples of a similar kind might be quoted. Briefly, it is found that a certain definite quantity of each element is capable of combining with, or of replacing in compounds, certain definite quantities of other elements, and these are termed their *chemical equivalents*. For the sake of comparison, one part of hydrogen is usually taken as the standard to which all other equivalents are referred, and from the example given above it is evident that the equivalent of iron is 28, and so on. In some cases, the number representing the equivalent of an element is the same as that representing its atomic weight; but in many cases, for reasons which cannot be entered into here, the latter is some simple multiple of the former. The *equivalent* is a quantity determined by actual experiment, the *atomic weight* is to a certain extent a matter of theory. A similar series of facts is observed in the case of compounds. For example, 56.1 parts of potash will neutralize as much acid as 40 parts of soda or 17 parts of ammonia; 56.1 parts of potash, 40 parts of soda, and 17 parts of ammonia, are therefore chemically equivalent to each other. Chemistry was formerly divided into two branches: *Inorganic chemistry*, or the chemistry of the mineral kingdom, and *Organic chemistry*, or the chemistry of the vegetable and animal kingdoms, i. e., of those substances which are produced by vital action. It was believed that there was an essential difference between the two, and that it was impossible to prepare artificially in the laboratory those compounds formed in the bodies of plants and animals.

In 1828, however, the substance *urea*, a body essentially characteristic of vital action, was prepared artificially, and even built up from its elements, by the German chemist, Wöhler. Since that time a large number of the compounds found in plants and animals have been produced from inorganic substances, or built up from other organic bodies, and it is now known that there is no essential difference whatever between organic and inorganic chemistry. The same forces are at work in both, subject to the same laws. One element, however, is contained in all organic bodies, viz, *carbon*. Carbon has the peculiar property of combining as it were with itself, and by virtue of this property it gives rise to an enormous number of derivatives, some of very complex composition and constitution. *Simply for the purposes of study*, these are still classed together under the head of *Organic chemistry*, which is defined as the *chemistry of the carbon compounds*. The greater number of the carbon compounds now known are artificial products which do not occur in nature. The majority of them may be regarded as derived from the hydro-carbons by the replacement of one or more atoms of hydrogen by some other element or group of elements. Amongst the most important of the series thus derived are the *haloid derivatives*, *alcohols*, *ethers*, *acids*, *aldehydes*, *ketones*, and *amines*. There are, however, important groups of substances, the relationships of which are not yet clearly made out. Amongst these are the *carbo-hydrates* and the *alkeloids*. The constitution and relationships of the *proteids* or *albuminoid substances*, and of some others found only in the bodies of plants or animals, are still less understood. Notwithstanding the differences already alluded to, chemical attraction is closely related to the various forms of energy, and, indeed, is itself a form of potential energy. Of late years, the study of the changes in the distribution of energy which accompany chemical change has become of great importance. Chemical combination is in the majority of cases accompanied by development of heat, and the quantity of heat thus developed by the formation of a given weight of a particular substance is always the same, and the decomposition of any compound requires the expenditure, in the form of heat or otherwise, of exactly the same amount of energy as was liberated by its formation. On the other hand, the formation of some compounds is attended by absorption of heat, and exactly the same amount of heat is liberated when the compound decomposes. That branch of the science which deals specially with the development or absorption of heat which accompanies chemical reactions is termed *thermo-chemistry*. It is found that those compounds in the formation of which the greatest amount of heat is developed or set free are the most stable, i. e., the most difficult to decompose, and vice versa. Further, when several substances which *theoretically* can react in several different ways, producing several different compounds, are mixed together, it is always found that those bodies are produced in the formation of which the greatest amount of heat is developed. This important law is known as the *principle of maximum work*. It has also

been shown that in many cases of chemical reaction a condition of equilibrium is set up between the reacting bodies and the products of the reaction. The reaction consequently ceases without being complete, but if the equilibrium is disturbed by the removal of one of the products, or by the introduction of a further quantity of one of the reacting bodies, then the reaction recommences, and continues until either a condition of equilibrium is again attained, or the reaction is complete.

TABLE OF CHEMICAL ELEMENTS

ELEMENTS	DISCOVERER	YEAR
Antimony,	Valentine,	1450
Bismuth,	Valentine,	1450
Zinc,	Paracelsus,	1520
Phosphorus,	Brandt,	1669
Arsenic,	Rutherford,	1694
Cobalt,	Brandt,	1733
Nickel,	Crondstadt,	1751
Hydrogen,	Cavendish,	1766
Nitrogen,	Rutherford,	1772
Manganese,	Gahn,	1774
Oxygen,	Priestley,	1774
Tungsten,	d'Elhujar,	1781
Molybdenum,	Hjelm,	1782
Tellurium,	Reichenstein,	1789
Uranium,	Klaproth,	1789
Titanium,	Klaproth,	1795
Chromium,	Vauquelin,	1797
Tellurium,	Klaproth,	1798
Columbium,	Hatchett,	1801
Tantalum,	Hatchett and Ekeburg,	1802
Palladium,	Wollaston,	1803
Osmium,	Tennant,	1803
Cerium,	Berzelius, Hisinger, and Klaproth,	1803
Iridium,	Tennant,	1804
Rhodium,	Wollaston,	1804
Potassium,	Davy,	1807
Sodium,	Davy,	1807
Barium,	Davy, Berzelius, and Pontin,	1808
Strontium,	Davy,	1808
Magnesium,	Davy,	1808
Calcium,	Davy, Berzelius, and Pontin,	1808
Boron,	Davy, Gay-Lussac, and Thénard,	1808
Chlorine,	Davy,	1810
Fluorine,	Ampère,	1810
Iodine,	Courtois,	1811
Selenium,	Berzelius,	1817
Cadmium,	Hermann and Stromeyer,	1817
Lithium,	Arfvedson,	1817
Silicon,	Berzelius,	1823
Zirconium,	Berzelius,	1824
Bromine,	Balard,	1826
Thorium,	Berzelius,	1828
Yttrium,	Wöhler,	1828
Glucinum,	Wöhler,	1828
Aluminum,	Wöhler,	1828
Vanadium,	Sefstroem,	1830
Lanthanum,	Mosander,	1841
Didymium,	Mosander,	1841
Erbium,	Mosander,	1843
Terbium,	Mosander,	1843
Niobium,	(same as Columbium, q. v.),	1844
Ruthenium,	Claus,	1844
Rubidium,	Bunsen,	1860
Cæsium,	Bunsen and Kirchhoff,	1860
Thallium,	Crookes and Lamy,	1862
Indium,	Reich and Richter,	1863
Gallium,	Boisbaudran,	1875
Ytterbium,	Marignac,	1878
Samarium,	Boisbaudran,	1879
Scandium,	Nilson,	1879
Thulium,	Cleve,	1879
Neodymium,	Welsbach,	1885
Praseodymium,	Welsbach,	1885
Gadolinium,	Marignac,	1886
Germanium,	Winkler,	1886
Argon,	Rayleigh and Ramsay,	1894
Krypton,	Ramsay and Travers,	1897
Neon,	Ramsay and Travers,	1898
Coronium,	Nasini,	1898
Xenon,	Ramsay,	1898
Victorium,	Crookes,	1898
Etherion (?),	Brush,	1898
Polonium,	Curié (Mrs.),	1898

ELEMENTS	DISCOVERER	YEAR
Radium,	Curié (Mr. and Mrs.) and Bémont,	1898
Actinium,	Debiere,	1899
(Must not be confounded with Phipson's actinium.)		
Asterium Hydrogen,	Lockyer,	1899
(New) unknown.		
Thorium a,	Brauner,	1900
Thorium B,	Brauner,	1900
Krypton II,	Labenberg and Krugel,	1900
Austrum II (?),	Pribram,	1900
Carolinium,	Baskerville,	1900
Radio-active lead (?),	Hoffmann and Strauss,	1900
Europium,	Demarçay,	1901
Euxenium earth (?),		
I and II,		
Amatillium (?),	Hoffmann and Prandtl,	1901
Tellurium X,	Courtis,	1902
Berzelium,	Pellini,	1903
Gold, silver, tin, copper, iron, lead, mercury, and carbon have been known from the earliest times.		

COMMON NAMES OF CHEMICAL SUBSTANCES

COMMON NAMES	CHEMICAL NAMES
Alum,	Sulphate of aluminum and potassium.
Aqua fortis,	Nitric acid.
Aqua regia,	Nitro-hydrochloric acid.
Calomel,	Mercurous chloride.
Carbolic acid,	Phenol.
Caustic potash,	Potassium hydrate.
Caustic soda,	Sodium hydrate.
Chalk,	Calcium carbonate.
Copperas,	Sulphate of iron.
Corrosive sublimate,	Mercuric chloride.
Cream of tartar,	Bitartrate of potassium.
Epsom salts,	Magnesium sulphate.
Fire damp,	Light carbureted hydrogen, methane.
Glauber's salt,	Sodium sulphate.
Grape sugar,	Glucose.
Goulard water,	Basic acetate of lead.
Iron pyrites,	Sulphide of iron.
Jewelers' putty,	Oxide of tin.
Laughing gas,	Nitrous oxide.
Lime,	Calcium oxide.
Lunar caustic,	Silver nitrate.
Mosaic gold,	Bisulphide of tin.
Muriatic acid,	Hydrochloric acid.
Plaster of Paris,	Calcium sulphate.
Realgar,	Sulphide of arsenic.
Red lead,	Oxide of lead.
Rochelle salts,	Sodium potassium tartrate.
Sal ammoniac,	Ammonium chloride.
Salt, common,	Sodium chloride.
Salt of tartar (potash),	Potassium carbonate.
Saltpetre,	Potassium nitrate.
Salts of lemon,	Oxalic acid.
Slaked lime,	Calcium hydrate.
Soda, washing,	Sodium carbonate.
Soda, baking,	Sodium bicarbonate.
Soda,	Sodium carbonate.
Spirits of hartshorn,	Ammonia, solution of.
Spirits of salts,	Hydrochloric acid.
Sugar of lead,	Lead acetate.
Tartar emetic,	Potassium antimony tartrate.
Verdigris,	Basic acetate of copper.
Vermilion,	Sulphide of mercury.
Vinegar,	Dilute acetic acid.
Vitriol, blue,	Copper sulphate.
Vitriol, green,	Ferrous sulphate.
Vitriol, oil of,	Sulphuric acid.
Vitriol, white,	Zinc sulphate.
Volatile alkali,	Ammonia.

Christ, Disciples of. A denomination of Christians in the United States commonly known as the Christian Church, or Church of Christ, and sometimes called Campbellites. In September, 1809, Thomas Campbell, a Scotch minister of the seceders' branch of the Presbyterian Church, then living in Western Pennsylvania, issued a "Declaration and Address" deploring the divided state of the Church, and urging as the only remedy a complete restoration of apostolic Christianity and the rejection of all human creeds and confessions of faith. The Christian Association of Washington, Pa., was formed for the purpose of promoting the

principles set forth in this "declaration." It was not the intention of the Campbellites to form a distinct religious body, but to effect the proposed reforms in the Churches. The Disciples maintained that having accepted the Bible as their only rule of faith and practice, and the only divine basis for the union of all Christians, they were led to reject infant baptism and adopt believers' immersion only. They observe the Lord's Supper each first day of the week, and heartily and practically accept and exalt the doctrine of the divinity of Christ. In 1907 the denomination had 7,153 ministers, 11,110 churches, and 1,264,758 communicants, besides several universities and colleges of high rank, and a number of religious publications.

Christian Endeavor, Young People's Society of. A society distinctly religious in all its features; organized February 2, 1881, in Williston Church, Portland, Me., by the Rev. Francis E. Clark, D. D. From one small association it expanded, up to 1908, into over 69,256 societies, in all parts of the world, with an aggregate membership of 3,462,800. In addition to the main organizations in the United States it has been found necessary to form branches, among which are the Juniors, organized March 27, 1884, at Tabor, Ia., by the Rev. J. W. Cowan and Miss Belle Smith; the Intermediate, organized by the Rev. A. Z. Conrad, of Worcester, Mass.; and the Mothers', suggested by Mrs. Amanda B. Fellows, of Chicago, and organized in April, 1893, at Topeka, Kan., by Mr. F. C. Barton. The first Christian Endeavor Society in England was organized in 1887, and was followed by similar ones in other countries, and the constitution has been printed in over thirty different languages. The movement is not a denominational one. Any society belonging to an evangelical Church, which adopts the leading principles as set forth in the constitution, including the prayer-meeting pledge, and which guarantees these principles by the name Christian Endeavor, either alone or in connection with a denominational name, is admitted to all the privileges of the organization.

The distinctive features in the Christian Endeavor movement are its work among the young people, leading them to consecrate their lives to the active service of God; the weekly prayer-meetings, which each member takes a solemn pledge to attend regularly (unless unavoidably detained), and to take part in; and the reconsecration meetings held once a month, at which special efforts are made to see if each one has been faithful to his pledges.

Christianity. The religion instituted by Jesus Christ. Though the great moral principles which it reveals and teaches, and the main doctrines of the gospel, have been preserved without interruption, the genius of the different nations and ages have materially colored its character. The first community of the followers of Jesus was formed at Jerusalem soon after the death of their Master. Another at Antioch in Syria first assumed (about 65) the name of *Christians*; and the travels of the apostles spread Christianity through the provinces of the Roman

Empire. Palestine, Syria, Asia Minor, Greece, the islands of the Mediterranean, Italy, and the northern coast of Africa, as early as the First Century, contained societies of Christians. At the end of the Third Century almost one-half of the inhabitants of the Roman Empire, and of several neighboring countries, professed this belief. While Christianity as a system was thus spreading, many heretical branches had sprung from the main trunk. From the Gnostics, who date from the days of the apostles, to the Nestorians of the Fifth Century, the number of sects was large, and some of them exist to the present day. The most important events in the subsequent history of Christianity are the separation of the Eastern and Western Churches early in the Eighth Century; and the Western reformation, which may be said to have commenced with the sectaries of the Thirteenth Century and ended with the establishment of Protestantism in the Sixteenth. The number of Christians now in the world is computed at 475,000,000. Of these about 230,000,000 are Roman Catholics, 98,000,000 belong to the Greek Church, and 145,000,000 are Protestants. Of the various sects of Protestants in the English-speaking world the most numerous are the Episcopalians, Methodists, Baptists, and Presbyterians.

Christian Science, a religious and theological system propounded in 1866 by Mrs. Mary Baker Eddy, Lynn, Mass., practiced by thousands of disciples in America and Europe. The members acknowledge and adore one Supreme God, taking the Scriptures for their guide. They confess God's Son, and the Holy Ghost, and man as the Divine image and likeness. They hold that Christian Science is the explication of Truth to be the power over all error, sin, sickness, and death. The curative system is spoken of as Christian Science Mind Healing, or Metaphysical healing, being based on the unreality or non-existence of matter. In her book, "Retrospection and Introspection," Mrs. Eddy says: "I claim for healing scientifically the following advantages: (1) It does away with all material medicines and recognizes the antidote for all sickness, as well as sin, in the immortal mind; and mortal mind is the source of all the ills which befall mortals. (2) It is more effectual than drugs, and cures when they fail, or only relieve, thus proving the superiority of metaphysics over physics. (3) A person healed by Christian Science is not only healed of his disease, but he is advanced morally and spiritually. The mortal body being but the objective state of the mortal mind, this mind must be renovated to improve the body." The absence of creed and dogma in the Christian Science Church, its freedom from materialism, mysticism, and superstition, also the simplicity, uniformity, and impersonality of its form of worship and organization are among the distinguishing features which characterize this modern religious movement. Hypnotism, mesmerism, spiritualism, theosophy, faith-cure, and kindred systems are foreign to true Christian Science. Those practicing these beliefs are denied admission to the Christian Science Church.

In June, 1906, the \$2,000,000 extension of the Mother Church, the First Church of Christ Scientist, in Boston, was dedicated. At the annual meeting, June, 1907, an increase of 4,000 members over the previous year was reported. The total membership, resident and non-resident, was given at 43,876. In the *Christian Science Journal Directory* for 1907, over 1,000 churches and societies of this denomination were listed. The estimated membership of these branch churches is approximately 40,000.

Chronology (Greek *chronos*, time, and *logos*, discourse). The science which treats of time, and has for its object the arrangement and exhibition of historical events in order of time and the ascertaining of the intervals between them. Its basis is necessarily the method of measuring or computing time by regular divisions or periods, according to the revolutions of the earth or moon. The motions of these bodies produce the natural division of time into years, months, and days. As there can be no exact computation of time or placing of events without a fixed point from which to start, dates are fixed from an arbitrary point or *epoch*, which forms the beginning of an *era*. The more important of these are the creation of the world among the Jews; the birth of Christ among Christians; the Olympiads among the Greeks; the building of Rome among the Romans; the Hejira or flight of Mohammed among the Mohammedans, etc.

BEGINNING OF EPOCHS, ERAS, AND PERIODS

NAME	BEGAN
Grecian Mundane Era,	B.C. 5598, Sept. 1
Civil Era of Constantinople,	" 5508, Sept. 1
Alexandrian Era,	" 5502, Aug. 29
Julian Period,	" 4713, Jan. 1
Mundane Era,	" 4008, Oct. 1
Jewish Mundane Era,	" 3761, Oct. 1
Era of Abraham,	" 2015, Oct. 1
Era of the Olympiads,	" 776, July 1
Roman Era (A. U. C.),	" 753, April 24
Metonic Cycle,	" 432, July 15
Grecian or Syro-Macedonian Era,	" 312, Sept. 1
Era of Maccabees,	" 166, Nov. 24
Tyrian Era,	" 125, Oct. 19
Sidonian Era,	" 110, Oct. 1
Julian Year,	" 45, Jan. 1
Spanish Era,	" 38, Jan. 1
Augustan Era,	" 27, Feb. 14
Vulgar Christian Era,	A.D. 1, Jan. 1
Destruction of Jerusalem,	" 69, Sept. 1
Mohammedan Era,	" 622, July 16

Chrysalis (*kris'ah-lis*). A name strictly belonging to those *pupa* of butterflies which are adorned with golden spots, but extended to the *pupa* of lepidopterous insects generally. The chrysalis is inclosed in a somewhat horny membranous case; sometimes very angular, sometimes nearly round; generally pointed at the abdominal end, sometimes at both ends; and before the caterpillar undergoes its transformation into this state it often spins for itself a silken cocoon, with which earth and other foreign substances are sometimes mixed, so as to increase its size, and within which the chrysalis is concealed. Chrysalis are often suspended by cords, and generally remain nearly at rest; some have the power of burying themselves in the earth; others are bound by a single silken thread which

passes round their middle; some twirl themselves round when touched, or when the stalk or leaf to which they are suspended is touched; and, in general, they give signs of life, when disturbed, by violent contortions of the abdominal part.

Cinematograph. A continuous band of instantaneous photographs which are by means of an arrangement similar to that of a magic lantern projected on a screen in such rapid succession that the image of one remains on the retina till it is succeeded by the next, and so the pictures are blended and suggest the moving object or objects originally photographed—a horse race, a moving crowd, dancing, etc.

Circulation. The natural motion of the blood in a living animal, by which it proceeds from the heart to all parts of the body by the arteries, and returns to the heart by the veins. The *circulation of the blood* is performed in the following manner: It is returned to the right auricle of the heart by the descending and ascending vena cava, which, when distended, contracts and sends it into the right ventricle; from the right ventricle it is propelled through the pulmonary artery, to circulate through and undergo a change in the lungs, being prevented from returning into the right auricle by the closing of valves. Having undergone this change in the lungs, it is brought to the left auricle of the heart by the four pulmonary veins, and thence is evacuated into the left ventricle. The left ventricle, after having been distended, contracts, and throws the blood through the aorta to every part of the body, by the arteries, to be returned by the veins into the vena cava. It is prevented from passing back from the left ventricle into the auricle by a valvular apparatus; and the beginning of the pulmonary artery and aorta is also furnished with similar organs, which prevent its returning into the ventricles.

Cloud. A collection of visible vapor or watery particles suspended in the atmosphere at some altitude. They differ from fogs only by their height and less degree of transparency. The average height of clouds is calculated to be two and one-half miles, thin and light clouds being much higher than the highest mountains, while thick heavy clouds often touch low mountains, steeples, and even trees. Clouds differ much in form and character, but are generally classed into three simple or primary forms, viz: (1) The *cirrus*, so called from its resemblance to a lock of hair, and consisting of fibers which diverge in all directions. Clouds of this description float at a great height, usually from three to five miles above the earth's surface. (2) The *cumulus* or *heap*, a cloud which assumes the form of dense convex or conical heaps, resting on a flattish base, called also summer-cloud. Under ordinary circumstances these clouds accompany fine weather, especially in the heat of summer. They attain their greatest size early in the afternoon and gradually decrease towards sunset. (3) The *stratus*, so named from its spreading out uniformly in a horizontal layer, which receives all its augmentations of volume from

below. It belongs essentially to the night, and is frequently seen on calm summer evenings after sunset ascending from the lower to the higher grounds, and dispersing in the form of a cumulus at sunrise. These three primary forms of clouds are subdivided as follows: (1) The *cirro-cumulus*, composed of a collection of cirri, and spreading itself frequently over the sky in the form of beds of delicate snow-flakes. (2) The *cirro-stratus* or *wane-cloud*, so called from its being generally seen slowly sinking, and in a state of transformation; when seen in the distance, a collection of these clouds suggests the resemblance of a shoal of fish, and the sky, when thickly mottled with them, is called in popular language a *mackerel sky*. (3) The *cumulo-stratus* or *twain-cloud*, one of the grandest and most beautiful of clouds, and consisting of a collection

of large fleecy clouds overhanging a flat stratum or base. (4) The *nimbus, cumulo-cirro-stratus*, or *rain-cloud*, recognizable, according to Mr. Howard, by its fibrous border and uniformly gray aspect. It is a dense cloud spreading out into a crown of cirrus and passing beneath into a shower. It presents one of the least attractive appearances among clouds, but it is only when the dark surface of this cloud forms its background that the splendid phenomenon of the rainbow is exhibited in perfection.

College Fraternities. Societies existing in American colleges which are named from the letters of the Greek alphabet and therefore commonly called "Greek Letter Societies." They are secret organizations only in their grips and passwords. They are organized chiefly for literary and social purposes.

GENERAL FRATERNITIES FOR MEN

FRATERNITY	MEMBERSHIP	ACTIVE CHAPTERS	INACTIVE CHAPTERS	NO. HOUSES	WHERE AND WHEN FOUNDED
Alpha Chi Rho.	490	10	1	6	Trinity, 1895.
Alpha Delta Phi.	10,363	24	5	24	Hamilton, 1832.
Alpha Tau Omega.	7,600	58	23	45	Virginia Military Institute, 1865.
Beta Theta Pi.	15,057	70	23	66	Miami, 1839.
Chi Phi.	4,394	20	26	15	Princeton, 1824.
Chi Psi.	4,500	18	11	18	Union, 1841.
Delta Kappa Epsilon.	16,000	42	11	20	Yale, 1844.
Delta Phi.	3,600	11	5	No Rep.	Union, 1827.
Delta Psi.	2,500	8	0	8	Columbia, 1847.
Delta Sigma Phi.	715	8	1	4	College, City of New York, 1901.
Delta Tau Delta.	8,900	50	28	12	Bethany, 1859.
Delta Upsilon.	9,700	37	5	34	Williams, 1834.
Kappa Alpha (North).	1,100	7	2	7	Union, 1825.
Kappa Alpha (South).	7,200	49	11	30	Washington and Lee, 1865.
Kappa Sigma.	8,755	76	15	50	University Virginia, 1869.
Omega Pi Alpha.	312	6	0	5	College, City of New York, 1901.
Phi Delta Theta.	16,548	71	23	54	Miami, 1848.
Phi Gamma Delta.	10,500	56	25	45	Washington and Jefferson, 1848.
Psi Kappa Psi.	10,500	43	20	30	Washington and Jefferson, 1852.
Phi Kappa Sigma.	3,700	26	14	18	University of Pennsylvania, 1850.
Psi Sigma Kappa.	2,500	23	0	22	Mass. Agricultural College, 1873.
Pi Kappa Alpha.	2,500	29	6	29	University of Virginia, 1868.
Psi Upsilon.	10,860	22	1	20	Union, 1833.
Sigma Alpha Epsilon.	13,000	70	27	49	University of Alabama, 1856.
Sigma Chi.	8,075	56	21	44	Miami, 1855.
Sigma Nu.	6,000	58	14	42	Virginia Military Institute, 1869.
Sigma Phi.	1,400	8	2	8	Union, 1827.
Sigma Phi Epsilon.	700	19	0	9	Richmond College, 1901.
Sigma Pi.	355	5	5	No Rep.	William and Mary, 1752.
Theta Chi.	625	3	0	3	Norwich University, 1856.
Theta Delta Chi.	5,000	25	16	19	Union, 1848.
Theta Xi (Eng. Scien.).	1,012	10	1	10	Rensselaer Polytechnic Inst., 1864.
Zeta Psi.	5,000	23	9	15	New York University, 1847.
Total.	199,961	1,040	351	695	

FRATERNITIES FOR WOMEN

FRATERNITY	MEMBERSHIP	ACTIVE CHAPTERS	INACTIVE CHAPTERS	NO. HOUSES	WHERE AND WHEN FOUNDED
Alpha Chi Omega.	1,500	12	1	7	De Pauw University, 1885.
Alpha Omicron Pi.	366	8	0	3	Barnard College, 1897.
Alpha Phi.	1,691	14	0	7	Syracuse University, 1872.
Alpha Xi Delta.	700	13	0	6	Lombard College, 1893.
Beta Sigma Omicron.	500	10	0	2	Missouri State University, 1888.
Chi Omega.	1,200	21	1	9	University of Arkansas, 1895.
Delta Delta Delta.	1,700	23	1	8	Boston University, 1888.
Delta Gamma.	2,052	18	10	13	Warren Female Institute, 1873-4.
Delta Sigma.	180	3	0	0	Brown University, 1901.
Gamma Phi Beta.	1,300	12	0	6	Syracuse University, 1874.
Kappa Alpha Theta.	3,641	28	9	14	De Pauw University, 1870.
Kappa Delta.	708	12	2	0	Virginia State Normal, 1897.
Kappa Kappa Gamma.	6,000	33	10	11	Monmouth College, 1870.
Pi Mu.	2,000	8	0	2	Wesleyan College, 1852.
Pi Beta Phi.	4,621	38	13	18	Monmouth College, 1867.
Sigma Kappa.	550	9	2	3	Colby College, 1874.
Sigma Sigma Sigma.	210	8	0	0	Virginia State Normal, 1868.
Zeta Tau Alpha.	350	8	4	0	Virginia State Normal, 1868.
Total.	29,269	276	53	109	

COLLEGES AND UNIVERSITIES OF THE UNITED STATES

"U." means "University"; "P. I." means "Polytechnic Institute."
TABLE I.—STATISTICS OF UNIVERSITIES AND COLLEGES

FOUNDED	NAME OF INSTITUTION	LOCATION	PRESIDENT OR DEAN	NO. IN-STRUCTORS	NO. OF STUDENTS	VOLUMES IN LIBRARY	VALUE OF PROPERTY (INCLUDING ENDOWMENT)
1896	Adelphi,	Brooklyn, N. Y., . .	Charles H. Levermore, Ph.D.	25	475	13,000	\$ 700,000
1859	Adrian,	Adrian, Mich., . . .	Rev. B. W. Anthony, D.D.,	18	268	7,000	
1861	Albion,	Albion, Mich., . . .	Samuel Dickie, LL. D., . .	25	450	18,000	580,000
1881	Albright,	Myerstown, Penn., .	Rev. Jas. D. Woodring, D.D.	19	210	6,500	250,000
1836	Alfred U.,	Alfred, N. Y., . . .	Boothe C. Davis, Ph. D., .	26	301	20,000	525,000
1815	Allegheny,	Meadeville, Penn., .	Rev. W. H. Crawford, LL.D.	27	383	22,000	1,140,000
1880	Allen,	Columbia, S. C., . .	Rev. Wm. D. Johnson, D.D.	15	516	900	100,000
1886	Alma,	Alma, Mich.,	August F. Bruske, D.D., .	26	280	21,000	500,000
1885	Amer'n Internation'l	Springfield, Mass., .	Rev. S. H. Lee, A. M., . .	12	103	3,500	150,000
1893	Am. U. of Harman, .	Harriman, Tenn., . .	James A. Tate,	11	317	2,000	50,000
1821	Amherst,	Amherst, Mass., . . .	George Harris,	40	540	80,000	3,000,000
1850	Antioch,	Yellow Springs, O., .	S. D. Foss, LL. D., . . .	10	257	9,000	300,000
1892	Ark. Cumberland, . .	Clarksville, Ark., . .	Rev. G. D. Crawford, . .	7	100	4,000	75,000
1867	Atlanta Baptist, . .	Atlanta, Ga.,	Rev. John Hope,	15	213	3,500	100,000
1869	Atlanta U.,	Atlanta, Ga.,	Edward T. Ware,	30	350	12,500	375,000
1869	Augsburg Seminary, .	Minneapolis, Minn., .	H. A. Urseth, Dean, . . .	8	135	5,000	100,000
1860	Augustana C. & T. S.,	Rock Island, Ill., . .	G. A. Andreen, Ph. D., . .	28	570	22,000	280,000
1849	Austin,	Sherman, Tex., . . .	Rev. T. S. Clyde, D.D., .	7	150	6,000	250,000
1858	Baker,	Baldwin, Kan., . . .	Lemuel H. Murlin, . . .	42	1,012	30,000	400,000
1846	Baldwin U.,	Berea, O.,	George B. Rogers,	34	460	10,000	300,000
1863	Bates,	Lewiston, Me., . . .	Rev. G. C. Chase, D.D., .	31	445	33,000	1,000,000
1845	Baylor U.,	Waco, Tex.,	S. P. Brooks, LL. D., . .	42	1,121	18,000	716,000
1853	Beaver C. & M. I., .	Beaver, Penn., . . .	Rev. A. Staples, D.D., . .	15	214	3,000	150,000
1880	Bellevue,	Bellevue, Neb., . . .	Guy W. Wadsworth, . . .	14	170	5,300	150,000
1846	Beloit,	Beloit, Wis.,	Edward D. Eaton, LL. D.,	31	319	40,000	1,500,000
1855	Berea,	Berea, Ky.,	William G. Frost, D.D., .	56	1,097	24,000	933,000
1840	Bethany,	Bethany, W. Va., . .	T. E. Cramblet, LL. D., .	18	300	10,000	500,000
1881	Bethany,	Lindsborg, Kan., . .	Ernest F. Philblad, . . .	40	648	10,000	179,000
1854	Bethel,	Russellville, Ky., . .	J. D. Garner,	8	90	6,000	212,000
1867	Biddle U.,	Charlotte, N. C., . .	D. J. Sanders, D.D., . . .	14	215	16,000	275,000
1859	Blackburn,	Carlinville, Ill., . . .	T. W. Lingle, Ph. D., . .	14	159	4,000	175,000
1869	Boston U.,	Boston, Mass., . . .	W. E. Huntington, LL. D.,	158	1,428	34,000	2,811,586
1794	Bowdoin,	Brunswick, Me., . . .	Rev. W. D. Hyde, LL. D.,	21	303	88,000	1,113,655
1857	Bowdon,	Bowdon, Ga.,	Wm. P. Lunsford,	7	296	500	20,000
1880	Bridgewater,	Bridgewater, Va., . .	Walter B. Yount, Ph. D.,	14	215	6,000	90,000
1887	Brigham Young, . .	Logan, Utah,	James H. Linford,	46	855	5,000	197,262
1764	Brown U.,	Providence, R. I., . .	Rev. W. H. P. Faunce, D.D.	76	915	150,000	5,000,000
1870	Buchtel,	Akron, O.,	A. B. Church, LL. D., . .	20	269	9,000	429,000
1846	Bucknell U.,	Lewisburg, Penn., . .	J. H. Harris, LL. D., . .	51	750	30,000	1,100,000
1891	Buena Vista,	Storm Lake, Ia., . . .	R. L. Campbell, D.D., . .	17	240	6,000	200,000
1895	Burleson,	Greenville, Tex., . .	Marcus H. Duncan, . . .	11	250	1,000	50,000
1849	Burritt,	Spencer, Tenn., . . .	W. N. Billingsley,	10	227	2,000	15,000
1850	Butler,	Indianapolis, Ind., .	T. C. Howe, Dean,	26	464	16,000	400,000
1876	California,	Oakland, Cal., . . .	Arthur A. Macurda, . . .	17	92	3,800	106,000
1903	Campbell,	Holton, Kan.,	Thomas D. Crites,	16	433	4,000	200,000
1870	Canisius,	Buffalo, N. Y., . . .	Rev. A. A. Miller, S. J., . .	31	450	30,000	
1830	Capital U.,	Columbus, O.,	Rev. L. H. Schuh, Ph. D.,	11	155	6,000	125,000
1866	Carleton,	Northfield, Minn., . .	W. H. Salmon, A. M., . .	21	315	21,000	728,000
1870	Carthage,	Carthage, Ill.,	Rev. F. L. Sigmund, D.D.,	16	250	8,000	130,000
1889	Catholic U. of Am., .	Washington, D. C., . .	Mgr. D. J. O'Connell, S.T.D.	30	152	30,000	2,228,982
1894	Cedarville,	Cedarville, O., . . .	Rev. D. McKinney, D.D., .	11	122	1,200	80,600
1825	Centenary C. of La.,	Jackson, La.,	Charles C. Miller,	7	108	3,000	125,000
1857	Central,	Fayette, Mo.,	W. A. Webb,	12	102	10,000	400,000
1889	Central H. S. of Phil.,	Philadelphia,	R. E. Thompson, S. T. D.,	78	1,964	10,000	1,603,000
1864	Central Wesleyan, . .	Warrenton, Mo., . . .	George B. Addicks,	18	315	900	250,000
1819	Central U. of Ky., . .	Danville, Ky.,	F. W. Hunt, Ph. D., . . .	70	694	30,000	750,000
1891	Charles City,	Charles City, Ia., . .	Rev. F. E. Hirsch, D.D., .	15	230	2,000	125,000
1785	College of Charleston,	Charleston, S. C., . .	H. Randolph, LL. D., . . .	10	81	16,700	461,000
1851	Christian Brothers, . .	St. Louis, Mo.,	Rev. Brother Justin, LL.D.	30	560	10,500	650,000
1871	Christian Brothers, . .	Memphis, Tenn., . .	Rev. Bro. Maurelian, . . .	23	270	6,000	
1858	Christian U.,	Canton, Mo.,	Carl Johann, LL. D., . . .	13	137	5,000	100,000
1869	Clafin U.,	Orangeburg, S. C., . .	Rev. L. M. Dunton, D.D., .	40	600	5,000	300,000
1870	Clark U.,	Atlanta, Ga.,	William H. Crogman, . . .	24	500	2,800	500,000
1889	Clark U.,	Worcester, Mass., . .	G. Stanley Hall,	15	69	42,000	4,138,395
1876	Clarksburg,	Clarksburg, Mo., . . .	Rev. J. E. Dillard, A. M., .	7	85	3,500	20,000
1881	Coe,	Cedar Rapids, Ia., . .	William W. Smith,	24	300	5,700	66,700
1813	Colby,	Waterville, Me., . . .	Rev. C. L. White, D.D., . .	15	239	43,000	75,000
1819	Colgate U.,	Hamilton, N. Y., . . .	George E. Merrill, LL. D.,	34	338	50,000	2,440,000
1874	Colorado,	Col. Springs, Col., . .	William F. Slocum,	43	607	44,800	1,487,900
1754	Columbia U.,	New York City,	Nicholas M. Butler, LL. D.,	604	5,197	450,000	33,026,009
1901	Columbia U.,	Portland, Ore.,	Rev. J. Gallagher, C. S. C.,	17	175	8,000	300,000
1839	Concordia,	Fort Wayne, Ind., . .	Rev. Martin Luecke, . . .	10	220	10,000	200,000
1881	Concordia,	Milwaukee, Wis., . . .	Max J. F. Albrecht,	8	213	5,000	125,000
1857	Cooper,	Stirling, Kan.,	Rev. F. M. Spencer, D.D.,	13	175	3,300	105,000
1853	Cornell,	Mount Vernon, Ia., . .	William F. King, LL. D., .	42	771	29,400	924,000
1865	Cornell U.,	Ithaca, N. Y.,	Jacob G. Schurman, LL. D.,	519	3,641	342,000	14,020,459
1889	Cotner U.,	Bethany, Neb.,	Wm. P. Aylsworth, LL. D.,	40	400		200,000
1879	Creighton U.,	Omaha, Neb.,	Rev. M. P. Dowling, S. J., .	103	707	19,500	1,294,131
1842	Cumberland U., . . .	Lebanon, Tenn., . . .	Nathan Green (acting), . .	18	216	20,000	275,000
1855	Dakota Wesleyan U., .	Mitchell, S. D., . . .	Rev. T. Nicholson, D.D., .	27	646	6,000	375,000

COLLEGES AND UNIVERSITIES OF THE UNITED STATES—Con.

FOUNDED	NAME OF INSTITUTION	LOCATION	PRESIDENT OR DEAN	NO. IN-STRUCTORS	NO. OF STUDENTS	VOLUMES IN LIBRARY	VALUE OF PROPERTY (INCLUDING ENDOWMENT)
1900	Dallas,	Dallas, Ore.,	Rev. Charles A. Mock,	9	110	1,000	\$ 50,000
1769	Dartmouth,	Hanover, N. H.,	William J. Tucker, LL. D.,	87	1,216	100,000	3,500,000
1837	Davidson,	Davidson, N. C.,	Henry Louis Smith,	17	306	16,000	350,000
1903	Davis and Elkins,	Elkins, W. Va.,	Marshall C. Allaben,	7	60	.....	200,000
1833	Delaware,	Newark, Del.,	G. A. Harter, Ph. D.,	21	155	16,000	250,000
1831	Denison U.,	Granville, O.,	Emory W. Hunt, LL. D.,	45	600	28,000	1,250,000
1837	De Pauw U.,	Greencastle, Ind.,	Rev. E. H. Hughes, D.D.,	42	950	50,000	1,000,000
1865	Des Moines,	Des Moines, Ia.,	L. D. Osborn, Ph. D.,	15	214	6,000	200,000
1877	Detroit,	Detroit, Mich.,	Rev. R. D. Slevin,	16	233	14,000	170,000
1783	Dickinson,	Carlisle, Pa.,	G. E. Reed, LL. D.,	33	530	40,500	835,000
1881	Drake U.,	Des Moines, Ia.,	Hill McClelland Bell,	112	1,764	12,000	771,500
1873	Drury,	Springfield, Mo.,	Joseph Henry George,	23	450	29,300	560,000
1839	Earlham,	Richmond, Ind.,	Robert L. Kelly,	28	500	18,000	700,000
1871	Elmhurst Proseminar,	Elmhurst, Ill.,	Rev. D. Irion, D.D.,	8	130	3,000	75,000
.....	Emerson,	Campbell, Tex.,	B. F. Holcomb,	15	275	2,000	28,000
1836	Emory,	Oxford, Ga.,	James E. Dicky, D.D.,	14	317	30,000	400,000
1837	Emory and Henry,	Emory, Va.,	Richard G. Waterhouse,	10	202	13,000	100,000
1882	Emporia,	Emporia, Kan.,	Henry C. Culbertson (act. g.),	23	507	7,500	130,000
1839	Erskine,	Due West, S. C.,	Rev. J. S. Moffatt, D.D.,	11	188	6,000	200,000
1855	Eureka,	Eureka, Ill.,	Robert E. Hieronymus,	17	225	8,000	164,000
1867	Ewing,	Ewing, Ill.,	J. A. Leavitt,	14	378	11,000	100,000
1895	Fairmount,	Wichita, Kan.,	Henry E. Thayer,	20	316	27,000	275,000
1887	Fargo,	Fargo, N. D.,	Edmund March Vittum,	21	306	5,000	300,000
1882	Findlay,	Findlay, O.,	Rev. C. I. Brown, D.D.,	17	369	2,000	200,000
1866	Fisk U.,	Nashville, Tenn.,	Rev. J. G. Merrill, D.D.,	36	550	8,000	500,000
1851	Florida State,	Tallahassee, Fla.,	Albert A. Murphree, A. M.,	18	330	8,000	200,000
1881	Fort Worth U.,	Fort Worth, Tex.,	Rev. W. Fielder, D.D.,	55	845	3,000	210,000
1906	Frank Hughes,	Clifton, Tenn.,	Rev. J. T. Baker, Ph. M.,	11	225	600	30,000
1825	Franklin,	New Athens, O.,	Rev. N. B. Kelly, D.D.,	9	100	3,000	75,000
1834	Franklin,	Franklin, Ind.,	W. T. Stott, LL. D.,	11	199	15,000	454,000
1787	Franklin & Marshall,	Lancaster, Penn.,	J. S. Stahr, D.D.,	22	372	43,000	700,000
1892	Fredericksburg,	Fredericksburg, Va.,	Rev. J. W. Rosebro, D.D.,	11	198	.....	25,000
1851	Furman U.,	Greenville, S. C.,	Edwin M. Poteat, D.D.,	14	228	3,000	300,000
1854	Gale,	Galesville, Wis.,	Lars M. Gimmetad,	5	60	3,000	35,000
1864	Gallaudet,	Kendall Green, D. C.,	E. M. Gallaudet, LL. D.,	20	132	5,550	730,000
1849	Geneva,	Beaver Falls, Penn.,	William Henry George,	13	250	4,000	400,000
1821	Geo. Washington U.,	Washington, D. C.,	C. W. Needham, LL. D.,	208	1,500	38,000	1,552,742
1789	Georgetown U.,	Washington, D. C.,	Rev. David H. Buel, S. J.,	154	738	91,129	1,440,000
1873	German,	Mount Pleasant, Ia.,	Rev. E. S. Havighorst, D.D.,	15	163	2,100	55,000
1821	Gonzaga,	Washington, D. C.,	Rev. E. H. Fink, S. J.,	12	156	20,000	200,000
1887	Gonzaga,	Spokane, Wash.,	Rev. H. J. Golier, S. J.,	34	450	20,000	500,000
1895	Graceland,	Lamoni, Ia.,	R. M. Stewart (acting),	9	140	2,500	45,000
1892	Grand Island,	Grand Island, Neb.,	George Sutherland,	14	213	6,000	288,746
1867	Grant U.,	Chattanooga, Tenn.,	Rev. J. H. Race, D.D.,	57	721	10,000	699,000
1892	Greenville,	Greenville, Ill.,	Augustine L. Whitcomb,	18	336	5,000	56,000
1876	Grove City,	Grove City, Penn.,	Rev. I. C. Ketter, LL. D.,	25	655	6,500	400,000
1837	Guilford,	Guilford College, N. C.,	Lewis L. Hobbs,	12	218	5,500	275,000
1862	Gustavus Adolphus,	St. Peter, Minn.,	Rev. P. A. Mattson, Ph. D.,	25	370	10,000	200,000
1812	Hamilton,	Clinton, N. Y.,	Rev. M. W. Stryker, LL. D.,	19	178	48,000	1,100,000
1854	Hamline U. of Minn.,	St. Paul, Minn.,	Rev. G. H. Bridgman, LL. D.,	77	521	8,000	750,000
1783	Hampden-Sidney,	Hampden-Sidney, Va.,	James Gray McAllister,	8	125	11,000	350,000
1828	Hanover,	Hanover, Ind.,	Glenn Culbertson (acting),	11	138	20,000	350,000
1865	Hartselle,	Hartselle, Ala.,	James H. Riddle,	4	175	500	5,000
1882	Harvard U.,	Cambridge, Mass.,	Charles William Eliot,	528	5,346	778,641	30,185,495
1833	Hastings,	Hastings, Neb.,	A. E. Turner, LL. D.,	11	200	6,700	185,000
1830	Haverford,	Haverford, Penn.,	Isaac Sharpless, LL. D.,	21	143	49,400	3,000,000
1889	Heidelberg U.,	Tiffin, O.,	Charles E. Miller, D.D.,	28	400	20,000	400,000
.....	Henderson,	Arkadelphia, Ark.,	J. H. Hinemon,	14	300	2,500	100,000
.....	Hendrix,	Conway, Ark.,	Stonewall Anderson,	11	213	13,000	250,000
1855	Henry Kendall,	Tulsa, Okla.,	Rev. A. Grant Evans,	11	110	3,000	250,000
1830	Highland U.,	Highland, Kan.,	George E. Knepper,	8	114	2,000	72,000
1849	Hillsdale,	Hillsdale, Mich.,	J. W. Mauck, LL. D.,	20	313	15,092	398,000
1825	Hiram,	Hiram, O.,	Carlos C. Rowilson,	22	254	12,000	350,000
1843	Hiram,	Sweetwater, Tenn.,	Rev. J. E. Lowry, A. M.,	6	157	4,000	1,500
1878	Holy Cross, C. of the,	Worcester, Mass.,	Rev. L. C. Stewardson, LL. D.,	17	100	50,000	1,176,925
1878	Holy Ghost, C. of the,	Pittsburg, Penn.,	Rev. T. E. Murphy, S. J.,	30	392	30,000	.....
1866	Hope,	Holland, Mich.,	G. J. Kollen, LL. D.,	30	385	3,600	500,000
1843	Howard,	Birmingham, Ala.,	G. J. Kollen, LL. D.,	20	380	16,000	600,000
1867	Howard U.,	Washington, D. C.,	Andrew P. Montague,	10	205	.....	300,000
1889	Howard Payne,	Brownwood, Tex.,	Rev. W. P. Thirkield, LL. D.,	98	1,011	46,000	2,000,000
1883	Huron,	Huron, S. D.,	James Harvey Grove,	14	411	2,000	75,000
1829	Illinois,	Jacksonville, Ill.,	Rev. C. H. French, D.D.,	16	282	4,000	245,000
1850	Illinois Wesleyan U.,	Bloomington, Ill.,	C. H. Rammelkamp, Ph. D.,	21	300	16,000	449,000
1847	Immaculate Concept,	New Orleans, La.,	Rev. F. G. Barnes, D.D.,	45	970	12,000	350,000
1880	Indian U.,	Bloomington, Ind.,	Rev. E. M. Matern, S. J.,	24	425	28,000	600,000
1820	Indiana U.,	Bloomington, Ind.,	Ewing N. Collette, A. M.,	11	125	1,600	250,000
1847	Iowa,	Grinnell, Ia.,	W. L. Bryan, Ph. D., LL. D.,	75	1,821	60,000	656,475
1844	Iowa Wesleyan U.,	Mount Pleasant, Ia.,	John H. T. Main,	50	636	38,300	807,542
1831	Jefferson,	Convent, La.,	J. W. Hancher, S. T. D.,	29	408	8,500	217,000
1887	John B. Stetson U.,	De Land, Fla.,	Rev. R. H. Smith, S. M.,	22	185	12,000	150,000
1876	Johns Hopkins U.,	Baltimore, Md.,	Lincoln Hulley, Ph. D.,	48	484	15,000	1,000,000
.....	Juniata,	Huntingdon, Penn.,	Ira Remsen, LL. D.,	176	605	135,000	6,470,000
1876	.....	.....	I. H. Brumbaugh (acting Pr.),	24	333	24,000	218,950

COLLEGES AND UNIVERSITIES OF THE UNITED STATES—Con.

FOUNDED	NAME OF INSTITUTION	LOCATION	PRESIDENT OR DEAN	No. IN-STRUCTORS	No. OF STUDENTS	VOLUMES IN LIBRARY	VALUE OF PROPERTY (INCLUDING ENDOWMENT)
1882	Kansas Christian,	Lincoln, Kan.,	George R. Stoner, M. S.,	5	120	3,000	\$ 30,000
1895	Kansas City U.,	Kansas City, Kan.,	Rev. D. S. Stephens, D.D.,	56	413	2,500	428,336
1799	Kentucky U.,	Lexington, Ky.,	T. B. McCartney, Jr.(act'g)	65	1,107	15,000	1,000,000
1868	Kentucky Wesleyan,	Winchester, Ky.,	Rev. H. K. Taylor,	9	170	3,000	170,000
1824	Kenyon,	Gambier, O.,	Rev. W. F. Pierce, L.H.D.,	15	120	35,000	1,031,369
1837	Knox,	Galesburg, Ill.,	Thomas McClelland, D.D.,	30	700	9,000	
1875	Knoxville,	Knoxville, Tenn.,	Rev. R. W. McGranahan, D.D.	18	437	3,000	150,000
1832	Lafayette,	Easton, Pa.,	Rev. E. D. Warfield, LL. D.,	35	401	30,000	1,328,456
1883	La Fayette,	La Fayette, Ala.,	John P. Neff, A. M.,	11	295	1,600	35,000
1858	La Grange,	La Grange, Mo.,	John W. Crouch,	10	165	5,000	75,000
1857	Lake Forest,	Lake Forest, Ill.,	John S. Nollen, Ph. D.,	17	186	21,150	1,500,000
1866	La Salle,	Philadelphia,	Rev. Brother Abbas,	16	150	10,000	100,000
1847	Lawrence U.,	Appleton, Wis.,	Rev. S. Plautz, D.D.,	33	611	24,000	932,000
1856	Lander Clark,	Toledo, Ia.,	Rev. Cyrus G. Kephart,	16	270	3,600	
1866	Lebanon Valley,	Annvile, Penn.,	Rev. L. Keister, D.D.,	23	316	5,000	300,000
1866	Lehigh U.,	South Bethlehem, Pa.	Henry S. Drinker, LL. D.,	63	655	125,000	2,750,000
1870	Leland U.,	New Orleans, La.,	R. W. Perkins, Ph. D.,	56	1,711	4,000	419,000
1891	Leland Stan'd, Jr., U	Palo Alto, Cal.,	David Starr Jordan,	136	1,583	100,000	30,000,000
1881	Lenoir,	Hickory, N. C.,	Rev. R. L. Fritz, A. M.,	11	216	4,000	40,000
1856	Lenox,	Hopkinton, Ia.,	Rev. E. E. Reed, D. D.,	12	188	5,300	91,000
1893	Lima,	Lima, O.,	Charles Christian Miller,	22	400	1,800	100,000
1865	Lincoln,	Lincoln, Ill.,	James H. McMurray,	15	256	4,000	200,000
1854	Lincoln U.,	Lincoln Univ., Ches- ter Co., Pa.,	Isaac N. Rendall, D. D.,	15	198	18,000	750,000
1891	Lineville,	Lineville, Ala.,	John D. Abernathy,	5	300	150	10,000
1880	Livingstone,	Livingstone, N. C.,	William H. Goler, LL. D.,	20	420	2,000	200,000
1851	Lombard,	Galesburg, Ill.,	Rev. L. B. Fisher, D. D.,	16	150	8,000	350,000
1852	Loyola,	Baltimore, Md.,	Rev. W. G. R. Mullan, S.J.,	19	162	41,000	310,000
1884	Macalester,	St. Paul, Minn.,	T. Morey Hodgman,	20	103	8,500	400,000
1863	Manhattan,	New York City,	Rev. Bro. Edward, F.S.C.,	16	208	11,000	883,552
1835	Marietta,	Marietta, O.,	Rev. A. T. Perry, D. D.,	30	485	60,000	600,000
1879	Maryville,	Maryville, Tenn.,	Rev. S. T. Wilson, D. D.,	27	611	13,000	511,000
1828	McKendree,	Lebanon, Ill.,	M. H. Chamberlin, LL. D.,	14	258	11,000	210,000
1857	McMinnville,	McMinnville, Ore.,	Leonard W. Riley,	12	206	4,000	100,000
1838	Mercer U.,	Macon, Ga.,	S. F. Jameson,	21	297	20,000	500,000
1809	Miami U.,	Oxford, O.,	Rev. G. P. Benton, D. D.,	50	1,149	26,000	425,000
1807	Middlebury,	Middlebury, Vt.,	Ezra Brainerd, LL. D.,	13	203	35,000	650,000
1882	Milligan,	Milligan, Tenn.,	Henry R. Garrett,	12	166	3,000	15,000
1867	Milton,	Milton, Wis.,	Rev. Wm. C. Daland, D.D.,	13	151	8,000	168,000
1859	Mission House of the Reformed Church,	Franklin, Wis.,	Rev. H. A. Muehlmeier, D.D.,	20	100	7,500	
1826	Mississippi,	Clinton, Miss.,	Rev. W. T. Lowrey, D. D.,	13	417	4,000	200,000
1880	Missouri Valley,	Marshall, Mo.,	W. H. Black, D. D.,	17	262	14,000	400,000
1887	Missouri Wesleyan,	Cameron, Mo.,	Walter D. Agnew,	15	225	1,000	115,000
1858	Monmouth,	Monmouth, Ill.,	T. H. McMichael,	25	491	8,000	415,000
1854	Moores Hill,	Moores Hill, Ind.,	Rev. F. C. English, D. D.,	15	259	7,000	130,000
1894	Morningside,	Sioux City, Ia.,	Willson S. Lewis,	37	480	5,200	420,000
1882	Morris Brown,	Atlanta, Ga.,	Rev. J. S. Flipper, D. D.,	30	1,175	2,000	100,000
1888	Morris Harvey,	Barboursville, W. Va.	D. W. Shaw,	13	191	2,500	75,000
1872	Morrisville,	Morrisville, Mo.,	Allen H. Godbey,	14	260	3,000	35,600
	Mount St. Joseph's,	Baltimore, Md.,	Brother Norbert,	15	170	3,000	100,000
1808	Mount St. Mary's,	Emmitsburg, Md.,	Very Rev. D. J. Flynn, LL.D.	25	333	10,000	300,000
1858	Mount Union,	Alliance, O.,	Rev. A. B. Riker, D. D.,	28	524	9,500	479,000
1867	Muhlenberg,	Allentown, Penn.,	Rev. J. A. W. Haas, LL.D.,	11	110	14,000	512,000
1837	Muskingum,	New Concord, O.,	Rev. J. K. Montgomery, D.D.	20	300	4,000	125,000
1888	Nebraska Wesleyan,	University Place, Neb.	D. C. Huntington, LL. D.,	45	1,213	6,000	400,000
1843	New Windsor,	New Windsor, Md.,	Rev. J. Fraser, Ph. D.,	6	60	4,000	60,000
1830	New York U.,	New York, N. Y.,	Rev. H. M. McCracken, LL.D., Chancellor,	280	3,600	90,000	3,900,000
1847	New York, Coll. of the City of,	New York, N. Y.,	John H. Finley, LL. D.,	179	3,905	38,000	
1856	Niagara U.,	Niagara Falls, N. Y.,	Very Rev. W. F. Likly, C.M.,	20	220	18,000	400,000
1860	Northern Illinois,	Fulton, Ill.,	J. E. Bittinger, A. M.,	6	180	8,500	70,000
1892	Northern Missouri,	Albany, Mo.,	James Ralph Clay,	8	151	1,400	50,000
1861	Northwestern,	Naperville, Ill.,	H. J. Kiekhoefer, Ph. D.,	21	460	8,600	450,000
1851	Northwestern U.,	Evanston, Ill.,	Abram W. Harris, LL. D.,	203	3,662	105,000	9,034,212
1865	Northwestern U.,	Watertown, Wis.,	August F. Ernst,	10	251	7,110	166,600
1861	Norwegian Luther,	Decorah, Ia.,	C. K. Preus,	13	211	13,500	139,000
1819	Norwich U.,	Northfield, Vt.,	C. H. Spooner, LL. D.,	11	168	15,000	200,000
1833	Oberlin,	Oberlin, O.,	Rev. H. C. King, D. D.,	129	1,848	177,070	3,022,416
1888	Occidental,	Los Angeles, Cal.,	John W. Baer, LL. D.,	32	400	2,000	400,000
1877	Ogden,	Bowling Green, Ky.,	A. F. Lewis, A. M.,	5	81	1,000	150,000
1870	Ohio State U.,	Columbus, O.,	W. O. Thompson, LL. D.,	175	2,227	73,600	4,200,000
1804	Ohio U.,	Athens, O.,	Alston Ellis, LL. D.,	49	1,319	27,000	2,930,000
1844	Ohio Wesleyan U.,	Delaware, O.,	Herbert Welch, LL. D.,	108	1,178	55,000	1,700,000
1844	Olivet,	Olivet, Mich.,	E. G. Lancaster, Ph. D.,	30	300	4,500	600,000
1865	Ottawa U.,	Ottawa, Kan.,	Silas Eber Price,	20	480	4,500	275,000
1847	Otterbein U.,	Westerville, O.,	Rev. L. Bookwalter, D.D.,	24	487	12,000	359,000
1886	Quacita,	Arkadelphia, Ark.,	H. S. Hartzog, LL. D.,	24	500	7,500	200,000
1891	Pacific,	Newberg, Ore.,	Francis K. Jones,	9	140	2,000	40,000
1849	Pacific U.,	Forest Grove, Ore.,	W. N. Ferrin, LL. D.,	19	237	14,000	408,000
1875	Park,	Parkville, Mo.,	L. M. McAfee,	25	360	15,000	707,531
1887	Parker,	Winnebago City, Min.	E. W. Van Aken,	12	175	3,500	80,000

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1875	Parsons, Peabody School for Teachers,	Fairfield, Ia.,	Rev. W. E. Parsons, D.D.,	19	250	2,000	\$ 376,000
1873	Penn.,	Nashville, Tenn.,	J. D. Porter, LL. D.,	35	500	20,000	250,000
1832	Pennsylvania,	Oskaloosa, Ia.,	Abalom Rosenberger,	17	273	7,000	203,000
1862	Pennsylv'a Military,	Gettysburg, Penn.,	Rev. S. G. Hefelbower,	19	301	29,000	600,000
1855	Pennsylvania State,	Chester, Penn.,	Charles E. Hyatt,	14	142	3,000	
1877	Philander Smith,	State College, Penn.,	Edwin E. Sparks, Ph. D.,	97	1,047	27,000	2,137,000
1865	Philomath,	Little Rock, Ark.,	Rev. J. M. Cox, D. D.,	21	661	3,500	58,000
1881	Pike,	Philomath, Ore.,	O. V. White,	12	95	150	25,000
1890	Polytechnic,	Bowling Green, Mo.,	L. M. Collins,	6	100	1,000	12,000
1854	Poly. Inst. of B'klyn,	Fort Worth, Tex.,	Rev. H. A. Boaz, A. M.,	8	115	3,000	150,000
1888	Pomona,	Brooklyn, N. Y.,	F. W. Atkinson, Ph. D.,	22	198	10,000	950,000
1905	Presbyterian of Fla.,	Claremont, Cal.,	G. A. Gates, LL. D.,	34	463	8,400	430,000
1880	Presbyterian of S.C.,	Eustis, Fla.,	Rev. L. M. Stevens (acting),	8	75	500	7,000
1746	Princeton U.,	Clinton, S. C.,	Rev. R. Adams, D. D.,	7	110	4,000	136,000
1868	Pritchett,	Princeton, N. J.,	W. Wilson, Litt. D.,	163	1,311	220,000	3,196,000
1830	Randolph-Macon,	Glasgow, Mo.,	Uriel S. Hall,	7	128	3,000	150,000
1835	Richmond,	Ashland, Va.,	R. E. Blackwell, LL. D.,	14	152	15,000	397,299
1832	Richmond,	Richmond, O.,	George W. Macmillan,	6	50	3,000	40,000
1876	Rio Grande,	Richmond, Va.,	F. W. Boatwright, LL. D.,	18	306	15,000	1,250,000
1851	Ripon,	Rio Grande, O.,	John Merrill Davis,	11	170	3,400	125,000
1853	Roanoke,	Ripon, Wis.,	Richard C. Hughes,	22	250	18,000	450,000
1856	Rock Hill,	Salem, Va.,	Rev. J. A. Morehead, D.D.,	16	223	24,000	275,000
1885	Rollins,	Ellicott City, Md.,	Brother Abraham, F. S. C.,	14	170	10,000	100,000
1867	Rust U.,	Winter Park, Fla.,	W. F. Blackman, Ph. D.,	20	200	3,000	325,000
1766	Rutgers,	Holly Springs, Miss.,	Rev. W. A. Foster, Jr., D.D.,	32	407	5,000	175,000
1888	Sacred Heart, Col. of,	New Brunswick, N.J.,	Rev. W. H. S. Demarest, D.D.,	35	260	52,000	1,000,000
1893	St. Anselm's,	Denver, Col.,	John J. Brown, S. J.,	15	223	8,000	150,000
1891	St. Bede's,	Manchester, N. H.,	Rt. Rev. L. Walter, O.S.B.,	22	115	5,000	150,000
1858	St. Benedict's,	Peru, Ill.,	Rt. Rev. L. Schnerr, O.S.B.,	15	176	6,000	
1868	St. Benedict's,	Atchison, Kan.,	Rev. Aloys Bradley, O.S.B.,	26	225	20,000	250,000
1892	St. Bernard,	Newark, N. J.,	Rev. V. Amberg, O. S. B.,	14	112	9,000	100,000
1859	St. Bonaventure's,	St. Bernard, Ala.,	Rt. Rev. B. Menges, O.S.B.,	22	125	5,000	110,000
1848	St. Charles,	Allegany, N. Y.,	Very Rev. J. F. Butler, O. S. B.,	18	207	7,000	250,000
1860	St. Francis Solanus,	Ellicott City, Md.,	Rev. F. X. McKenny, S. S.,	18	235	16,000	150,000
1847	St. Francis Xavier,	Quincy, Ill.,	Very Rev. P. A. Mueller, O. F. M.,	17	200	8,000	200,000
1886	St. Ignatius,	New York, N. Y.,	Rev. T. J. McCluskey, S. J.,	37	566	150,000	
1784	St. John's,	Cleveland, O.,	Rev. G. J. Pickel, S. J.,	25	320	13,500	224,482
1866	St. John's,	Annapolis, Md.,	Thomas Fell, LL. D.,	13	207	10,000	300,000
1841	St. John's,	Washington, D. C.,	Brother Germanus, F. S. C.,	12	145	5,500	150,000
1893	St. John's Lutheran,	New York, N. Y.,	Rev. J. J. Collins, S. J.,	37	440	38,000	1,000,000
1868	St. John's,	Winfield, Kan.,	Adolphus W. Meyer,	6	100	2,000	50,000
1867	St. John's U.,	Brooklyn, N. Y.,	Very Rev. J. W. Moore, C. M.,	23	265	12,000	
1872	St. Joseph's,	Collegeville, Minn.,	Rt. Rev. P. Engel, O.S.B.,	34	305	25,000	300,000
1856	St. Lawrence U.,	Dubuque, Ia.,	Very Rev. D. M. Gorman,	15	255	3,000	200,000
1889	St. Leo,	Canton, N. Y.,	A. Gunnison, LL. D.,	21	600	35,000	800,000
1829	St. Louis U.,	St. Leo, Fla.,	Rt. Rev. C. H. Mohr, O.S.B.,	7	75	12,800	50,000
1821	St. Mary's,	St. Louis, Mo.,	Rev. W. B. Rogers, S. J.,	158	862	55,000	1,000,000
1878	St. Mary's,	St. Mary, Ky.,	Rev. M. Jaglowicz, C. R.,	12	141	5,500	
1848	St. Mary's,	Belmont, N. C.,	Rt. Rev. L. Haid, O. S. B.,	15	150	12,500	100,000
1857	St. Meinrad,	St. Mary's, Kan.,	Rev. A. J. Breen, S. J.,	39	412	24,000	359,000
1874	St. Olaf,	St. Meinrad, Ind.,	Rt. Rev. A. Schmitt, O.S.B.,	17	132	22,000	
1878	St. Peter's,	Northfield, Minn.,	Rev. John N. Kildahl,	28	475	5,000	184,000
1860	St. Stephens,	Jersey City, N. J.,	Rev. E. J. Magrath,	13	207	10,000	200,000
1846	St. Vincent's,	Annandale, N. Y.,	Rev. G. B. Hopson, D. D. (acting warden),	9	50	18,500	233,000
1865	St. Vincent's,	Beatty, Penn.,	Rt. Rev. W. Stehle, O.S.B.,	34	390	45,000	
1831	St. Xavier,	Los Angeles, Cal.,	Very Rev. J. S. Glas, D.D.,	29	350	4,600	750,000
1851	Santa Clara,	Cincinnati, O.,	Rev. A. A. Dierckes, S. J.,	31	417	28,500	
1878	Scarritt Coll. Inst.,	Santa Clara, Cal.,	Rev. R. A. Gleeson, S. J.,	25	325	18,000	
1857	Scio,	Neosho, Mo.,	J. T. Pritchett, A. M.,	14	178	2,500	45,000
1856	Seton Hall,	Scio, O.,	Robert E. Beethan,	12	125	3,000	50,000
1865	Shaw U.,	South Orange, N. J.,	Very Rev. J. F. Mooney, D.D.,	18	201	25,000	500,000
1827	Shurtleff,	Raleigh, N. C.,	Rev. C. F. Meserve, LL. D.,	30	526	5,150	200,000
1868	Simpson,	Upper Alton, Ill.,	J. D. S. Riggs, L. H. D.,	14	200	13,000	250,000
1901	South Carolina U.,	Indianola, Ia.,	C. E. Shelton, LL. D.,	25	929	5,100	213,000
1842	S. Carolina Mil. Ac.,	Columbia, S. C.,	Benjamin Sloan, LL. D.,	26	275	38,000	420,000
1856	Southern U.,	Charleston, S. C.,	Col. A. Coward, Supt.,	9	170	7,500	125,000
1875	South'n Pres. U.,	Greensboro, Ala.,	Rev. S. M. Hosmer, D. D.,	12	176	8,500	310,000
1830	Spring Hill,	Clarksville, Tenn.,	Rev. N. M. Woods, LL. D.,	13	116	8,500	450,000
1907	Stanford Graded,	Mobile, Ala.,	Chancellor,	28	235	25,000	
1891	State Col. for Col'd S.,	Stanford, Ky.,	Rev. F. X. Twellmeyer, S.J.,	12	367	150	30,000
1899	Straight U.,	Dover, Del.,	J. W. Ireland,	7	120	700	35,000
1858	Susquehanna U.,	William C. Jason,	Rev. S. G. Butcher,	30	659	3,000	217,000
1869	Swarthmore,	New Orleans, La.,	Rev. C. T. Aikens,	23	228	12,000	250,000
1851	Syracuse U.,	Selinsgrove, Penn.,	Joseph Swain, LL. D.,	34	310	33,500	1,895,361
1857	Tabor,	Swarthmore, Penn.,	Rev. J. R. Day, S. T. D.,	220	3,200	90,000	4,163,467
1883	Tarkio,	Syracuse, N. Y.,	Chancellor,	14	230	15,000	325,000
			George N. Ellis, A. M.,	25	335	2,500	223,387
			Rev. J. A. Thompson, D.D.,				

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1890	Taylor U.,	Upland, Ind.,	Rev. A. R. Archibald (act'g),	15	212	4,300	\$ 80,000
1874	Temple,	Philadelphia, Penn., .	R. H. Cromwell, D. D., .	199	3,301	5,100	486,000
1874	Tenn. Military Inst., .	Sweetwater, Tenn., .	Otey C. Hulvey,	8	90	2,000	35,000
1870	Thiel,	Greenville, Penn., .	Otto F. H. Bert, Dean, .	6	59	7,500	140,000
1823	Trinity,	Hartford, Conn., . .	F. S. Luther, LL. D., .	21	213	52,500	1,920,000
1852	Trinity,	Durham, N. C., . . .	Rev. J. C. Kilgo, D. D., .	27	280	35,000	1,200,000
1869	Trinity U.,	Waxahachie, Tex., .	L. E. Wear, Dean, . . .	20	300	5,000	100,000
1852	Tufts,	Medford, Mass., . .	Rev. F. W. Hamilton, D. D.,	208	1,120	56,100	2,000,000
1834	Tulane University of Louisiana,	New Orleans, La., . .	E. B. Craighead, LL. D., .	150	1,869	38,300	7,096,079
1887	Union,	Barbourville, Ky., . .	James Warren Easley, . .	12	155	3,000	325,000
1891	Union U.,	College View, Neb., .	Charles Clarke Lewis, . .	30	440	2,000	175,000
1795	Union U.,	Schenectady and Albany, N. Y.,	Rev. G. Alexander, D. D.,	30	270	40,500	1,279,476
1859	Union Christian, . . .	Merion, Ind.,	O. B. Whitaker,	12	100	3,000	170,000
1831	U. of Alabama,	Tuscaloosa, Ala., . .	J. W. Abercrombie, LL. D.,	46	807	25,000	2,000,000
1891	U. of Arizona,	Tucson, Ariz., . . .	K. C. Babcock, Ph. D., .	35	215	11,000	255,000
1871	U. of Arkansas,	Fayetteville, Ark., .	J. N. Tillman, LL. D., .	90	1,800	15,000	500,000
1846	U. of Buffalo,	Buffalo, N. Y., . . .	C. P. Norton,	166	600	9,133	305,000
1860	U. of California, . . .	Berkeley, Cal., . . .	B. I. Wheeler, LL. D., .	400	3,122	195,000	6,232,643
1890	U. of Chicago,	Chicago, Ill.,	H. P. Judson, LL. D., .	332	5,070	461,000	27,153,000
1819	U. of Cincinnati, . . .	Cincinnati, O., . . .	C. W. Dabney, LL. D., .	135	1,374	104,000	3,300,000
1876	U. of Colorado,	Boulder, Col., . . .	J. H. Baker, LL. D., . .	115	950	40,000	700,000
1864	U. of Denver,	Denver, Col.,	Rev. H. A. Buchtel, LL. D.,	175	1,300	10,000	750,000
1884	U. of Florida,	Gainesville, Fla., . .	Andrew Sledd, Ph. D., .	15	100	6,000	250,000
1875	U. of Georgia,	Athens, Ga.,	D. C. Barrow, Chancellor,	129	2,931	30,000	1,750,000
1889	U. of Idaho,	Moscow, Idaho, . . .	E. J. James, LL. D., . .	35	425	15,000	3,000,000
1867	U. of Illinois,	Urbana, Ill.,	E. J. James, LL. D., . .	430	4,600	100,500	3,074,041
1847	U. of Iowa,	Iowa City, Ia., . . .	G. E. McLean, LL. D., .	150	2,072	65,000	2,574,000
1864	U. of Kansas,	Lawrence, Kan., . .	Frank Strong, Ph. D., .	118	2,000	57,000	1,500,000
1907	U. of Louisville, . . .	Louisville, Ky., . . .	J. C. Willis, Ph. D., . .	72	800	10,000	1,000,000
1865	U. of Maine,	Orono, Me.,	G. E. Fellows, LL. D., .	73	730	35,000	1,000,000
1837	U. of Michigan,	Ann Arbor, Mich., . .	J. B. Angell, LL. D., . .	336	5,000	222,609	3,513,500
1868	U. of Minnesota, . . .	Minneapolis, Minn., .	C. Northrop, LL. D., . .	300	4,350	115,000	6,000,000
1848	U. of Mississippi, . . .	University, Miss., . .	A. A. Kinnannon, Chan.,	33	344	28,000	1,200,000
1839	U. of Missouri,	Columbia, Mo., . . .	R. H. Jesse, LL. D., . .	148	2,221	79,500	3,000,000
1895	U. of Montana,	Missoula, Mont., . .	O. J. Craig, Ph. D., . .	26	392	20,000	1,250,000
1869	U. of Nebraska,	Lincoln, Neb., . . .	E. B. Andrews, Chancellor,	235	3,130	83,000	2,600,646
1874	U. of Nevada,	Reno, Nev.,	J. E. Stubbs, LL. D., . .	30	308	28,000	750,000
1889	U. of New Mexico, . .	Albuquerque, N. M., .	William G. Tight,	15	150	7,000	200,000
1789	U. of North Carolina, .	Chapel Hill, N. C., .	F. P. Venale, LL. D., . .	84	775	50,000	1,110,000
1883	U. of North Dakota, . .	Grand Forks, N. D., .	Webster Merrifield, . .	63	1,000	30,000	2,000,000
1842	U. of Notre Dame, . .	Notre Dame, Ind., . .	Very Rev. J. Cavanaugh, C. S. C.,	76	890	66,000	2,000,000
1892	U. of Oklahoma, . . .	Norman, Okla., . . .	D. R. Boyd, Ph. D., . .	42	650	18,000	4,350,000
1872	U. of Oregon,	Eugene, Ore.,	Prince L. Campbell, . . .	93	740	20,000	500,000
1851	U. of the Pacific, . . .	San José, Cal., . . .	Rev. M. S. Cross, D. D., .	21	261	9,000	250,000
1740	U. of Pennsylvania, . .	Philadelphia, Penn., .	C. C. Harrison, LL. D., Pro't,	375	4,067	259,000	16,078,192
1850	U. of Rochester,	Rochester, N. Y., . .	Rush Rhees, LL. D., . .	21	351	46,900	1,519,926
1854	U. of St. Mary,	Galveston, Tex., . .	Rev. A. E. Otis, S. J., . .	9	100	5,000	150,000
1868	U. of the South,	Sewanee, Tenn., . . .	B. L. Wiggins, LL. D., .	49	513	28,000	800,000
1882	U. of South Dakota, . .	Vermillion, S. D., . .	Franklin B. Gault, . . .	50	359	12,500	400,000
1794	U. of Tennessee, . . .	Knoxville, Tenn., . .	Brown Ayres, Ph. D., . .	115	750	26,000	1,300,000
1883	U. of Texas,	Austin, Tex.,	David F. Houston,	130	1,511	55,000	3,299,500
1850	U. of Utah,	Salt Lake City, Utah, .	Joseph T. Kingsbury, . .	61	806	27,000	856,305
1791	U. of Vermont,	Burlington, Vt., . . .	Rev. M. H. Buckham, LL. D.,	74	532	75,000	1,662,000
1819	U. of Virginia,	Charlottesville, Va., .	E. A. Alderman, LL. D., .	75	755	70,000	2,100,000
1861	U. of Washington, . . .	Seattle, Wash., . . .	T. F. Kane, Ph. D., . .	92	1,530	29,000	2,500,000
1868	U. of Wooster,	Wooster, O.,	Rev. L. E. Holden, LL. D.,	31	615	27,000	1,076,313
1886	U. of Wyoming,	Laramie, Wyo., . . .	F. M. Tisdell, Ph. D., . .	25	243	2,100	381,711
1857	Upper Iowa U.,	Fayette, Ia.,	Rev. W. A. Shanklin, D. D.,	23	534	13,000	310,000
1850	Urbana U.,	Urbana, O.,	Rev. F. A. Gustafson, . .	6	45	7,000	250,000
1869	Ursinus,	Collegeville, Penn., .	Rev. A. E. Keigwin, D. D.,	19	235	14,000	335,000
1842	Vanderbilt U.,	Nashville, Tenn., . .	J. H. Kirkland,	111	884	35,000	2,500,000
1842	Villanova,	Villanova, Penn., . .	Rev. L. A. Delurey, O. S. B.,	32	357	8,000	
1839	Virginia Military Inst.,	Lexington, Va., . . .	E. W. Nichols (acting supt.)	20	301	15,000	500,000
1888	Volant,	Volant, Penn., . . .	Charles F. Ball,	6	200	1,500	5,000
1832	Wabash,	Crawfordsville, Ind., .	George L. Mackintosh, . .	22	315	42,000	1,000,000
1888	Wake Forest,	Wake Forest, N. C., .	William L. Poteat, . . .	31	371	18,000	460,707
1866	Walden University, . .	Nashville, Tenn., . .	Rev. J. A. Kumer, D. D., .	68	923	6,800	150,000
1868	Wartburg,	Clinton, Ia.,	John Futschel,	8	95	4,100	95,000
1865	Washburn,	Topeka, Kan.,	Rev. N. Plass, D. D., . .	106	720	12,500	563,000
1782	Washington U.,	St. Louis, Mo., . . .	M. S. Snow (acting chan.),	190	1,133	60,000	8,500,000
1795	Washington,	Chestertown, Md., . .	James W. Cain, LL. D., .	11	142	4,000	125,000
1802	Wash't'n & Jefferson, .	Washington Coll., Tenn.	James T. Coates, D. D., .	9	135	4,700	115,000
1749	Washing't'n & Lee U., .	Washington, Penn., .	Rev. J. D. Moffat, LL. D.,	30	425	20,000	1,117,000
1869	Weaver,	Lexington, Va., . . .	George H. Denny, LL. D.,	33	455	50,000	1,165,000
1831	Wesleyan U.,	Weaverville, N. C., .	Rev. L. B. Abernethy, . .	7	175	1,500	30,000
1867	West Virginia U., . . .	Middletown, Conn., .	Rev. B. P. Raymond, LL. D.,	34	308	75,000	2,545,735
1867	W. Va. Wesleyan, . . .	Morgantown, W. Va., .	D. B. Purinton, LL. D., .	70	1,257	28,834	815,769
1867	Western Maryland, . .	Buckhannon, W. Va., .	Rev. C. G. Doney, D. D., .	23	417	6,000	250,000
1826	Western Reserve U., .	Westminster, Md., . .	Rev. T. H. Lewis, D. D., .	22	250	7,000	250,000
		Cleveland, O., . . .	C. F. Thwing, LL. D., . .	131	907	90,000	3,145,872

COLLEGES AND UNIVERSITIES OF THE UNITED STATES—Con.

FOUNDED	NAME OF INSTITUTION	LOCATION	PRESIDENT OR DEAN	NO. IN-STRUCTORS	NO. OF STUDENTS	VOLUMES IN LIBRARY	VALUE OF PROPERTY (INCLUDING ENDOWMENT)
1787	Western U. of Penn.,	Allegheny and Pittsburg, Penn.,	S. B. McCormick, Chan.,	159	994	15,000	\$ 1,100.00
1865	Westfield,	Westfield, Ill.,	Rev. B. F. Daughly, . .	9	73	2,500	137,000
1853	Westminster,	Fulton, Mo.,	Rev. D. R. Kerr, D. D.,	14	180	6,100	382,243.00
1852	Westminster,	N. Wilmington, Penn.,	Rev. R. McW. Russell, D. D.,	26	291	7,000	400,000
1860	Wheaton,	Wheaton, Ill.,	Rev. C. A. Blanchard, D. D.,	19	340	3,000	281,026
1859	Whitman,	Walla Walla, Wash.,	Rev. S. B. L. Penrose, D. D.,	34	360	14,000	450,000
1856	Wilberforce U.,	Wilberforce, O.,	Rev. J. H. Jones, LL. D.,	32	450	10,000	300,000
1873	Wiley U.,	Marshall, Tex.,	Rev. M. W. Dogan, Ph. D.,	24	650	6,200	107,000
1844	Williamette U.,	Salem, Ore.,	Rev. J. H. Coleman, Ph. D.,	45	573	7,000	400,000
1693	William and Mary,	Williamsburg, Va.,	L. G. Tyler, LL. D.,	22	224	15,000	275,000
1849	William Jewell,	Liberty, Mo.,	Rev. J. P. Greene, LL. D.,	35	500	21,000	600,000
1793	Williams,	Williamstown, Mass.,	Rev. H. Hopkins, LL. D.,	49	490	58,000	2,726,729
1875	Wilmington,	Wilmington, O.,	Albert J. Brown,	13	150	5,000	75,000
1845	Wittenberg,	Springfield, O.,	Charles G. Heckert, . .	29	404	15,500	650,000
1854	Wofford,	Spartanburg, S. C.,	Henry N. Snyder,	12	286	17,000	371,300
1701	Yale U.,	New Haven, Conn.,	A. T. Hadley, LL. D.,	383	3,300	500,000	8,348,844
1882	Yankton,	York, Neb.,	Rev. H. K. Warren, LL. D.,	22	299	8,000	354,563
1890	York,	Yankton, S. D.,	W. E. Schell, D. D.,	17	505	3,000	125,000

TABLE II—STATISTICS OF COLLEGES FOR WOMEN.

1854	Alabama Con. Fem.,	Tuskegee, Ala.,	John Massey, LL. D.,	12	150	2,500	\$ 140,000
1903	Alabama Synodical,	Talladega, Ala.,	Rev. T. P. Walton, . . .	13	112	200	20,000
1882	Albert Lea,	Albert Lea, Minn.,	Mary Lee Marquis, . . .	13	185	1,200	150,000
1867	Allentown,	Allentown, Penn.,	J. S. Peters (acting), . .	9	90	800	60,000
1854	Andrew Female,	Cuthbert, Ga.,	Rev. J. W. Malone, D. D.,	12	150	4,000	100,000
1889	Barnard,	New York,	L. D. Gill, A. M., Dean,	68	601	4,000	1,251,708
1845	Baylor Female,	Belton, Tex.,	W. A. Wilson, D. D.,	20	402	6,000	175,000
1841	Beaumont,	Harrodsburg, Ky.,	Th. Smith, A. M.,	10	95	4,000	50,000
1853	Beaver,	Beaver, Penn.,	Geo. D. Crissman,	15	217	3,000	200,000
1894	Belhaven (Y'g Lad's),	Jackson, Miss.,	James R. Preston,	15	158	1,500	50,000
1907	Bessie Tift,	Forsyth, Ga.,	C. H. S. Jackson,	30	350	3,000	200,000
1854	Bethel Female,	Hopkinsville, Ky.,	E. Harrison, LL. D.,	7	87		60,000
1851	Blairsville,	Blairsville, Penn.,	Rev. N. L. Fiscus,	11	100	5,000	100,000
1873	Blue Mountain Fem.,	Blue Mountain, Miss.,	B. G. Lowrey,	30	527	2,000	80,000
1890	Boscobel (Y'g Lad's),	Nashville, Tenn.,	Mrs. J. O'Brien Rust, . .	14	125	1,800	70,000
1878	Brenan,	Gainesville, Ga.,	Haywood J. Pearce, . . .	33	375	3,500	150,000
1880	Bryn Mawr,	Bryn Mawr, Penn.,	M. Carey Thomas,	46	456	48,000	2,984,550
1854	Caldwell (Y'g Wom.),	Danville, Ky.,	John Carey Acheson, . . .	20	225		
1892	Central Baptist for Young Ladies,	Conway, Ark.,	W. W. Rivers, A. M.,	10	135	3,500	60,000
1869	Central Female,	Lexington, Mo.,	Alfred F. Smith,	19	150	5,000	150,000
1851	Chappell Hill Female,	Chappell Hill, Tex.,	James E. Willis,	7	100	3,000	30,000
1852	Chickasaw Female,	Pontotoc, Miss.,	John Goff,	8	125	2,000	50,000
1851	Christian,	Columbia, Mo.,	Mrs. W. T. Moore,	28	250	5,000	300,000
1880	Claremont,	Hickory, N. C.,	Daniel W. Read,	8	100	5,000	25,000
1881	Clifford Female,	Union, S. C.,	B. G. Clifford,	7	50	1,000	15,000
1854	Columbia Female,	Columbia, S. C.,	W. W. Daniel, D. D.,	23	300	800	200,000
1890	Converse,	Spartanburg, S. C.,	Robert P. Pell,	23	322	3,500	300,000
1884	Cottey,	Nevada, Mo.,	Mrs. V. A. C. Stockard, . .	20	280	1,500	80,000
1843	Cox,	Cox Pk. (Atlanta), Ga.,	John W. Gaines,	25	250	10,000	200,000
1859	Due West Female,	Due West, S. C.,	Rev. James Boyce,	15	130	1,000	20,000
1897	Elizabeth,	Charlotte, N. C.,	Rev. C. B. King, A. M.,	18	200	1,200	250,000
1905	Florida Female,	Tallahassee, Fla.,	A. A. Murphree,	21	175	7,000	175,000
1879	Gaston,	Dallas, N. C.,	S. A. Wolf, A. M.,	7	149	1,300	10,000
1854	Glendale,	Glendale, O.,	Miss R. J. De Vore, A. M.,	12	70	5,000	40,000
1838	Greensboro Female,	Greensboro, N. C.,	Mrs. L. H. Robertson, . .	14	198	2,000	210,000
1873	Hardin,	Mexico, Mo.,	J. W. Million,	22	240	1,000	200,000
1852	Hillman (Y'g Lad's),	Clinton, Miss.,	W. T. Lowrey, D. D.,	10	148	2,000	15,000
1842	Hollins Institute,	Hollins, Va.,	Miss Matty L. Cocke, . . .	28	260	3,000	150,000
1856	Howard Female,	Gallatin, Tenn.,	Amos L. Edwards,	10	110	800	35,000
1859	Howard-Payne,	Fayette, Mo.,	Rev. H. E. Stout,	17	200	1,500	100,000
1847	Illinois Woman's,	Jacksonville, Ill.,	Rev. J. R. Harker, Ph. D.,	26	326	1,000	300,000
1856	Irving,	Mechanicsburg, Penn.,	E. E. Campbell, Ph. D.,	17	150	1,000	100,000
1852	Isbell,	Talladega, Ala.,	Frank B. Webb, D. D.,	6	75	200	10,000
1854	Jessamine Institute,	Nicholasville, Ky.,	H. H. Savage,	18	140	2,000	75,000
1852	Kee Mar,	Hagerstown, Md.,	J. Emery Shaw,	13	100	1,000	75,000
1846	La Grange Female,	La Grange, Ga.,	R. W. Smith, A. M.,	18	221	2,000	187,000
1859	Lake Erie C. & S.,	Painesville, O.,	Miss Mary Evans,	22	152	9,000	420,000
1872	Lander,	Greenwood, S. C.,	Rev. J. O. Willson, D. D.,	14	160	4,500	60,000
1851	Lasell S.,	Auburndale, Mass.,	C. C. Bragdon, LL. D.,	29	159	2,200	168,000
1855	Lexington,	Lexington, Mo.,	E. W. White, A. M.,	14	140	1,500	50,000
1875	Liberty,	Glasgow, Ky.,	Robert E. Hatton, Ph. D.,	18	225	2,500	50,000
1845	Limestone,	Gaffney, S. C.,	L. D. Lodge, Ph. D.,	14	203	4,500	150,000
1831	Lindenwood,	St. Charles, Mo.,	Rev. G. F. Ayers, Ph. D.,	15	108	1,400	173,500
1858	Logan Female,	Russellville, Ky.,	Benjamin E. Atkins,	9	140	500	40,000
1857	Louisburg,	Louisburg, N. C.,	Mrs. Mary D. Allen,	12	113	1,400	20,000
1856	Louisiana Female,	Keatchie, La.,	G. W. Thigpen, M. A.,	7	41	1,200	30,000
1858	Luxy Cobb Institute,	Athens, Ga.,	Miss M. Rutherford,	20	250	900	50,000
1826	Maine Wes. S.,	Kent's Hill, Me.,	Rev. W. F. Berry, D. D.,	14	200	10,000	350,000

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1854	Mansfield,	Mansfield, La.,	Olin S. Dean,	10	100	700	\$ 50,000
1874	Marion Female,	Marion, Va.,	Rev. J. J. Scherer, D. D.,	10	80		20,000
1836	Marion Female,	Marion, Ala.,		8	70	1,000	20,000
1853	Martha Washington,	Abingdon, Va.,	Rev. S. D. Long, D. D.,	24	173	1,000	80,000
1870	Martin,	Pulaski, Tenn.,	Mrs. J. H. Jennings,	9	107	800	70,000
1853	Maryland for Wom'n,	Lutherville, Md.,	Rev. J. H. Turner, D. D.,	14	118	1,200	100,000
1842	Memphis Con. F. Ins.,	Jackson, Tenn.,	Rev. A. B. Jones, LL. D.,	22	523	6,875	75,000
1850	Millersburg Female,	Millersburg, Ky.,	Rev. C. G. Fisher, A. M.,	11	140	1,000	
1851	Millwaukee-Downer,	Millwaukee, Wis.,	Miss E. C. Sabin, A. M.,	38	408	7,100	548,743
1884	Miss. Ind. Inst. & Col.,	Columbus, Miss.,	Henry L. Whitfield,	62	800	7,500	500,000
1749	Moravian Seminary,	Bethlehem, Penn.,	Rev. J. M. Hark, D. D.,	18	112	6,000	100,000
1837	Mount Holyoke,	South Hadley, Mass.,	Miss M. E. Woolley, L. H. D.,	100	730	32,500	1,843,000
1851	Notre Dame,	San José, Cal.,	Sister Mary Bernardine,	30	118	7,800	240,000
1850	Ogontz Sch. for Girls,	Ogontz, Penn.,	Miss S. J. Eastman,	30	140	4,200	
1891	Owensboro Female,	Owensboro, Ky.,	J. B. La Rue,	14	300	1,000	30,000
1849	Oxford,	Oxford, O.,	Jane Sherzer, Ph. D.,	25	143	4,000	140,000
1853	Packer College Inst.,	Brooklyn, N. Y.,	T. J. Backus, LL. D.,	54	650	8,500	400,000
1869	Pennsylv'a for Wom.,	Pittsburg, Penn.,	Rev. H. D. Lindsay, D. D.,	24	185	10,000	400,000
1889	Potter,	Bowling Green, Ky.,	Rev. B. F. Cabell, D. D.,	20	200	6,000	100,000
1890	Presbyter'n (Wom'n)	Columbia, S. C.,	Euphemia McClintock,	24	250	600	100,000
1893	Randolph-Macon,	Lynchburg, Va.,	W. W. Smith, LL. D.,	32	385	5,500	530,000
1859	Ranoke Female,	Danville, Va.,	R. E. Hutton, Ph. D.,	20	130	2,500	25,000
1849	Rockford,	Rockford, Ill.,	J. H. Gulliver, Ph. D.,	25	192	5,000	339,754
1849	Rogersville Synodic'l,	Rogersville, Tenn.,	Lawrence Rolfe,	10	76		20,000
	St. Elizabeth,	Convent Station, N. J.,	Sister Mary Pauline,	30	350	11,000	300,000
1868	St. Mary's School,	Knoxville, Ill.,	Rev. C. W. Leffingwell, D. D.,	20	100	2,500	175,000
1802	Salem Acad. & Coll.,	Winston-Salem, N. C.,	Rev. J. H. Clewey, Ph. D.,	35	400	5,000	230,000
1894	San Antonio Female,	San Antonio, Tex.,	Rev. J. E. Harrison,	15	200	2,500	125,000
1845	Sayre Female Inst.,	Lexington, Ky.,	J. Morton Spencer, D. D.,	14	110	2,000	150,000
1877	Shorter,	Rome, Ga.,	T. J. Simmons, LL. D.,	30	250	5,000	300,000
1852	Silliman College Inst.	Clinton, La.,	H. H. Brownlee,	11	150	500	75,000
1899	Simmons,	Boston, Mass.,	H. Lefavour, LL. D.,	61	550	7,050	2,796,565
1860	Sisters of Bethany,	Topeka, Kan.,	Rt. Rev. F. R. Millsbaugh,	15	142	1,800	340,000
1875	Smith,	Northampton, Mass.,	Rev. L. C. Seelye, LL. D.,	102	1,477	20,000	2,650,000
1852	Soule,	Murfreesboro, Tenn.,	Miss M. A. Hopkins,	14	130	500	17,000
1894	Stanton,	Natchez, Miss.,	J. K. Morrison,	14	170	400	35,000
1868	Stonewall Jackson,	Abingdon, Va.,	Miss Kate M. Hunt,	11	115		50,000
1843	Stuart Hall,	Staunton, Va.,	Miss M. P. Duvall,	23	150	1,500	75,000
1870	Sullins,	Bristol, Va.,	W. E. Martin,	28	325	2,000	150,000
1871	Synodical Female,	Fulton, Mo.,	Rev. C. A. McPheeters,	12	90	800	60,000
1856	Tennessee Female,	Franklin, Tenn.,	T. E. Allen,	14	160	2,000	20,000
1858	Tuscaloosa Female,	Tuscaloosa, Ala.,	R. J. Holston,	8	100	1,000	30,000
1861	Vassar,	Poughkeepsie, N. Y.,	J. M. Taylor, LL. D.,	95	1,000	60,000	2,156,000
1874	Vassar Female,	Luray, Va.,	Miss S. C. McKim,	5	24	200	
1883	Virginia Institute,	Bristol, Va.,	J. T. Henderson, A. M.,	16	175	2,000	150,000
1865	Ward Sem. (Young Ladies),	Nashville, Tenn.,	J. D. Blanton, LL. D.,	30	500	3,000	150,000
1875	Wellesley,	Wellesley, Mass.,	Caroline Hazard, Lit. D.,	101	1,210	61,761	2,646,835
1868	Wells,	Aurora, N. Y.,	Rev. G. M. Ward, LL. D.,	25	171	15,300	761,500
1836	Westleyan Female,	Macon, Ga.,	Du Pont Guerry,	33	440	3,000	325,000
1831	Westbrook, Sem. and Female,	Portland, Me.,	Arthur C. Yeaton,	11	81	3,000	250,000
1855	Western for Women,	Oxford, O.,	Mary A. Sawyer, Dean,	27	245	13,000	396,494
1859	Whitworth Female,	Brookhaven, Miss.,	Rev. I. W. Cooper, D. D.,	20	260	1,500	125,000
1908	William Smith,	Geneva, N. Y.,	M. H. Turk, Dean,	17			475,000
1870	Wilson,	Chambersburg, Penn.,	M. H. Reaser,	35	348	7,000	325,000
1893	Woman's,	Frederick, Md.,	J. H. Apple, A. M.,	18	200	3,000	120,000
1888	Woman's of Balt.,	Baltimore, Md.,	John F. Goucher, LL. D.,	27	340	12,000	1,336,533
1869	Young's Female,	Thomasville, Ga.,	I. Cochrane Hunt,	15	110	500	125,000

TABLE III—SCHOOLS OF TECHNOLOGY

1890	Agricultural of Utah,	Logan, Utah,	J. A. Widdsoe,	55	671	17,000	\$ 440,557
1893	Ag. & Mech. (Color'd)	Greensboro, N. C.,	J. B. Dudley, A. M.,	14	178	1,400	122,660
1872	Alabama Poly. Inst.,	Auburn, Ala.,	C. C. Thach,	53	575	22,000	519,300
1871	Alcorn Ag. & Mech.,	Rodney, Miss.,	Levi J. Rowan,	21	500	2,000	225,000
1892	Armour Inst. of Tech.	Chicago, Ill.,	Rev. F. W. Gunsaulus, LL. D.,	62	1,869	20,000	5,000,000
1881	Case Sch. of Ap. Sci.,	Cleveland, O.,	C. S. Howe, Ph. D.,	38	427	5,000	3,000,000
1896	Thos. S. Clarkson M. S. of T.,	Potsdam, N. Y.,	W. S. Aldrich, M. E.,	13	96	2,500	467,962
1889	Clemson Agricultural	Clemson, Coll., S. C.,	P. H. Mell, Ph. D.,	42	658	13,000	865,500
1879	Colorado Agricultu'l,	Fort Collins, Colo.,	B. O. Aylesworth, LL. D.,	52	500	30,000	561,274
1874	Colorado Sc. of Mines,	Golden, Colo.,	V. C. Alderson, Sc. D.,	18	330	8,500	550,000
1881	Connecticut Agric'u'l,	Storrs, Conn.,	R. W. Stimson, B. D.,	22	119	10,600	464,000
1888	Georgia Sch. of Tech.,	Atlanta, Ga.,	K. G. Matheson, LL. D.,	41	562	5,000	600,000
1869	Iowa of Ag. & M. A.,	Ames, Ia.,	A. B. Storms, D. D.,	116	1,981	18,300	1,676,806
1863	Kansas State Agric'l,	Manhattan, Kan.,	E. R. Nichols,	124	2,300	35,000	1,340,000
1862	Kentucky Ag. & M.,	Lexington, Ky.,	J. K. Patterson, LL. D.,	53	901	5,500	3,000,000
1856	Maryland Agricult'l,	College Park, Md.,	R. W. Silvester, LL. D.,	25	230	10,000	350,000
1863	Massachusetts Agric'l,	Amherst, Mass.,	K. L. Butterfield,	31	244	28,000	965,730
1861	Mass. Inst. of Tech.,	Boston, Mass.,	A. A. Noyes (acting),	250	1,400	75,000	5,968,176

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FOUNDED	NAMES OF INSTITUTION	LOCATION	PRESIDENT OR DEAN	NO. IN-STRUCTORS	NO. OF STUDENTS	VOLUMES IN LIBRARY	VALUE OF PROPERTY (INCLUDING ENDOWMENT)
1857	Michigan State Agri.	Lansing, Mich.	J. L. Snyder	80	1,200	30,000	\$2,200,000
1855	Michigan C. of Mines, Miller Manual.	Houghton, Mich.	Fred W. McNair	21	234	21,000	538,561
1880	Miss. Ag. & Mech.	Crozet, Va.	R. B. Fulton, LL. D.	28	250	3,500	1,800,000
1893	Montana Agricultu'l.	Starksville, Miss.	J. C. Hardy	53	950	7,500	1,000,000
1885	Newark Tech. School.	Bozeman, Mont.	J. M. Hamilton, M. S.	32	372	9,000	832,000
1893	N. H. of A. & M. A.	Newark, N. J.	C. A. Colton, Director	16	350	2,000	100,000
1889	N. M. of A. & M. A.	Durham, N. H.	W. D. Gibbs, M. S.	27	204	13,500	445,000
1889	N. C. of A. & M. A.	Mesilla Park, N. M.	L. Foster, M. S. A.	33	277	17,000	125,000
1890	North Dakota Agric.	West Raleigh, N. C.	G. T. Winston, LL. D.	42	436	5,000	544,517
1873	North Ga. A. & M.	Fargo, N. D.	J. H. Worst, LL. D.	42	889	19,300	2,083,236
1891	Okla. Agri. & Mech.	Danionega, Ga.	G. R. Glenn	13	225	5,000	75,000
1868	Oregon Agricultural, Purdue University.	Corvallis, Ore.	A. C. Scott, LL. M.	30	973	12,000	1,675,000
1874	Rensselaer Poly. Ins.	Lafayette, Ind.	W. J. Kerr	50	950	5,000	300,000
1890	R. I. of A. & M. A.	Troy, N. Y.	W. E. Stone, Ph. D.	125	1,820	18,500	1,488,000
1874	Rose Polytechnic Ins.	Kingston, R. I.	P. C. Ricketts	40	591	7,800	2,158,397
1881	South Dakota Agric.	Terre Haute, Ind.	Howard Edwards	24	137	14,500	280,000
1885	S. D. S. of Mines	Brookings, S. D.	C. Leo Mees	21	245	12,000	900,000
1871	Stevens Ins. of Tech.	Rapid City, S. D.	R. L. Slagle	37	552	1,000	248,300
1876	Texas Ag. & Mech.	Hoboken, N. J.	C. H. Fulton, E. M.	17	114	2,250	170,000
1891	Throop Polytec. Ins.	College Station, Tex.	A. C. Humphreys, LL. D.	37	431	8,500	1,850,000
1881	Tuskegee Institute.	Pasadena, Cal.	H. H. Harrington	46	610	6,200	1,041,000
1802	U. S. Military Acad.	Tuskegee, Ala.	A. H. Chamberlain	37	350	4,000	309,584
1845	U. S. Naval Academy	West Point, N. Y.	B. T. Washington, LL. D.	149	1,648	16,000	2,406,390
1873	Virginia Polytechnic	Annapolis, Md.	Col. H. L. Scott, U. S. A., Supt.	88	442	67,000	10,000,000
1892	Washington Agricult.	Blacksburg, Va.	Capt. C. J. Badger, U. S. N., S't	98	852	48,326	11,000,000
1805	Worcester Poly. Inst.	Pullman, Wash.	Paul B. Barringer	56	530	9,000	638,000
		Worcester, Mass.	E. A. Bryan, LL. D.	80	1,150	15,000	3,500,000
			E. A. Engler, LL. D.	45	465	11,500	

Color is the name given to distinguish the various sensations that lights of various rates of vibration give to the eye. As is the case with many of the words that denote our sensations, the word *color* is also applied to the properties of bodies that cause them to emit the light that thus affects our senses. The molecular constitution of a body determines the character and number of the light vibrations it returns to the eye, and so gives to each body its own characteristic color; hence the term color is used to denote that in respect of which bodies have a different appearance to the eye independently of their form.

Ordinary white light (the light which comes from an incandescent solid or liquid) when transmitted through triangular prisms of glass or other media differing in dispersive power from the atmosphere, is shown to consist of a number of colored lights, which, meeting the eye, together produce the sensation of white light. The colors thus shown are usually said to be seven—red, orange, yellow, green, blue, indigo, violet; although in reality there is an enormous, if not an infinite, number of perfectly distinct colors in light. The seven colors are frequently called the primary colors, and other tints and shades are producible by mixing them; but in a stricter sense the primary colors are three in number, namely, red, green, and violet (or blue). These three colors or kinds of light cannot be resolved into any other. In the scientific sense of the world white and black are not considered colors, a white body reflecting and a black body absorbing all the rays of light without separating them, whereas the colors proper are due to separation of the rays of light by partial absorption and reflection or by refraction. If a body absorbs every other kind of light and reflects or transmits red light only, it will appear of a red color; if

it absorbs every kind except blue rays, it will appear blue; and so on. If more than one kind of light be transmitted or reflected the object will appear of a color compounded of these different rays of light.

In art the term color is applied to that combination or modification of tints which produces a particular and desired effect in painting. The colors of the spectrum have to be distinguished from colors used in reference to *pigments*. The pigments red, blue, and yellow, regarded in the arts as the primary colors, produce effects, when mixed, very different from those produced by admixture of the corresponding spectrum colors. These three pigment colors form other colors thus: red and yellow make orange, yellow and blue make green, and red and blue make purple; but red, blue, and yellow cannot be produced by any combination of the other colors. — *Local colors* are those which are natural to a particular object in a picture, and by which it is distinguished from other objects.— *Neutral colors*, those in which the hue is broken by partaking of the reflected colors of the objects which surround them.— *Positive colors*, those which are unbroken by such accidents as affect neutral objects.— *Complementary colors*, colors which together make white; thus any of the primary colors is complementary to the other two.— *Subjective or accidental colors*, the imaginary complementary colors seen after fixing the eye for a short time on a bright-colored object, and then turning it suddenly to a white- or light-colored surface.

Combustion. The operation of fire on inflammable substances; or the union of an inflammable substance with oxygen or some other supporter of combustion, attended with heat and in most instances with light. In consequence of the combination of the carbon in fuel with the

oxygen of the air being the universal method of getting heat and light, and as when the action takes place the fuel is said to burn or undergo combustion, the latter term has been extended to those cases in which other bodies than carbon—for example, phosphorus, sulphur, metals, etc.—burn in the air or in other substances than air—for example, chlorine. Though the action between the gas and the more solid material, as coal, wood, charcoal, of whose combination combustion is the result, is mutual, the one having as much to do with the process as the other, yet the former, as oxygen, chlorine, iodine, and the compounds which they form with each other and with nitrogen, have received the name of supporters of combustion, while to the latter the term combustibles has been assigned.

Spontaneous Combustion is the ignition of a body by the internal development of heat without the application of fire. It not unfrequently takes place among heaps of rags, wool, and cotton when lubricated with oil; hay and straw when damp or moistened with water; and coal in the bunkers of vessels. In the first case the oil rapidly combines with the oxygen of the air, this being accompanied with great heat; in the second case the heat is produced by a kind of fermentation; in the third by the pyrites of the coal rapidly absorbing and combining with the oxygen of the air. The term is also applied to the extraordinary alleged phenomenon of the human body being reduced to ashes without the direct application of fire. It is said to have occurred in the aged and persons that were fat and hard drinkers; but most chemists reject the theory and altogether discredit it.

Comet. A celestial body presenting a nebulous aspect, and traveling under the sun's attraction. Many of these bodies are distinguished by a remarkable tail-like appendage. The greater number of those hitherto known have revolved round the sun on a path whose observed portion belonged to an exceedingly elongated ellipse, or was even parabolic or hyperbolic. A few, however, travel in closed orbits around the sun in known periods. Among the most remarkable comets in recent times were those of 1780, 1807, 1811, 1815, 1819, 1825, 1843, 1847, 1858, 1861, and 1874. We know so little respecting the physical conditions of comets that it would be hazardous to speculate at present concerning their real nature. A theory of great ingenuity, and (what is novel in this branch of speculation) founded on physical experiments which really seem to have some bearing on the subject, were put forward by Professor Tyndall, who is disposed to regard the tails of comets as resulting from the formation of a species of actinic cloud by the action of the solar rays, *after* their character has been altered during their passage through the comet's head. At present, however, it is difficult to say whether such a theory is well or ill founded.

Conchology. The science of shells, that department of zoölogy which treats of the nature, formation, and classification of the shells with which the bodies of many mollusca are protected; or the word may be used also to include a knowledge of the animals themselves, in which case it is equivalent to *malacology*. In systems

of conchology shells are usually divided into three orders: Univalves, Bivalves, and Multivalves, according to the number of pieces of which they are composed.

Conductor. A body capable of transmitting the electric fluid. It is called also a *non-electric*; for, unless insulated, it will not exhibit electrical excitement, the electricity being carried off along it as fast as it is communicated to or excited upon it. The metals are the best conductors; resinous substances are very bad ones. Bodies incapable of transmitting electricity are called *non-conductors*; and, because electricity may be communicated to or excited upon them, without artificial insulation, they are termed *electrics*. There is no body a perfect conductor, or a perfect non-conductor. The non-conducting power depends very much on the extent of non-conducting surface. In frictional electricity, the best conductors are the metals, as before stated; after which come graphite, sea-, spring-, and rain-water. Ice is a worse conductor than fluid or water. Alcohol, ether, paper, dry wood, and straw, are also weak conductors. Shellac, wax, amber, and sulphur become conductors when fused; and glass at a red heat conducts readily. A conductor is said to be *insulated* when it rests upon non-conducting supports. A lightning-conductor is a pointed metallic rod fixed to the upper parts of buildings to secure them from the effects of lightning. It is connected with the earth, or, what is better, the nearest water, by a good conductor, which is sufficiently thick not to be melted in transmitting the electricity; and which, where attached to the wall, is insulated by non-conductors, so that the electricity may not be diverted to the building, instead of passing harmlessly away. This useful instrument was invented by Franklin in 1755.

Congregationalists. A large and influential Christian sect, called also *Independents* in England, because they hold that every single congregation of Christians, when properly constituted with deacons and a pastor, forms an independent body, competent to its own direction and government, without interference from any other church, or any presbyteries, bishops, etc. They therefore hold that each congregation has inherent in itself power to fix its own tenets and form of religious worship, and to exercise ecclesiastical government. They hold a Christian Church to be a congregation of true believers; *i. e.*, persons who both openly profess their faith in the essential doctrines of the Gospel, and evince the earnestness of their belief by a corresponding change of disposition and demeanor. The doctrines of the Congregational Churches are almost identical with those embodied in the Articles of the Presbyterian Church, interpreted according to their Calvinistic meaning. They disavow all subscription to creeds, confessions, or articles of faith; nevertheless, they are distinguished by a singular degree of uniformity in faith and practice. As to the origin of Independency, it is probable that some conventicles were secretly established in England soon after the accession of Elizabeth; but the first prominent advocate of Congregational principles appeared in 1580, in the person

of Robert Brown. The Plymouth and Massachusetts Bay settlements in this country were founded by Congregational pilgrims in 1620 and 1628; and others, a few years afterwards, in Massachusetts and Connecticut. Congregationalism gave New England the distinctive character it bears in history, and, in return, the development of the New England Churches, and the teachings of their pastors, gave Congregationalism substantially its form. "From the earliest settlement of New England, there was a definite but peculiar relation between the Churches and the State. It was neither that in which the State rules the Church, nor that in which the Church rules the State, but rather a peculiar blending of the two. Townships were incorporated with a view to ability to maintain a settled ministry, and to the convenience of the people in attending public worship. Provision was made by law for the support of pastors, and for all necessary expenses. The choice of a pastor belonged to the Church." Throughout the whole of the early history of New England, the affairs and discussions of Church and State were blended in what would now seem an extremely curious manner. Though the doctrine of Congregationalism is, that, according to Scripture, every Church is confined to the limits of a single congregation, "the fellowship of the Churches has always been maintained, and all 'matters of common concernment' have been decided by the common consent of the whole body, and sometimes embodied in the pronounced opinions of general bodies convened for the special occasion. Denying the authority of any standing judiciary, Congregationalists recognize the necessity and desirableness of occasional synods for deliberation and advice on great public interests." Until within recent times the Congregational Churches had not made rapid growth west of the Hudson River; but, latterly, movements to spread the sect in all parts of the United States have been pushed with great energy, and the Churches have increased rapidly.

Constellations are the groups into which astronomers have divided the fixed stars, and which have received names for the convenience of description and reference. It is plain that the union of several stars into a constellation, to which the name of some animal, person, or inanimate object is given, must be entirely arbitrary, since the several points (the stars) may be united in a hundred different ways, just as imagination directs. The grouping adopted by the Egyptians was accordingly modified by the Greeks, though they retained the Ram, the Bull, the Dog, etc.; and the Greek constellations were again modified by the Romans, and again by the Arabians. At various times, also, Christianity has endeavored to supplant the pagan system, the Venerable Bede having given the names of the twelve apostles to the signs of the zodiac, and Judas Schillerius having, in 1627, applied Scripture names to all the constellations. Weigelius, a professor of Jena, even grouped the stars upon a heraldic basis, introducing the arms of all the princes of Europe among the constellations. The old constellations have, however,

been for the most part retained. Ptolemy enumerated forty-eight constellations, which are still called the *Ptolemaean*. They are the following: (1) The twelve signs of the zodiac (see *Zodiac*). (2) Twenty-one constellations found in the northern hemisphere — the Great Bear (*Ursa Major*), the Little Bear (*Ursa Minor*), Perseus, the Dragon, Cepheus, Cassiopeia, Andromeda, Pegasus, Equulus (Horse's Head), the Triangle, the Charioteer (*Auriga*), Boötes, the Northern Crown (*Corona Borealis*), Ophiuchus, the Serpent (*Serpentarius*), Hercules, the Arrow (*Sagitta*), the Lyre, the Swan (*Cygnus*), the Dolphin, the Eagle (*Aquila*). (3) Fifteen constellations in the southern hemisphere — Orion, the Whale (*Cetus*), Eridanus, the Hare (*Lepus*), the Great Dog (*Canis Major*), the Little Dog (*Canis Minor*), Hydra, the Cup (*Crater*), the Crow (*Corvus*), the Centaur, the Wolf (*Lupus*), the Altar (*Ara*), the Southern Fish (*Piscis Australis*), the Argo, the Southern Crown (*Corona Australis*). Others were subsequently added, this being especially rendered necessary by the increased navigation of the southern hemisphere, and now the different groups of stars have come to be associated with all sorts of animals and objects, including the Camelopard, the Fly, the Air-pump, the Compasses, etc.

Continuity, Law of. The principle that nothing passes from one state to another without passing through all intermediate states. From this law, for instance, if it be known that at two instants of time a body had a temperature of 20°, and at another a temperature of 40°, then there must have been an instant between these at which the temperature was 30°. If a body, at two different times, had velocities of twelve feet and twenty feet per second, respectively, we may conclude, from the law of continuity, that between these times it had all velocities between twelve feet and twenty feet. The principle is of considerable use in investigations on motion and physical change; it was distinctly laid down by Galileo, who ascribed it to Plato; but Leibnitz was the first to apply it extensively to test physical theories. He established its truth by the method of *reductio ad absurdum*. If a change were to happen without the lapse of time, the thing changed must be in two different conditions at the same instant, which is obviously impossible.

Contractile Force or Contractility. That property or power inherent in certain elastic bodies, on account of which, after having been extended, they reduce themselves again to their former dimensions, if permitted to do so. It has been calculated from Joule's data that the force exerted by heat in expanding a pound of iron between 0° and 100° during which it increases about $\frac{1}{15}$ of its bulk, is equal to 16,000 foot pounds; that is, it could raise a weight of seven tons through a height of one foot. An application of this contractile force is seen in the mode of securing the tires on wheels. The tire being made red-hot, and thus considerably expanded, is placed on the circumference of the wheel, and then cooled. The tire, when cold, embraces the wheel with such force as not only to secure itself on the rim, but also to press home the joints of the spokes into the felloes and nave.

Convection. When a liquid is heated from above, the temperature of the mass rises with extreme slowness, because liquids possess but little conducting power for heat; thus water may be boiled on ice, although separated from it by a very thin stratum of water. But if the liquid be heated from below, we notice at once that currents of liquid ascend from the bottom to the top of the vessel, and the liquid acquires a uniform temperature. This transport of heat by masses of matter is known as Convection. The layers of a liquid or gas which are nearest to the source of heat are expanded, and thus become specifically lighter than surrounding portions, consequently they rise; while colder, and consequently heavier, portions descend, are heated in their turn, and then ascend to make way for other colder portions. Thus, however badly a liquid or gas conducts heat, it can rapidly acquire a uniform temperature by the convection of heat; and convection takes place in gases far more readily than in fluids, because for equal increments of heat they expand to a greater extent than liquids.

Cooper Union or Cooper Institute. An institute founded in New York City in 1857, by Peter Cooper. Its object is to provide free schools of art and science, and free reading rooms and library for the working classes. There are lecture courses, a museum, an art gallery, and a library of 31,000 volumes, with a reading room containing current numbers of nearly 500 magazines and newspapers. The institute was built at a cost of \$630,000 and was endowed by Mr. Cooper with \$300,000. It has received additional gifts from time to time from Edward Cooper and Abram S. Hewitt, and in 1899 Andrew Carnegie gave it \$300,000 for the founding of a mechanical day art school.

Correlation of the Physical Forces. The principle that any one of the various forms of physical force may be converted into one or more of the other forms. Thus, heat may mediate or immediately produce electricity, electricity may produce heat, and so of the rest, each merging itself as the force it produces becomes developed; and that the same must hold good of other forces, it being an irresistible inference from observed phenomena that a force cannot originate otherwise than by devolution from pre-existing force or forces. This principle is also called *Transmutation of Energy*.

Cosmogony. A theory of the origin or formation of the universe. Such theories may be comprehended under three classes: (1) The first represents the world as eternal, in form as well as substance. (2) The matter of the world is eternal, but not its form. (3) The matter and form of the universe is ascribed to the direct agency of a spiritual cause; the world had a beginning, and shall have an end. Aristotle appears to have embraced the first theory; but the theory which considers the *matter* of the universe eternal, but not its *form*, was the prevailing one among the ancients, who, starting from the principle that nothing could be made out of nothing, could not admit the creation of matter, yet did not believe that the world had been always in its present state. The prior state of the world subject to a constant succes-

sion of uncertain movements which chance afterwards made regular, they called *chaos*. The Phenicians, Babylonians, and also Egyptians, seem to have adhered to this theory. One form of this theory is the atomic theory, as taught by Leucippus, Epicurus, and Lucretius. According to it atoms or indivisible particles existed from eternity, moving at hazard, and producing, by their constant meeting, a variety of substances. After having given rise to an immense variety of combinations they produced the present organization of bodies. The third theory of cosmogony makes God, or some deity, the Creator of the world out of nothing. This is an ancient and widely-spread theory, and is that taught in the book of Genesis. Anaxagoras was the first among the Greeks who taught that God created the universe from nothing. The Romans generally adopted this theory, notwithstanding the efforts of Lucretius to establish the doctrine of Epicurus.

Councils of the Church. General councils, called also œcumenical or universal, are summoned by the Pope of Rome, and are designed to settle questions affecting the Universal Church. The Roman Catholic Church recognizes twenty-one general councils; the Greek Church, the first seven of these, besides that of Jerusalem; and the Protestant Churches generally admit the full authority of none of them, and reckon as œcumenical only the first six. The following are the most notable of the councils of the Church of Rome:

- A. D.
50. Of the Apostles at Jerusalem.
314. Of the Western Bishops at Arles, in France, to suppress the Donatists; three fathers of the English Church went over to attend it.
325. The first Œcumenical or General Nicene, held at Nice, Constantine the Great presided; Arius and Eusebius condemned for heresy. This council composed the Nicene Creed.
335. At Tyre, when the doctrine of Athanasius was canvassed.
337. The first held at Constantinople, when the Arian heresy gained ground.
342. At Rome, concerning Athanasius, which lasted eighteen months.
347. At Sardis; 370 bishops attended.
359. Of Rimini; 400 bishops attended, and Constantine obliged them to sign a new confession of faith.
381. The second General at Constantinople; 350 bishops attended and Pope Damasius presided.
431. The third at Ephesus, when Pope Celestine presided.
451. Fourth at Chalcedon; the Emperor Marcian and his Empress attended.
553. The fifth at Constantinople, when Pope Vigilius presided.
650. The sixth at Constantinople, when Pope Agatho presided.
715. Authority of the six general councils reestablished by Theodosius.
787. The second Nicene Council, seventh General; 350 bishops attended.
869. Of Constantinople, eighth General; the Emperor Basil attended.
1122. The first Lateran, the ninth General; the right of investitures settled by treaty between Pope Calixtus II. and the Emperor Henry V.
1139. The second Lateran, tenth General, Innocent II. presided; the preservation of the temporal ties of ecclesiastics, the principal subject which occasioned the attendance of 1,000 fathers of the Church.
1179. The third Lateran, eleventh General; held against schismatics.
1215. Fourth Lateran, twelfth General; 400 bishops and 1,000 abbots attended; Innocent III. presided.

A. D.

1245. Of Lyons, the thirteenth General, under Pope Innocent IV.
 1274. Of Lyons, the fourteenth General, under Gregory X.
 1311. Of Vienne in Dauphine, the fifteenth General; Clement V. presided and the kings of France and Arragon attended. The order of the Knights Templar suppressed.
 1409. Of Pisa, the sixteenth General; Gregory XII. and Benedict XIII. deposed, and Alexander elected.
 1414. Of Constance, the seventeenth General; Martin V. is elected pope; and John Huss and Jerome of Prague condemned to be burnt.
 1431. Of Basil, the eighteenth General.
 The fifth Lateran, the nineteenth General, begun by Julius II.
 1512. Continued under Leo X., for the suppression of the Pragmatic sanction of France against the Council of Pisa, etc.
 1545. Of Trent, the twentieth Œcumenical, as regarding the affairs of all the Christian world; it was held to condemn the doctrines of the reformers, Luther, Zuinglius and Calvin.
 1870. Of Rome, the last Œcumenical which adopted the dogma of Papal infallibility.

Creed. A summary of belief, from the Latin *credo* (I believe), with which the Apostles' and Nicene Creeds begin. These two creeds, together with the Athanasian Creed, are the most ancient authoritative Christian creeds, though numerous ancient formularies of faith are preserved in the writings of the early fathers.

The belief in evil spirits, witches, etc., was in the Seventeenth Century so common that they became the objects of judicial process. With the progress of the natural sciences, however, in the Eighteenth Century many wonderful phenomena became explained, and less was heard of witchcraft.

Dew. The moisture which rises into the atmosphere during the day, and is afterwards deposited on the earth in gentle drops during the night. The air, when heated during the day, is capable of holding a larger quantity of water in solution as vapor, than when cooled during the night, the low temperature of which causes some of the water to separate. The separated particles, uniting, form drops of dew. When the night is cloudy, the surfaces on which the dew would be deposited are not sufficiently cooled down for the purpose, since the clouds give back some of the heat which passed off by radiation.

Digestion is that process in the animal body by which the aliments are so acted upon that the nutritive parts are prepared to enter the circulation, and separated from those which cannot afford nourishment to the body. The organs effecting this process are called the *digestive* organs, and consist of the stomach, the great and small intestines, etc., the liver, and pancreas. When the aliments, after being properly prepared and mixed with saliva by mastication, have reached the stomach, they are intimately united with a liquid substance called the *gastric juice*, by the motion of the stomach. By this motion the aliments are mechanically separated into their smallest parts, penetrated by the gastric juice, and transformed into a uniform pulpy or fluid mass. The gastric juice acts upon the albuminous parts of the food, converting them into peptones, which can pass through organic membranes and thus enters the blood. This action is aided by the warmth of the stomach. The pulpy mass called *chyme*, proceeds from the stomach, through the pylorus, into that part

of the intestinal canal called the small intestine, where it is mixed with the pancreatic juice, bile, and intestinal juice. The pancreatic juice converts starch into sugar, albumins into peptones, and emulsionizes fats, so that all these kinds of food are rendered capable of absorption. The process is aided by the intestinal juice. The bile also acts upon fats, and thus the food is formed into the *chyle*, which is absorbed into the system by the capillary vessels called *lacteals*, while the non-nutritious matters pass down the intestinal canal and are carried off.

Dissenter. One who secedes from, or is opposed to, the service and worship prescribed by any established or State Church. In England, the term is applied (indifferently with that of *Nonconformist*) to those who do not conform to the rites and services of the Church as established by law of the land. It must be understood that the term does in no case apply to either Jews or Roman Catholics. Thus the apparent paradox exists that in England the Presbyterian body are Dissenters, while in Scotland they form the Established Church, leaving the Episcopalians as the chief dissenting body. In this country, there being no State Church, such differences in the ecclesiastical polity have, necessarily, no existence.

Distillation. An operation by which a liquid is converted into vapor by heat, which vapor is condensed by cold in a separate vessel. It may be employed for various purposes: thus simple distillation purifies liquids; it enables a more volatile to be separated from a less volatile substance; by its means a liquid possessing a definite boiling-point may be separated from other liquids possessing other boiling-points. This latter is known as *fractional distillation*, and is much used in the separation of hydrocarbons, the various products being collected at intervals of, say, ten degrees of temperature. The essential parts of a distilling apparatus are a vessel in which the substance is heated, called sometimes a *still* and sometimes a *retort*; a *condenser* or *refrigerator*, in which the vapor is cooled, and a *receiver* in which the condensed products are collected. Distillation was an important operation in the earliest alchemical processes of which we have any record; it does not, however, appear to have been known before the time of Pliny.

Dominicans. An order of preaching friars, founded at Toulouse in 1215, by the Spanish St. Dominic de Guzman, who was born in Old Castile, in 1170, became one of the instigators of the crusade against the Albigenses, and died in 1221. This order, confirmed by bull of Pope Honorius, 1216, rapidly multiplied in Christendom. In course of time, however, the Dominicans were superseded in the schools by the Jesuits, and were also eclipsed by the great rival order of the Franciscans. Among the lights of the Dominican order may be counted St. Thomas Aquinas and Albertus Magnus. In more modern times, the order has been resuscitated in France by the labors of Père Lacordaire (*q. v.*), and they are likewise to be found in Belgium, Hungary, Switzerland, and the United States. Their rule is very strict, including rigorous fasting and total abstinence from flesh. They wear a

white robe, with a black gaberdine, and a pointed black cap.

Drawing. The art of representing on a flat surface the forms of objects, and their positions and relations to each other, was prehistoric in origin.

Drawings may be divided into five classes: sketches, finished drawings, studies, academic drawings, and cartoons. First sketches are the ideas put on paper by an artist, with the intention of carrying them out with more completeness and detail in some more elaborate work. They are merely intended to fix and retain his first thoughts. Finished drawings are such as are carefully executed and made complete in all their parts. By studies are generally understood separate parts of objects carefully drawn either from life or from figures in relief; for example, heads, hands, feet, arms; but sometimes the term is applied to drawings of entire figures. To this class also belong drawings of the skeleton and muscles, as well as of draperies, animals, trees, foregrounds, or other parts of landscapes. Academic drawings are those made in art academies from a living model in lamplight which brings out the shadows more than daylight. The position of the model is carefully arranged at the commencement of each sitting, and in that position he is required to remain. In this way the learners practice the drawing of the figure in various attitudes. In studying drapery and dress, a lay figure, made of wood and with movable joints, is clothed in various styles, and drawings made from it. Cartoons are drawings made on stout paper of the size of the painting to be executed from them. They are mostly employed for pictures of large size, and are regularly used by fresco painters. The design is pricked through or traced from the cartoon on the surface that receives the finished picture.

Dream. A series of mental impressions occurring to sleeping persons, and which, therefore, are not under the command of reason. Dreams have been referred to various causes; among others, to direct impressions on the organs of sense during sleep; to the absence of a power to test the inaccurate conclusions drawn from one set of impressions by other impressions; to a disordered state of the digestive organs; to a less restrained action of the mental faculties; to the suspension of volition while the powers of sensation continue, etc. In health there is a less tendency to dream than in disease; in the earlier than in the later periods of life; and the very act of dreaming shows that the brain is not enjoying a complete state of rest. The phenomena of dreams are yet too little studied to enable us to attest much with certainty regarding them. The popular belief has frequently ascribed them to supernatural agency, especially where there has been any coincidence between a dream and an external event; and it may be said that if many of the instances of remarkable dreams may be explained by natural causes, there are others so well authenticated that we cannot altogether discredit them, that are manifestly unexplained by any natural means.

Dynamics. That branch of the science which treats of the action of force in producing motion. It treats of bodies not in equilibrium,

as *statics* treats of bodies at rest. Dynamics is divided into two parts — *kinematics*, which investigates the circumstances of mere motion without reference to the bodies moved, the forces producing the motion, or to the forces called into action by the motion; and *kinetics*, which investigates the nature and relation of the forces which produce motion. Dynamics has to do with the primary conceptions of space, matter, time, and velocity, each of which admits of numerical estimation by comparison with units arbitrarily chosen; hence dynamics is a science of numbers. It is usual to consider the subject in two parts: the dynamics of a particle, and the dynamics of a rigid body. The science owes its origin to Galileo, to whom is due the law of the acceleration of falling bodies. Huyghens added the theories of the pendulum and centrifugal force, and Newton developed the science, and applied it to the infinitesimal calculus.

Electricity, from the Greek *elektron* (amber), the name applied originally to the unknown cause of the attractions, repulsions, sparkings, etc., which attend the friction of amber and similar substances. The same cause is now recognized as giving rise, under various circumstances, to many phenomena. Many attempts have been made to ascertain the true nature of electricity, but it cannot be said that we have yet any sure knowledge of what this subtle agent really is. Electricity behaves as if it were an incompressible fluid substance, but it differs from all known fluids in so many particulars that it may be asserted that whatever else it may be, it is not a fluid in the ordinary sense of the word. Neither is it a form of energy, though electrification as distinguished from electricity certainly is such. Many scientific men hold the view that electricity is the ether itself (the elastic, incompressible medium pervading all space and conveying luminous and other vibrations), and that the phenomena of positive and negative electrifications are due to displacement of the ether at the surfaces of bodies. The researches of Hertz, who, by direct experiment, verified James Clerk Maxwell's brilliant theory that electrical action is propagated through space by wave motion in the ether, differing only in respect of wave length and period from the vibrations which constitute light, have been of the utmost value in helping to arrive at a solution of this question. Investigations into the phenomena of electric discharges in high vacua, followed by the discovery of Roentgen of the X-Rays, have also thrown great light on the subject. The applications of electricity are extremely varied. Its employment for telegraphy and electro-metallurgy, for chemical and for medical and physiological purposes, for the production of light to illuminate streets and buildings, for driving vehicles and machinery of various kinds, may be mentioned as examples.

Motor. For practical purposes, to produce continuous power, it is most convenient to use a machine called a *motor*, which is so arranged that the electricity traverses a wire wound (in the form of one or more coils) many times around a suitably-shaped frame of iron called a field magnet or simply a field. The current so circulating round the field magnetizes, or as it is

called, excites it, causing it to exert an attraction or pull upon another part of the machine known as the armature. The armature is also wound with wire through which the current passes, and is placed between the extremities of the field magnet which are called poles. The electrical connections are so adjusted that the attraction or pull between the field and armature is up on one side of the armature and down on the other, thus causing the latter to rotate with any desired speed and power according to the size of the motor. The power may be brought in by wires through the window-casing, and the whole machinery started and stopped by turning a switch. Being entirely noiseless, perfectly clean, susceptible of being started, regulated, or stopped as stated by the mere pressure of a button, and cheap, both in constructing and operating, its utility for the lighter kinds of industrial service is beyond question. There is no delay with electric motors similar to that in getting up steam in a steam-engine, and this quality is of the utmost importance in the fire-engine service, and is made use of in the electric fire-engine. Upon reaching a fire the connecting wires from the electric engine are hooked into the box on the electric light post, from which wires run up to the electric light wires above. The engine is then ready for instant operation at full power. The revival of interest in the electric motor causes it to seem like a new invention to those not familiar with the record of electrical science. As a matter of fact, the electrician Jacobi, under the patronage of the Czar of Russia, propelled a boat on the Neva by electricity more than half a century ago; and not many years later Professor Page, in this country, succeeded in driving a car by an electric locomotive between Washington and Bladensburg at a speed of nineteen miles an hour. But nothing resulted from those early experiments on account of the rudimentary methods of generating electricity; and had not the dynamo machine been made commercially successful the motor would still be floating in the brain of scientists as a future but very indefinite possibility. Now, however, it has been caught and made objective. Thousands of electric motors are at work in various parts of the country, ranging in capacity from one-half to twenty horse-power, and they are transferring freight and passengers, running printing-presses, lifting elevators, driving ventilators, and making themselves generally useful at domestic and industrial service. The adaptability of the motor for operating street railways is its chief recommendation to the American people.

The Dynamo. This machine is very like the modern motor just described. In fact a dynamo may be used as a motor by supplying it with electricity from another dynamo or any other source of electricity, and if the armature of a motor be rotated by a steam-engine or other prime mover, it will give a current of electricity and become for the time being a dynamo. The only difference between the dynamo and motor is in the proportioning of parts, the modes of regulating speed power, etc. Only after the invention of the modern dynamo was this fact discovered, and in the early and partially suc-

cessful attempts to make both, the experimenters did not appear to even guess that there was any particular connection between them. The designing of motors does not stop with the simple application of the revolving wheel principles explained above, but furnishes unlimited room for skill in making them in forms convenient for use, and adapted for direct connection to various kinds of machinery. American ingenuity has undoubtedly taken the lead in making motors of all kinds.

The Trolley. An electric street car, such as may be seen in the majority of towns and cities throughout the Union, is known as a trolley car because the current is taken from the overhead wire through the trolley or wheel, whence it goes down the pole and through a wire to the motor which is situated under the floor, then into car wheels and so to the rails and ground and back to the generator or dynamo in the power station.

Electric Light, is one of the many electric processes which depend upon the faculty of being easily converted into heat at any desired place and in any part of its conductor. In itself electric lighting covers a range of sizes or powers more extensive than the candle, the gas-burner, and the calcium light combined. Heat is the vibratory motion of the atoms which compose substances, which kind of motion electricity always produces when moving through a conductor. The temperature increases with the current, and it becomes possible, therefore, to raise the temperature of a given conductor to a red or white heat. If such a current be sent through an iron, a copper, or a platinum wire it will glow very brightly and be in danger of fusing; but if a filament of carbon be used instead, inclosed in a vacuum, it cannot fuse, but gives out a bright light. It is also a great advantage to be able to produce intense heat at a particular spot by passing a current through a wire and thinning the wire at the desired place. The higher incandescent or luminous heat is obtained by making the section of the wire still thinner, which brings it to a heat of dazzling brilliancy. This is the whole principle of the incandescent electric light in a nutshell. Electric lights are of two classes, known as "arc" and "incandescent." The latter, named from the incandescent heat of the thin wire, consists of a fine wire or filament of any substance which will stand enormous heat, inclosed in a glass, with the air removed to prevent its burning up at the high temperature. These lights, which are usually small, are very soft and pleasant to the eye, and are used for indoor illumination. The arc light is produced by the current passing from the end of one rod of carbon to the end of another rod through the vapor produced by the burning of the carbon and is named from the curved or arc-shaped path which the current takes in passing through this vapor. The passage of the current heats the particles of carbon in the vapor as well as the tips of the rods to an intense degree, and gives off a light of absolutely unapproached brilliancy. They are used for street illumination, man-of-war search-lights, etc., and have been tried in the more important light-houses of the world. An ordinary gas-burner

is of 16 candle-power. The bright electric lights in the street are 1,200 to 1,500 candle-power. The Statue of Liberty light is 48,000 candle-power. Going to the other extreme, we have very small lights of $1\frac{1}{2}$, and even $\frac{1}{2}$ candle-power for special purposes. They are used for house decorations, in the hair with ball costumes, in bouquets, etc., but the important uses are for illuminating for exploration places into which no burning light could be introduced, as in the method recently devised by medical electricians of illuminating the interior of the stomach for examination.

Engineering, the branch of science dealing with the design, construction, and operation of various machines, structures, and engines used in the arts, trades, and everyday life. Engineering is divided into many branches, the more important being civil, mechanical, electrical, mining, military, marine, and sanitary engineering. Mechanical engineering has to do with the design, construction, and operation of machinery, the design of manufacturing plants, and all branches of industrial production. The mechanical engineer's education should be similar to that of the civil engineer, with the addition of a knowledge of the theory and practice of machine construction. Electrical engineering is a branch of mechanical engineering and includes the application of electricity to mechanical and industrial pursuits, as derived from some other source of energy. Mining engineering is a combination of the three preceding branches as applied to the discovery and operation of mines, the building of mineral working plants, and treatment of ores. Military engineering deals entirely with the arts of war, the design, construction and maintenance of fortifications, machines of defense and attack, ordnance, and the surveying of country in preparation for military operations. Marine engineering is partly military and partly civil, embracing naval architecture, building and operating of ships and naval accessories. In the military sense, it comprises the construction of war vessels and the construction and placing of torpedoes, submarine mines, etc. Sanitary engineering consists of the construction of sewers and drains, providing for the cleaning of city streets and the disposal of garbage and sewage, reclaiming of swamps, and overcoming of all conditions tending to interfere with public health. The education and training of the engineer in modern times have called for the establishment of technical schools and courses in engineering in the large colleges and universities. These schools provide the student with the theories of mathematics, mechanics, and engineering, and by means of extensive laboratory and outside work provide him with practice in the design, construction, and use of modern engineering appliances.

Episcopal Church, Protestant, a denomination in the United States directly descended from the Church of England, which doctrinally claims to be based on the Holy Scriptures, as interpreted in the Apostles and other ancient creeds of the Church that have been universally received, and to have kept herself aloof from all the modern systems of faith,

whether of Calvin, or Luther, or Arminius, leaving its members free to enjoy their own opinions on all points not represented in the Scriptures as necessary to soul's health, and refusing to be narrowed down to any other creed or creeds than those of the Apostles and the Primitive Church. It claims also to have retained all that is essential to Church organization in its episcopate, and in its liturgy to have not only a wise and judicious compend of doctrine and devotion, but also one of the most effectual of all possible conservative safeguards for the faith once delivered to the saints. Three clerical orders are recognized — bishops, priests, and deacons — the first deriving their office in direct succession from the apostles by episcopal consecration, and the others receiving ordination at the hands of a bishop. Those of the second order are entitled archdeacons, deans, rectors, vicars, or curates, according to their functions. A reader is a layman licensed by the bishop to read in a church or chapel where there is no clergyman. Parson signifies a clergyman in possession of a parochial church. From the time of the first congregations of the Church of England, in America, in 1607, to the close of the Revolution, all the clergy in the colonies were regarded as under the supervision of the Bishop of London. The first American Bishop was Rev. Samuel Seabury, who, in 1783, was consecrated in Scotland as Bishop of Connecticut. All Protestant Episcopal Churches in the United States are associated in one national body, called the General Convention, which meets triennially.

Fathers of the Church, the name given to certain writers, or apologists, of the early Christian Church. They are usually divided into three classes — the Apostolic Fathers, the Primitive Fathers, and (simply) the Fathers. The *Apostolic Fathers*, who were contemporary to some extent with the apostles, are Hermas, Barnabas, Clemens Romanus, Ignatius, and Polycarp. The *Primitive Fathers*, who lived in the Second and Third Centuries, include Justin Martyr, Irenæus, Athenagoras, Clemens Alexandrinus, Hippolytus, and Origen (who wrote in Greek), and Tertullian, Minutius Felix, and Cyprian (who wrote in Latin). The *Fathers*, or those of the Fourth and Fifth Centuries, belonged either to the Greek or to the Latin Church. The principal Greek Fathers are Eusebius, Athanasius, Ephraem Syrus, Basil, Cyril of Jerusalem, Gregory Nazienzen, Macarius, Gregory Nyssen, Epiphanius, John Chrysostom, Cyril of Alexandria, and Theodoret. The principal Latin Fathers are Hilary, Lactantius, Ambrose, Jerome, and Augustine.

Friends, Society of, the organization commonly called Quakers, founded in the middle of the Seventeenth Century by George Fox. They are distinguished from other Christian bodies by the special stress they lay on the immediate teaching and guidance of the Holy Spirit, and their belief that no one should be paid or appointed by human authority for the exercise of the gift of the ministry. In obedience to this belief they hold their meetings without any prearranged service or sermon, and sometimes in total silence. The Friends believe that the sacraments of Baptism and the Lord's

Supper are to be taken spiritually, and not in an outward form. Their protests against the use of oaths and against the exaction of tithes and church rates cost them much suffering and frequent imprisonment during the first fifty years of their existence. The simplified dress which Friends adopted from conviction 200 years ago became stereotyped into a uniform. This dress has generally been given up, as having the "testimony" against music and singing in its rigid application, and the peculiarities of speech, such as the use of "thee" and "thou" instead of "you" (though many Friends still retain this custom among themselves), and the avoidance of all titles of courtesy. Of late years there has been a very decided evangelical movement among Friends, under the influence of which the old quietism is dying out. As a result of this change the influence of the Society beyond its own borders, through home and foreign missions and adult First Day (Sunday) Schools, has developed to a remarkable extent. There is in the United States a numerous body of Friends called Hicksites (from their founder, Elias Hicks), who separated from the orthodox community. They hold latitudinarian views. The Wilburite section are conspicuous in Pennsylvania by their adherence to the livery and the "plain language." Large numbers of persons who do not appear in the statistical returns attend the Mission meetings of the Society of Friends, and very large numbers come under their influence in the foreign mission field.

Greek Church, The, taken in the widest sense, comprehends all those Christians following the Greek or Greco-Slavonic rite who receive the first seven general councils, but reject the authority of the Roman pontiff and the later councils of the Western Church. The Greek Church calls itself "the Holy Orthodox Catholic and Apostolic Church," and it includes three distinct branches—the Church within the Ottoman Empire, subject directly to the patriarch of Constantinople; the Church in the kingdom of Greece; and the Russo-Greek Church in the dominions of the czar. The proper history of the Greek Church as a separate body dates from the commencement of the Greek schism, or rather from the commencement of the efforts on the part of the Church of Constantinople to establish for itself a distinct jurisdiction, and an independent headship in the eastern division of the empire. The ecclesiastical preëminence of Constantinople, it need hardly be said, followed upon the political distinction to which it rose as the seat of the imperial residence and the center of the imperial government. Originally Byzantium was but a simple episcopal see, subject to the metropolitan of Heraclea; but the rank of the see rose with the fortunes of the city; and before the close of the Fourth Century a canon of the first council of Constantinople, held in 381, assures to it, on the ground that "Constantinople is the new Rome," the "precedence of honor" next after the ancient Rome. The United Greek Church comprehends those Christians who, while they follow the Greek rite, observe the discipline of the Greek Church and make use of the Greek liturgy, are yet united with the Church of Rome, admitting the double

procession of the spirit and the supremacy of the Roman pontiff, and accepting all the doctrinal decisions subsequent to the Greek schism which have force as articles of faith in the Roman Church. The United Greeks are found chiefly in southern Italy, in the Austrian dominions, in Poland, and the Russian Empire. In Italy they are computed at 80,000; in Austria at about 4,000,000; and in Poland at about 250,000. In Russia it is difficult to ascertain their number; it has fallen off considerably in late years. In Austria they are divided into Roumanians and Ruthenians—the former being settled in Wallachia, Transylvania, and eastern Hungary; the latter, in Little Russia, Galicia, and north-eastern Hungary. The union of the Greek Christians of Wallachia and Transylvania dates from the end of the Twelfth Century; and although the Reformation made some progress among them, they still for the most part remained true to the union. The union of the Galician Greeks or Ruthenians is of much later date, about the close of the Seventeenth Century. It is only necessary to add that the usage of the United Greek Church as to the law of celibacy is, with the consent of the Roman pontiffs, the same as among the other Greeks. They are also permitted to administer communion under both kinds.

Heart. A hollow muscular organ, the function of which is to maintain the circulation of the blood. The human heart is formed of a firm thick muscular tissue, composed of fibers interlacing with each other, and is supplied with nerves and vessels, which are termed *coronary*. Its coronary arteries branch off from the aorta, and the coronary veins return the blood in the right auricle. Its nerves are branches of the eighth and great intercostal pairs. It is divided in the middle by a strong partition, and on each side by two cavities, called *ventricles*; one the right or *pulmonic*, and the other the left or *systemic*. Attached to the base of the heart are two *auricles*, so-called from their resemblance to an ear. In the right auricle there are four apertures: two of the *vena cava*, one of the coronary vein, and one an opening into the right ventricle. There are five apertures in the left auricle; one into the left ventricle, and those of the four pulmonary veins. Each ventricle has two orifices; one from the auricle, and another into the artery. The ventricles are supplied with valves; those at the arterial opening being, from their form, called *semi-lunar*; those at the orifice of the right auricle, *tricuspid*; and those at the orifice of the left auricle, *mitral*. The valve at the termination of the *vena cava inferior*, just within the auricle, is called the *valve of Eustachius*. The dilatation of the heart is called *diastole*; its contraction, *systole*. The alternate contraction and dilatation of the heart are entirely involuntary, and dependent on the nervous system. It has been calculated that the daily work of an ordinary human heart, in propelling the blood, is equal to the lifting 124 tons a foot high.

Horse Power, the measure of a steam engine's power, as originally settled by James Watt, being a lifting power equal to 33,000 pounds raised one foot high per minute. Thus,

an engine is said to be of 100 horse power (h. p.) when it has a lifting capacity equivalent to 3,300,000 pounds one foot high per minute. To ascertain the horse power of an engine multiply together the pressure in pounds on a square inch of the piston, the area of the piston in inches, the length of the stroke in feet, and the number of strokes per minute, divide the result by 33,000 and the quotient, less one-tenth, allowed for loss by friction, will give the horse power. Engines are frequently said to be of so many horse power nominal; the real or indicated horse power, however, often exceeds the nominal by as much as three to one.

Illiteracy. The following percentages indicate the relative illiteracy of the chief nations of the world. In Rumania, 88.4 per cent. of the population can neither read nor write; in Servia, 79.3 per cent.; in Portugal, 79.2; in Spain, 68.1 per cent.; in Russia, 61.7 per cent.; in Hungary, 47.8 per cent.; in Austria, 35.6 per cent.; in Italy, 32.9 per cent.; in Greece, 30 per cent.; in Belgium, 10 per cent.; in Ireland, 7.9 per cent.; in France, 4.7 per cent.; in England, 3 per cent.; in Scotland, 2.5 per cent.; in The Netherlands, 2.3 per cent.; in Finland, .5 per cent.; in Denmark, .2 per cent.; in Switzerland, .13 per cent.; in Sweden and Norway, .08 per cent.; in The German Empire, .05 per cent.; and in Saxony, Bavaria, Württemberg and some other German states only rarely a person can be found who cannot read and write. In the United States the ratio of illiteracy among the whites is 6.2 per cent.

Libraries. Libraries existed in ancient Egypt and Assyria, and Pisistratus is credited with the honor of introducing a public library at Athens about B. C. 337. Cicero and various wealthy Romans made collections of books, and several Roman Emperors established libraries, partly with books obtained as spoils of war. By far the most celebrated library of antiquity was the Alexandrian. In the West libraries of any note were founded in the second half of the Eighth Century by the encouragement of Charlemagne. In France one of the most celebrated was that in the Abbey of St. Germain des Prés, near Paris. In Germany the libraries of Fulda, Corvey, and in the Eleventh Century that of Hirschau, were valuable. In Spain, in the Twelfth Century, the Moors had seventy public libraries, of which that of Cordova contained 250,000 volumes. In Britain and Italy libraries were also founded with great zeal, particularly in the former country, by Richard Aungerville; in the latter by Petrarch, Boccaccio, and others. After the invention of the art of printing this was done more easily and at less expense. The principal libraries of modern times are:

LIBRARY	CITY	No. OF VOLS.
Bibliothèque nationale,	Paris,	2,602,000
British Museum,	London,	2,003,000
Library of Congress,	Washington,	1,434,000
Imper. publicnaja biblioteka,	St. Petersburg,	1,329,000
Königliche bibliothek,	Berlin,	1,200,000
Kön. Hof- u. Staatsbibliothek,	Munich,	1,000,000
K. u. k. Hofbibliothek,	Vienna,	900,000
Universitäts- u. landesbibliothek,	Strasbourg,	814,000
Public Library,	Boston,	812,260
Publienyj i Rumjancovskij muzej,	Moscow,	800,000

LIBRARY	CITY	No. OF VOLS.
Public Library—Astor, Lenox, and Tilden Foundation,	New York City,	787,700
Biblioteca nacional,	Madrid,	600,000
Bodleian Library,	Oxford,	600,000
K. k. Universitäts-bibliothek,	Vienna,	596,526
Harvard University Library,	Cambridge (U. S.)	575,889
Cambridge University Library,	Cambridge (Eng.)	550,000
Det store kongelige bibliotek,	Copenhagen,	550,000
Universitäts-bibliothek,	Göttingen,	506,814
Universiteit bibliotheek,	Amsterdam,	500,000
Kön bibliotheek,	The Hague,	500,000

Other large and valuable libraries are: the royal libraries at Stuttgart and Dresden; the university libraries of Genoa, Prague, Göttingen, Upsal, and Dublin; also the libraries of Venice, Florence, Milan, Bologna, Naples, and the Advocates', Edinburgh. The Vatican library, Rome, and the Bodleian, Oxford, are particularly valuable in rare books and manuscripts. The spread of education, and the consequent growing taste for knowledge, has called into existence innumerable smaller libraries, ready of access, and providing such literature as the special class of readers demand. This public library system has naturally been most developed in highly-educated countries such as Germany, France, Great Britain, and the United States.

Light. That peculiar property of matter which affects the nerves of sight, and causes us to see. A *ray of light* is an exceedingly small portion of light as it comes from a luminous body. A *beam of light* is a collection of parallel rays. A *medium* is a body which affords a passage for the rays of light. A *pencil of rays* is a mass of diverging or converging rays. *Converging* rays are those which tend to a common point; *diverging* rays, those which come from one point, and continually separate as they proceed. The rays of light are *parallel*, where the lines which they describe are so. The *radiant point* is the point from which diverging rays proceed. The *focus* is the point to which the converging rays are directed. Light passes off from a luminous body in all directions; and its intensity decreases as the square of the distance increases: thus, if one object is twice as far from a luminous body as another of the same size, it will receive only one-fourth as much light as the latter. The velocity with which light travels is enormous; it was estimated, on astronomical data, at 183,470 miles per second; but according to Léon Foucault's recent experiments with the "turning mirror," it is 185,170 English miles per second; and it requires little more than a quarter of an hour to pass through the diameter of the earth's orbit. When light encounters an obstacle, some of it is reflected, some absorbed, and, if the interposed body is not opaque, some of it is transmitted. During transmission it is modified, being in some cases, as with doubly refracting crystals, decomposed into two white rays, possessing different properties; and in others, as with glass prisms, decomposed into a number of *colored* rays, accompanied by rays which are colorless, and in fact *invisible*, but which have marked chemical and calorific properties. When luminous rays pass into a dark chamber through a small aperture, and are received upon a screen, they form images of external objects. These

images are inverted; their shape is always that of the external objects, and is independent of the shape of the aperture. The inversion of the images arises from the fact that the luminous rays proceeding from external objects, and penetrating into the chamber, cross one another in passing the aperture. Continuing in a straight line, the rays from the higher parts meet the screen at the lower parts, and inversely, those which come from the lower parts meet the higher parts of the screen. Hence the inversion of the image. Light, heat, and the chemical principle seem to be modifications of the same element; but there are circumstances in which they differ.

Liquid Air is based upon the cooling that air undergoes when it is subject to expansion and passes from a given to a lower pressure. To obtain a liquefaction of the air at atmospheric pressure it is necessary to cool it to -191° ; that is, to compress it to 800 atmospheres before expanding it. This is accomplished by an electric motor actuating a pump which sucks air from the atmosphere. It is then dried by passing over chloride of calcium, thence into a liquid ammonia refrigerating apparatus. It is successfully employed in the production of oxygen. It is of little use as a motive power or refrigerant, partly on account of its cost.

Lungs, the sole breathing organs of reptiles, birds, mammals, and in part of amphibians (frogs, newts, etc.), the latter forms breathing in early life by branchiæ or gills, and afterwards partly or entirely by lungs. The essential idea of a lung is that of a sac communicating with the atmosphere by means of a tube, the *trachea* or windpipe, through which air is admitted to the organ, and through structural peculiarities to its intimate parts, the air serving to supply oxygen to the blood and to remove carbonic acid. In the Mammalia, including man, the lungs are confined to and freely suspended in the cavity of the thorax or chest, which is completely separated from the abdominal cavity by the muscular diaphragm or 'midriff.' In man the lungs are made up of honeycomb-like cells which receive their supply of air through the bronchial tubes. If a bronchial tube is traced it is found to lead into a passage which divides and subdivides, leading off into air-cells. The walls of these air-cells consist of thin, elastic, connective tissue, through which run small blood-vessels in connection with the pulmonary artery and veins. By this arrangement the blood is brought into contact with, and becomes purified by means of, the air. The impure blood enters at the root of the lung through the pulmonary artery at the right side of the heart, and passes out purified through the pulmonary veins towards the left side of the heart. Both lungs are enclosed in a delicate membrane called the *pleura*, which forms a kind of double sac that on one side lines the ribs and part of the breast bone, and on the other side surrounds the lung. Pleurisy arises from inflammation of this membrane. The lungs are situated one on each side of the heart, the upper part of each fits into the upper corner of the chest, about an inch above the collar-bone, while the base of each rests upon the diaphragm.

The right lung is shorter and broader than the left, which extends downwards further by the breadth of a rib. Each lung exhibits a broad division into an upper and lower portion or *lobe*, the division being marked by a deep cleft which runs downwards obliquely to the front of the organ; and in the case of the right lung there is a further division at right angles to the main cleft. Thus the left lung has two, whilst the right lung has three lobes. These again are divided into *lobules* which measure from one-fourth to one-half inch in diameter, and consists of air-cells, blood-vessels, nerves, lymphatic vessels, and the tissue by which the lobules themselves are bound together. The elasticity of the lungs by which they expand and expel the air is due to the contractile tissues found in the bronchial tubes and air-cells, this elasticity being aided by a delicate, elastic, surface tissue. The lungs are popularly termed "lights," because they are the lightest organs in the body, and float when placed in water, except when they are diseased.

Lutherans. A designation originally applied by their adversaries to the Reformers of the Sixteenth Century, and afterward appropriated among Protestants themselves to those who took part with Martin Luther against the Swiss Reformers, particularly in the controversies regarding the Lord's Supper. It is so employed to this day as the designation of one of the two great sections into which the Protestant Church was divided, the other being known as the Reformed Church. Lutheranism is the prevailing form of Protestantism in Germany; it is the national religion of Denmark, Sweden, and Norway; and there are Lutheran churches in the Baltic provinces of Russia, in Holland, France, Poland, and the United States. In all there are about 30,000,000 Lutherans. Among the Lutheran symbolical books the "Augsburg Confession," Luther's "Shorter Catechism," and the "Formula Concordiæ" ("Formula of Harmony"), hold the principal place. The chief difference between the Lutherans and the Reformed is as to the real presence of Christ in the sacrament of the Supper; the Lutherans holding the doctrine of consubstantiation—Christ's body present "in, with, and under the unchanged bread and wine"—though rejecting transubstantiation; while some of their more extreme theologians have asserted not only the presence of the human nature of Christ in the Lord's Supper, as Luther did, but the absolute omnipresence or ubiquity of His human nature. Other points of difference relate to the allowance in Christian worship of things indifferent; and many of those things at first retained as merely tolerable by Luther and his fellow-reformers have become favorite characteristics of some of the Lutheran churches—as crucifixes and pictures in places of worship, etc. In its constitution the Lutheran Church is generally unepiscopal without being properly presbyterian. It is consistorial, with the civil authorities so far in place of bishops. In Denmark, Sweden, and Norway there are bishops, and in Sweden an archbishop (of Upsala), but their powers are very limited. In 1900, there were five bodies of Lutherans in the United States, with a total

of 6,710 ministers, 11,123 churches, and 1,665,878 members.

Methodist. A branch of the Christian Church which originated in England during the Eighteenth Century. In 1729 John Wesley, with his brother Charles and a few other associates at Oxford, organized a meeting for their mutual moral improvement. They were soon joined by others, among them Mr. Hervey and George Whitefield, till at the end of six years they numbered fourteen or fifteen. The term "Methodists" was applied to them on account of their methodical mode of life and work. After his return from Georgia in 1738, Wesley began to preach with great fervor. In the early part of 1739, Whitefield set the first example of open-air preaching at Kingswood, near Bristol, addressing an immense crowd of colliers. John Wesley, as well as his brother Charles, followed this example. Being denied admission to the churches by the clergy, they preached in private houses, barns, market places, and the open fields. The converts made by their preaching were either despised or utterly neglected by the Church, and hence Wesley, at their own request, formed them into societies for mutual edification and improvement, called "the United Societies." For their government a few simple rules were proposed by the Wesleys, which, with slight exceptions, are still recognized as the "General Rules" by all branches of the Methodist Church. Methodism strove at first only to restore a purified and intensified spiritual life. The substance of its doctrines is to be found in the writings of John Wesley, John Fletcher, Richard Watson, and others, and in the generally uniform teachings of the Methodist pulpit. The articles which Wesley prepared for the Methodist Church in America were taken substantially from the thirty-nine articles of the Church of England. Methodism holds that the salvation or non-salvation of each human being depends solely on his own free action in respect to the enlightening, renewing, and sanctifying inworkings of the Holy Spirit; hence it is Arminian in distinction from Calvinistic. It emphasizes the doctrine of assurance, *i. e.*, that the Holy Spirit bears witness of pardon and acceptance to the justified sinner. It also makes prominent the doctrine of Christian perfection, or perfect love. Methodist polity, like the Methodist confession, is to be understood only by regarding Methodism as a revival and missionary movement. Wesley thought as little of establishing a separate church polity as of publishing a separate theology. But the neglect and frequent ridicule of the converts by the clergy of the establishment caused many to relapse; and this led him to consent reluctantly to the appointment of lay preachers. The first assembly that took the name of "conference" was held in the Foundery, London, June 25, 1744, and thereafter annually. Secession was discouraged, and they distinctly denied that they were dissenters. Previous to the conference of 1744, the greater portion of England had been divided into "circuits," and provision had been made to supply these with preachers for such time as the need of the work seemed to indicate. Wesley's views of ecclesiastical authority and polity underwent radical

changes, and led him, at the recognition of the independence of the American colonies, to provide a separate church organization for the Methodists of America, and at his death to perpetuate his work by constituting the "United Societies" a distinct ecclesiastical body in regular legal form. Methodism holds to no inspired or divinely imposed church polity. In Great Britain it recognizes but one order of clergy, while in America it has provided two.

The Methodist Episcopal Church is the original and largest body of Methodists in the United States. Wesley and Whitefield, during their visits to America, had organized no Methodist societies. In 1766, a class was formed by Philip Embury, greatly assisted by Captain Thomas Webb, an officer of the British Army stationed in New York, one of Wesley's local preachers. Webb preached and formed classes during 1768, on Long Island, and in New Jersey, Delaware, and Philadelphia. In the same year the first chapel was dedicated in John Street, New York; and in 1770, the first Methodist Church in Philadelphia was erected. In 1769, Boardman and Pilmore, the first missionaries sent to America by Wesley, arrived in New York. In 1771, Francis Asbury arrived, and the next year he was appointed by Mr. Wesley superintendent of the American societies. He was soon superseded by Thomas Rankin. The first American conference was held in 1773, and consisted of ten preachers, all of European birth. The societies then aggregated 1,160 members. At the beginning of the revolutionary struggle nearly all the preachers of English descent, except Asbury, returned home. During the war the English church in America was nearly extinguished, and the dependence of the Methodists on the English clergy for the sacraments almost entirely failed them. Wesley in 1780, applied to the Bishop of London to ordain at least one presbyter to administer the sacraments among the American Methodists, but was refused. Therefore in 1784, Wesley, assisted by the Rev. Thomas Creighton and Richard Whatcoat, presbyters, ordained the Rev. Thomas Coke, LL. D., as superintendent of the American Methodist Churches, with the instruction that Asbury should be assistant superintendent. On Coke's arrival a general conference of sixty ministers met in Baltimore, December 24, 1784, adopted the episcopal form of government, made the episcopal office elective, and held the superintendents amenable to the body of ministers and preachers. The "Sunday Service" and twenty-five "Articles of Religion" were adopted. In 1800, Richard Whatcoat was elected bishop, and in 1808, William McKendree. In 1808, the plan of a delegated general conference was adopted. This body, composed of ninety members, held its first session in 1812. The doctrines of the Methodist Episcopal Church are expressed in the twenty-five "Articles of Religion," which, with the exception of the twenty-third, which recognizes the civil authority of the United States, were prepared by Mr. Wesley from the thirty-nine articles of the Church of England.

There are five judicatory bodies, termed respectively the "general conference," the "judicial conference," the "annual conference," the

"district conference," and the "quarterly conference." Prior to 1872, the general conference was composed exclusively of preachers. It now consists of two laymen for each annual conference and one minister for every forty-five members. It meets quadrennially on the first day of May, and is presided over by the bishops. It is the sole legislative body of the Church. It elects bishops, missionary and educational secretaries; book agents, and editors of its periodicals; and is also the court of final appeal. The annual conference consists of traveling preachers. A bishop is the presiding officer, or in his absence the conference may appoint its president. Its powers are simply administrative. It holds its members responsible, passing their character under examination each year. The district conference is composed of the presiding elder of the district, pastors, local preachers, exhorters, and one steward and Sunday school superintendent from each pastoral charge.

Mohammedanism, the name commonly given in Christian countries to the creed established by Mohammed. His followers call their creed *Islam* (entire submission to the decrees of God), and their common formula of faith is, "There is no God but Allah, and Mohammed is his prophet." The dogmatic or theoretical part of Mohammedanism embraces the following points: (1) Belief in God, who is without beginning or end, the sole Creator and Lord of the universe, having absolute power, knowledge, glory, and perfection. (2) Belief in his angels, who are impeccable beings, created of light. (3) Belief in good and evil Jinn (genii), who are created of smokeless fire, and are subject to death. (4) Belief in the Holy Scriptures, which are his uncreated word revealed to the prophets. Of these there now exist, but in a greatly corrupted form, the Pentateuch, the Psalms, and the Gospels; and in an uncorrupted and incorruptible state the Koran, which abrogates and surpasses all preceding revelations. (5) Belief in God's prophets and apostles, the most distinguished of whom are Adam, Noah, Abraham, Moses, Jesus, and Mohammed. Mohammed is the greatest of them all, the last of the prophets and the most excellent of the creatures of God. (6) Belief in a general resurrection and final judgment, and in future rewards and punishments, chiefly of a physical nature. (7) The belief, even to the extent of fatalism, of God's absolute foreknowledge and predestination of all events both good and evil. The practical part of Mohammedanism inculcates certain observances or duties, of which four are most important. The first is prayer, including preparatory purifications. Prayer must be engaged in at five stated periods each day. On each of these occasions the Moslem has to offer up certain prayers held to be ordained by God, and others ordained by his prophet. During prayer it is necessary that the face of the worshiper be turned towards the *kebla*, that is, in the direction of Mecca. Prayers may be said in any clean place, but on Friday they must be said in the mosque. Second in importance to prayer stands the duty of giving alms. Next comes the duty of fasting. The Moslem must abstain from eating and drinking, and from every indulgence of the senses,

every day during the month of Ramadhan, from the first appearance of daybreak until sunset, unless physically incapacitated. The fourth paramount religious duty of the Moslem is the performance at least once in his life, if possible, of the pilgrimage to Mecca, after which he becomes a Hadji. Circumcision is general among Mohammedans, but is not absolutely obligatory. The distinctions of clean and unclean meats are nearly the same as in the Mosaic code. Wine and all intoxicating liquors are strictly forbidden. Music, games of chance, and usury are condemned. Images and pictures of living creatures are contrary to law. Charity, probity in all transactions, veracity (except in a few cases), and modesty, are indispensable virtues. After Mohammed's death Abu Bekr, his father-in-law, became his successor, but disputes immediately arose, a party holding that Ali, the son-in-law of Mohammed, was by right entitled to be his immediate successor. This led to the division of the Mohammedans into the two sects known as Shiites and Sunnites. The former, the believers in the right of Ali to be considered the first successor, constitute at present the majority of the Mussulmans of Persia and India; the latter, considered as the orthodox Mohammedans, are dominant in the Ottoman Empire, Arabia, Turkestan, and Africa. The total Mohammedan population of the world is estimated at fully 215,000,000.

Moon. The orb which revolves round the earth; a secondary planet or satellite of the earth, whose borrowed light is reflected to the earth and serves to dispel the darkness of night. Its mean distance from the earth is about 237,000 miles; its diameter is 2,160 miles and its magnitude about one-fourty-ninth of that of the earth. It completes its revolution round the earth, in a mean or average period of twenty-seven days, seven hours, forty-three minutes, eleven and one-half seconds, which constitutes the sidereal month. The satellite of any planet.

Moravians. A religious sect, called at first Bohemians, and constituting a branch of the Hussites, who, when the Calixtines came to terms with the council of Basel, in 1433, refused to subscribe the articles of agreement, and constituted themselves into a distinct body. Their tenets were evangelical. In 1522, they made advances to Luther, who partially recognized them, but they ultimately adopted Calvinistic views as to the Lord's Supper. Driven by persecution, they scattered abroad, and for a time their chief settlement was at Fulnek in Moravia, whence they were called Moravian Brethren, or Moravians. On May 26, 1700, was born Nicolaus Ludwig, Count von Zinzendorf, son of the chamberlain and state minister of Augustus II., Elector of Saxony and King of Poland. Having met with a Moravian refugee, who told him of the persecutions to which his sect was exposed in Austria, Count Zinzendorf offered him and his coreligionists an asylum on his estate. The man, whose name was David, accepted the offer, and in 1722, settled with three other men, at a place called by Zinzendorf "Herrnhut" (the Lord's guard). Under his fostering care, the sect greatly increased in strength. Till his death, on May 9, 1760, he

traveled, largely spreading their views. Though they have never been numerous, yet in the latter part of the Eighteenth Century and the beginning of the Nineteenth they acquired great reputation from having a larger proportion of their membership engaged in foreign missions than any Christian denomination since apostolic times. In 1900, the denomination in the United States reported 118 ministers, 111 churches, and 14,817 members.

Mormons, a sect founded in 1830, by Joseph Smith, a native of the United States. The distinguishing peculiarities of the sect are—the belief in a continual divine revelation through the inspired medium of the prophet at the head of their Church, the practice of polygamy, and a complete hierarchical organization. The supreme power, spiritual and temporal, rests with the president or prophet (elected by the whole body of the Church), who alone works miracles and receives revelations. The Mormons accept both the Bible and the Book of Mormon as divine revelations, but hold them equally subject to the explanation and correction of the prophet. The latter mentioned book (in large part a kind of historical romance written by one Solomon Spaulding, in 1812), pretends to be a history of America from the first settlement of the continent after the destruction of the tower of Babel up to the end of the Fourth Century of our era, at which time flourished the legendary prophet Mormon, its reputed author. It was said to have been written on gold plates, and concealed until its hiding place was revealed to Smith by an angel. The name given to it was evidently owing to the important part which Spaulding had assigned to Mormon and his son Moroni in his novel; but Smith and his coadjutors, instead of confining themselves to the original manuscript, had clumsily engrafted upon it a number of maxims, prophecies, etc., evidently garbled from the sacred volume, and interpolated in such a manner as to involve anachronisms and contradictions. The doctrine of the Mormons is a mixture of materialism and millenarianism, and their most distinctive feature, polygamy, which, though originally condemned in the Book of Mormon, was introduced under a theory of “spiritual wives,” and a mysterious system of unrestricted marriage called “sealing.” The Mormons first appeared at Manchester, New York, whence they were compelled by the persevering hostility of their neighbors to flee, first to Kirtland in Ohio (1831), then to Nauvoo, the “City of Beauty,” in Illinois (1838), and finally to the Salt Lake in Utah (1848). In 1844, the founder, Joseph Smith, was shot by a mob in Carthage prison, where his lawless behavior had brought him. The advance made by Mormonism seems to have been due far more to the abilities of Brigham Young, the successor of Smith, than to the founder himself, who was little better than a dissipated and immoral scamp. Under Young’s direction large tracts of land at Salt Lake were brought under cultivation, an emigration fund was established, and a skillful system of propagandism set on foot, by which large numbers of converts were brought from Europe, especially from Great Britain. A State was organized under the name of Deseret.

Congress refused to recognize it, but erected Utah into a Territory, and Brigham Young was appointed governor of it. He was soon removed by the United States authorities, but after a time the Mormons were left pretty much to themselves. In 1870, Congress passed a bill to compel them to renounce polygamy, or quit the United States. A prosecution was instituted against Brigham Young, who was sentenced to fine and imprisonment. In 1877, Young died and was succeeded by John Taylor, an Englishman, during whose presidency the United States Government has passed several bills for the abolition of polygamy. The Reorganized Church of Jesus Christ of Latter-Day Saints, sometimes called non-polygamous Mormons, claim to be true to the doctrines proclaimed by Joseph Smith, insisting that Brigham Young’s followers were led by him from the truth, and deny that Young’s revelation in 1852 concerning polygamy was genuine.

Mosque [mosk], a Mohammedan temple or house of worship. The first mosque, square and capacious, erected by Mohammed at Medina, partly with his own hands, became in its plan the model for all others, which was, however, subsequently modified by the addition of the cupola and minaret. This mosque, that at Mecca, and the mosque of Omar at Jerusalem are considered peculiarly holy by the Moslems. The *jumma musjid* or great mosque at Delhi, built by Shah Jehan in 1631–37, is generally considered the noblest building ever erected for Mohammedan worship. The chief officer of a mosque is the Nazir, under whom are two Imáms, a kind of religious official, in no way to be compared with what we understand by a clergyman of a creed, but who performs a certain number of religious rites as long as the Nazir allows him to do so, and who, being very badly remunerated, generally has to find some other occupation besides. With many of the larger mosques there are schools, academies, and hospitals connected, and public kitchens, in which food is prepared for the poor.

Music. The origin of music is involved in obscurity, and it has been said that speech and song are coeval. From several passages in the Old Testament it is evident that music was made use of at an early period, but probably without any regard to rhythm. The Greeks, who inherited the art from the Egyptians, were the first to reduce music to a system; but it was not until the introduction of Christianity into Western Europe that marked signs of improvement took place, and not until the Fifteenth Century that any rapid progress was made. The great distinction between the music of the ancients and that of modern times lies in the peculiarity of the scales in which it is written. The scales or modes of the ancients varied from four to fourteen, and were distinguished by the position of the semitones, as in our modern major and minor scales. Many of our national melodies are written in these ancient scales, their peculiar character being derived from the position of the semitones. *Melody* was probably the sole characteristic of the music of the ancients, and it was not until the Seventh Century that composition in harmony, either vocal or

instrumental, came into use. In the Eleventh Century we also find an innovation by the introduction of notes of unequal length, giving variety to melody; and the question of time and rhythm came into consideration. It is supposed that the art of composition was first cultivated in Flanders. The earliest example is of the Tenth Century, and consists simply of a succession, of fourths and fifths. *Harmony* probably belongs exclusively to the music of the most civilized nations of modern times. In the Sixteenth and Seventeenth Centuries we have Palestrina and his contemporaries, Boyd, Gibbons, etc., who enriched the art by their compositions, simplifying the harmonies, and giving more flowing and natural melodies. In the Seventeenth and Eighteenth Centuries we have Handel, Bach, Haydn, Mozart; and in the Eighteenth and Nineteenth Centuries, perfection of the art has almost been attained in Beethoven, Spohr, Weber, Cherubini, Mendelssohn, Chopin, and Schumann, etc. The science of music is treated in works on acoustics, and has reference to the nature of musical sounds and their relation to each other. Under this branch of the science are classed musical sounds, the vibrations required to produce them, pitch, harmonies, etc. The theory of music has reference to the symbols and the language in which music is expressed, and to the rules generally laid down in order to produce correct and effective musical composition. The symbols used in music are scales, clefs, forms of notes and equivalent rests, tune divisions, and others, respecting which information may be obtained from any catechism of music. These symbols and signs were not completed in their present form until very recent times. Having obtained the necessary materials, the laws of composition may be studied, the simplest form being that of melody, produced by a single voice or instrument. The higher branches of the art are harmony, composition, modulation, and counterpoint, the rules for which are laid down in text-books on the subject.

Ozone. A substance discovered by Schönbein, occasionally existing in the atmosphere, and having a peculiar odor resembling that produced when repeated electric sparks, or electric discharges, from a point are transmitted through the air. It is supposed to be an allotropic form of oxygen. It is also formed in certain cases of the slow action of air upon phosphorus. The ozone existing from time to time in the atmosphere has been supposed to have an influence on the health of the community, and observations with regard to it are frequently made by means of an apparatus called an ozonimeter, the essential parts of which consist of strips of paper steeped in a mixture of starch and iodide of potassium. Ozone turns the paper brown, the tint varying with the quantity of ozone.

Paganism. The religion of the heathen world, in which the deity is represented under various forms, and by all kinds of images or idols; it is therefore called idolatry or image-worship. The theology of the pagans was of three sorts — fabulous, natural, and political or civil. The *fabulous* treats of the genealogy, worship, and attributes of their deities, who were for the most part the offspring of the imagination

of poets, painters, and statuary. The *natural* theology of the pagans was studied and taught by the philosophers, who rejected the multiplicity of gods introduced by the poets, and brought their ideas to a more rational form. The *political* or civil theology of the pagans was instituted by legislators, statesmen, and politicians, to keep the people in subjection to the civil power. This chiefly related to their temples, altars, sacrifices, and rites of worship. The word *pagan* was originally applied to the inhabitants of the rural districts, who, on the first propagation of the Christian religion, adhered to the worship of false gods, or who refused to receive Christianity after it had been adopted by the inhabitants of the cities. In the Middle Ages, this name was given to all who were not Jews or Christians, they only being considered to belong to a true religion; but in more modern times, Mohammedans, who worship the one supreme God of the Jews and Christians, are not called *pagans*.

Pagoda. A Hindoo place of worship, containing an idol. It consists of three portions: an apartment surmounted by a dome, resting on columns, and accessible to all; a chamber into which only Brahmins are allowed to enter; and, lastly, a cell containing the statue of the deity, closed by massive gates. The most remarkable pagodas are those of Benares, Siam, Pegu, and particularly that of Juggernaut, in Orissa.

Parsees. The name given in India to the fire-worshipping followers of Zoroaster, chiefly settled in Bombay, Surat, etc., where they are amongst the most successful merchants. They have a great reverence for fire in all its forms, since they find in it the symbol of the good deity Ahurâ-Mazda (Ormuzd). To this divinity they have dedicated "fire-temples," on whose altar the sacred flame is kept continually burning. Benevolence is the chief practical precept of their religion, and their practice of this finds its evidence in their many charitable institutions. One of the most curious of their customs is in the disposal of their dead. For this they erect what are called "towers of silence," built of stone, about twenty-five feet high, and with a small door to admit the corpse. Inside is a large pit with a raised circular platform round it on which the body is exposed that it may be denuded of flesh by vultures, after which the bones drop through an iron grating into the pit below.

Perfectionists, or Bible Communists, popularly named Free-lovers, an American sect founded in 1838 by John Humphrey Noyes. Noyes was employed as a law-clerk at Putney, in Vermont, when the fierce religious revival of 1830 spread over the New England States, but he abandoned law for religion, and took upon himself the restoration of the primitive Christian ideal. His distinctive doctrines were: (1) reconciliation to God and salvation from sin — purely matters of faith; (2) recognition of the brotherhood and the equality of man and woman; and (3) community of labor and its fruits. In 1838 he succeeded in organizing a society giving expression to his views at Putney. Besides himself this included his wife, his mother, and his sister and brother, who were joined by several other families. All property

was thrown into a common stock; all debts, all duties fell upon the society, which ate in one room, slept under one roof, and lived upon one common store. All prayer and religious service were stopped, Sunday was unobserved, family ties were broken up, and a complex marriage system was established, by which each man became the husband and brother of every woman; every woman the wife and sister of every man. They held that true believers are free to follow the indications of the Holy Spirit in all things, nothing being good or bad in itself. Consequently, they rejected all laws and rules of conduct, except those which each believer formulated for himself; but to prevent the inconveniences arising from an ignorant exercise of individual liberty, they introduced the "principle of sympathy," or free public opinion, which, in fact, constituted the supreme government of the sect.

Presbyterian Church. A name applied to those Christian denominations which hold that there is no order in the Church as established by Christ and His apostles superior to that of presbyters, and who vest Church government in presbyteries, constituted of ministers and elders, possessed of equal powers, thus without superiority among themselves. Presbyterianism does not recognize the term bishop as the superior of the presbytery, because these two names or titles in the New Testament, are used interchangeably of the same persons. Presbyterians hold that the authority of their ministers is derived from the Holy Spirit, which is symbolized by the imposition of the hands of presbytery collectively. They affirm that all Christian ministers, being ambassadors of Christ, are equal by their commission. The congregation elects its own minister and elders, and also its deacons and trustees — the former of the last two, takes charge of the charities of the Church, and the latter of its temporal or financial affairs. The session, consisting of the minister and elders, has the spiritual oversight of the church members. The Presbytery is constituted by ministers and elders in equal numbers. A congregation for the time without a pastor can be represented in the presbytery by an elder. An appeal may be made to the presbytery from congregations or sessions. A synod consists of a number of presbyteries within defined boundaries. The general assembly is the highest court of the Church, and consists of representatives from all the presbyteries, each minister is accompanied by an elder from the same presbytery. The first Presbyterian Church in modern times was founded in Geneva by John Calvin, about 1541; and the constitution and doctrines were thence introduced, with some modifications, into Scotland by John Knox, about 1560, though the Presbyterian was not legally recognized as the national form of Church government till 1592. The first Presbyterians in America were emigrants from the British Isles, and the first Presbyterian Church in America was founded in the colony of Massachusetts in 1629. It was the outgrowth of a Presbyterian congregation that landed there in 1625. This movement was projected by Presbyterian leaders in the south of England and also in London. It was designed to be a colonization on

a higher principle than the desire for gain. The Church now has five theological seminaries. A revision of the confession was commenced in 1891, and is now in progress. It is also proposed to formulate a creed which shall express the doctrine of all the branches of the Church. There are several branches which virtually hold the polity of the Presbyterian Church in the United States, each having its own theological seminaries and colleges, such as the Presbyterian churches northern and southern, the Cumberland, Reformed, the United Presbyterian, the Reformed Dutch and German, etc. The Presbyterian Church in Canada is strong and prosperous, with six theological colleges. In 1890, there were above 800 ministers and 140,000 communicants. In the Australasia colonies Presbyterianism is also vigorous. In the Cape Colony and minor colonies Presbyterianism is also represented.

Reformed Church. In general, comprehends those Churches which were formed at the Reformation; but the term is specifically applied to those Protestant Churches which did not embrace the doctrines and discipline of Luther. The title was first assumed by the French Protestants, but afterwards became the common denomination of all the Calvinistic churches on the European continent. The Reformed Church of America is a body known up to 1867 as the Reformed Protestant Dutch Church, being founded by settlers from Holland and holding Calvinistic doctrines. The first minister was the Rev. George Michael Weiss, who emigrated with about 400 people of the Palatinate in 1727. These and most of the immigrants who followed settled in Pennsylvania, east of the Susquehanna. In 1746, the Rev. Michael Schlatter was commissioned by the synods of North and South Holland to visit their German missions in America, and to regulate their ecclesiastical relations. He assembled in Philadelphia the first synod (or, as it was then called, *coetus*) of the German Reformed Church, September 29, 1747. The German Reformed *coetus* continued under the jurisdiction of the Church of Holland till 1793, when an independent synod was formed. It increased rapidly in membership and congregations. The spread of the English language led to a closer connection with other Protestant Churches of the United States; and many ministers and congregations showed a tendency to drop certain customs of the Church, as confirmation and church holidays. The first triennial general synod, with jurisdiction over the whole Church, met in Pittsburgh in November, 1863. The general synod of 1869, resolved to drop the word German from the name of the Church. The Heidelberg catechism is the only standard of doctrine. As this book was intended to harmonize the Melancthonian and Calvinistic tendencies, it has been construed by theologians of these two schools in different ways. In the German Reformed Church the Melancthonian element has been predominant, so that many representative theologians have incurred the charge of Romanizing tendencies. The worship of the Church is liturgical; its government is presbyterian.

RELIGIOUS STATISTICS

DIVISIONS OF EUROPE

COUNTRIES	CATHOLIC CHURCH	PROTESTANT CHURCHES	ORTHODOX CHURCHES	Jews	MOHAM-MEDANS	UNCLAS-SIFIED
Russia,	9,600,000	3,400,000	73,310,000	3,400,000	3,000,000	290,000
Germany,	17,100,000	29,478,000	.....	590,000	.....	32,000
Austria-Hungary,	31,100,000	3,900,000	3,100,000	1,700,000	.....	100,000
France,	35,387,000	580,000	.....	49,000	.....	84,000
United Kingdom,	6,500,000	30,100,000	.....	100,000	.....	500,000
Italy,	29,850,000	62,000	.....	38,000	.....	50,000
Spain,	16,850,000	29,000	.....	5,000	.....	.....
Belgium,	5,880,000	15,000	.....	3,000	.....	2,000
Rumania,	100,000	15,000	4,800,000	400,000	30,000	55,000
Ottoman Empire,	320,000	11,000	1,700,000	60,000	2,708,000	70,000
Netherlands,	1,545,000	2,756,000	.....	83,000	.....	16,000
Portugal,	4,300,000	.....	.....	.....	.....	1,000
Sweden,	1,000	4,698,000	.....	2,000	.....	1,000
Switzerland,	1,172,000	1,710,000	.....	8,000	.....	10,000
Denmark,	3,000	2,089,000	.....	4,000	.....	4,000
Greece,	10,000	10,000	1,930,000	5,000	45,000	.....
Servia,	6,000	1,000	1,973,000	5,000	15,000	.....
Bulgaria,	29,000	.....	1,393,000	.....	571,000	.....
Norway,	1,000	1,958,000	.....	.....	.....	1,000
Rumelia,	30,000	.....	700,000	4,000	240,000	2,000
Montenegro,	5,000	.....	290,000	.....	.....	1,000
Luxembourg,	200,000	.....	.....	.....	.....	.....
Malta,	160,000	.....	.....	.....	.....	.....
Gibraltar,	16,000	.....	.....	.....	.....	.....
Total Followers,	160,165,000	80,812,000	89,196,000	6,456,000	6,629,000	1,219,000

The distinction between followers and actual communicants should be observed.

DENOMINATIONS IN THE UNITED STATES

DENOMINATIONS	MINISTERS	CHURCHES	COMMUNICANTS
Adventists,	1,565	2,499	95,437
Baptists,	38,010	54,566	5,140,770
Brethren (River),	173	98	4,239
Brethren (Plymouth), . . . . .	.....	314	6,661
Buddhist (Chinese), . . . . .	.....	47	.....
Buddhist and Shintoist (Japanese), . . . . .	.....	9	.....
Catholics,	15,260	12,449	11,143,455
Catholic Apostolic,	95	10	1,491
Christadelphians, . . . . .	.....	63	1,277
Christian Connection,	1,348	1,340	101,597
Christian Catholic (Dowie),	104	110	40,000
Christian Scientists,	1,326	663	80,197
Christian Union,	201	268	17,500
Church of God (Winebrennerian),	490	590	41,475
Church of the New Jerusalem,	128	139	8,084
Communitic Societies, . . . . .	.....	22	3,084
Congregationalists,	5,950	5,943	694,923
Disciples of Christ,	7,153	11,110	1,264,758
Dunkards,	3,241	1,100	121,194
Evangelical Bodies,	1,508	2,730	179,339
Friends,	1,466	1,075	118,752
Friends of the Temple,	4	4	340
German Evangelical Protestant,	100	155	20,000
German Evangelical Synod,	964	1,227	228,420
Jews,	301	570	143,000
Latter-Day Saints,	1,652	1,328	396,354
Lutherans,	7,872	13,919	1,957,433
Swedish Evangelical Mission Covenant (Waldenstromians),	345	351	46,000
Mennonites,	1,240	701	61,690
Methodists,	41,483	60,352	6,551,891
Moravians,	130	119	16,923
Presbyterians,	12,705	15,922	1,771,877
Protestant Episcopal,	5,258	7,567	846,492
Reformed,	2,044	2,563	422,359
Salvation Army,	3,773	983	28,500
Schwenkfeldians,	5	8	731
Social Brethren,	17	20	913
Society for Ethical Culture, . . . . .	.....	5	1,700
Spiritualists, . . . . .	.....	748	295,000
Theosophical Society, . . . . .	.....	71	2,607
United Brethren,	2,247	4,351	286,238
Unitarians,	544	464	71,000
Universalists,	720	977	55,831
Independent Congregations,	54	156	14,126
Grand Total,	150,503	207,707	32,283,658

Respiration. A function proper to animals, the object of which is, to place the materials of the blood — the mixture of the venous blood with lymph and chyle — in contact with atmospheric air, in order that it may acquire the vivifying qualities which belong to arterial blood. The organs for executing this function are, in the mammalia, birds, and reptiles, the *lungs*. In man, the respiration consists of mechanical and chemical phenomena. The mechanical are *inspiration* and *expiration*. The evident chemical phenomena consist in the formation of a certain quantity of carbonic acid, the absorption of a part of the oxygen of the air, and the disengagement of a quantity of water in the state of vapor. In the healthy condition the respiration is easy, gentle, regular, and without noise. In man, the respirations are generally about thirty-five per minute in the first year of life; twenty-five during the second; twenty at puberty; and eighteen in the adult age — during which time he inhales about eighteen pints of air. The air drawn in and expelled by the lungs in respiration is called *breath*.

Salvation Army, The. The Salvation Army is a missionary organization set on foot in England by William Booth, who was called the "General" of the army. The plan of operation is for a company to march about cities, towns, and villages, singing popular sacred songs and speaking between whiles for about five minutes. The army has also a large number of religious periodicals and small books. Mr. Booth was a minister of the Methodist New Connexion, which he left in 1861, to begin "revivalistic services" in a tent in Whitechapel. In 1865, his little band of followers called themselves "The East London Christian Revival Society," afterwards changed to "The Christian Mission." In 1869, the Mission made expeditions to provincial towns. Lastly in 1873, the name was changed to "The Salvation Army." Its literary organ, called "The Christian Mission," first appeared monthly in 1874. In 1879, it was called "The Salvantonist," and in the same year its title was changed into "The War Cry." Its flag now flies in fifty-one countries or colonies, where, under the charge of 20,000 officers and employees, with 46,000 local officers, and about 50,000 musicians. The army has sixty-three weekly newspapers and magazines, with a total weekly circulation of 1,300,000, and published in twenty-four languages.

Sciences. The name for such portions of human knowledge as have been more or less generalized, systematized, and verified. The term "Philosophy" is to a certain extent, but not altogether, coincident with science, being applied to the early efforts and strainings after the explanation of the universe, that preceded exact science in any department. Both names denote the pursuit of knowledge as knowledge, or for intellectual satisfaction, in contrast to the search that is limited to immediate practice or utility.

The sciences have been variously classified, and the principles of their classification have been a subject of discussion. We shall here describe the mode of classifying them in accordance with present usage, and with the principles

most generally agreed upon. It is convenient to prepare the way by distinguishing between Theoretical Sciences, which are the sciences properly so called, and Practical Science. A Theoretical Science embraces a distinct department of nature, and is so arranged as to give, in the most compact form, the entire body of ascertained (scientific) knowledge in that department: such are mathematics, chemistry, physiology, zoölogy. A practical science is the application of scientifically obtained facts and laws in one or more departments to some practical end, which end rules the selection and arrangement of the whole; as, for example, navigation, engineering, mining, medicine. Navigation selects from the theoretical sciences — mathematics, astronomy, optics, meteorology, etc. — whatever is available for guiding a ship on the seas, and converts the knowledge into rules or prescriptions for that purpose. The arts that can thus draw upon the exact sciences are by so much the more certain in their operations; they are the scientific arts.

Another distinction must be made before laying down the systematic order of the theoretical sciences. A certain number of these sciences have for their subject matter each a separate department of natural forces or powers; thus, biology deals with the department of organized beings, psychology with mind. Others deal with the application of powers elsewhere recognized to some region of concrete facts or phenomena. Thus, geology does not discuss any natural powers not found in other sciences, but seeks to apply the laws of physics, chemistry, and biology to account for the appearances of the earth's crust. The sciences that embrace peculiar natural powers are called abstract, general, or fundamental sciences; those that apply the powers treated of under these to regions of concrete phenomena are called concrete, derived, or applied sciences.

The abstract or theoretical sciences, as most commonly recognized, are these six: mathematics, physics, chemistry, biology (vegetable and animal physiology), psychology (mind), sociology (society). The concrete sciences are the natural history group — meteorology, mineralogy, botany, zoölogy, geology, also geography, and we might, with some explanations, add astronomy. The abstract or fundamental sciences have a definite sequence, determining the proper order for the learner, and also the order of their arriving at perfection. We proceed from the simple to the complex, from the independent to the dependent. Thus, mathematics relates to *quantity*, the most pervading, simple, fundamental, and independent attribute of the universe. The consideration of this attribute has therefore a natural priority; its laws underlie all other laws. As mathematics is at present understood, it has an abstract department, which treats of quantity in its most general form, or as applied to nothing in particular — including arithmetic, algebra, and the calculus — and a concrete or applied department — viz: *geometry*, or quantity in space or extension. It has been suggested that general mechanics, or the estimation of quantity in *force*, should be considered a second concrete

department. But usually mechanics ranks with the next fundamental science in order, called physics.

Natural philosophy has long been considered the name of a distinct department of science: the designation physics is now more common. This science succeeds mathematics, and precedes chemistry. Of all the fundamental sciences, it has the least unity, being an aggregate of subjects with more or less connection. Mechanics, hydrostatics, hydraulics, pneumatics, acoustics, astronomy, are all closely related; they represent the phenomenon of movement in *mass*, as applied to all the three states of matter, solid, liquid, and gas. The remaining subjects—heat, light, and electricity—together with the attractions and repulsions that determine cohesion, crystallization, etc., are described as relating to movement in the *molecule*. We have thus molar physics and molecular physics; and the tendency is now to treat the two separately.

Chemistry lies between physics and biology, reposing upon the one and supporting the other. It assumes all the physical laws, both molar and molecular, as known, and proceeds to consider the special phenomenon of the composition and decomposition of bodies considered as taking place in definite proportions, and leading to change of properties. The composition of a cup of tea from water, sugar, milk, and infusion of tea-leaf, is physical; the composition of marble from oxygen, carbon, and calcium, is chemical. In the one case, the properties of the separate ingredients are still discernible; in the other, these are merged and untraceable.

Biology, or the science of living organization, involves mathematical, physical, and chemical laws, in company with certain others, called vital. It is most usually expounded under the designations vegetable and animal physiology; and in the concrete departments, botany, zoology, and anthropology.

Psychology, or the science of mind, makes a wide transition, the widest that can be taken within the whole circle of the sciences, from the so-called material world, to the world of feeling, volition, and intellect. The main source of our knowledge of mind is self-consciousness; and it is only from the intimate connection of mind with a living organism, that the subject is a proper sequel to biology. Not until lately has any insight into mind been obtained through the consideration of the physical organ—the brain; so that psychology might have been placed anywhere, but for another consideration that helps to determine the order of the sciences—viz: that the *discipline*, or method, of the simpler sciences is a preparation for the more abstruse. Mathematics and physics especially are an admirable training of the intellect for the studies connected with mind proper, although the laws of physics may not of themselves throw any direct light on the successions of thought and feeling.

These five sciences embrace all the fundamental laws of the world, and, if perfect, their application would suffice to account for the whole course of nature. To a person fully versed in them, no phenomenon of the explained universe can appear strange; the concrete sciences

and the practical sciences contain nothing fundamentally new. They constitute a liberal scientific education. It is not uncommon, however, to rank sociology, or the laws of man in society, as a sixth primary science following on psychology, of which it is a special development.

The practical sciences do not admit of any regular classification. They are as numerous as the separate ends of human life that can receive aid from science, or from knowledge scientifically constituted. Connected with mind and society, we have ethics, logic, rhetoric, grammar, philology, education, law, jurisprudence, politics, political economy, etc. In the manual and mechanical arts, there are navigation, practical mechanics, engineering, civil and military, mining and metallurgy, chemistry applied to dyeing, bleaching, etc.

The medical department contains medicine, surgery, midwifery, *materia medica*, medical jurisprudence. A science of living, or of the production of happiness by a skilled application of all existing resources, would be the crowning practical science.

Septuagint (*səp'tu-a-jint*). A Greek version of the books of the Old Testament; so called because the translation is supposed to have been made by seventy-two Jews, who, for the sake of round numbers, are usually called the *seventy interpreters*. It is said to have been made at the request of Ptolemy Philadelphus, King of Egypt, about 280 years B. C. It is that out of which all the citations in the New Testament and the Old are taken. It was also the ordinary and canonical translation made use of by the Christian Church in the earliest ages; and is still retained in the Churches both of the East and West. According to the chronology of the Septuagint, there were fifteen hundred years more from the creation to Abraham than according to the present Hebrew copies of the Bible.

Shorthand. An art by which writing is abbreviated, so as to keep pace with speaking. Its great and general utility has been recognized in every age, and numberless systems have been devised to facilitate its acquirement. It was practiced by the ancients for its secrecy as well as for its brevity, and a work is extant on the art, which is ascribed to Tiro, the freedman of Cicero. The first English treatise on stenography, in which marks represent words, was published in 1588, by Timothy Bright, M. D., under the title, "Characterie: an Art of Short, Swift, and Secret Writing by Character." In 1837, appeared Pitman's "Phonography"—the first really popular system. Melville Bell, following in the path marked out by Pitman, founded his system on the sounds of the language. The first sketch appeared in 1849; in 1852, the first complete edition, under the title "Semi-Phonography." Shorthand is now largely practiced in both the United States and England, and has extended its benefits to many classes besides that of the professional reporter. This is due chiefly to the excellences of Pitman's system and to his activity in disseminating its principles. The existence of two styles of phonography, one adapted for letter writing and the other for reporting—the second, however, being

only an extension of the first, and not a new system in itself — has been the chief basis of the popularity of phonetic shorthand. Popular modifications of Pitman's system have been made in the United States by Graham, Burnz, and Munson.

Skeleton. A term which is popularly used to denote the system of hard parts forming the bony framework of the body. The skeleton of mammalia consists of an axial portion which comprises the skull, the vertebral column, the sternum and ribs, and an appendicular portion consisting of the limbs. The skull consists mainly of the cranium, which is the strong bony case or frame which encloses the brain, and affords support and protection to the organs of smell, taste, sight, and hearing. To the inferior surface of the cranium are suspended the mandible, or lower jaw, and also a group of skeletal structures termed the hyoidian apparatus, which supports the tongue, etc. The vertebral or spinal column consists of a series of bones called vertebrae, arranged in close connection with each other on the dorsal side of the neck and trunk. It generally extends posteriorly beyond the trunk to form the tail, and anteriorly it articulates with the skull. The number of distinct bones of which the vertebral column consists varies in different animals, the variation being mainly due to the development of the tail. The vertebrae differ in form in the different regions of the column, but they are nevertheless constructed on a common plan. The sternum consists of a series of bones placed longitudinally in the middle line of the ventral side of the thorax or chest, and connected on each side with the vertebral column by a series of long, narrow, and more or less flattened bones termed the ribs. The anterior limbs consist of the following bones: the humerus, or arm-bone; the radius and ulna, which together constitute the forearm; the carpal, or wrist bones; and the metacarpals and phalanges, or bones of the hand. The posterior limbs consist of the femur, or thigh bone; the tibia and fibula, or leg bones; the tarsal bones, forming the ankle; and the meta-tarsals and phalanges, constituting the bones of the foot.

Skin. The integument which invests and surrounds the exterior of the body. The skin of man consists of two fundamental layers, viz: the cuticle, or epidermis, and the cutis, dermis, or true skin. The cuticle, or epidermis, is a layer of epithelial cells; it differs in thickness in different parts of the body, is without blood-vessels and nerves, and is, therefore, quite devoid of sensibility. It may be divided into two groups of strata, a superficial and a deep stratum. The superficial one is what is usually termed the epidermis, in the more precise meaning of the word. The inner or deep layer is molded on to the true skin, and consists of softer, moister, and more rounded cells than the outer layer. It is sometimes called the Malpighian layer, or rete mucosum; and it is the seat of the coloring material or pigment of colored races, such as the negro. The cutis or dermis, or true skin, forms the more complex lower layer of the skin. It consists of densely-interwoven tissues, and is well supplied with

blood-vessels and nerves. This layer contains the sudoriparous or sweat-glands, which excrete the perspiration, and also the sebaceous glands, which secrete oily matter, and the function of which it is to keep the skin soft and flexible. The papillae of the skin consist of small conical processes on the surface of the cutis. The central portion of each papilla contains a group of blood-vessels and a nerve, and on the more sensitive parts of the skin touch-corpuscles are also present. Hair, nails, etc., are developed from skin. The skin is the organ of the sense of touch; it protects the superficial parts of the body; is an organ of respiration, excretion, and absorption; and regulates the temperature of the body.

Smithsonian Institution. A scientific institute in Washington, organized by Act of Congress in 1846, to carry into effect the provisions of the will of James Smithson, the founder. Smithson was a natural son of the Duke of Northumberland; was educated at Oxford, and was, in 1790, elected a Fellow of the Royal Society. He died at Genoa in 1829, leaving his property (worth \$600,000) to his nephew, with the condition that if the latter died without issue the property was to go to the United States to found an establishment for the increase and diffusion of knowledge. In 1835, the nephew died childless, and in 1838, the sum of \$515,169 was paid to the treasury of the United States. In 1846, the interest on this sum (the principal itself must remain untouched) was applied to the erection of a suitable building, with apartments for the reception and arrangement of objects of natural history, including a geological and mineralogical cabinet, a chemical laboratory, a library, a gallery of art, and the necessary lecture-rooms. The building is one of the finest in Washington. A portion of the funds of the institution is devoted to scientific researches and the publication of works too expensive for private enterprise. Three series of publications are issued: "Contributions to Knowledge," "Miscellaneous Collections," and "Annual Reports." The institution contains the National Museum, which is, however, wholly maintained by the government. The institution is administered by regents, composed of the chief-justice of the United States, three members of the Senate, and three of the House of Representatives, with six other persons, not members of Congress. The president vice-president, and members of the cabinet for the time being have the position of governors or visitors of the institution, the president being *ex officio* at the head.

Stars, The, are mostly suns, but being, the nearest of them, at a distance from us more than 500,000 times our distance from the sun, are of a size we cannot estimate, but are believed to be 300 times larger than the earth; they are of unequal brightness, and are, according to this standard, classified as of the first, second, down to the sixteenth magnitude; those visible to the naked eye include stars from the first to the sixth magnitude, and number 3,000, while 20,000,000 are visible by the telescope; of these in the Milky Way alone there are 18,000,000; they are distinguished by their colors as well

as their brightness, being white, orange, red, green, and blue, according to their temperature and composition; they have from ancient date been grouped into constellations of the northern and the southern hemispheres and of the zodiac, the stars in each of which being noted by the Greek letters, according to their brightness.

Stomach. In comparative anatomy, a membranous sac, formed by a dilation of the alimentary canal, in which food is received and subjected to the processes of digestion. The human stomach is an elongated, curved pouch, from ten to twelve inches long, and four or five inches in diameter at its widest part, lying almost immediately below the diaphragm, nearly transversely across the upper and left portion of the abdominal cavity, and having the form of a bagpipe. It is very dilatable and contractile, and its average capacity is about five pints. The food enters the stomach through the œsophagus by the cardia or cardiac orifice, and after having been acted on by the gastric juice, is passed on in a semi-fluid or pulpy state through the pylorus into the small intestines. Owing to the recent improvements in electrical apparatus, the physiology and pathology of the human stomach in life is becoming much better known. Medical electricians have recently devised a plan by which the interior of the human stomach may be illuminated for examination. The patient is laid on the operating table and a slender tube, carrying a glass bead on its end, is introduced into the stomach. A small light inside the bead is supplied by fine wires running out through the tube and connected to a small battery. The interior of the stomach is plainly lighted and all its parts are brought into view by a small movable mirror at the end of the tube.

Sun. The central orb of the solar system, that around which revolve the earth and the other planets. The sun appears to be a perfect sphere, with a diameter of 866,900 miles; its mean density is about one-fourth, taking that of the earth as one; its mean distance from the earth is taken as 93,000,000 miles. It rotates on its own axis; this axis of rotation being inclined to the ecliptic at an angle of $82^{\circ} 40'$; and its rotation period is variously estimated at from twenty-five to twenty-eight days. The mass of the sun is about 750 times that of all the other members of the solar system combined, and the center of gravity of the solar system lies somewhere in the sun, whatever may be the relative positions of the planets in their orbits. The dark spots on the sun discovered by Galileo have been shown to be hollows, and their depth has been estimated at from 3,000 to 10,000 miles. The spots are very changeable in their figure and dimensions, and vary in size from mere points to spaces of 50,000 miles or more in diameter. It is from observations of these spots that the sun's rotation on its axis has been calculated. The frequency of sun spots attains a maximum every ten and a half years, the number of spots falling off during the interval to a minimum, from which it recovers gradually to the next maximum. This periodicity has been thought to be intimately connected with the meteorological phenomena observed on the

earth, especially with the rainfall. Spots are called *maculae*, brighter portions of the sun are called *faculae*, and the lesser markings are called *mottlings*. The sun is now generally believed to be of gaseous constitution, covered with a sort of luminous shell of cloud formed by the precipitation of the vapors which are cooled by external radiation. This dazzling shell is termed the *photosphere*. The spots are supposed to be cavities in this cloud-layer, caused by the unequal velocities of neighboring portions of the solar atmosphere. Zöllner, who considers the body of the sun to be liquid, sees therein slags or scoræ floating on a molten surface, and surrounded by clouds. It is estimated that the sun's radiation would melt a shell of ice covering its own surface to a depth of between thirty-nine and forty feet in one minute, but the temperature of the surface has not yet been ascertained. It is evident, however, that the temperature and radiation have remained constant for a long period. The photosphere is overlaid by an atmosphere which is shown by the spectroscope to contain nearly all the materials which enter into the composition of the sun. The region outside the photosphere in which these colored prominences are observed has been called the *chromosphere*, which has an average depth of from 3,000 to 8,000 miles. The incandescent hydrogen clouds stretch out beyond this to altitudes of 20,000 to 100,000 miles, and jets of chromospheric hydrogen have been observed to reach a height of 200,000 miles in twenty minutes, and disappear altogether within half an hour. Outside the chromosphere, extending very far out from the sun, is the *corona*, an aurora of light observed during total eclipses. The amount of light sent forth by the sun is not exactly measurable, but the amount of heat has been pretty accurately computed, and it is equivalent in mechanical effect to the action of 7,000 horse-power on every square foot of the solar surface, or to the combustion on every square foot of upwards of thirteen and one-half hundred pounds of coal per hour.

Theology is the science which treats of the existence of God, his attributes, and the Divine will regarding our actions, present condition, and ultimate destiny. In reference to the sources whence it is derived theology is distinguished into *natural* or *philosophical* theology, which relates to the knowledge of God from His works by the light of nature and reason; and *supernatural*, *positive*, or *revealed* theology, which sets forth and systematizes the doctrines of the Scriptures. With regard to the contents of theology it is classified into *theoretical* theology or *dogmatics*, and *practical* theology or *ethics*. As comprehending the whole extent of religious science, theology is divided into four principal classes, *historical*, *exegetical*, *systematic*, and *practical* theology. Historical theology treats of the history of Christian doctrines. Exegetical theology embraces the interpretation of the Scriptures and Biblical criticism. Systematic theology arranges methodically the great truths of religion. Practical theology consists of an exhibition, first, of precepts and directions; and, secondly, of the motives from which we should be expected to

comply with these. *Apologetic* and *polemic* theology belong to several of the above-mentioned four classes at once. The *Scholastic theology* attempted to clear and discuss all questions by the aid of human reason alone, laying aside the study of the Scriptures, and adopting instead the arts of the dialectician.

Theosophy, according to its etymology the science of divine things. But the name of *theosophists* has generally been applied to persons who in their inquiries respecting God have run into mysticism, as Jacob Böhme, Swedenborg, St. Martin, and others. At the present day the term is applied to the tenets of the Theosophical Society, founded in New York in 1875 by a Col. Olcott, the objects of which are: to form the nucleus of a universal brotherhood of humanity, to promote the study of Eastern literature and science, and chiefly to investigate unexplained laws of nature, and the physical powers of man, and generally the search after divine knowledge—divine applying to the divine nature of the abstract principle, not to the quality of a personal God. The theosophists assert that humanity is possessed of certain powers over nature, which the narrower study of nature from the merely materialistic standpoint has failed to develop.

Unitarian Church. A communion comprising all who maintain that God exists in one person only. The name Unitarian is applied specially to a small Christian sect whose distinguishing tenet is the unity as opposed to the trinity of the Godhead. In the more general sense the name of course includes the Jews and the Mohammedans. From the middle of the Second Century to the end of the Third Century there was a succession of eminent Christian teachers—Monarchians—who maintained, against the ecclesiastical doctrine of the Logos, the undivided unity of God. There are said to have been two classes of them—those who taught that Christ was God in such a sense that it was the Father who became man and those who held that Christ was in nature a mere man, but exalted above all other prophets by the superior measure of Divine wisdom with which he was endowed. The latter class was represented by Theodotus, Artemon, and especially Paul of Samosata. The grand theological struggle which followed in the Fourth Century between the Arians and the Athanasians may be regarded as a phase of the Unitarian controversy. Unitarians of all shades of opinion are agreed in rejecting the entire orthodox scheme—including the doctrines of the Trinity, the vicarious atonement, the deity of Christ, original sin, and everlasting punishment—as both unscriptural and irrational. They celebrate the Lord's Supper in their churches, not as a sacrament, but as a service commemorative of Christ's death, and expressive of spiritual communion with Him. They also adhere generally to the rite of infant baptism, though there are a few Unitarian Baptist churches.

United Brethren in Christ. A denomination of evangelical Christians, founded through the labors of Rev. William Otterbein, a minister of the German Reformed Church.

His meeting with Rev. Martin Boehm, a minister of the Mennonite Society, about 1766, marked the beginning of a wide-spread revival, in which he and Boehm were the recognized leaders. Preachers were licensed, the Church was to a certain extent brought under system, conferences were held in 1789 and 1791, but the religious movement did not take the form of a Church till 1800, in which year an important conference was held at Peter Kemp's in Frederick County, Maryland. At this time the name of the denomination was definitely fixed, and Otterbein and Boehm were chosen bishops. Thereafter conferences were held yearly. The Church is Arminian in doctrine, very aggressive in work, and has been characterized by a strong reform spirit, standing from the first opposed to slavery, intemperance, and connection with secret societies.

Universalists. A religious sect who maintain as a fundamental article of their belief that saving grace is given to all men, without reserve, and that its operation is *universal*—whence their denomination. Universalists, it may be observed, generally differ from the prevalent bodies of Christians in other important doctrines, though it is not because of such differences that they have received their name, nor is it necessary to merit the name that one should share these differences. Most of them agree with Unitarians—but there are eminent examples to the contrary—in rejecting the doctrine of the Trinity; they are also Pelagian in the matter of original sin, and reject the notion that the new birth is something supernatural. Universalism, as a mode of belief, is of very ancient origin; but it was in 1770, that the Rev. John Murray became a propagator of Universalist views, and some years later Universalism, as a sect, was founded in the United States by Hosea Ballou (commonly called "Father Ballou"), a learned divine and indefatigable preacher.

X-Rays. Invisible rays producing fluorescence upon striking certain substances and acting upon a photographic plate. Obtained by discharging a high-pressure electric current through a vacuum glass tube. They differ from cathode rays in not being deflected by a magnet. Their practical use in photographing the skeleton and interior organs of the human body is of great service in locating foreign bodies in surgical operations, and facilitating the setting of broken bones, etc.

Young Men's Christian Associations. Among the first of these was that founded in London, in 1844, by Mr. George Williams. Its object was the holding of religious meetings in business houses in the center of London. The movement extended, and became one not only for the religious but for the general culture and social well-being of young men engaged in business. In 1908, the young men's Christian Associations, all of which are self-governing while forming an organized union, were 7,771 in number. Of these, 1,952 associations, with 437,178 members, were in the United States and Canada. In the United States, in 1907, current expenses, \$6,000,000; value of property, over \$34,000,000.

NINTH BOOK

NATURAL HISTORY

DAVID STARR JORDAN — NATURALIST

NATURAL HISTORY

Alabaster. A name applied to a granular variety of gypsum or hydrated sulphate of lime. It was much used by the ancients for the manufacture of ointment and perfume boxes, vases, and the like. It has a fine granular texture, is usually of a pure white color, and is so soft that it can be scratched with the nail. It is found in many parts of Europe; in great abundance and of peculiarly excellent quality in Tuscany. From the finer and more compact kinds, vases, clock-stands, statuettes, and other ornamental articles are made, and from inferior kinds the cement known as plaster of paris. A variety of carbonate of lime, closely resembling alabaster in appearance, is used for similar purposes under the name of *Oriental alabaster*. It is usually stalagmitic or stalactitic in origin and is often of a yellowish color. It may be distinguished from true alabaster by being too hard to be scratched with the nail.

Alligator. A genus of saurian reptiles. They differ from the true crocodiles in having a shorter and flatter head, cavities or pits in the upper jaw, into which the long canine teeth of the under jaw fit, and feet much less webbed. Their habits are less perfectly aquatic. The largest grows to the length of seventeen or eighteen feet. The female lays her eggs in the sand, to be hatched by the heat of the sun. They are found only in tropical America. Among the fossils of the south of England, however, are remains of a true alligator.

Ant. An insect belonging to the same order as the bees and wasps. Like bees, the ants form communities, consisting of males, females, and neuters. The males and females are winged, and are produced in great numbers at a particular time of the year; they then quit the nest and pair, after which the males die, while the females, losing their wings, become the queens of fresh societies. The neuters are divided into two classes, workers and soldiers, the former doing all the necessary work, except defending the nest, which devolves upon the latter. Many singular habits and instincts of ants have been observed. Two of the most interesting are the instinct of making slaves, and that of milking, so to speak, the little plant-lice. As regards the former, it is found that certain ants capture the pupæ of other species of ants (i. e., when they are in the quiescent or chrysalis stage), and bring them up as slaves.

Antelope. In Zoölogy, a genus of ruminating mammals, belonging to the hollow-horned family, and distinguished by the round, annulated form of their horns, which are unbranched, and by the grace and symmetry of their proportions. Externally, they very much resemble deer, from which, however, they are to be distinguished by various points of structure, such as the horns, which in the deer are solid and branched, and by the absence of front teeth in the upper jaw. Generally speaking, antelopes

are gregarious, and unite in large flocks or herds. Africa may be considered the headquarters of the antelope. The species are numerous, and include the spring bok, hartbeest, gnu, eland, and gazelle, among others. There are two European antelopes, the chamois which inhabits the Alps, and the saiga from Eastern Russia.

Ape. A name somewhat loosely employed, in common language, as a synonym for monkey, but, in its more restricted sense, applicable only to the highest section of the order *Quadrumanæ*, or four-handed mammals; those which make a nearer approach, in anatomical structure, to the human species than do any other animals. The group of apes includes the gibbons, orangoutangs, chimpanzees, and gorillas. They are all devoid of tails and cheek-pouches; the arms are remarkable for their extreme length, and the hind limbs for their comparative shortness. On the ground these animals are awkward and waddling; they tread rather on the outer edge of the sole than on the sole itself, which imparts to their hind-limbs a bowed appearance; while their long fore-limbs are employed somewhat after the manner of crutches, on the half-closed fists of which, planted firmly on the ground, they rest their bodies. The great length of their arms, on the other hand, gives these animals peculiar advantages in their native forests, and they climb to the topmost branches, or pass from tree to tree, with surprising facility. They do not repose, like ordinary monkeys, on their hams, but stretch themselves on their sides, like human beings. The apes in general appear to be more grave, and less petulant and mischievous, than the ordinary monkey.

Baboon. The name applied in popular language to a genus of the zoölogical order *Quadrumanæ* (four-handed mammals), or monkeys. The baboons rank next to the apes in the ascending series of animals, and are distinguished externally by a short tail (which in some species is quite rudimentary) and by the large head, which has a muzzle resembling that of a dog, the nostrils being situated at its extremity. They are large, strong animals, extremely unattractive in outward appearance, and of great ferocity. More than any other of the monkeys, they employ the fore-limbs in terrestrial progression, running upon all fours with the greatest ease; and, though they climb trees with facility, they prefer, as a rule, to dwell among craggy rocks and precipices. They are all inhabitants of Africa, and one of them, the *Mandrill*, attains very nearly the height of a man. The *Common Baboon*, a native of Guinea, is very often brought to Europe, and is that most usually seen in menageries and museums. It is of a uniform reddish-brown color, with black face and white eyelids; when young it is gentle, curious, gluttonous, and incessantly in motion, but as it grows older it ceases to be familiar, and assumes all the morose look and

repulsive manners which characterize the baboons in general.

Bacteria (Gr. *baktērion*, a rod). A class of very minute microscopic organisms, often of a rod-like form, which are regarded as of vegetable nature, and as being the cause of putrefaction; they are also called *microbes* or *microphytes*. The genus *Bacterium*, in a restricted sense, comprises microscopic unicellular rod-shaped vegetable organisms, which multiply by transverse division of the cells. Species are found in all decomposing animal and vegetable liquids. The bacilli are often spoken of as bacteria, this latter term being used in a wide sense and comprising organisms of various forms and with several distinct names, as *spirillum*, *micrococcus*, etc. They consist of a mass of protoplasm inclosed in a membrane, and all have at some stage or other cilia serving for locomotion. Reproduction is asexual and by division.

Badger. A plantigrade, carnivorous mammal, allied both to the bears and to the weasels, of a clumsy make, with short, thick legs, and long claws on the fore-feet. The common badger (*Meles vulgāris*) is as large as a middling-sized dog, but much lower on the legs, with a flatter and broader body, very thick, tough hide, and long, coarse hair. It inhabits the north of Europe and Asia, burrows, is indolent and sleepy, feeds by night on vegetables, small quadrupeds, etc. Its flesh may be eaten, and its hair is used for artists' brushes in painting. The American badger belongs to a separate genus. *Badger baiting*, or *drawing the badger*, is a barbarous sport formerly, and yet to some extent, practiced, generally as an attraction to public-houses of the lowest sort. A badger is put in a barrel, and one or more dogs are put in to drag him out. When this is effected he is returned to his barrel, to be similarly assailed by a fresh set. The badger usually makes a most determined and savage resistance.

Balata. A gum yielded by *Mimusops Balata*, a tree growing abundantly in British, French, and Dutch Guiana, Honduras, and Brazil, obtained in a milky state by "tapping" the tree, and hardening to a substance like leather. Used for similar purposes to india-rubber, and in the United States chewed as a masticatory.

Balm of Gilead. The exudation of a tree, *Balsamodendron gileadense*, nat. order *Amyridaceæ*, a native of Arabia Felix, and also obtained from the closely allied species *Balsamodendron Opobalsamum*. The leaves of the former tree yield when bruised a strong aromatic scent; and the balm of Gilead of the shops, or balsam of Mecca or of Syria, is obtained from it by making an incision in its trunk. It has a yellowish or greenish color, a warm, bitterish, aromatic taste, and an acidulous, fragrant smell. It is valued as an odoriferous unguent and cosmetic.

Balsam. An aromatic, resinous substance, flowing spontaneously or by incision from certain plants. A great variety of substances pass under this name. But in chemistry the term is confined to such vegetable juices as consist of resins mixed with volatile oils, and yield the

volatile oil on distillation. The resins are produced from the oils by oxidation. A balsam is thus intermediate between a volatile oil and a resin. It is soluble in alcohol and ether, and capable of yielding benzoic acid. The balsams are either liquid or more or less solid; as, for example, the balm of Gilead, and the balsams of copaiba, Peru, and Tolu. Benzoin, dragon's-blood, and storax are not true balsams, though sometimes called so. The balsams are used in perfumery, medicine, and the arts.

Bamboo. The common name of the arborescent grasses belonging to the genus *Bambusa*. There are many species, belonging to the warmer parts of Asia, Africa, and America, and growing from a few feet to as much as 100, requiring much moisture to thrive properly. The best-known species is *B. arundinacea*, common in tropical and sub-tropical regions. From the creeping underground rhizome, which is long, thick, and jointed, spring several round jointed stalks, which send out from their joints several shoots, the stalks also being armed at their joints with one or two sharp, rigid spines. The oval leaves, eight or nine inches long, are placed on short footstalks. The flowers grow in large panicles from the joints of the stalk. Some stems grow to eight or ten inches in diameter, and are so hard and durable as to be used for building purposes. The smaller sticks are used for walking-sticks, flutes, etc.; and, indeed, the plant is used for innumerable purposes in the East Indies, China, and other Eastern countries. Cottages are almost wholly made of it; also, bridges, boxes, water-pipes, ladders, fences, bows and arrows, spears, baskets, mats, paper, masts for boats, etc. The young shoots are pickled and eaten, or otherwise used as food; the seeds of some species are also eaten. The substance called *tabasheer* is a siliceous deposit that gathers at the internodes of the stems. The bamboo is imported into Europe and America as a paper material as well as for other purposes.

Banyan, or Banian, a tree of India, of the fig genus. The most peculiar feature of this tree is its method of throwing out from the horizontal branches, supports which take root as soon as they reach the ground, enlarge into trunks, and extending branches in their turn, soon cover a prodigious extent of ground. A celebrated banyan-tree has been known to shelter 7,000 men beneath its shade. The wood is soft and porous, and from its white, glutinous juice bird-lime is sometimes prepared. Both juice and bark are regarded by the Hindoos as valuable medicines.

Baobab, or Monkey-bread Tree. A tree belonging to the natural order (or sub-order) *Bombaceæ*, and the only known species of its genus, which was named after the naturalist, Adanson. It is one of the largest of trees, its trunk sometimes attaining a diameter of thirty feet; and as the profusion of leaves and drooping boughs sometimes almost hides the stem, the whole forms a hemispherical mass of verdure 140 to 150 feet in diameter and sixty to seventy feet high. It is a native of Western Africa, and is found also in Abyssinia; it is cultivated in many of the warmer parts of the world. The roots are of extraordinary length,

a tree seventy-seven feet in girth having a taproot 110 feet in length. The leaves are deep green, divided into five unequal parts, lanceolate in shape, and radiating from a common center. The flowers resemble the white poppy, having snowy petals and violet-colored stamens; and the fruit, which is large and of an oblong shape, is said to taste like gingerbread, with a pleasant acid flavor. The wood is pale-colored, light and soft. The tree is liable to be attacked by a fungus which, vegetating in the woody part, renders it soft and pithlike. By the negroes of the west coast these trunks are hollowed into chambers, and dead bodies are suspended in them. There they become perfectly dry and well preserved, without further preparation or embalming. The baobab is emollient and mucilaginous; the pulverized leaves constitute *lalo*, which the natives mix with their daily food to diminish excessive perspiration, and which is even used by Europeans in fevers and diarrhœas. The expressed juice of the fruit is used as a cooling drink in putrid fevers, and also as a seasoning for various foods.

Banana. A plant of the genus *Musa*, natural order Musacæ, being *M. sapientum*, while the plantain is *M. paradisiæca*. It is originally indigenous to the East Indies, and an herbaceous plant with an underground stem. The apparent stem, which is sometimes as high as thirty feet, is formed of the closely compacted sheaths of the leaves. The leaves are six to ten feet long and one or more broad, with a strong midrib, from which the veins are given off at right angles; they are used for thatch, basket-making, etc., besides yielding a useful fiber. The spikes of the flowers grow nearly four feet long, in bunches, covered with purple-colored bracts. The fruit is four to ten or twelve inches long, and one inch or more in diameter; it grows in large bunches, weighing often from forty to eighty pounds. The pulp is soft and of a luscious taste; when ripe it is eaten raw or fried in slices. The banana is cultivated in tropical and sub-tropical countries, and is an important article of food. Manilla hemp is the product of a species of banana.

Barbary Ape. A species of ape, or tailless monkey, with greenish-brown hair, of the size of a large cat, remarkable for docility, also called the *magot*. It is common in Barbary and other parts of Africa, and some used to live formerly on Gibraltar Rock, being the only European monkey, though probably not indigenous. It has been the "showman's ape" from time immemorial.

Barberry. A genus of shrubs, the common barberry having bunches of small, beautiful red berries, somewhat oval; serrated and pointed leaves; thorns, three together, upon the branches and hanging clusters of yellow flowers. The berries nearly approach the tamarind in respect of acidity, and when boiled with sugar make an agreeable preserve, rob, or jelly. They are also used as a dry sweetmeat, and in sugar-plums or comfits; are pickled with vinegar, and are used for the garnishing of dishes. The bark is said to have medicinal properties, and the inner bark and roots with alum yield a fine yellow dye. The shrub was originally a native

of eastern countries, but is now generally diffused in Europe, as also in North America. In England it has been almost universally banished from hedgerows, from the belief that it causes rust on corn—a supposition supported by the fact that it is subject itself to attacks of a sort of epiphyte. Numerous other species belong to Asia and America.

Barbets. A family of climbing birds with a thick, conical beak, having tufts of bristles at its base. Their wings are short and their flight somewhat heavy. They have been divided into three sub-genera: The *barbicans* (*Pogonias*), inhabiting India and Africa, and feeding chiefly on fruit; the *barbets* proper (*Bucco*), found in Africa and America, and nearly related to the woodpeckers; and the *puff-birds* (*Tamatia*), inhabiting America, and feeding on insects.

Bark. The exterior covering of the stems of exogenous plants. It is composed of cellular and vascular tissue, is separable from the wood, and is often regarded as consisting of four layers: (1) The *epidermis* or *cuticle*, which, however, is scarcely regarded as a part of the true bark; (2) the *epiphleum* or outer cellular layer of the true bark or cortex; (3) the *mesophleum* or middle layer, also cellular; (4) an inner vascular layer, the *liber* or *endophleum*, commonly called *bast*. Endogenous plants have no true bark. Bark contains many valuable products, as gum, tannin, etc.; cork is a highly useful substance obtained from the epiphleum; and the strength and flexibility of *bast* makes it of considerable value. Bark used for tanning is obtained from oak, hemlock-spruce, species of acacia growing in Australia, etc. Angostura bark, Peruvian or cinchona bark, cinnamon, cascarilla, etc., are useful barks.

Bark, Peruvian, is the bark of various species of trees of the genus *Cinchona*, found in many parts of South America, but more particularly in Peru, and having medicinal properties. It was formerly called *Jesuit's bark*, from its having been introduced into Europe by Jesuits. Its medicinal properties depend upon the presence of *quinine*, which is now extracted from the bark, imported, and prescribed in place of nauseous mouthfuls of bark.

Barley. The name of several cereal plants yielding a grain used as food and also for making malt, from which are prepared beer, porter, and whisky. Barley has been known and cultivated from remote antiquity, and beer was made from it among the Egyptians. Excellent barley is produced in Britain. The species principally cultivated are *Hordeum distichum*, two-rowed barley; *H. vulgare*, four-rowed barley; and *H. hexastichum*, six-rowed, of which the small variety is the sacred barley of the ancients. The varieties of the four and six-rowed species are generally coarser than those of the two-rowed, and adapted for a poorer soil and more exposed situation. Some of these are called *bere* or *bigg*. In Britain barley occupies about the same area as wheat, but in North America the extent of it as a crop is comparatively small, being in Canada, however, relatively greater than in the States, and the Canadian barley is of very high quality. Barley is better adapted for cold climates than any other grain, and some of the

coarser varieties are cultivated where no other cereal can be grown. Some species of the genus, three of which are natives of Britain, are mere grasses. *Pot* or *Scotch barley* is the grain deprived of the husk in a mill. *Pearl barley* is the grain polished and rounded and deprived of husk and pellicle. *Patent barley* is the farina obtained by grinding pearl barley. *Barley-water*, a decoction of pearl barley, is used in medicine as possessing emollient, diluent, and expectorant qualities.

Barnacle. The name of a family of marine crustaceous animals. They are enveloped by a mantle and shell, composed of five principal valves and several smaller pieces, joined together by a membrane attached to their circumference; and they are furnished with a long, flexible, fleshy stalk or peduncle, provided with muscles, by which they attach themselves to ships' bottoms, submerged timber, etc. They feed on small marine animals, brought within their reach by the water and secured by their tentacula. Some of the larger species are edible. According to an old fable, these animals produced barnacle geese.

Barnacle Goose. A summer visitant of the northern seas, in size rather smaller than the common wild goose, and having the forehead and cheeks white, the upper body and neck black. A fable asserts that the crustaceans called barnacles (see preceding article) changed into geese, and various theories have been framed to account for its origin. Max Müller supposes the geese were originally called *Hiberniculæ* or Irish geese, and that barnacle is a corruption of this; but the resemblance of a barnacle to a goose hanging by the head may account for it. The Brent Goose is also sometimes called the Barnacle Goose, but the two should be discriminated.

Basalt. A well-known igneous rock occurring in the ancient trap and the recent volcanic series of rocks, but most abundantly in the former. It is a fine-grained, heavy crystalline rock, consisting of felspar, augite, and magnetic iron, and sometimes contains a little olivine. Basalt is amorphous, columnar, tabular, or globular. The columnar form is straight or curved, perpendicular or inclined, sometimes nearly horizontal; the diameter of the columns from three to eighteen inches, sometimes with transverse semispherical joints, in which the convex part of one is inserted in the concavity of another; and the height from five feet to 150. The forms of the columns generally are pentagonal, hexagonal, or octagonal. When decomposed it is found also in round masses, either spherical or compressed and lenticular. These rounded masses are sometimes composed of concentric layers, with a nucleus, and sometimes of prisms radiating from a center. Fingal's Cave, in the island of Staffa, furnishes a remarkable instance of basaltic columns. The pillars of the Giant's Causeway, Ireland, composed of this stone, and exposed to the roughest sea, for ages, have their angles as perfect as those at a distance from the waves. Basalt often assumes curious and fantastic forms, as for example, those masses popularly known as "Sampson's Ribs" at Arthur's Seat, Edinburgh, and "Lot"

and "Lot's Wife" near the southern coast of St. Helena.

Bass. The name of a number of fishes of several genera, but originally belonging to the perch family, distinguished from the true perches by having the tongue covered by small teeth and the preoperculum smooth. *Labrax lupus*, the only British species, called also sea-dace, and from its voracity, sea-wolf, resembles somewhat the salmon in shape, and is much esteemed for the table, weighing about fifteen pounds. *Labrax lineatus*, or striped bass, an American species, weighing from twenty-five to thirty pounds, is much used for food, and is also known as rock-fish. Both species occasionally ascend rivers, and attempts have been made to cultivate British bass in fresh-water ponds with success. Two species of black bass, American fresh-water fishes, are excellent as food and give fine sport to the angler. The former is often called the large-mouthed black bass, from the size of its mouth. Both make nests and take great care of their eggs and young. The *Centropomus nigricans*, an American sea-fish of the perch family, and weighing two to three pounds, is known as the sea-bass.

Bat. One of the group of wing-handed, flying mammals, having the fore-limb peculiarly modified so as to serve for flight, and constituting the order *Cheiroptera*. Bats are animals of the twilight and darkness, and are common in temperate and warm regions, but are most numerous and largest in the tropics. All European bats are small, and have a mouse-like skin. The body of the largest British species, *Vespertilio noctula*, is less than that of a mouse, but its wings stretch about fifteen inches. During the day it remains in caverns, in the crevices of ruins, hollow trees, and such-like lurking-places, and flits out at evening in search of food, which consists of insects. Several species of the same genus are common in North America. Many bats are remarkable for having a singular nasal cutaneous appendage, bearing in some cases a fancied resemblance to a horse-shoe. Two of these horse-shoe bats occur in Britain. Bats may be conveniently divided into two sections: the insectivorous or carnivorous, comprising all European and most African and American species; and the fruit-eating, belonging to tropical Asia and Australia, with several African forms. An Australian fruit-eating bat, commonly known as the kalong or flying-fox, is the largest of all the bats; it does much mischief in orchards. At least two species of South American bats are known to suck the blood of other mammals, and thence are called "vampire-bats" (though this name has also been given to a species not guilty of this habit). The best known is the *Desmodus rufus* of Brazil, Chile, etc. As winter approaches, in cold climates bats seek shelter in caverns, vaults, ruinous and deserted buildings, and similar retreats, where they cling together in large clusters, hanging head downwards by the feet, and remain in a torpid condition until the returning spring recalls them to active exertions. Bats generally bring forth two young, which, while suckling, remain closely attached to the mother's teats, which are two, situated upon the chest.

The parent shows a strong degree of attachment for her offspring, and, when they are captured, will follow them, and even submit to captivity herself rather than forsake her charge.

Batrachia (from the Gr. *batrachos*, a frog). An order of amphibious animals, which includes the frogs and toads; it is also designated by the name of *Anoura*, or "tailless" amphibians. In the batrachia, the adult is destitute of gills and tail, and the two pairs of limbs are always present; there are no ribs, and the skin is soft; the mouth is sometimes without teeth, but the upper jaw is usually provided with teeth, and, more rarely, both jaws; the hind-limbs usually have the toes webbed for swimming, and are much larger than the fore-limbs. In the adult batrachia the breathing is carried on by means of lungs; but, as there are no movable ribs, the process of breathing is somewhat peculiar—in fact, it is one of swallowing, and it is possible to suffocate a frog simply by holding its mouth open. The moist and delicate skin, however, also performs an important part in respiration. The young, or *larvæ*, of frogs and toads are familiarly known as "tadpoles." The eggs are deposited in masses in water, and the young, when hatched, are fish-like in form, with a broad, rounded head and a compressed tail. There are at first two sets of gills, one external and the other internal; but the outer ones disappear very shortly after birth, and the inner ones are subsequently replaced by lungs. The hind-limbs first make their appearance, and are followed by the fore-limbs; and as the limbs become fully developed the tail gradually disappears. In both the common frog and the toad the tongue is fixed to the front of the mouth, whilst it is free behind, so that it can be protruded for some distance from the mouth. The *Tree-frogs* have the toes of all the feet furnished with terminal suckers, by the help of which they climb with ease; they are mostly found in America, but one species is European. The *Surinam toads* (found in Surinam and also in Brazil) rarely have teeth, and the mouth is destitute of a tongue.

Bdellium (*del'i-um*). An aromatic gum resin brought chiefly from Africa and India, in pieces of different sizes and figures, externally of a dark reddish brown, internally clear, and not unlike glue. To the taste it is slightly bitterish and pungent; its odor is agreeable. It is used as a perfume and a medicine, being a weak deobstruent. Indian bdellium is the produce of *Balsamodendron Roxburghii*; African of *B. africanum*; Egyptian bdellium is obtained from the doum palm; and Sicilian is produced by *Daucus gummifer*, a species of the genus to which the carrot belongs. The bdellium mentioned in Genesis ii. was apparently a precious stone, perhaps a pearl.

Beaver. A quadruped of the order *Rodentia*, or gnawers, the only species of its genus. It is very widely distributed, being found in the northern parts of Europe, Asia, and America, nowadays most abundantly in the northern and thinly peopled parts of North America, dwelling in communities on the banks of rivers and lakes. At one time immense numbers of these animals were killed for their fur, which was largely used

in making hats, but in more recent times they have suffered less persecution on this account, their fur now not being held in the same estimation. The beaver is about two feet in length; its body thick and heavy; the head compressed, and somewhat arched at the front, the upper part rather narrow; the snout much so. The eyes are placed rather high on the head, and the pupils are rounded; the ears are short, elliptical, and almost concealed by the fur. The skin is covered by two sorts of hair, of which one is long, rather stiff, elastic, and of a gray color for two-thirds of its length next the base, and terminated by shining, reddish-brown points; the other is short, thick, tufted, and soft, being of different shades of silver-gray or light lead color. The hair is shortest on the head and feet. The hind legs are longer than the fore, and are completely webbed. The tail is ten or eleven inches long, and, except the part nearest the body, is covered with hexagonal scales.

Bean. A name given to several kinds of leguminous seeds and the plants producing them, probably originally belonging to Asia. They belong to several genera, particularly to *Faba*, garden and field bean; *Phaseolus*, French or kidney bean; and *Dolichos*, tropical bean. The common bean (*F. vulgaris*) is cultivated both in fields and gardens as food for man and beast. There are many varieties, as the mazzagan, the Windsor, the long-pod, etc., in gardens, and the horse or tick bean in fields. The soil that best suits is a good, strong clay. The seed of the Windsor is fully an inch in diameter; the horse-bean is much less, often not much more than half an inch in length and three-eighths of an inch in diameter. Beans are very nutritious, containing 36 per cent. of starch and 23 per cent. of nitrogenous matter called legumin, analogous to the caseine in cheese. The bean is an annual, from two to four feet high. The flowers are beautiful and fragrant. The *kidney-bean*, *French bean*, or *haricot*, is the *Phaseolus vulgaris*, a well-known culinary vegetable. There are two principal varieties, annual dwarfs and runners. The beans cultivated in America and largely used as articles of food belong to the genus *Phaseolus*. The *scarlet-runner bean* (*Phaseolus coccineus*), a native of Mexico, is cultivated on account of its long, rough pods and its scarlet flowers. *St. Ignatius' bean* is not really a bean, but the seed of a large climbing shrub, of the order Loganiaceæ, nearly allied to the species of *Strychnos* which produces nux vomica.

Bear. The name of several large plantigrade carnivorous mammals of the genus *Ursus*. The teeth are forty-two in number, as in the dog, but there is no carnassial or sectorial tooth, and the molars have a more tubercular character than in other carnivores. The eyes have a nictitating membrane, the nose is prominent and mobile, and the tail very short. The true bears are about ten in number, natives chiefly of Europe, Asia, and North America. They generally lie dormant in their den during the winter months. The brown or black bear of Europe is the *Ursus arctos*. It is a native of almost all the northern parts of Europe and Asia, and was at one time common in the British islands. It feeds on fruits, roots, honey, ants,

and, in case of need, on mammals. It sometimes reaches the length of seven feet, the largest specimens being found farthest to the north. It lives solitarily. The American black bear is the *Ursus americanus*, with black shining hair, and rarely above five feet in length. It is a great climber, is less dangerous than the brown bear, and is hunted for its fur and flesh. It is very amusing in captivity. The grizzly bear (*Ursus ferox* or *horribilis*) is an inhabitant of the Rocky Mountains; it is a ferocious animal, sometimes nine feet in length, and has a bulky and unwieldy form, but is nevertheless capable of great rapidity of motion. The extinct cave-bear (*Ursus spelæus*) seems to have been closely akin to the grizzly. The Siberian bear (*Ursus collaris*) is perhaps a variety of the brown bear. The polar or white bear (*Ursus maritimus*) is characterized by its flat head and comparatively long neck.

Bee. A well-known family of insects, belonging to the order *Hymenoptera*, an order which also includes the wasps, ants, and gall-flies. Man appears from the very earliest ages to have known the value of bees, and to have taken advantage of their produce. The Bible makes mention of honey-bees, and the Latin poet Virgil has celebrated them in the fourth book of his *Georgics*, where he has summed up all that the ancients knew about them. During the greater part of the year the population of our hives is composed exclusively of two sorts of individuals, namely, the female or mother bee, called also the *queen bee*, and the working bees or neuters, which are, properly speaking, females imperfectly developed. A third kind of individuals, the males, called also *drones*, are generally not met with except from May to July. The working bees constitute essentially the bee community: they are recognized by their small size, reddish-brown color, and, above all, by the palettes and brushes with which the hind legs are furnished. The three pairs of legs, which are inserted in the thorax, or chest, of the bee, are its tools. The two hind legs are longer than the other pairs, and present on the exterior a triangular depression, resembling a *palette*, which is surrounded by stiff hairs, forming the borders of a sort of basket in which the insect deposits the pollen of flowers. To each of these hind legs is jointed a square expanded piece, which might be termed the ankle, smooth on the exterior, but having hairs on its interior surface, which has caused it to be named the *brush*, and which is employed in collecting the pollen. The other tools of the working bee consist of a pair of movable mandibles, which close the mouth on its two sides, and of a trunk, or proboscis, which may be considered as a sort of tongue; this latter organ has a hairy surface, to which the honey of flowers adheres, whence it is conveyed to the mouth, and from it to the stomach, to be subsequently disgorged. The males, or drones, are larger and more hairy than the working bees; they emit a buzzing sound, have no palettes, and no sting. The female, or queen, has a longer body than the workers, and the wings shorter in proportion. The only part she has to play is that of laying eggs, and so she has no palettes or brushes. Only one

queen lives in each hive, of which she is perfect sovereign, all the workers submissively obeying her. The number of males is scarcely one-tenth that of the working bees, and they live only about three months. The wax of which the cells of the honeycomb are constructed is supposed to be secreted by an organ situated in the abdomen, or belly, of the bee; but, in addition to wax, another substance, much resembling it, but not identical, called *propolis*, is elaborated from the juices of certain plants, and employed to line the inner surface of the hive. The cells are hexagonal in shape, that is, having six equal sides—the most economical form as regards space—and are of two kinds, namely, store-cells, which are filled with honey, as a reserve store of food, and cradle-cells, in which the eggs are deposited. At a certain time of the year the queen leaves the hive, accompanied by the drones, and takes what is called her “nuptial flight” through the air. About forty-eight hours after her return to the hive she begins laying her eggs, at the rate of about two hundred a day. The eggs which are destined to develop into workers are first laid, then those which are to produce males, and lastly those which give birth to females. The eggs are not long in being hatched, and the *larvæ*, or caterpillars, which emerge from them are tended by the workers, and fed by them on a peculiar paste, which is apparently a preparation of pollen. In five or six days the larvæ pass into the condition of *pupa*, or chrysalis, and in about seven or eight days after this the perfect insect is hatched.

Beet (Beta). A genus of plants, distinguished by its fruit being inclosed in a tough woody or spongy five-lobed enlarged calyx. Two species only are known in general cultivation namely, the sea-beet (*Beta maritima*) and the garden beet (*Beta vulgaris*). The former is a tough-rooted perennial, common on many parts of the British coast and sometimes cultivated for its leaves, which are an excellent substitute for spinach. Of the garden beet, which differs from the last in being of only biennial duration and in forming a tender fleshy root, two principal forms are known to cultivators, the chard beet and the common beet. In the chard beet the roots are small, white, and rather tough, and the leaves are furnished with a broad, fleshy midrib (*chard*), employed as a vegetable by the French, who dress the ribs like sea-kale under the name of *poirée*. Some writers regard this as a peculiar species, and call it *Beta cicla* or *hortensis*. The common beet includes all the fleshy-rooted varieties, such as red beet (with a fleshy large carrot-shaped root), yellow beet, sugar-beet, mangel-wurzel, etc. For garden purposes the best is the red beet of Castelnaudary, so called from a town in the southwest of France. The beet requires a rich light soil, and being a native of the Mediterranean region is impatient of severe cold, requiring to be taken up in the beginning of winter and packed in dry sand, or in pits like potatoes, the succulent leaves having been first removed. Red beet is principally used at table, but if eaten in great quantity is said to be injurious. The beet may be taken out of the ground for use about the end of August, but it does not attain its full size and perfection till the month

of October. A good beer may be brewed from the beet, and it yields a spirit of good quality. From the white beet the French, during the wars with Napoleon I., succeeded in preparing sugar. Since that time, with the increase of chemical and technical knowledge, the making of beet-sugar has become an important industry in France, Germany, Austria, Russia, Belgium, Holland, and some parts of the United States. It has even been tried in England, and the failure of attempts to produce beet-sugar on a large scale there seems to have been mainly due to artificial conditions of trade competition.

Beetle. A name often used as synonymous with the term *Coleoptera*, but restricted by others to include all those insects that have their wings protected by hard cases or sheaths, called elytra. Beetles vary in size from a mere point to the bulk of a man's fist, the largest, the elephant beetle of South America, being four inches long. The so-called "black beetles" of kitchens and cellars are not properly beetles at all, but cockroaches, and of the order *Orthoptera*.

Begonia. An extensive genus of succulent-stemmed herbaceous plants, order *Begoniaceæ*, with fleshy oblique leaves of various colors, and showy unisexual flowers, the whole perianth colored. They readily hybridize, and many fine varieties have been raised from the tuberous-rooted kinds. From the shape of their leaves they have been called *elephant's ear*. Almost all the plants of the order are tropical, and they have mostly pink or red flowers.

Belladonna. A European plant (*Atröpa Belladonna*), or deadly nightshade. It is native in Britain. All parts of the plant are poisonous, and the incautious eating of the berries has often produced death. The inspissated juice is commonly known by the name of extract of belladonna. It is narcotic and poisonous, but is of great value in medicine, especially in nervous ailments. It has the property of causing the pupil of the eye to dilate. The fruit of the plant is a dark brownish-black shining berry. The name signifies "beautiful lady," and is said to have been given from the use of the plant as a cosmetic.

Betel (Bete). A species of pepper, *Chavica Betel*, a creeping or climbing plant, native of the East Indies, native order *Piperaceæ*. The leaves are employed to inclose a piece of the areca or betel-nut and a little lime into a pellet, which is extensively chewed in the East. The pellet is hot and acrid, but has aromatic and astringent properties. It tinges the saliva, gums and lips a brick-red, and blackens the teeth.

Birch (Betula). A genus of trees, order *Betulaceæ*, which comprises only the birches and alders, which inhabit Europe, Northern Asia, and North America. The common birch is indigenous throughout the north, and on high situations in the south of Europe. It is extremely hardy, and only one or two other species of trees approach so near to the north pole. There are two varieties natives of Britain, *Betula alba*, and *Betula alba pendula*, or weeping-birch, the latter a very beautiful tree. The wood of the birch, which is light in color, and firm and tough in texture, is used for chairs, tables, bedsteads, and the woodwork of furniture generally, also

for fish-cases and hoops, and for smoking hams and herrings, as well as for many small articles. In France wooden shoes are made of it. The bark is whitish in color, smooth and shining, separable in thin sheets or layers. Fishing-nets and sails are steeped with it to preserve them. In some countries it is made into hats, shoes, boxes, etc. In Russia the oil extracted from it is used in the preparation of Russian leather, and imparts the well-known scent to it. In Lapland bread has been made from it. The sap, from the amount of sugar it contains, affords a kind of agreeable wine, which is produced by the tree being tapped during warm weather in the end of spring or beginning of summer, when the sap runs most copiously. The dwarf birch, *Betula nana*, a low shrub, two or three feet high at most, is a native of all the most northerly regions. *Betula lenta*, the cherry-birch of America, and the black birch (*Betula nigra*) of the same country, produce valuable timber, as do other American species. The largest of these is the yellow birch (*Betula lutea* or *excelsa*), which attains the height of eighty feet. It is named from its bark being of a rich yellow color. The paper birch of America (*Betula papyracea*) has a bark that may be readily divided into thin sheets almost like paper. From it the Indian bark canoes are made.

Bird-catching Spider. A name applied to gigantic spiders of the genera *Mygale* and *Epeira*, more especially to the *Mygale avicularia*, a native of Surinam and elsewhere, which preys upon insects and small birds, which it hunts for and pounces on. It is about two inches long, very hairy, and almost black; its feet when spread out occupy a surface of nearly a foot in diameter.

Bird of Paradise. The name for members of a family of birds of splendid plumage allied to the crows, inhabiting New Guinea and the adjacent islands. The family includes eleven or twelve genera and a number of species, some of them remarkably beautiful. The largest species is over two feet in length. The king bird of paradise (*Paradisæa regia*), is possibly the most beautiful species, but is rare. It has a magnificent plume of feathers, of a delicate yellow color, coming up from under the wings, and falling over the back like a jet of water. The feathers of the *Paradisæa major* and *Paradisæa minor* are those chiefly worn in plumes. These splendid ornaments are confined to the male bird.

Birds. A class of animals comprising all oviparous vertebrates which are clothed with feathers, furnished with a bill, and organized for flight. They have warm blood, and a complete double circulation. They are all bipeds; the body is inclined before their feet, the thighs are directed forward, and the toes elongated, forming a broad supporting base. The head and neck are more or less prolonged, the latter very flexible, and generally containing twelve or more vertebrae. The posterior extremities present five principal modifications, affording characters which distinguish five primary orders. In the first order the foot has three toes before and one behind, all armed with long, strong, crooked, and more or less retractile talons,

adapted to seize and lacerate a living prey; this structure is associated with a strong, curved, sharp-edged and sharp-pointed beak, often armed with a lateral tooth; a very muscular body, and capability of rapid and long-continued flight. This order is termed *Raptores* or *Accipitres*. The second type of foot presents three toes before and one behind, and placed on the same level; slender, flexible, of moderate length, and provided with long, pointed, and slightly curved claws. The two external toes are united by a very short membrane. A foot so constructed is especially adapted for the delicate operations of nest-building, and for grasping and perching among the slender branches of trees; hence the order so characterized has been termed *Inssessores*, and from including the smaller tribes of birds, *Passeres*. In the third type of foot the hinder toe is raised above the level of the three anterior ones; this lessens the power of perching; but the other toes are strong, straight, and terminated by robust obtuse claws, adapted for scratching up the soil, and for running along the ground; the legs are for this purpose very strong and muscular, and the order so characterized is termed *Rasores*, or *Gallina*. The modification by which birds are enabled to wade and seek their food in water along the margins of rivers, lakes, and estuaries, is gained simply by elongating the bones of the leg (tibia and metatarsus), which are covered with a naked scaly skin. The three anterior toes are very long and slender, as in the Parra Jacana, by which the bird can support itself upon the broad floating leaves of aquatic plants; sometimes the toes are united by intervening webs; the legs are placed behind the center of equilibrium; the body is protected by a dense covering of feathers, and a thick down next to the skin; and the whole organization is especially adapted for aquatic life. Hence the order is termed *Natatores*.

Bison. The name applied to two species of ox. One of these, the European bison or aurochs (*Bos bison* or *Bison europæus*), is now nearly extinct, being found only in the forests of Lithuania and the Caucasus. The other, or American bison, improperly termed buffalo (*Bison americanus*), is found only in the region lying north and south between the Great Slave Lake and the Yellowstone River, and in parts of Kansas and Texas, and is rapidly becoming extinct in the wild state, though formerly to be met with in immense herds. The two species closely resemble each other, the American bison, however, being for the most part smaller, and with shorter and weaker hind-quarters. The bison is remarkable for the great hump or projection over its fore-shoulders, at which point the adult male is almost six feet in height; and for the long, shaggy, rust-colored hair over the head, neck, and forepart of the body. In summer, from the shoulders backwards, the surface is covered with a very short fine hair, smooth and soft as velvet. The tail is short and tufted at the end. The American bison used to be much hunted for sport as well as for its flesh and skin. Its flesh is rather coarser grained than that of the domestic ox, but was considered by hunters and travelers as superior in tenderness

and flavor. The hump is highly celebrated for its richness and delicacy. Their skins, especially that of the cow, dressed in the Indian fashion, with the hair on, make admirable defenses against the cold, and are known as *buffalo robes*; the wool has been manufactured into hats, and a coarse cloth. The American bison has been found to breed readily with the common ox, the issue being fertile among themselves.

Bittern. The name of several grallatorial birds, family *Ardeidæ* or herons, genus *Botaurus*. There are two British species, the common bittern (*Botaurus stellaris*) and the little bittern (*Botaurus minutus*), a native of the South, and only a summer visitor to Britain. Both, however, are becoming rare from the reclamation of the marshy grounds that form their favorite haunt. The common bittern is about twenty-eight inches in length, about forty-four in extent of wing; general color, dull yellowish-brown, with spots and bars of black or dark brown; feathers on the breast long and loose; tail short; bill about four inches long. It is remarkable for its curious booming or bellowing cry, from which come the provincial names of *miredrum* and *butter-bump*, etc. The eggs (greenish-brown) are four or five in number. The little bittern is not more than fifteen inches in length. The American bittern (*Botaurus lentiginosus*) has some resemblance to the common European bittern, but is smaller.

Bitter-root (*Lewisia rediviva*). A plant of Canada and part of the United States, order *Mesembryaceæ*, so called from its root being bitter though edible, and indeed esteemed as an article of food by whites as well as Indians. From the root, which is long, fleshy, and tapering, grow clusters of succulent green leaves, with a fleshy stalk bearing a solitary rose-colored flower rising in the center, and remaining open only in sunshine. Flower and leaves together, the plant appears above ground for only about six weeks. California bitter-root (*Echinocystis fabacea*) and Natal bitter-root (*Gerrardanthus macrorrhiza*) both belong to the gourd family.

Blackbird (*Turdus merula*), called also the *merle*, a well-known species of thrush, common in Britain and throughout Europe. It is larger than the common thrush, its length being about eleven inches. The color of the male is a uniform deep black, the bill being an orange-yellow; the female is of a brown color, with blackish-brown bill. The nest is usually in a thick bush, and is built of grass, roots, twigs, etc., strengthened with clay. The eggs, generally four or five in number, are of a greenish-blue, spotted with various shades of brown. The song is rich, mellow, and flute-like, but of no great variety or compass. Its food is insects, worms, snails, fruits, etc. The blackbirds or crow-blackbirds of America are quite different from the European blackbird, and are more nearly allied to the starlings and crows. The red-winged blackbird (*Agelaius phœniceus*), belonging to the starling family, is a familiar American bird that congregates in great flocks.

Blood-hound. A variety of dog with long, smooth and pendulous ears, remarkable for the acuteness of its smell, and employed to recover game or prey which has escaped wounded

from the hunter, by tracing the lost animal by the blood it has spilt: whence the name of the dog. There are several varieties of this animal, as the English, the Cuban, and the African bloodhound. In former times blood-hounds were not only trained to the pursuit of game, but also to the chase of man. In America they used to be employed in hunting fugitive slaves.

Blue-bird. A small dentirostral, inessorial bird, the *Erythæca*, or *Sialia Wilsoni*, very common in the United States. The upper part of the body is blue, and the throat and breast of a dirty red. It makes its nest in the hole of a tree or in the box that is so commonly provided for its use by the friendly farmer. The blue-bird is the harbinger of spring to the Americans; its song is cheerful, continuing with little interruption from March to October, but is most frequently heard in the serene days of the spring. It is also called *blue robin* or *blue redbreast*, and is regarded with the same sort of sentiments as the robin of Europe.

Blue-fish (*Temnūdon* or *Pomatōmus saltātor*). A fish common on the eastern coasts of America, allied to the mackerel, but larger, growing to the length of three feet or more, and much esteemed for the table. It is very destructive to other fishes. It is also called horse-mackerel, green-fish, skip-jack, etc.

Boa. A genus of serpents, family *Boidæ*, having the jaws so constructed that these animals can dilate the mouth sufficiently to swallow bodies thicker than themselves. They are also distinguished by having a hook on each side of the vent; the tail prehensile; the body compressed and largest in the middle, and with small scales, at least on the posterior part of the head. The genus includes some of the largest species of serpents, reptiles endowed with immense muscular power. They seize sheep, deer, etc., and crush them in their folds, after which they swallow the animal whole. The boas are peculiar to the hot parts of South America. The *Boa constrictor* is not one of the largest members of the genus, rarely exceeding twenty feet in length; but the name *boa* or *boa constrictor* is often given popularly to any of the large serpents of similar habits, and so as to include the Pythons of the Old World and the Anacondã and other large serpents of America.

Boneset or **Thoroughwort** (*Eupatorium perfoliatum*). A useful annual plant, indigenous to America, and easily recognized by its tall stem, four or five feet in height, passing through the middle of a large double hairy leaf, and surmounted by a broad, flat head of light purple flowers. It is much used as a domestic medicine in the form for an infusion, having tonic and diaphoretic properties.

Bony Pike or **Gar-fish.** A remarkable genus of fishes inhabiting North American lakes and rivers, and one of the few living forms that now represent the order of ganoid fishes so largely developed in previous geological epochs. The body is covered with smooth enameled scales, so hard that it is impossible to pierce them with a spear. The common gar-fish attains the length of five feet, and is easily distinguished by the great length of its jaws.

Borax. Biorate of sodium. Native borax has long been obtained under the name of *tincal*, from India, the main source being not India but a series of lakes in Tibet. As imported it is in small pieces of a dirty yellowish color, and is covered with a fatty or soapy matter. Tincal, which contains various impurities, was formerly the only source of borax; but besides Tuscan other sources of boracic acid, more particularly in North and South America, and the salt mines at Stassfurt, etc., in Germany, have been rendered available. North America yields large quantities, there being rich deposits of borax and boracic minerals on the Pacific slope. Pure borax forms large, transparent, six-sided prisms, which dissolve readily in water, effloresce in dry air, and when heated melt in their water of crystallization, swell up, and finally fuse to a transparent glass. Borax has a variety of uses.

Bower-bird. A name given to certain Australian birds of the starling family from a remarkable habit they have of building bowers to serve as places of resort. The bowers are constructed on the ground, and usually under overhanging branches in the most retired parts of the forest. They are decorated with variegated feathers, shells, small pebbles, bones, etc. At each end there is an entrance left open. These bowers do not serve as nests at all, but seem to be places of amusement and resort, especially during the breeding season. The *Satin Bower-bird* is so called from its beautiful glossy plumage, which is of a black color. Another common species is the *Spotted Bower-bird*, which is about eleven inches long, or rather smaller than the first mentioned, and less gay in color, but is the most lavish of all in decorating its bowers.

Box-tree. A shrubby evergreen tree, twelve or fifteen feet high, order *Euphorbiaceæ*, a native of England, Southern Europe, and parts of Asia, with small oval and opposite leaves, and greenish, inconspicuous flowers, male and female on the same tree. It was formerly so common in England as to have given its name to several places—Boxhill, in Surrey, for instance, and Boxley, in Kent. The wood is of a yellowish color, close-grained, very hard and heavy, and admits of a beautiful polish. On these accounts it is much used by turners, wood-carvers, engravers on wood (no wood surpassing it in this respect), and mathematical-instrument makers. Flutes and other wind-instruments are formed of it. The box of commerce comes mostly from the regions adjoining the Black Sea and Caspian, and is said to be diminishing in quantity. In gardens and shrubberies box-trees may often be seen clipped into various formal shapes. There is also a dwarf variety reared as an edging for garden walks and the like.

Bramble. The name commonly applied to the bush with trailing prickly stems, which bears the well-known berries usually called in Scotland brambles, and in England blackberries. It is similar to the raspberry, and belongs to the same genus, natural order *Rosaceæ*. It is rarely cultivated, but as a wild plant it grows in great abundance. The flowers do not appear

till late in the summer, and the fruit, which is deep purple or almost black in color, does not ripen till autumn.

Brazil-wood. A kind of wood yielding a red dye, obtained from several trees of the genus *Casalpinia*, order *Leguminosæ*, natives of the West Indies and Central and South America. The best kind is *Casalpinia echinata*; other varieties are *Casalpinia brasiliensis*, *Casalpinia crista*, and *Casalpinia Sappan*. The wood is hard and heavy, and as it takes on a fine polish it is used by cabinet-makers for various purposes, but its principal use is in dyeing red. The dye is obtained by reducing the wood to powder and boiling it in water, when the water receives the red coloring principle, which is a crystallizable substance called *brasilin*. The color is not permanent unless fixed by suitable mordants.

Bread-fruit. A large, globular fruit of a pale-green color, about the size of a child's head, marked on the surface with irregular six-sided depressions, and containing a white and somewhat fibrous pulp, which, when ripe, becomes juicy and yellow. The tree that produces it grows wild in Otaheite and other islands of the South Seas, whence it was introduced into the West Indies and South America. It is about forty feet high, with large and spreading branches and has large, bright-green leaves deeply divided into seven or nine spear-shaped lobes. The fruit is generally eaten immediately after being gathered, but is also often prepared so as to keep for some time either by baking it whole in close underground pits or by beating it into paste and storing it underground, when a slight fermentation takes place. The eatable part lies between the skin and the core, and is somewhat of the consistence of new bread. Mixed with cocoanut milk it makes an excellent pudding. The inner bark of the tree is made into a kind of cloth. The wood is used for the building of boats and for furniture. The jack, much used in India and Ceylon, is another member of this genus.

Bread-nuts. The seeds of the *Brosimum alicastrum*, a tree of the same order as the bread-fruit. The bread-nut tree is a native of Jamaica. Its wood, which resembles mahogany, is useful to cabinet-makers, and its nuts make a pleasant food, in taste not unlike hazel-nuts.

Brussels Sprouts. One of the cultivated varieties of cabbage, having an elongated stem four or five feet high, with small, clustering, green heads like miniature cabbages. They are cultivated in great quantities near Brussels, as well as in other parts of the world.

Buckwheat or Brank. A plant with branched herbaceous stem, somewhat arrow-shaped leaves, and purplish-white flowers, growing to the height of about thirty inches, and bearing a small triangular grain of a brownish-black without and white within. The shape of its seeds gives it its German name *Buchweizen*, "beech-wheat," whence the English name. The plant was first brought to Europe from Asia by the Crusaders, and hence in France is often called Saracen corn. It grows on the poorest soils. It is cultivated in China and other eastern countries as a bread-corn. In Europe buckwheat has been principally cultivated as food

for oxen, swine, and poultry; but in Germany it serves as an ingredient in pottage, puddings, and other food, and in America buckwheat cakes are common.

Bull-dog. A variety of the common dog, remarkable for its short, broad muzzle, and the projection of its lower jaw, which causes the lower front teeth to protrude beyond the upper. The head is massive and broad; the lips are thick and pendulous; the ears pendent at the extremity; the neck robust and short; the body long and stout; and the legs short and thick. The bull-dog is a slow-motioned, ferocious animal, better suited for savage combat than for any purpose requiring activity and intelligence. For this reason he is often employed as a watch-dog. It was formerly used — as its name implies — for the barbarous sport of bull-baiting. The *bull terrier* was originally from a cross between the bull-dog and the terrier. It is smaller than the bull-dog, lively, docile, and very courageous.

Bull-frog. A large species of frog found in North America, eight to twelve inches long, of a dusky-brown color mixed with a yellowish-green, and spotted with black. These frogs live in stagnant water, and utter a low, croaking sound resembling the lowing of cattle, whence the name.

Bull-head. The popular name of certain fishes. One of these, the *Cottus gobio*, a British fish, is about four inches long, with head very large and broader than the body. It is often called also *Miller's-thumb*. The armed bull-head is found in the Baltic and northern seas; the six-horned bull-head is a North American species. In America this name is given to a species of *Cat-fish* and *Horned-pout*.

Bustard. A bird belonging to the order *Cursores*, or runners, but approaching the waders. The great bustard is the largest European bird, the male often weighing thirty pounds, with a breadth of wing of six or seven feet. The bustard is now rare in Britain, but abounds in the south and east of Europe and the steppes of Tartary, feeding on green corn and other vegetables, and on earth-worms. Its flesh is esteemed. All the species run fast, and take flight with difficulty. The little bustard occasionally visits Britain. The Australian species is a magnificent bird highly prized as food.

Butterfly. The family of the butterflies is a very extensive one, and naturalists differ much as to the manner of subdividing it. One of the most remarkable and interesting circumstances connected with these beautiful insects is their series of transformations before reaching a perfect state. The female butterfly lays a great quantity of eggs, which produce larvæ, commonly called caterpillars. After a short life these assume a new form, and become chrysalids or pupæ. These chrysalids are attached to other bodies in various ways, and are of various forms; they often have brilliant golden or argentine spots. Within its covering the insect develops, to emerge as the active and brilliant butterfly. These insects in their perfect form suck the nectar of plants, but take little food, and are all believed to be short-lived, their work in the perfect state being almost confined to the propa-

gation of the species. Butterflies vary greatly in size and coloring.

Buzzard. The name of raptorial birds which form one of the sub-families of the diurnal birds of prey; characters, a moderate-sized beak, hooked from the base, long wings, long tarsi, and short, weak toes. The common buzzard is distributed over the whole of Europe as well as the north of Africa and America. Its food is very miscellaneous, and consists of moles, mice, frogs, toads, worms, insects, etc. It is sluggish in its habits. Its length is from twenty to twenty-two inches. The rough-legged buzzard, so called from having its legs feathered to the toes, is also a native of Britain. Its habits resemble those of the common buzzard. The red-tailed hawk of the United States is a buzzard. It is also called hen-hawk, from its raids on the poultry-yard. The honey-buzzard is so called because of its feeding specially on bees and wasps.

Cabbage. The popular name of various species of cruciferous plants of the genus *Brassica*, and especially applied to the plain-leaved, hearting, garden varieties of *Brassica oleracea*, cultivated for food. The wild cabbage is a native of the coasts of Britain, but is much more common on other European shores. The kinds most cultivated are the common cabbage, the savoy, the broccoli, and the cauliflower. The common cabbage forms its leaves into heads or bolls, the inner leaves being blanched. Its varieties are the white, the red or purple, the tree or cow cabbage for cattle (branching and growing when in flower to the height of ten feet), and the very delicate Portugal cabbage. The garden sorts form valuable culinary vegetables, and are used at table in various ways.

Cabbage-rose. A species of rose (*Rosa centifolia*) of many varieties, supposed to have been cultivated from ancient times, and eminently fitted for the manufacture of rose-water and attar from its fragrance. It has a large, rounded, and compact flower. Called also *Provence Rose*.

Cacao, or Cocoa. The seeds of a plant known as *Theobroma Cacao* (or "Food of the Gods," as Linnæus named the tree), a native of the West Indies and of tropical America, and cultivated in Asia and Africa. It is a small tree, seldom more than sixteen or eighteen feet high, with large oblong leaves, and clusters of flowers which have rose-colored sepals and yellowish petals. Its fruits vary from six to ten inches in length, and from three to five in breadth, each containing between fifty and a hundred seeds, and it is from these that the cocoa is prepared. When ripe the fruits turn yellow outside, and they are then gathered by hand, and afterwards split open and the seeds removed. The seeds are oval, and about as large as an olive. To prepare them for use they are roasted, and then bruised to loosen their skins which are removed by fanning; the seed-lobes, commonly called "cocoa-nibs," are next crushed and ground between rollers, which reduces them to a uniform pasty consistence. This paste, when sweetened, flavored with vanilla or cinnamon, and dried, constitutes *Chocolate*. Cocoa contains an active principle called *theo-bromine*, resembling caffeine,

the alkaloid in tea and coffee. A fatty or oily matter, called *butter of cacao*, is also present in the cocoa-seeds, to the extent of one-half their weight. Cocoa must not be confounded with *Cuca*, or *Coca*, a plant chewed by the Indians of South America.

Cactus. A Linnæan genus of plants, now used as a name for any of the Cactaceæ, a natural order of dicotyledons, otherwise called the Indian fig order. The species are succulent shrubs, with minute scale-like leaves (except in the genus *Pereskia*, tree-cactus, with large leaves), and with clusters and spines on the stems. They have fleshy stems, with sweetish watery or milky juice, and they assume many peculiar forms. The juice in some species affords a refreshing beverage where water is not to be got. All the plants of this order, except a single species, are natives of America. They are generally found in very dry localities. Some are epiphytes. Several have been introduced into the Old World, and in many places they have become naturalized. The fruits of some species are edible, as the prickly-pear and the Indian fig, cultivated throughout the Mediterranean region. The flowers are usually large and beautifully colored, and many members of the order are cultivated in hothouses.

Camel. The Camel family, including hornless ruminant animals distinguished by the presence of two incisors in the upper jaw. The genus *Camelus* embraces two species, which are only known in the domesticated state. The dromedary, or African camel, has one hump on the back; the common, or Asiatic camel, has two humps. The camel, by its power of sustaining abstinence from drink for many days, from the peculiar formation of its stomach, and of subsisting on a few coarse shrubs, is peculiarly fitted for the parched and barren lands of Asia and Africa. The Arabians live chiefly on the milk of their camels; and without them they could neither carry on trade, nor travel over their sandy deserts.

Camellia (*ka-mē'lya*). A genus of plants, order *Ternstramiaceæ* (the tea order), with showy flowers and elegant dark-green, shining, laurel-like leaves, nearly allied to the plants which yield tea, and named from George Joseph Kamel, a Moravian Jesuit. The *Camellia japonica*, in Japan and China, is a lofty tree of beautiful proportions. It is the origin of many double varieties of our gardens. Besides this species, the *Camellia Sasanqua*, with small white scentless flowers, and the *Camellia reticulata* (net-veined), with its large peony-like flowers, are cultivated in United States.

Camelopard. The Camelopard or Giraffe, a genus of ruminant animals, family *Cervida*. The only known species, *Camelopard girafa*, is a native of several parts of Africa, living in forests, and feeding on the leaves of trees. It has two straight horns, without branches, six inches long, covered with hair, truncated at the end, and tufted. The shoulders are of such a length as to render the fore part of the animal much higher than the hind part. The neck is very long, the head slender and elegant, and the color of the body is a dusky white, with large rusty spots. It is mild and inoffensive, and in

case of danger has recourse to flight for safety, but when obliged to stand on self-defense, it kicks its adversary.

Candleberry, Candleberry Myrtle, Wax Myrtle, etc. A shrub, growing from four to eighteen feet high, and common in North America, where candles are made from its drupes or berries, which are about the size of peppercorns, and covered with a greenish-white wax popularly known as Blayberry tallow. The wax is collected by boiling the drupes in water and skimming off the surface. A bushel of berries yields from four to five pounds of wax. Another plant belonging to the same genus is the sweetgale, which grows abundantly in bogs and marshes in Scotland—a small shrub, with leaves somewhat like the myrtle or willow, of a fragrant odor and bitter taste, and yielding an essential oil by distillation.

Canvas-back Duck. A bird peculiar to North America, and considered the finest of the water-fowl for the table. They arrive in the United States from the North about the middle of October, sometimes assembling in immense numbers. The plumage is black, white, chestnut brown, and slate color; length about twenty inches.

Caper. The unopened flower-bud of a low trailing shrub, which grows from the crevices of rocks and walls, and among rubbish, in the countries bordering the Mediterranean. Picked and pickled in vinegar and salt they are much used as a condiment (caper-sauce being especially the accompaniment of boiled mutton). The plant was introduced into Britain as early as 1596, but has never been grown on a large scale. The flower-buds of the marsh-marigold and nasturtium are frequently pickled and eaten as a substitute for capers.

Capsicum. A genus of annual, sub-shrubby plants, order *Solanaceæ*, with a wheel-shaped corolla, projecting and converging stamens, and a many-seeded berry. They are chiefly natives of the East and West Indies, China, Brazil, and Egypt, but have spread to various other tropical or sub-tropical countries, being cultivated for their fruit, which in some reaches the size of an orange, is fleshy and variously colored, and contains a pungent principle, which is present also and more largely in the seed. The fruit or pod is used for pickles, sauces, etc., and also medicinally.

Caraway. An umbelliferous biennial plant, with a tapering fleshy root, a striated furrowed stem, and white or pinkish flowers. It produces a well-known seed used in confectionery, and from which both a carminative oil is extracted and the liqueur called *kümmel* prepared.

Cardinal Bird. A North American bird of the finch family, with a fine red plumage, and a crest on the head. Its song resembles that of the nightingale, hence one of its common names, *Virginian Nightingale*. In size it is about equal to the starling. Called also *Scarlet Grosbeak* or *Cardinal Grosbeak* and *Redbird*.

Carrot. A biennial umbelliferous plant. In gardens there are three chief varieties. The leaves are tripinnate, of a handsome feathery appearance. The plants rise to the height of

two feet, and produces white flowers. The root, in its wild state, is small, tapering, of a white color, and strong-flavored; but that of the cultivated variety is large, succulent, and of a red, yellow, or pale-straw color, and shows remarkably the improvement which may be effected by cultivation. It is cultivated for the table and as a food for cattle. Carrots contain a large proportion of saccharine matter, and attempts have been made to extract sugar from them. They have been also employed in distillation.

Cat. A well-known domesticated quadruped, order Carnivora, the same name being also given to allied forms of the same order. It is believed that the cat was originally domesticated in Egypt, and the gloved cat of Egypt and Nubia has by some been considered the original stock of the domestic cat, though more probably it was the Egyptian cat. It was seldom, if at all, kept by the Greeks and Romans, and till long after the Christian era was rare in many parts of Europe. Some have thought that the domestic breed owed its origin to the wild cat; but there are considerable differences between them, the latter being larger, and having a shorter and thicker tail, which also does not taper. The domestic cat belongs to a genus—that which contains the lion and tiger—better armed for the destruction of animal life than any other quadrupeds. The short and powerful jaws, trenchant teeth, cunning disposition, combined with nocturnal habits (for which their eyesight is naturally adapted) and much patience in pursuit, give these animals great advantages over their prey. The cat, in a degree, partakes of all the attributes of its race. Its food, in a state of domestication, is necessarily very various, but always of flesh or fish if it can be obtained. Instances of its catching the latter are known, though usually the cat is extremely averse to wetting itself. It is a very cleanly animal, avoiding to step in any sort of filth, and preserving its fur in a very neat condition. Its fur is very easily injured by water on account of the want of oil in it, and it can be rendered highly electric by friction. The cat goes with young for sixty-three days, and brings forth usually from three to six at a litter, which remain blind for nine days. It is usually regarded as less intelligent than the dog, but this is by no means certain. It has a singular power of finding its way home when taken to a distance and covered up by the way. Among the various breeds or races of cat may be mentioned the tailless cat of the Isle of Man (and the Crimea); the tortoiseshell, with its color a mixture of black, white, and brownish or fawn color; the large Angora or Persian cat, with its long silky fur; and the blue or Carthusian, with long, soft, greyish-blue fur.

Cat-bird. A well-known species of American thrush, which, during the summer, is found throughout the Middle and New England States, frequenting thickets and shrubberies. Its note is strikingly similar to the plaint of a kitten in distress. The plumage is a deep slate-color above and lighter below, and it is about nine inches in length. In habit it is lively, familiar, and unsuspicious; the song is largely

imitative of those of other birds. During the winter it inhabits the extreme south of the United States, and is found also in Mexico and Central America. The cat-bird frequently attacks the common black snake, which, in the absence of the bird, rifies its nest.

Cedar. A tree which forms fine woods on the mountains of Syria and Asia Minor, and other parts of the world. It is an evergreen, grows to a great size, and is remarkable for its durability. Of the famous cedars of Lebanon comparatively few now remain, and the tree does not grow in any other part of Palestine. The most celebrated group is situated not far from the village of Tripoli, at an elevation of about 6,000 feet above the sea. The circumference of the twelve largest trees here varies from about eighteen to forty-seven feet. Cedar timber was formerly much prized, but in modern times is not regarded as of much value, perhaps from the trees not being of sufficient age. Some fine cedars are met with in America and England. The name is given also to the deodar, which is indeed regarded by many botanists as a mere variety of the cedar of Lebanon, and which produces excellent timber. It is a native of India, and is a large and handsome tree, growing in the Himalayas to the height of 150 feet, with a circumference of thirty. It has wide-spreading branches, which droop a little at the extremities. The leaves are tufted or solitary, larger than those of the cedar of Lebanon and very numerous, of a dark-bluish green, and covered with a glaucous bloom. The cones are rather larger than those of the Lebanon cedar, and very resinous. The wood is well adapted for building purposes, being compact and very enduring.

Chameleon (*ka-me'li-on*). A genus of reptiles belonging to the Saurian or lizard order, a native of parts of Asia, Africa, and the south of Europe. The best-known species has a naked body six or seven inches long, with a prehensile tail of about five inches, and feet suitable for grasping branches. The skin is cold to the touch, and contains small grains or eminences of a bluish-gray color in the shade, but in the light of the sun all parts of the body become of a grayish-brown or tawny color. It possesses the curious faculty, however, of changing its color, either in accordance with its environment, or with its temper when disturbed, the change being due to the presence of clear or pigment-bearing contractile cells placed at various depths in the skin, their contractions and dilatations being under the influence of the nervous system. Their power of fasting and habit of inflating themselves gave rise to the fable that they lived on air, but they are in reality insectivorous, taking their prey by rapid movements of a long viscid tongue. In general habit they are dull and torpid.

Chamols. A species of goat-like antelope inhabiting high inaccessible mountains in Europe and Western Asia. Its horns, which are about six or seven inches long, are round, almost smooth, perpendicular and straight until near the tip, where they suddenly terminate in a hook directed backwards and downwards. Its hair is brown in winter, brown fawn color in

summer, and grayish in spring. The head is of a pale yellow color with a black band from the nose to the ears and surrounding the eyes. The tail is black. Its agility, the nature of its haunts, and its powers of smell, render its pursuit an exceedingly difficult and hazardous occupation.

Chimpanzee. The native Guinea name of a large West and Central African ape belonging to the anthropoid or man-like monkeys, and to the same genus as the gorilla. When full grown it is sometimes about five feet high, with black hair, and is not so large and powerful as the gorilla. Like the orang, it has the hair on its forearm turned backwards, but differs from it in having an additional dorsal vertebra and a thirteenth pair of ribs. It walks erect better than most of the apes. It feeds on fruits, often robs the gardens of the natives, and constructs a sort of nest amongst the branches. It is common in menageries, where it shows much intelligence and docility.

Chrysanthemum. A genus of herbaceous or slightly shrubby plants, distinguished by their hemispherical involucre being composed of imbricated scales which are membranous at the edges, and large naked receptacles. The ox-eye daisy is a common weed in hay-fields, where its flowers, which are white with a yellow disk, are conspicuous. The corn marigold has large golden-yellow flowers. It is a handsome but mischievous weed in cornfields. The species, however, which holds so high a rank among florists' flowers is a plant which has been long familiar to us from its frequent appearance in Chinese drawings, but has of late years been improved to such an extent as to be prized for its intrinsic beauty, and not simply from its valuable property of blooming in November and December.

Cloves. A very pungent aromatic spice, the dried flower-buds of *Caryophyllus aromaticus*, a native of the Molucca Islands, belonging to the myrtle tribe, now cultivated in Sumatra, Mauritius, Malacca, Jamaica, etc. The tree is a handsome evergreen from fifteen to thirty feet high, with large elliptic smooth leaves and numerous purplish flowers on jointed stalks. Every part of the plant abounds in the volatile oil for which the flower-buds are prized. The spice yields a very fragrant odor, and has a bitterish, pungent, and warm taste. It is sometimes employed as a hot and stimulating medicine, but is more frequently used in culinary preparations.

Cocoonut or Coco-nut. A woody fruit of an oval shape, from three or four to six or eight inches in length, covered with a fibrous husk, and lined internally with a white, firm, and fleshy kernel. The tree which produces the cocoa-nut is a palm, from forty to sixty feet high. The trunk is straight and naked, and surmounted by a crown of feather-like leaves. The nuts hang from the summit of the tree in clusters of a dozen or more together. The external rind of the nuts has a smooth surface. This incloses an extremely fibrous substance, of considerable thickness, which immediately surrounds the nut. The fibrous coat of the nut is made into the well-known cocoa-nut matting; the coarse yarn obtained from it is called *coir*, which is also

used for cordage. The hard shell of the nut is polished and made into a cup or other domestic utensil. The fronds are wrought into baskets, brooms, mats, sacks, and many other useful articles; the trunks are made into boats or furnish timber for the construction of houses. By boring the tree a white sweetish liquor called *toddy* exudes from the wound, and yields by distillation one of the varieties of the spirit called *arack*. A kind of sugar called *jaggery* is also obtained from the juice by inspissation.

Coffee. Is the seed of an evergreen shrub which is cultivated in hot climates, and is a native of Abyssinia and of Arabia. This shrub is from fifteen to twenty feet in height; the leaves are green, glossy on the upper surface, and the flowers are white and sweet-scented. The fruit is of an oval shape, about the size of a cherry, and of a dark-red color when ripe. Each of these contains two cells, and each cell a single seed, which is the coffee as we see it before it undergoes the process of roasting. Great attention is paid to the culture of coffee in Arabia. The trees are raised from seed sown in nurseries and afterwards planted out in moist and shady situations, on sloping grounds or at the foot of mountains. Care is taken to conduct little rills of water to their roots, which at certain seasons require to be constantly surrounded with moisture. When the fruit has attained its maturity cloths are placed under the trees, and upon these the laborers shake it down. They afterwards spread the berries on mats, and expose them to the sun to dry. The husk is then broken off by large and heavy rollers of wood or iron. When the coffee has been thus cleared of its husk it is again dried in the sun, and, lastly, winnowed with a large fan, for the purpose of clearing it from the pieces of husks with which it is intermingled. A pound of coffee is generally more than the produce of one tree; but a tree in great vigor will produce three or four pounds. The best coffee is imported from Mocha, on the Red Sea. It is packed in large bales, each containing a number of smaller bales, and when good appears fresh and of a greenish-olive color. Next in quality to the Mocha coffee may perhaps be ranked that of Southern India and that of Ceylon, which is strong and well flavored. Java and Central America also produce large quantities of excellent coffee. Brazilian coffee, though produced more abundantly than any other, stands at the bottom of the list as regards quality. Liberian coffee may also be mentioned. American coffee holds in the judgment of all Orientals the very last rank. The Dutch were the first to extend the cultivation of coffee beyond the countries to which it is native. About 1690, some coffee seeds were brought to Java, where they were planted and produced fruit. By 1718, the Dutch planters of Surinam had entered on the cultivation of coffee with success, and ten years after it was introduced from that colony by the English into Jamaica, and by the French into Martinique. It was not till 1774, that the planters of Brazil, now the greatest producers of coffee in the world, commenced its cultivation. Coffee as an article of diet is of but comparatively recent introduction. To the Greeks and Romans it was wholly

unknown. From Arabia it passed to Egypt and Turkey, whence it was introduced into England by a Turkey merchant named Edwards in 1652, whose Greek servant, named Pasqua, first opened a coffee-house in London. In 1671, an Armenian named Pascal set up a coffee-house in Paris. In Great Britain much less is drunk than on the continent of Europe or in the United States and Canada, tea being the British national beverage. The excellence of coffee depends in a great measure on the skill and attention exercised in roasting it. If it be too little roasted it is devoid of flavor, and if too much it becomes acrid, and has a disagreeable, burned taste.

Condor. A South American bird, one of the largest of the vulturine birds. In its essential features it resembles the common vultures, differing from them mainly in the large cartilaginous caruncle which surmounts its beak, and in the large size of its oval and longitudinal nostrils placed almost at the extremity of the cere. Despite the many stories of its gigantic proportions, Humboldt met with no specimens whose wings exceeded nine feet in expanse, though it has occasionally been known to attain an expanse of fourteen feet. It is found in greatest numbers in the Andes chain, frequenting regions from 10,000 to 15,000 feet above the level of the sea where they breed, depositing their two white eggs on the bare rock. They are generally to be seen in groups of three or four, and only descend to the plains under stress of hunger, when they will successfully attack sheep, goats, deer, and bullocks. They prefer carrion, however, and, when they have opportunity, gorge themselves until they become incapable of rising from the ground, and so become a prey to the Indians.

Crab. The popular name for a considerable group of invertebrate animals belonging to the class *Crustacea*, of which there are numerous species, exceedingly various in size, color, and modes of living. Like other crustaceans, their bodies are covered by an external skeleton or calcareous crust; they have ten jointed limbs, adapted for walking; and the breathing is performed by means of gills, which are somewhat like a pyramid in form, and in the edible crabs are popularly called dead men's fingers. The head and breast are united, constituting the *cephalothorax*, and the whole covered by a strong carapace, which is broader than it is long. The tail, or abdomen, is very short, and is tucked up beneath the cephalothorax out of view; it is employed by the females to carry the eggs. In all the essential points of their anatomy the crabs do not differ from the lobster and the crayfish, but they are decidedly higher in their organization. The sense of sight is peculiarly acute, and enables them to distinguish the approach of objects at a considerable distance. The mouth is furnished with several pairs of strong jaws; in addition to which the stomach has its internal surface studded with hard projections, or teeth, for the purpose of grinding the food. The liver is of great size, and constitutes that soft, rich, yellow substance, found immediately beneath the shell, and called the fat of the crab. The crabs, like the lobsters, "moult," or throw off their entire calcareous covering, periodically, when they are soft and help-

less, and usually bury themselves in the sand until a new crust is formed. Most of them are littoral in their habits, dwelling upon the shores of the sea or those of creeks and rivers, but some few live inland, and are known as land crabs. One remarkable species inhabits holes in the highest hills and mountains of Jamaica and other islands of the West Indies. When the season for spawning arrives, they proceed to the sea in a body of many millions, a journey which occupies some weeks. Having deposited their eggs in the sand, they return, traveling only by night, and arrive emaciated and exhausted.

Crane. A genus of birds belonging to the order *Grallæ*. They are chiefly remarkable for their long migrations. In these journeys they usually fly in large flocks led by a single leader, the whole assemblage assuming a wedge-like form, and the leadership is continually changed, so that it is occupied in succession by every crane in the flock. The common crane breeds in the north of Europe and in Siberia, and migrates southwards at the approach of winter. It is a fine bird, attaining nearly five feet in height; with the exception of the neck, which is black, the body is of a uniform ashy-grey; it has a noble and graceful carriage, and the feathers on its tail, which rise up in undulating clusters, adds much to its elegance. It frequents large plains and marshes, and feeds miscellaneously on fish, reptiles, frogs, molluses, worms, insects, and even small mammals. When the breeding season arrives, the birds break up their social compact, and pair off for the purpose of reproduction and rearing the young. The nest, in which are usually laid two eggs, is roughly constructed on the ground, and the male shares with the female the cares of incubation. When caught young, cranes are easily tamed. The games and dances in which they are said to indulge are not mere idle stories; it is certainly true that these birds form groups in various fashions, advance towards one another, make a kind of salutation, and adopt the strangest postures. The Demoiselle crane is remarkable for two beautiful clusters of white feathers on either side of its head, and for a black pendent tuft down the breast. Its size is about the same as that of the common crane, and its shape is still more elegant. It is a native of Turkey, Northern Africa, and some parts of Asia. The crested crane has the top of its head adorned with a tuft of feathers, which it has the power of spreading out like a fan. It inhabits the eastern and northern coasts of Africa, and some of the islands of the Mediterranean.

Crocodile. A genus, family, and order of saurian reptiles, comprising the largest living forms of reptiles. The characters of the order Crocodilia are as follows: The skin is covered with square, bony plates; the tail is long and compressed laterally. The four feet are short, and there are five toes on each of the two fore-feet, and four on each of the two hind-feet, the latter more or less webbed; the limbs are feeble. The jaws are long and their gape of enormous width. The nostrils are at the extremity of the snout, and capable of being closed to prevent ingress of water. The heart is four-chambered. The families now existing are the

Alligatoridæ, *Crocodilidæ*, and *Gavialidæ*. The alligators are all New World forms. The gavial proper is confined to the East Indies. The *Crocodilidæ*, to which family the crocodile belongs, have unequal teeth and no abdominal plates, and the cervical and dorsal plates are distinct for the most part. The crocodile of the Nile is the best-known member of the order; another species is met with in South Asia, Sunda, and the Moluccas. The crocodile is formidable from its great size and strength, but on shore its shortness of limb, great length of body, and difficulty of turning enable men and animals readily to escape pursuit. In the water it is active and formidable. It is exclusively carnivorous, and always prefers its food in a state of putrefaction. In Egypt it is no longer found except in the upper or more southern parts, where the heat is greatest and the population least numerous. Crocodiles are still common enough in the river Senegal, the Congo, Niger, etc. They grow sometimes to a length of thirty feet, and apparently live to a vast age.

Crow, the crow family. They are very omnivorous, and remarkable for their intelligence. The family, widely diffused over the world, includes the common crow, and the raven, the fish-crow, the rook, the jay, and the magpie. The common crow of North America is remarkable for its gregarious and predatory habits. They pair in March; the old repair their nests, the young frame new ones; but they are such thieves, that while the one is fetching materials, the other must keep watch to prevent the rising fabric from being plundered by their neighbors. As soon as the nest is finished and the eggs produced (five, bluish-green, with dark blotches), the male takes upon himself the care of providing for his mate, which he continues during the whole period of incubation. They frequent the same rookeries for years, but allow no intruders into their community. They feed chiefly on worms and the larvæ of insects; they also eat grain and seeds, whence they have sometimes been supposed injurious to the farmer; but they amply repay him for what they take by destroying the vermin in his fields.

Cypress. A genus of coniferous trees. The common European cypress is a dark-colored evergreen with extremely small leaves, entirely covering the branches. It has a quadrangular, or, where the top branches diminish in length, pyramidal shape. Cypress trees, though of a somewhat somber and gloomy appearance, may be used with great effect in shrubberies and gardens. They are much valued also on account of their wood, which is hard, compact, and very durable, of a reddish color and a pleasant smell. It was used at funerals and as an emblem of mourning by the ancients. Amongst other members of the genus are the Indian cypress; the *Cypress pendula*, a native of China and Japan; the incense-bearing cypress, a native of Mexico; and the evergreen American cypress or white cedar. The deciduous cypress of the United States and Mexico, is frequently called the Virginian cypress. Its timber is valuable, and under water is almost imperishable. In parts of the United States this cypress constitutes forests hundreds of miles in extent.

Deer. A genus of ruminant quadrupeds now constituting the family *Cervidae*, which some naturalists have divided into a number of genera, whilst others still regard it as forming only one. Deer are animals of graceful form, combining much compactness and strength with slenderness of limb and fleetness. They use their powerful horns for weapons of defense, and sometimes of offense; but in general they trust to flight for their safety. They have a long neck, a small head, which they carry high, large ears, and large full eyes. In most of them there is, below each eye, a sac or fold of the skin, sometimes very small, sometimes of considerable size, called the *suborbital sinus*, *lacrimal sinus*, or *tear-pit*, the use of which is not well known. Deer have no cutting teeth in the upper, but eight in the lower jaw; the males have usually two short canines in the upper, but neither sex has any in the lower jaw; the *præmolars* are three, and the true molars three on each side in each jaw. They are distinguished from all other ruminants by their branching horns (antlers), which in most of the species exist in the male sex only; they are solid and deciduous, i. e., fall off annually, and are renewed with increase of size, and of breadth of palmation, and number of branches, according to the kind, until the animal has reached old age, when the size of the horns begins to diminish on each annual renewal. Deer are found in almost all parts of the globe except Australia and the south of Africa, their place in the latter region being supplied by antelopes in extraordinary number and variety. Some of them live amidst the snows of very northerly regions, and some in tropical forests; the greater number inhabit the warmer temperate countries, and they are chiefly found in wide plains and hills of moderate height, none dwelling on those lofty mountain summits which are the chosen abode of some animals of the kindred families of *Antilopidae*, *Capridæ* and *Moschidæ*, as the chamois, the bouquetin, and the musk. The flesh (venison) of most kinds of deer is highly esteemed for the table, and they have long been regarded as among the noblest objects of the chase. Only one species, the reindeer, can be said to have been fully domesticated and reduced to the service of man although individuals of many species have been rendered very tame.

Dog. An animal well known for its attachment to mankind, and remarkable for the almost infinite varieties, as to size, form, color, and quality of the hair, which the influence of domestication has brought about in the species. It belongs to the order of carnivorous mammals, and to that section of quadrupeds which is distinguished as *digitigrade*. The zoölogical genus is termed *Canis*, and includes, besides the dog, the jackal and the wolf; and by many writers the fox is also placed in the same genus. It is a question of considerable interest what was the parent stock of the dog. Some zoölogists are of opinion that the breed is derived from the wolf; others that it is a familiarized jackal; all agree that no trace of it is to be found in a primitive state of nature. That there are wild dogs, we know. The *Dhole* of India and the *Dingo* of Australia are remarkable examples,

which exist in a state of complete independence, and without any indication of a wish to approach the dwellings of man. These dogs, however, throw very little light upon the question. They may have escaped from the dominion or half-dominion of man, and have betaken themselves to a vagabond life. The food of the dog is various. It will live on cooked vegetable matter, but prefers animal food. In drinking, it laps with the tongue. It never perspires, but the nose is naked and moist, and, when hot, the tongue hangs out of the mouth, and a considerable quantity of water drops from it. The female goes with young sixty-three days, and usually has about six or eight at a litter, though sometimes more. The young are blind at birth, and do not acquire their sight until the tenth day. The dog attains its full growth at the expiration of the second year, it is old at fifteen years, and seldom lives beyond twenty years.

Eagle. A genus of birds belonging to the order *Accipitres*, and to the same family as the falcons and the hawks. They are found in all parts of the globe. The size varies according to the species, but all attain imposing dimensions. The Golden Eagle measures about three feet nine inches in height, and the spread of its wings is nearly ten feet, while in the Imperial Eagle the spread of the wings is only six feet. The eagle soars at prodigious heights, and its sense of vision is very highly developed. It builds its nests in the clefts of the most inaccessible rocks, and lays generally two or three eggs; the period of incubation is thirty days. If captured young, the eagles are susceptible of a certain amount of education; when taken old they are quite untamable. Besides the Golden Eagle and the Imperial Eagle, there are other species, such as the American Eagle, White-tailed Eagle, Bonelli's Eagle, the Tawny Eagle, and the Booted Eagle; and numerous smaller species are to be met with in tropical regions.

Elephant. A genus of mammals, the only living representatives of the order *Proboscidea*, or animals with a trunk or proboscis. They are exclusively confined to the tropical regions of the old world, in the forests of which they live in herds. Only two existing species are known, the Asiatic elephant and the African elephant. In both species the two upper incisors, or front teeth, are enormously developed, constituting long tusks. The lower incisors are absent, and there are no other teeth in the jaws except the large molars, or grinders, which are usually two in number on each side of each jaw. The molar teeth are of very large size, and are composed of a number of transverse plates of enamel, united together by dentine. In the Indian elephant the transverse ridges of enamel are narrow and undulating, whilst in the African elephant they enclose lozenge-shaped intervals. The nose is prolonged into a cylindrical trunk, movable in every direction, highly sensitive, and terminating in a finger-like, prehensile lobe. The nostrils are placed at the extremity of this proboscis. The feet are furnished with five toes, but these are only indicated externally by the divisions of the hoof; and the sole of the foot is formed of a thick pad of integument. The

Indian elephant is the only species which is now caught and domesticated; and, as it will scarcely ever breed in captivity, the demand for it is supplied entirely by the capture of adult wild individuals, which are taken chiefly by the assistance of those which have been already tamed. The Indian elephant is distinguished by its concave forehead and its small ears; the African elephant, on the other hand, has a strongly convex forehead, and great flapping ears. The African elephant is chiefly hunted for the sake of its ivory, and there is too much reason to believe that the pursuit will ultimately end in the complete extinction of these fine animals. The elephants are all vegetable feeders, living almost entirely on the foliage of shrubs and trees, which they strip off by means of the prehensile trunk. As the tusks prevent the animal from drinking in the ordinary manner, the water is sucked up by the trunk, which is then inserted in the mouth, into which it empties its contents. Many species of fossil elephants are known, the most familiar of which is the Mammoth.

Falcon. A name of various birds of prey, members of the family Falconidæ. The falcons proper, for strength, symmetry, and powers of flight, are the most perfectly developed of the feathered race. They are distinguished by having the beak curved from the base, hooked at the point, the upper mandible with a notch or tooth on its cutting edge on either side, wings long and powerful, the second feather rather the longest, legs short and strong. The largest European falcons are the jerfalcon or gyrfalcon proper, a native of the Scandinavian Peninsula, and the Iceland falcon; to which may be also added the Greenland falcon. Between these three species much confusion at one time prevailed, but they are now distinctly defined and described. In the Greenland falcon the prevailing color at all ages is white, in the Iceland falcon, dark. The latter more nearly resembles the true gyrfalcon of Norway, which, however, is generally darker, rather smaller, but with a longer tail. The average length of any of these falcons is about two feet. The Greenland species used to be the most highly prized by falconers. Its food consists chiefly of ptarmigans, hares, and water-fowl. It is found over a wide range of northern territory. The peregrine falcon is not so large as the jerfalcon, but more elegant in shape. It chiefly inhabits wild districts, and nestles among rocks. It preys on grouse, partridges, ptarmigans, pigeons, rabbits, etc. Its flight is exceedingly swift, said to be as much as 150 miles an hour.

Ferns. A natural order of cryptogamous or flowerless plants, forming the highest group of the acrogens or summit-growers. They are leafy plants, the leaves, or more properly fronds, arising from a rhizome or root-stock, or from a hollow arborescent trunk, and being circinate in veneration, a term descriptive of the manner in which the fronds are rolled up before they are developed in spring, having then the appearance of a bishop's crosier. Ferns have a wide geographical range, but are most abundant in humid, temperate, and tropical regions. In the

tropical forests the tree-ferns rival the palms, rising sometimes to a height of fifty or sixty feet. Ferns are very abundant as fossil plants. The earliest known forms occur in Devonian rocks. Various systems of classification for ferns have been proposed. At present the order is usually divided into six or eight sub-orders or tribes distinguished by differences in the structure of the sporangium. The generic characters are founded on the position and direction of the sori and on the venation. The largest division is that of the Polypodiaceæ, to which belong the polypody, the lady-fern, the bracken, the hard-fern, the spleenwort, the maiden-hair, the hart's-tongue fern, etc. A few of the ferns are used medicinally, mostly as demulcents and astringents. Some yield food.

Fishes. The lowest class of back-boned animals, or that division of the animal kingdom which is known to zoölogists as *Vertebrata*. They are wholly adapted for an aquatic mode of life. The shape of the body is such as to give rise to the least possible friction in swimming, and thus to admit of rapid locomotion in water. To this end also, as well as for purposes of defense, the body is usually covered with a coating of scales. The limbs, when present, are always in the form of fins, but one or both pairs may be wanting; the anterior or fore limbs are known as the pectoral fins, and the posterior or hind limbs as the ventral fins. Besides the fins which represent the limbs, fishes possess other fins placed in the middle line of the body; one or two of these run along the back, and are known as the dorsal fins, one or two lie on the belly, near the vent, known as the anal fins, and a broad fin at the extremity of the spinal column is called the caudal or tail fin. The tail fin is always set vertically in fishes, so as to work from side to side, and is the chief organ of progression; it differs altogether from the horizontal expansion which constitutes the tail of whales, dolphins, dugongs, and manatees—animals which belong to the class of mammals. In the form of the tail, fishes exhibit two very distinct types of structure, termed respectively the *homocercal* and the *heterocercal* type of tail. The homocercal tail is the one which most commonly occurs in existing fishes, and it is characterized by the fact that the two lobes of the tail are equal, and the spinal column stops short at its base; in the heterocercal tail, on the other hand, found in many fossil specimens of the fish class, the spinal column is prolonged into the upper lobe of the tail, so that the tail becomes unequally lobed. All the fins are supported by bony spines, or rays, which are of two kinds, termed respectively spinous rays and soft rays. Further, to aid in supporting themselves at varying depths in the water, most fishes are provided with a sac containing gas, situated above the alimentary tube, and known as the air or swim bladder, by the filling or emptying of which the fish is rendered heavier or lighter in comparison with the surrounding water. The skeleton of most fishes consists entirely of bone, but in some it is partly of bone and partly of cartilage, and in a few it remains permanently cartilaginous.

Flamingo. A genus of web-footed birds which may be regarded as in some respects intermediate between the storks and the ducks, their long legs and necks giving them a resemblance to the former, while their webbed feet connect them with the latter. There are nine species of true flamingoes. Their food appears to be mollusca, spawn, grass, water plants, insects, etc., which they fish up by means of their long neck.

They breed in companies in mud-flats or inundated marshes, raising up the mud into a small hillock, which is concave at the top so as to form a nest. In this hollow the female lays her eggs, and hatches them by sitting on them with her legs doubled up under her.

The young, which never exceed three in number, do not fly till they have nearly attained their full growth, though they can run very swiftly and swim with ease almost immediately after their exclusion from the shell. The common American species is of a deep red color, with black quills. It is peculiar to tropical America, migrating in summer to the Southern, and rarely to the Middle States.

Flax. A fiber obtained from a plant belonging to the order *Linacea*. Common flax (*Linum usitatissimum*) is an annual plant, with a slender erect stem, two or three feet high, which is grown in large quantities in Italy, Russia, Saxony, Belgium, Holland, and Northern France, but is not cultivated to any great extent in this country. After being cut, and allowed to dry, the flax undergoes a process called *retting*, in order to remove resinous and glutinous substances, and disintegrate the woody portions of the stem. The flax is steeped in water, and after a time a process of fermentation sets in, by which the resinous and glutinous substances are decomposed. The fibers are then freed from portions of woody matter, and separated one from another by a process known as *scutching*. The seeds of the flax plant are also a valuable article of commerce.

Flea. A name for several insects regarded by entomologists as constituting a distinct order *Aphaniptera*, because the wings are inconspicuous scales. All the species of the genus are very similar to the common flea. It has two eyes and six feet; the feelers are like threads; the oral appendages are modified into piercing stilets and a suctorial proboscis. The flea is remarkable for its agility, leaping to a surprising distance, and its bite is very troublesome.

Flounder. One of the flat-fishes, family *Pleuronectidae*, genus *Pleuronectes* or *Platessa*, the common flounder being the *Pleuronectes* or *Platessa flesus*. It is one of the most common of the flat-fishes, and is found along the shores of almost all countries. The body is extremely flattened at the sides. Flounders have been successfully transferred to fresh-water ponds. They feed upon crustacea, worms, and small fishes, and are much used as food. The Argus-flounder is the *Pleuronectes argus*, a native of the American seas.

Flower. That part of a plant in which the organs of reproduction (*stamens* and *pistils*) are situated. The parts are arranged in whorls. In a complete flower the outer one consists of the *calyx*, formed of one or more leaves termed *sepals*;

the next is the *corolla*, composed of one or more *petals*; the third whorl is formed by the stamens, and the innermost of the pistils. Sometimes there is only one whorl of floral leaves, and then the flower is said to be *monochlamydeous*; if neither whorl is present, it is termed *achlamydeous*. If both calyx and corolla are present, but so blended together that they are not easily distinguished, the floral envelope is called a *perianth*. *Double* or *semi-double* flowers are those, in which through the effect of cultivation, what should be stamens are changed into petals, as in the rose, camellias, carnations, etc. The colors and odors of flowers are subjects in the investigation of which physiologists have not yet been able to go far. The chemical products on which they immediately depend are partially known; but how the chemical changes are wrought, and what various purposes they all serve as to the plant itself, can scarcely be said to have even begun to be ascertained. Both colors and odors are more or less owing to the action of the sun's rays. They also are sometimes modified by soil; and diversities of color have been obtained in cultivated flowers by changing the soil in which they grow.

Fly. A winged insect of various genera and species, whose distinguishing characteristics are that the wings are transparent and have no cases or covers. By these marks flies are distinguished from beetles, butterflies, grasshoppers, etc. The true flies or *Diptera* have only two wings, viz: the anterior pair. In common language, *fly* is the house-fly, of the genus *Musco*. The house-fly is found wherever man is, and in hot weather causes a good deal of annoyance. It is furnished with a suctorial proboscis, from which, when feeding on dry substances, it exudes a liquid, which, by moistening them, fits them to be sucked. From its feet being beset with hairs, each terminating in a disc which is supposed to act as a sucker, it can walk on smooth surfaces, as a ceiling, even with its back down. The female lays her eggs in dung or refuse; the larvæ are small white worms. They change into pupæ without casting their skins, and in from eight to fourteen days the perfect fly emerges. The very small flies and the very large ones often seen about houses belong to other species.

Flying-fish. A name common to various fishes which have the power of sustaining themselves for a time in the air by means of their large pectoral fins. Generally, however, the name is limited to the species of the genus *Exocætus*, which belongs to the family *Scomberesocidae* (mackerel-pikes). The pectoral fins, which are very large, are the principal instruments in their flight, serving to sustain the fish temporarily in the air after it has acquired an initial velocity in its rush through the water. It can pass through the air to a considerable distance, sometimes as much as 200 yards, which it does to escape from the attacks of other fishes, especially the dolphin. It is most common between the tropics. The best-known species are *Exocætus volitans*, abundant in the warmer parts of the Atlantic, and *Exocætus exiliens* of the Mediterranean. By some naturalists this genus has been subdivided into several, characterized by the presence or absence of barbels.

Flying-squirrel. A genus of rodent animals, family *Sciuridæ* (squirrels), to which the skin of the flank, extending between the fore and hind legs, imparts the faculty of supporting themselves for a moment in the air, as with a parachute, and of making very great leaps. The European flying-squirrel is a native of the forests in the colder parts of Europe and Asia; the American flying-squirrel lives in troops in the western parts of North America.

Fox. A carnivorous animal, of which there are several species, belonging to the same family as the dog. It is chiefly characterized by its sharp muzzle, and its long bushy tail; as well as by its cunning, which has passed into a proverb. The pupil of the eye is elongated, and not circular as in the dog, and the ears are triangular in shape and pointed. A very powerful scent is emitted from the fox, in consequence of some glands which are placed near the root of the tail, and which furnish the odorous secretion; this odor is so fetid, that even other animals avoid its locality. The common fox is an inhabitant of most parts of Europe and America, and extends also into Northern Asia. Its senses are extremely acute, so as alike to inform it of the neighborhood of its prey and to warn it of the approach of danger. It usually remains concealed during the day in a burrow, which it has either dug for itself or usurped, and ventures abroad chiefly at night, with stealthy movements, in search of food. Birds, rabbits, or hares constitute its usual prey, but, when pressed by necessity, it will have recourse to other food, and it has a predilection for certain kinds of fruit, such as grapes. To domestic poultry it is terribly destructive. Though slightly made, the fox has great muscular vigor, and bites with much severity. Even when taken at a very early age, it is never properly domesticated; and adults, when placed in confinement, show great ferocity, and soon die. It is to its power of endurance and its great speed, as well as to the cunning which dictates various expedients for escape, that the chase of this animal owes its exciting character. Among the most common of its expedients for escape is that of feigning death, which is done also by several other animals. Numerous other species of fox exist in the old and new worlds, of which the most important are the Arctic, or Blue Fox, and the American, or Red Fox. The Arctic fox abounds in the Arctic regions, and is remarkable for changing its color with the season, being brown or bluish in summer, and white in winter. The soles of its feet are hairy. The Red Fox is found throughout North America; it is very variable in color and marking, and varieties of it are known by different names. The skins of all the species of fox are valuable, and make warm and soft furs, used for muffs, linings, etc.

Frog. The genus is distinguished from its congeners by having the tongue and tympanum distinct, the skin smooth, and the toes without claws; they are, however, pointed, and the hinder feet are united almost to the tips by a membrane. The species are numerous; they are widely distributed over the globe, many inhabiting tropical regions. The common frog is too well known to require description. It is

found at the genial period of the year, burying itself at the approach of winter, in the mud at the bottom of ponds, and reappearing early in spring. In the month of March it lays its eggs, which are enveloped in a gelatinous material, in water, where they float. Each female deposits from 600 to 1,200 eggs a year. By April they have greatly increased in size and are becoming hatched. The immature frogs which come forth are called tadpoles. They have tails, no legs, breathe by gills, and are aquatic. Six or eight weeks later the legs are fully developed, the tail is absorbed, and they quit the water, remaining, however, in its vicinity to the last. The common frog is found in most parts of this country, in Europe, in parts of Asia, and in the north of Africa. The eatable frog is common on the European continent. The bull-frog of North America is also well known. In farriery, a kind of tender horny substance growing in the middle of a horse's foot, dividing into two branches which run like a fork toward the heel.

Gazelle. An animal belonging to the Antelope family; of very graceful shape, and rather smaller in size than the chamois. The color of the gazelle is fawn or dun on the back, which is separated from the white belly by a brown or blackish band. The horns, which are stronger in the male than in the female, are twice bent, in the shape of a lyre, and without sharp edges. The eyes of this animal are beautiful and soft in expression, and its movements are elegant and light. It inhabits the large plains and the Saharian region of Northern Africa, as well as Arabia and Syria, living in numerous herds. When taken young, the gazelle, though naturally wild and timid, is readily domesticated, and becomes quite tame.

Giraffe. The tallest of animals, often called the *Camelopard*, from the fact that the skin is spotted like the leopard, whilst the neck resembles that of the camel. It inhabits various parts of Africa, and comprises in itself an entire family, belonging to the class *Ungulata*, or hoofed animals. The height of this animal ranges from fifteen to twenty feet, the greater part of which is obtained by the enormous length of the neck, which is, nevertheless, possessed of only the usual number of seven vertebrae, as in the whole class of mammals. The back slopes considerably from the shoulders to the tail, this elevation of the shoulders being due to the great elongation of the shoulder-blade — a fact which also explains the apparent inequality of the fore and hind legs, which are, in reality, equal in length. The giraffe has an unusually long cylindrical tongue, which is prehensile, and is used for stripping the leaves off the trees on which it feeds.

Goat. A genus of ruminant quadrupeds so closely allied to the sheep that it is not easy exactly to define the distinction, although the common domestic goat and sheep are of widely different appearance. It is frequently mentioned in the books of Moses, and formed a large portion of the flocks of the patriarchs. The uses of the goat are numerous. The flesh is good; that of the kid, or young goat, is, in most countries, esteemed a delicacy. The milk is very rich and nutritious, more easy of diges-

tion than that of the cow, and is often useful to consumptive patients. Some goats yield as much as four quarts of milk daily, although the average quantity is more nearly two. The skin of the goat was early used for clothing, and is now dressed as leather for many uses, particularly for making gloves and the finer kinds of shoes. The hair, which may be advantageously clipped annually, is used for making ropes which are indestructible in water. The horns are used for making knife-handles, etc., and the fat is said to be superior to that of the ox for candles. Goats are found wild only in mountainous countries; they all exhibit a great aptitude for scrambling among rocks and bushes, are extremely sure-footed on narrow ledges and pinnacles, and display great strength and agility in leaping. The Rocky Mountain goat is an animal of the antelope family. Its size is about that of an ordinary sheep, and its general appearance is not unlike that of a sheep of the Merino breed, its long, straight hair hanging down in an abundant white fleece.

Gold. On account of its beautiful color and since it does not become tarnished or corroded in use, is considered the most precious of metals and is used as the principal basis of value throughout the civilized world. It has been known from time immemorial, and is found in many parts of the world. It is usually found in the metallic or native state in the form of nuggets or smaller particles, in sand or gravel, or distributed through rocks or veins. Nuggets weighing as much as 1,000 ounces have been found. Native gold always contains some silver. The metal is also found in combination with tellurium as "telluride ore," and it frequently accompanies copper ores and iron pyrites. The extraction of gold from sands or gravels, called alluvial or placer mining, is accomplished by washing with water in various ways. The heavy gold sinks to the bottom when the material is stirred up with water, and mercury (quicksilver) is usually used to amalgamate the gold and hold it. Solid ores have to be powdered by stamp mills or other devices before the gold can be extracted, and sometimes they must be heated to redness (roasted) to drive off tellurium or other things. One of the modern methods of extracting gold from ores consists in dissolving out the metal with water containing potassium cyanide. This is known as the "cyanide process." Gold is the heaviest of all the familiar metals except platinum. It is more than nineteen times as heavy as water. In malleability it stands first among the metals, being capable of being beaten to a thickness of $\frac{1}{250,000}$ of an inch and ductile enough to be drawn into a wire 500 feet long and weighing only one grain. It may be alloyed with other metals to change the color for designs. The best known alloy of gold is that with copper, which is used for gold coins. The chief gold discoveries have been in California, 1848; Australia, 1851; British Columbia, 1858; New Zealand and Nova Scotia, 1861; South Africa, 1868; West Australia, 1870; South Australia, 1886; Alaska and Klondike.

Goose. A genus of web-footed birds, having the bill not longer than the head,

more high than broad at the base, the upper mandible slightly hooked at the tip; the legs placed farther forward than in ducks, and so better adapted for walking; the neck of moderate length, with sixteen vertebrae, a character which widely distinguishes them from swans. In general, geese spend more of their time on land than any other of the *Anatida*, feeding on grass and other herbage, berries, seeds, and other vegetable food. Although large birds, and of bulky form, they have great powers of flight. They strike with their wings in fighting, and there is a hard callous knob or tubercle at the bend of the wing, which in some species becomes a spur. The domestic goose is regarded as deriving its origin from the Gray Lag goose or common wild goose, but all the species seem very capable of domestication, and several of them have been to some extent domesticated. The Gray Lag goose is almost three feet in length from the tip of the bill to the extremity of the short tail. Its extent of wing is about five feet. The wings do not reach to the extremity of the tail. The weight of the largest birds is about ten pounds. The color of the plumage is gray, varying in some parts to grayish-brown; the rump and belly white, the tail grayish-brown and white; the bill is orange, the nail at the tip of the upper mandible white. The young are darker than the adults.

Guinea Pig or Cavy. A small animal belonging to the family of rodents. It is indigenous to South America, and has been introduced into many parts of Europe, where it is domesticated as a pet. It possesses a very low degree of intelligence; in its natural home it is gregarious, and is usually found living on dry lands covered with low brushwood. The color of the guinea pig is variegated, and its tail is quite rudimentary. It is an extremely prolific animal, and begins to breed at the age of ten months, producing many broods in a year; each litter usually consists of about eight. The origin of the popular name of this animal is quite unknown; it appears to be very inappropriate, for the animal does not come from Guinea, nor yet is it a pig.

Hippopotamus. A genus of animals nearly allied to the pigs, hogs, and peccaries, and belonging to the class *Ungulata*. The group is represented by only one (well-established) living species, the *Hippopotamus amphibius*, or River horse, of Africa. It is enormously bulky and unwieldy, attaining a height of five feet, and a length of as much as twelve feet. The feet are massive, and are terminated by four hooved toes; the skin is very thick and strong. Between the skin and the flesh there is a layer of fat, which is salted and eaten by the Dutch settlers of South Africa. The hippopotamus feeds entirely upon vegetable substances, such as grasses and shrubs; it dives and swims with great facility.

Horse. An ungulate or hooved mammal. The horse proper is characterized by the tail being furnished with long hairs from its base; by the long and flowing mane; by the possession of a bare callosity on the inner surface of the hind as well as of the fore legs; and by the head and ears being smaller and the limbs

longer than in the ass and other species related to the horse. The native country of the horse seems to have been Central Asia. It became early domesticated in Egypt. It is mentioned throughout the Bible. The people of Thessaly were excellent equestrians, and probably first among the Greeks who broke horses in for service in war; whence probably arose the fable that Thessaly was originally inhabited by centaurs. "Solomon had 40,000 stalls of horses for his chariots, and 12,000 horsemen," 1014 B. C. The Greeks and Romans had some covering to secure their horses' hoofs from injury. In the Ninth Century, horses were only shod in time of frost. Shoeing was introduced into England by William I., in 1066. It is believed that the original breed of horses is extinct, and that the half-wild herds existing in many places have descended from animals once in captivity. Thus, when the horse was first introduced by the Spaniards in 1537, at Buenos Ayres, there were no wild horses in America. But individuals escaping ran wild, and, by 1580, their descendants had spread over the continent as far as the Straits of Magellan. Their favorite abode is on the Pampas, where they now exist in untold numbers. But there was found in La Plata a now extinct species of horse, and more Equidæ have been found in the New than in the Old World. The horse may have descended from a striped ancestor, stripes still sometimes remaining, especially in duns and mouse-duns. His present colors are brown, gray, or black, sometimes with roundish pale spots. His age is ascertained by examining first which teeth are developed, and then to what extent they have been worn away by use. They are best tamed by kindness. Like other domestic animals the horse has run into various breeds. The most celebrated is the Arab horse. Great attention is given in America to the breeding of horses, and American horses have won races both in England and on the Continent. The fear that the horse would go out of fashion on account of bicycles and automobiles seems unfounded. A similar fear was expressed when the railway took the place of the stage-coach.

Hyena. A genus of carnivorous animals, containing three species. Two of these, the Spotted Hyena and the Brown Hyena, are entirely confined to the African continent; while the third species, the Striped Hyena, is found in Northern Africa, and ranges over all the open country of India to the foot of the Himalayas, and through Persia and Asia Minor. These animals have a villainous appearance, and are covered with coarse bristly hair, short over the greater portion of the body, but produced into a mane along the ridge of the neck. The hind legs are shorter than the fore, giving the body a slope from the withers to the haunches. In size they are somewhat larger than a shepherd's dog. The cheek-muscles are greatly developed, and the large grinding teeth have great conical crowns, giving to them the power of smashing the thigh-bones of animals the size of a horse, and enabling them to procure their favorite morsel, the marrow. As carrion-feeders they are useful scavengers. All the species are nocturnal in their habits.

Insects. A class of invertebrate animals, in which the body is divided into a variable number of segments, which usually become modified to form three distinct regions, known as the head, the thorax, and the abdomen. The total number of segments never exceeds twenty. Of these, five, and probably six, become completely united to form the head, which carries four pairs of appendages, viz: a pair of antennæ, a pair of mandibles, and two pairs of maxillæ, the second pair of which together constitute the labium. There is generally a pair of compound eyes on the sides of the head, and sometimes simple eyes, or *ocelli*, also. The thorax always consists of three segments, which are termed respectively the prothorax, the meso-thorax, and the meta-thorax. Each of these carries a pair of jointed legs, and the possession of these six legs is characteristic of the whole class of insects; when wings are present they are attached to the second or third thoracic segments, or to both. The remaining segments constitute the abdomen; they have no appendages. The organs of the mouth in insects are of two principal types, viz: *masticatory* (beetles, dragon-flies, ants, etc.), and *suctorial* (butterflies, moths, fleas, gnats, etc.). The digestive apparatus, or alimentary canal, usually consists of an œsophagus, a crop, a gizzard, a stomach, a small intestine, a large intestine, and a rectum, together with organs playing the part of liver and kidneys. There is no definite and regular course of circulation in insects. The heart is represented by a contractile tube, situated on the back, and termed the *dorsal vessel*. Respiration is effected by means of branching air tubes, or *tracheæ*, which ramify through the entire body, and open on the exterior by lateral apertures, known as *stigmata*, or *spiracles*. The nervous system consists of a chain of ganglia placed on the ventral surface, and connected by a series of double cords. The sexes of insects are in different individuals, and most are oviparous. Most insects in the course of their lives pass through a series of changes, which constitute the *metamorphoses*, before attaining maturity.

Jaguar. A carnivorous mammal, belonging to the cat family. In size it is rather larger than the leopard, but is more elegant in form and in the beauty of its skin, the ground color of which is pale brownish-yellow, variegated on the upper parts with streaks and irregular oblong spots of black. The top of the back is marked with long uninterrupted stripes, and the sides with rows of regular open marks; on the thighs and the legs are full black spots; the breast and the belly are whitish; the tail is not so long as the body, and is spotted irregularly with black. This animal is one of the most formidable beasts of prey found in America, being of an extremely fierce nature. It inhabits North and South America, extending from the southern regions of the United States, through Mexico, Central America, and Brazil, as far south as Paraguay. Wooded banks of rivers are its favorite haunts, and it is said to frequent the reedy margins of lakes, seeming to have a great predilection for water. It preys chiefly upon the water-hog, and is said

to catch fish; but occasionally it kills horses and cattle, and even men. The jaguar is a noisy animal, roaring much at night, especially on the approach of bad weather.

Kangaroo. A family of pouch-bearing animals. They are the most highly developed members of the order, and are peculiarly suited for the conditions of life in Australia, over all parts of which they range, supplying the place of deer and cattle. The family comprises no fewer than fifty-six species, and of these the Great Kangaroo may be taken as a type. This species was formerly plentiful, and roamed over all the plains, but it is now fast retiring before the colonist. The fore-limbs are small; the hind-limbs very large and thick; the head small, with rather long ears, and a long, dusky-brown muzzle; the body long, with the fur shortish but thick, and of a grey-brown tint. In height it is as tall or taller than a man. The female carries her young in a pouch on the underside of the belly. When moving quickly the hind-limbs alone are brought into action, and by means of these the animal bounds along in great leaps of from ten to fifteen feet, the body being carried in a nearly horizontal position, and the tail extended to balance it. The fore-limbs are chiefly used in handling, and with these the females lift their young, and place them in the pouch. The kangaroos are vegetable feeders, delighting in grasses, leaves, and herbs.

Lark. The common name of birds comprising the genus *Alauda* and *Sturnella*. The Sky-lark, or Laverock, of Europe, the most harmonious of this musical tribe, commences its song early in the spring, continues it during the whole summer, and is one of those few birds that chant while on the wing. When it first rises from the earth, its notes are feeble and interrupted; as it ascends, however, they gradually swell to their full tone, and long after it is lost to the sight it still continues to charm the ear with its melody. It mounts almost perpendicularly, but descends in an oblique direction, unless threatened with danger, when it drops like a stone. The Meadow-lark of North America, about ten inches long, somewhat resembles the Sky-lark in its habits, but its song is not so sweet and harmonious.

Leopard. The *Felis Leopardus* differs from the panther only by having small spots thickly set, while the panther's spots are large and open. The species is a native both of Africa and Asia. The body of this fierce and rapacious animal is about four feet long. From the great flexibility of the limbs and spine, it can take surprising leaps, swim, crawl, and ascend trees.

Lemon. A plant of the genus *Citrus*, belonging to the order *Aurantiaceæ*, which also includes the orange, lime, citron, etc. The lemon is a native of Northern India, and is extensively cultivated for its fruit, the pulp of which abounds in citric acid, and is much used in the manufacture of cooling and effervescing drinks. The peel, or rind, is covered with glands containing oil, which is used as an aromatic: when dried and preserved, it forms an article of commerce, and is used for flavor-

ing. The produce of the lemon groves of the Mediterranean is chiefly imported to the north.

Lilac. A genus of plants belonging to the natural order *Oleaceæ* (which includes the ash, jessamine, olive, etc.). The lilacs are natives of the east; they are shrubs or small trees; and the flowers are characterized by a four-cleft corolla, by two stamens, and by a two-valved fruit. Several species are cultivated for ornamental purposes, the common lilac being one of the most extensively cultivated shrubs in Europe. Lilac bark is used as a febrifuge in some parts of France.

Lily. A popular name applied to plants of several genera belonging to the order *Liliaceæ*, but especially to the individuals constituting the genus *Lilium*. They are herbaceous, with scaly bulbous roots and conspicuous flowers, on account of which they are great favorites with the horticulturist, and are extensively cultivated. The tiger lily, with its showy yellow flowers, is a native of warm climates, and is peculiar in producing bulbs in the axils of the leaves and capable of independent growth. The white lily and the orange lily are also familiar under cultivation. The bulbs are rich in starch, and in some districts those of certain species are used as food.

Lion. The largest and most majestic of carnivorous quadrupeds. It is, when mature, of a nearly uniform tawny or yellowish color, paler on the under parts, the young alone exhibiting markings like those common in the *Felidæ*; the male has, usually, a great shaggy and flowing mane, and the tail, which is pretty long, terminates in a tuft of hair. The whole frame is extremely muscular, and the foreparts, in particular, are remarkably powerful, giving, with the large head, bright, flashing eye, and copious mane, a noble appearance to the animal, which, with its strength, has led to its being called the "king of beasts." A lion of the largest size measures about eight feet from the nose to the tail, and the tail about four feet. The lioness is smaller, has no mane, and is of a lighter color on the under parts. The strength of the lion is such that he can carry off a heifer as a cat carries a rat. The lion is chiefly an inhabitant of Africa, although it is found also in some of the wilds of Asia, particularly in certain parts of Arabia, Persia, and India. It was anciently much more common in Asia, and was found in some parts of Europe, particularly in Macedonia and Thrace, according to Herodotus and other authors. The lion is not, in general, an inhabitant of deep forests, but rather of open plains in which the shelter of occasional bushes and thickets may be found. The lion is easily tamed, at least when taken young and when abundantly supplied with food. Lions were made to contribute to the barbarous sports of the ancient Romans; a combat of lions was an attractive spectacle, and vast numbers were imported into Rome, chiefly from Africa, for the supply of the amphitheater. Pompey exhibited 600 at once. The mane of the lion and the tuft at the end of the tail are not fully developed till he is six or seven years old. The tail terminates in a small prickle, the existence of which was known to the

ancients, and which was supposed by them to be a kind of goad to the animal when lashing himself with his tail in rage. There are several varieties of the lion, slightly differing from each other in form and color, but particularly in the development of the mane. The largest lions of the south of Africa are remarkable for the size of the head and the great black mane.

Llama. The popular name of the genus *Auchenia*, family *Camelidæ*. The llama proper, and the Alpaca or Peruvian sheep, which is entirely confined to Peru, are, according to Cuvier, only domesticated forms of the Guanaco, while Humboldt considers them as distinct species. The Vicuna, which belongs to the same genus, is a more beautiful animal than any of its congeners. In size, it is intermediate between the llama and the alpaca. Its neck is longer and more slender than theirs; its wool is also finer, short, and curled. It is of a rich brown color, with patches of white across the shoulders, and the inner side of the legs. The Vicuna inhabits the most desolate parts of the Cordillera, at great elevations; like the wild goat and the antelope, it is a very active animal.

Lobster. A familiar invertebrate animal, belonging to the order *Crustacea*, and inhabiting the sea. Lobsters are found in great numbers about many European shores, and the greater part of those taken to English markets are supplied from Norway; they are also quite numerous on the coasts of North America. The body of the lobster is composed of two principal divisions, popularly termed head and tail; the former, however, which is technically called the *cephalo-thorax*, is constituted (as the name implies) by both head and thorax; the tail is the abdomen. The body carries twenty pairs of appendages, consisting of feelers, jaws, claws, legs, etc. The nervous system consists of a chain of ganglia placed along the under surface. The stomach and the intestines form a long and straight canal. Lobsters are extremely combative, and fight furiously, the vanquished party usually leaving one of its limbs in its opponent's grasp.

Macaw. A genus of beautiful birds of the parrot tribe. The macaws are magnificent birds, distinguished by having their cheeks destitute of feathers, and their tail-feathers long (hence their generic name). They are all natives of the tropical regions of South America. The largest and most splendid in regard to color is the great scarlet or red and blue macaw. The great green macaw and the blue-and-yellow macaw are somewhat smaller.

Magnolia. A genus of trees and shrubs, named from Pierre Magnol, a French botanist of the Seventeenth Century. The species, which chiefly inhabit North America, Northern India, Chian, Japan, and other parts of Asia, are trees much admired on account of the elegance of their flowers and foliage, and are in great request in gardens. In their native countries some of them attain great height, and have flowers ten inches across. The bark of the root of the beaver-tree is an important tonic. The umbrella-tree has also tonic properties. The cones of some species yield a spirituous liquor, employed in Virginia in rheumatic affections.

Big-laurel and the yulan or Chinese magnolia, grow well in the south of England, and are splendid ornamental trees. The yulan is remarkable in that it flowers in spring before the leaves expand.

Magpie. A bird belonging to the crow family. There are several species, two of which belong to America. The common European magpie is about eighteen inches in length; the plumage is black and white, the black glossed with green and purple; the bill is stout, and the tail is very long. The magpies continue in pairs throughout the year, and prey on a variety of food, chiefly animal. They are determined robbers of other birds' nests, destroying the eggs and young birds. In captivity they are celebrated for their crafty instincts, their power of imitating words, and their propensity to purloin and secrete glittering articles.

Mahogany. This tree is a native of the West Indies and of Tropical America. It is a tree of considerable magnitude, with compound leaves of several pairs of leaflets, and yellowish white flowers. Mahogany is applied to many uses. It is a fine wood, of close texture, of a reddish color shaded with brown, and is capable of taking a fine polish. It varies much in value according to the color and markings. The mahogany tree is found most commonly on the coasts of Honduras and Campeachy, and also in the islands of Cuba and Hayti. It was formerly plentiful in Jamaica. The wood obtained from Honduras and Campeachy is often termed bay-wood; that from Cuba and Hayti (which is of finer quality) is known in the market as Spanish mahogany. There are one or two other varieties of mahogany, produced by trees belonging to the same natural order, and natives of the East Indies.

Man. The only species composing the order of *Mammals Bimana*. He possesses two prehensile hands, with fingers protected by flat nails; two feet with single soles, a single stomach, and three kinds of teeth: *incisive*, *canine*, and *molar*. His position is upright; his food both vegetable and animal; his body without natural covering. Blumenbach divides mankind into five varieties: (1) The first occupies the central parts of the old continent, namely, Western Asia, Eastern and Northern Africa, Hindostan, and Europe. Its characters are, the color of the skin, more or less white or brown; the cheeks tinged with red; long hair, either brown or fair; the head almost spherical; the face oval and narrow; the features moderately marked; the nose slightly arched; the mouth small; the front teeth placed perpendicularly in the jaws; the chin full and round. This is called the *Caucasian*, from its supposed origin in the Caucasus. (2) The second variety has been termed the *Eastern*. The color in this race is yellow; the hair black, stiff, straight, and rather thin; the head almost square; the face large, flat, and depressed; the features indistinctly marked; the nose small and flat; the cheeks round and prominent; the chin pointed; the eyes small. This variety comprises all the Asiatics to the east of the Ganges and of Mount Beloor, except the Malays; it also includes the Turks, Egyptians, Persians, Hindoos, Tartars,

Chinese, etc. (3) The *American* variety. (4) The fourth variety is called by Blumenbach the *Malay*, and described as of a tawny color; the hair black, soft, thick, and curled; the forehead a little projecting. This variety comprehends the islanders of the Pacific Ocean. (5) The remaining variety is the *Negro*. Its characters are: color, black; hair, black and woolly; head, narrow; forehead convex and arched; cheek-bones projecting; nose large, and almost confounded with the upper jaw; the upper front teeth obliquely placed; the lips thick; the chin drawn in; the legs crooked. This race is found in Western and Southern Africa, and the great islands of the Pacific, generally in the interior. There are very great differences in the tribes included in this variety; as witness, the Negro, with the complexion of jet, and woolly hair; the Kaffre, with a copper complexion and long hair; the sooty Papuan, or New Guinea-man; the native of Van Diemen's Land; and the Hottentot. The structure of man is essentially the same in kind as that of other mammals, differing only or mainly in degree; yet the degrees of difference separate him widely from all other animals, and place him in an order by himself, and far above all other organized beings. He is the only animal to which the erect posture is natural; his whole organization is adapted to that attitude. His brain is the largest in the

animal kingdom, excepting that only of the elephant and of the whale, and in its organization is far superior to that of any other animal. His face is a model of beauty, and endowed with a wonderful power of expression. The hand of man is superior in its structure and in its functions to the corresponding member of any other animal. Man alone truly speaks a language. Even physically considered, he is the highest possible expression of a vertebrate. But man is the highest representative of the animal kingdom, not only on account of his superior form and higher physical organization, but, above all, on account of those high mental and spiritual endowments which belong to him alone, and which enable him to understand and appreciate the wonderful and sublime harmonies of the material and moral world, and his own relations to the Author of nature and of revelation. While each species of the lower animals is limited to a given region or country, and in many cases cannot survive a removal, man's home is the whole earth—he alone is truly cosmopolite. It is not possible to fix the date of man's appearance upon the surface of the globe, or even to approximate to it, but the researches of modern geologists show that there is apparent evidence of his existence far beyond that which is assigned by our popular chronology.

RACES OF MANKIND

Arranged by Ethnologist Fignier and others.

WHITE RACE

European Branch.	{ Teutonic Family,	Scandinavians, Germans, English.
	{ Latin Family,	French, Spaniards, Italians, Moldo-Wallachians.
	{ Slavonian Family,	Russians, Finns, Bulgarians, Servians, Magyars, Croats, Tchecks, Poles, Lithuanians.
Aramean Branch.	{ Greek Family,	Greeks, Albanians.
	{ Libyan Family,	Egyptians, Berbers.
	{ Semitic Family,	Arabs, Jews, Syrians.
	{ Persian Family,	Persians, Afghans, Kurds, Armenians, Ossetines.
	{ Georgian Family,	Georgians.
	{ Circassian Family,	Circassians, Mingrelians.

YELLOW RACE

Hyperborean Branch.	{ Lapp Family,	Samoiede, Kamtschadale, Esquimau, Tenissian, Jukaghirite, and Koriak Families.
	{ Mongol Family,	Mongols, Kalmucks, Buriats.
Mongolian Branch.	{ Tunguse Family,	Tunguses, Manchus.
	{ Turk Family,	Turcomans, Kirghis, Nogays, Osmanlis.
	{ Yakut Family,	Yakuts.
Sinaic Branch.	{ Chinese Family,	Chinese.
	{ Japanese Family,	Japanese.
	{ Indo-Chinese Family,	Burmese, Siamese.

BROWN RACE

Hindo Branch.	{ Hindo Family,	Sikhs, Jats, Rajpoots, Mahrattas, Bengalese, Cingalese.
	{ Malabar Family,	Malabars, Tamals, Telingas.
Ethiopian Branch.	{ Abyssinian Family,	Abyssinians, Berabras, Gallas.
	{ Fellan Family,	Fellans.
Malay Branch.	{ Malay Family,	Malays, Javanese, Battas, Bougis, Maccassars, Dyaks, Togals.
	{ Polynesian Family,	Maoris, Tongas, Tahitians, Pomotouans, Marquesans, Sandwichians.
	{ Micronesian Family,	Ladrone, Caroline, and Mulgrave Islanders.

RED RACE

Southern Branch.	{ Andian Family,	Quichuas (or Incas), Antis, Andians, Araucanians.
	{ Pampean Family,	Patagonians, Puelches, Charruas, Tobas, Moxas, Abipous, etc.
	{ Guarani Family,	Guaranis, Bocotudos.
Northern Branch.	{ Southern Family,	Aztecs, Mayas, Lencas, Othomis, Tarascas, etc.
	{ Northeastern Family,	Cherokees, Hurons, Iroquois, Sioux, Apaches, Comanches, Creeks, etc.
	{ Northwestern Family,	Chinooks, Digger Indians, Nootkans, etc.

BLACK RACE

Western Branch.	{ Kaffre Family,	
	{ Hottentot Family,	
Eastern Branch.	{ Negro Family,	
	{ Papuan Family,	Fijians, New Caledonians, etc.
	{ Andaman Family,	Andamans, Australians.

Manatee. The sea-cow or lamantin, a gregarious aquatic mammal of the genus *Manatus*, order *Sirenia*, found on the coasts of South America, Africa, and Australia. They generally frequent the mouths of rivers and estuaries, and feed on algae and such littoral land vegetations as they can reach at high tide. Their anterior limbs or swimming paws are furnished with nails by means of which they drag themselves along the shore. They are large awkward animals, attaining a length of eight to ten feet as a rule, but sometimes growing to twenty feet. The skin is of a grayish color, sparsely covered with hairs. Their flesh is excellent, and they furnish a soft, clear oil which does not become rancid. There are several species, the principal being the American manatee, which inhabits the shallow waters of the east coasts of South and North America, and the African manatee.

Mandrill. A species of baboon which is distinguished by the short or rudimentary tail, by the elongated, dog-like muzzle, and by the presence of buttock callosities which are generally brightly colored. The mandrill inhabits Western Africa, where they associate in large troops. Full-grown males measure about five feet; they are exceedingly strong and muscular, and fierce in disposition. It has cheek protuberances colored with stripes of brilliant red and blue.

Mangrove. A genus of plants consisting of trees or shrubs which grow in tropical countries along the muddy beaches of low coasts, where they form impenetrable barriers for long distances. They throw out numerous roots from the lower part of the stem, and also send down long, slender roots from the branches, like the Indian banyan-tree. The seeds germinate in the seed-vessel, the root growing downward till it fixes itself in the mud. The wood is dark-red, hard, and durable, and the bark is used for tanning.

Manna. The sweet, concrete juice which is obtained by incisions made in the stem of a species of ash, *Fraxinus Ornus*, a native of Sicily, Calabria, and other parts of the south of Europe. The manna of commerce is collected in Sicily, where the manna-ash is cultivated for the purpose in regular plantations. The best manna is in oblong pieces or flakes of a whitish or pale-yellow color, light, friable, and somewhat transparent. It has a slight peculiar odor, and a sweetish taste mixed with a slight degree of bitterness, and is employed as a gentle laxative for children or persons of weak habit. It is, however, generally used as an adjunct to other more active medicines. Other sweetish secretions exuded by some other plants growing in warm and dry climates, as the *Eucalyptus mannifera* of Australia, the *Tamarix mannifera* or *gallica* of Arabia and Syria, are considered to be kinds of manna. Small quantities of manna, known under the name of *Briançon manna*, are obtained from the common larch. In Scripture we are told that a substance called manna was miraculously furnished as food for the Israelites in their journey through the wilderness of Arabia. Some persons identify it with the saccharine substance yielded by the *Tamarix mannifera*.

Maple. A name for trees of the genus *Acer*, natural order *Aceraceæ* or *Sapindaceæ*, peculiar to the northern and temperate parts of the globe. About fifty species are known, distributed through Europe, North America, and different parts of Asia. They are small or large trees, with a sweetish, rarely milky, sap, usually lobed leaves, and small greenish flowers.

Mistletoe. An American and European plant growing parasitically on various trees, and celebrated on account of the religious purposes to which it was consecrated by the ancient Celtic nations of Europe, being held in great veneration by the Druids, particularly when it was found growing on the oak. It is a small shrub, with sessile, oblong, entire, somewhat leathery leaves, and small, yellowish-green flowers, the whole forming a pendent bush, covered in winter with small white berries, which contain a glutinous substance. It is common enough on certain species of trees, such as apple and pear trees, hawthorn, maple, lime and other similar trees, but is very seldom found on the oak. Its roots penetrate into the substance of the tree on which it grows, and latterly it kills the branch supporting it. Traces of the old superstitious regard for the mistletoe still remain in Germany and England, as kissing under it at Christmas.

Mocking Bird. A genus of the family *Turdidæ*, or Thrushes, exclusively American in its distribution, but ranging widely over the northern and southern portions of that continent. These birds are remarkable for their power of song. The best known species is *Mimus polyglottus*, which has marvelous power of voice, and is able to imitate almost any species of animal, as well as noises produced artificially. Its own song is loud, full, and exceedingly varied. In plumage it is decidedly somber, being of a general ashy-gray hue, paler beneath; but, though the mocking bird cannot vie with other American birds in brilliancy of plumage, its sweet and varied notes, and its faculty of imitation, render it a prime favorite.

Monkey. The popular name of a large group of animals, belonging to the order *Primates*, or the Cuvierian order *Quadrumana*, and to the class *Mammalia*. The name is frequently used to comprehend the members of the following families and sub-families of the order, viz: the *Simiidae* (Anthropoid Apes and Gibbons), the *Semnopithecinae* (Old World Monkeys), the *Cynopithecinae* (Baboons and Macaques), the *Cebidæ* (American Monkeys), and the *Hapalidæ* (Marmosets). In a restricted sense, however, it is only applicable to certain members of some of the above families and sub-families, and cannot be correctly applied to the apes and gibbons (*Simiidae*), or to the baboons. The characteristics of the different species of monkeys are so very varied, that it is impossible to frame a general definition of them that would be applicable to all, and the limits of space preclude us from entering into a description of each species. The *Semnopithecinae* comprise the long-tailed monkeys without cheek-pouches, which have rather long, rounded faces and more prominent muzzles; they are widely distributed over Africa and Asia. The *Cynopithecinae* contain all the

monkeys with cheek-pouches; they have affinities with the baboons, and are generally distributed over Africa, Asia, and the Malay Islands, one species, the Gibraltar monkey, being the only monkey inhabiting Europe. The family *Cebidæ* comprise all the larger American monkeys, which differ from those of the old world in having an additional molar tooth, or grinder, in each jaw, and the nostrils widely separated; while they have neither cheek-pouches nor callosities, and their thumbs are never completely opposable; some have a prehensile tail, which is as useful to them as an additional limb in their arboreal haunts. The members of this family are strictly confined to the forest regions of tropical America, from Southern Mexico to Northern Chile. The last family, the *Hapalidæ*, comprises the marmosets, which are strictly South American in their distribution. The habitats of all monkeys are chiefly confined to forests, for which their form is especially adapted, enabling them to climb trees with ease, and to leap from branch to branch with extraordinary agility. Here they are masters of the situation, the only foe they dread being the serpent, which alone can reach them in their arboreal retreats. Their food consists chiefly of fruits and other vegetable substances; but, in addition to these, birds and their eggs, and insects, are by no means unacceptable to them.

Mosses. A large group of flowerless plants of diminutive size, which constitute the class *Musci*. Mosses are among the most extensively diffused of all plants, and are both terrestrial and aquatic in habits. They consist of a leafy stem, the leaves being often closely packed or overlapping one another. The fructification of mosses is somewhat complicated, and may be compared to that of ferns in all essential points. A capsule is first produced, and borne at the top of a long foot-stalk which springs from a tuft of leaves. It is covered at first by a hood, termed the *calyptra*, but this afterwards falls off, and the capsule is then seen to be closed by an *operculum* or lid, which eventually bursts away to allow of the escape of the contained spores. The mouth of the capsule, when the *operculum* has fallen off, is seen to be surrounded by a row of minute teeth which constitute the *peristome*. The development of the spore gives rise to a branching filament, on several points of which buds appear, which become leafy stems; and some of these produce true reproductive organs, the male organs being termed *antheridia*, and the female organs *archegonia*; these may be borne by the same plant, or by different plants. Several thousand species of mosses are known, and many of them are extremely beautiful, especially under the microscope.

Moth. The popular name of a numerous and beautiful division of lepidopterous insects, readily distinguished from butterflies by their antennæ tapering to a point instead of terminating in a knob, by their wings being horizontal when resting, and by their being seldom seen on the wing except in the evening or at night (though some moths fly by day); hence the terms crepuscular and nocturnal lepidoptera applied to them. Amongst the more notable of

the moths are the "feather" or "plume-moths," the "death's-head moth," the "clothes-moths," and the "silk-moth."

Mother-of-pearl, or Nacre. The hard silvery, brilliant, internal or nacreous layer of several kinds of shells, particularly of the oyster family, often variegated with changing purple and azure colors. It is destitute of coloring matter, but is composed of a series of minute and slightly imbricated layers or ridges which have the power of decomposing the rays of light, thus producing beautiful iridescent hues. The large oysters of the tropical seas alone secrete this coat of sufficient thickness to render their shells available for the purposes of manufacture. Mother-of-pearl is extensively used in the arts, particularly in inlaid work, and in the manufacture of handles for knives, buttons, toys, snuff-boxes, etc.

Mouse. The name given to certain species of small mammals, belonging to the order *Rodentia*, or gnawing animals. The mice, along with the rats, form the very extensive genus *Mus*, and, with other allies, the family *Muridæ*. The British species of mice are the *Common House Mouse*, which is too familiar to need any description; the *Harvest Mouse*, the smallest and at the same time one of the prettiest of British mammals, which in the summer constructs a curious nest high up in the straws of the standing corn, retiring in the winter into burrows, in which it hibernates; and the *Long-tailed Field Mouse*, which frequents fields and gardens. The *Dormouse* belongs to another family, *Myoxidæ*, of the same order.

Mulberry. A fruit-tree of the genus *Morus* akin to nettles. The black or common mulberry (*Morus nigra*) is the only species worthy of being cultivated as a fruit-tree. The fruit is used at dessert, and also preserved in the form of a syrup. The juice of the berries mixed with that of apples forms a beverage of a deep portwine color.

Mule. A hybrid animal between the horse and the ass, differing in size, strength, and beauty, according to the predominance of its parental species; those between a male ass and a mare being far superior to the progeny of a she-ass with a horse. In mountainous countries mules are highly serviceable; no beast of burden being either so sure-footed, or so capable of enduring fatigue; but in beauty of form they fall very short of that noble quadruped, the horse; the mule having a large, clumsy head, long erect ears, a short mane, and a thin tail.

Mongoose. A species of ichneumon, otherwise known as the "gray" or "Indian" ichneumon. Being easily domesticated, it is kept in many houses in Hindustan to rid them of reptiles and other vermin, as rats, mice, etc. It has been said that it neutralizes the poison of snakes, which it fearlessly attacks, by eating, during its contests with them, the snake-root; but its immunity is really due to the extreme celerity of its movements. It is of a gray color flecked with black, and about the size of a rat.

Musk-deer. A genus of deer, forming the type of the family *Moschidæ*, which is essentially distinct from the family of the *Cervidæ*, or true deer. Their chief habitat is Asia and the is-

lands of the Eastern Archipelago; though one species is found on the west coast of Africa. The typical species of the family is found chiefly in the elevated tablelands of Central Asia, and particularly of Tibet. These animals attain the size of a young roe-deer, and the upper jaw bears prominent canine teeth. The males alone yield the musk, which is secreted by an abdominal gland of about the size of a hen's egg. The Tibet musk is most in repute, that known as Russian or Siberian being inferior in quality. Besides its familiar use as a scent, musk is employed medicinally as an antispasmodic. There are six or seven other species of *Moschus*, two of which, very diminutive, lack the musk gland.

Musk-ox. An animal intermediate between the ox and sheep. Resembling in general appearance a large goat-like sheep, its body is covered with a coat of tufted hair, brownish in color and of great length. The hair about the neck and shoulders is so thick as to give the animal a "humped" appearance; on the rest of the body it is very long, smooth, and flowing, while interspersed among its fibers is a layer of lighter-colored wool. The musk-ox is active and agile, and climbs mountainous places with ease and dexterity. The horns, broad at the base and covering the forehead and crown, curve downwards between the eye and the ear, and then upwards and slightly backwards. The horns of the female are smaller than those of the male, and their bases do not touch. The ears are short, the head large and broad, the muzzle blunted. The average size of the male is that of a small domestic ox. The food consists of grass, lichens, etc. The musk-ox inhabits the Arctic regions of America north of the sixtieth degree of latitude. The flesh is pleasant to the taste, though it smells strongly of musk, the odor of which is also diffused from the living animal.

Nightingale. A genus of birds belonging to the order *Passeres*, of which there are two species, very similar in plumage, inhabiting Europe, Western Asia, and North Africa. One of these is a summer-visitant to the southern and eastern counties of England, arriving about the middle of April; it occurs very occasionally as far north as Mid-Yorkshire. The plumage of this delightful songster is of a somber hue, being on the upper surface of a reddish brown, redder on the head and rump; the tail a lighter tint; the throat, lower part of the breast, and abdomen, greyish white; the lower neck and sides pale, greyish brown. The favorite haunts of this bird are copses and hedgerows, and its food consists of insects of various descriptions. The nest is composed of dry leaves, lined with grass, roots, and hair. The eggs are four or five in number, and of an uniform olive-brown, tinged with greyish blue.

Opossum. A family of mammals, belonging to the order of pouch-bearers, which range throughout the wooded districts of America, from the southern boundary of Texas to the La Plata River, where they are most numerous; while one species is found in North America, from Florida to the Hudson River, and west to the Missouri. They are rat-like in form, and the largest species is about the size of the com-

mon cat; they have a long tail, which is almost destitute of hair, and is very useful from its prehensile nature, enabling the animal not only to hang by it, but also to climb and descend trees. They are sly and intelligent, and live chiefly in trees, lying up in the daytime, and at night roaming abroad in search of their food, which consists of insects, small reptiles, birds' eggs, etc. Some species have no marsupium, or pouch, or it is very slightly developed; and in these particular species the young, on leaving the nipples, are carried on their mother's back, retaining their position by entwining their tails around hers. The opossums may be divided into three groups: those whose pouch is well developed, those in which it is a mere fold, and those which have webbed feet, and live in the water like otters.

Orange. The name given to certain plants of the genus *Citrus*. The common or sweet orange is in universal request for its fruit. It is an evergreen tree, with oblong leaves and white flowers. It is extensively cultivated in Southern Europe, and, in fact, in every part of the world where the climate is suitable. There are numerous varieties of the common orange, the most important of which are the Chinese or Mandarin orange, the Maltese and St. Michael's oranges, and the blood orange, which is remarkable for the color of the pulp. The Seville or bitter orange is another species, having a bitter fruit of different shape, but of not less importance than the common orange. Its flowers yield the distilled water (orange-flower water), so much used in medicine, and the volatile oil called *essence of Neroli*, used in the preparation of Eau de Cologne. The rind is much used for making marmalade, and in the young state is one of the principal flavoring ingredients of the liqueur Curaçoa. Orange-trees are extremely fruitful, a single tree sometimes producing as many as 20,000 oranges. The importance of these fruits is due to the free acids contained in the pulp, and the volatile oil secreted by the glands which cover the rind. The orange is especially cultivated in the Azores, America, Spain, Portugal, and the Mediterranean regions.

Orang Outang. In zoölogy the *Mias* of the Dyaks; also known as the "wild man of the wood." It is a dull, slothful animal, but possessed of great strength. These animals are now confined to the swampy forests of Sumatra and Borneo. Their height has been variously stated, but we have not the least reliable evidence of the existence of oranges in Borneo more than four feet two inches high. The legs are very short, the arms are disproportionately long, reaching to the ankle when the animal is placed in an erect position. The males have a longish beard, and they sometimes develop warty protuberances on each side of the face. The resemblance to man in appearance is greatest in the females and in young animals. The head of a baby orang is not very different from that of an average child; but in the adult the muzzle is as well-marked a feature as in the Carnivora. It never walks erect, unless when using its hands to support itself by branches overhead, or when attacked.

Oriole. A family of birds which inhabit Southern Asia, the Malay Islands, Africa, and Australia, while one species, the Golden Oriole, is a summer visitant to Central Europe, and, during the period of migration, is occasionally observed in England. The male of this species is of great beauty, having a brilliant yellow body and black wings and tail. The female is much plainer, being of a greenish hue, streaked with dusky lines. It is about the size of the common thrush. The name *Oriole* is also applied to several American birds, of which the Baltimore Oriole, a bird ranging from Canada to Mexico, is a well-known example. It has the head, throat, wings, and upper back black; the lower back and all the under parts bright orange, deepening into vermilion on the breast.

Ostrich. A family of birds, belonging to the order *Struthiones*; having a raft-like sternum (breast-bone), and consequently not possessing the power of flight. The ostriches are contained in two genera, which are sometimes considered as distinct families. The genus *Struthio* comprises the true ostriches, which inhabit the desert regions of Northeast and South Africa, and of Arabia and Syria. The other genus, *Rhea*, contains the three species of ostriches (of which the *Nandu* is one), inhabiting South America from Patagonia to Brazil. The ostriches, of which there are two species, are generally found in small companies; they are polygamous, each male accompanying three or four females, all of which deposit their eggs in a single large nest scooped out in the sand; all the hens sit and relieve each other by turns, the male also taking his turn and assisting in the incubation of the eggs. The Rheas are distinguished by possessing three toes, whilst the ostriches have only two; the head and neck are fully feathered, and there is no tail visible. Their habits are similar to those of the African birds, but they do not attain to the stature of the latter, and their feathers are not of such beauty.

Owl. The popular name applied to the species of birds formerly regarded as a division of the falcon tribe. This order is a sharply-defined one. The head is extremely large; the eyes huge and directed forward; the bill short and stout; the apertures of the ears very large; the legs feathered; the toes four in number, the outer one capable of being directed backwards. The plumage is full and remarkably soft, the feathers of the face being so arranged as to form two discs around the eyes. The owls are cosmopolitan in their distribution, ranging over the whole of the globe from the highest northern latitudes, and are even found in the remotest oceanic islands. They feed on small mammals, birds, fishes, and insects, swallowing the hair, bones, feathers, and scales, which they afterwards disgorge in the shape of "pellets." Their flight is buoyant and noiseless. They place their nests on the ground, among rocks, in hollow trees, and in buildings, while some resort to the old nests of other birds. They lay from two to five roundish white eggs.

Oyster. A well-known edible shell-fish. The oyster particularly when eaten raw, is easy of digestion, and remarkably nutritious. The

principal breeding-time of the common oyster is in April or May, when their spawn is usually cast; this appears at first like little spots of grease, which fasten upon rocks, stones, or other hard substances that happen to be near. Very commonly they adhere to adult shells; and thus are formed the large masses termed *oyster-banks*. In about a year and a half they attain a size fit for the table.

Palms. A large and important order of plants, which are chiefly trees, often of great height. They have simple (rarely-branched) trunks, marked with scars, which indicate the attachment of former leaves. The leaves are usually either feather-shaped or fan-shaped, arranged in a crown at the summit of the stem, and often of gigantic size. The flowers are commonly male and female, and small, but, when taken collectively, their bright clusters form a striking object. The palms are mostly natives of the tropics, and form one of the most striking characteristics of tropical vegetation. The only European species is the Fan Palm. The properties of the palms are various. The fruits of some are edible, as the cocoa-nut palm and the date palm, and form an important item of food in the countries where they grow. Many supply oils, wax, starchy matter, and sugar, from which an intoxicating beverage is obtained by fermentation and distillation. The palm of the Bible appears to be the date palm. The cocoa-nut palm is one of the most important of the family. Betel-nut is the produce of a palm of the genus *Areca*; and sago is also obtained from the stem of a palm. The Palmyra palm of the East Indies is chiefly important for its timber, which is very hard, heavy, and of a black color.

Panther. A carnivorous animal measuring about six feet and a half from nose to tail, which is itself about three feet long. It differs from the leopard chiefly by its superior size and deeper color. The manner it seizes its prey, lurking near the sides of woods, etc., and darting forward with a sudden spring, resembles that of the tiger. The puma, or cougar, is sometimes called the American panther.

Parrot. The name applied in a general sense to all the members of the order *Psittaci*, which comprises the parrots proper, the cockatoos, parakeets, macaws, lorries, nestors, etc. The true parrots have the upper mandible toothed, and longer than it is high, and have a short and rounded tail. These birds combine with the beauty of their plumage a nature of great docility, and have the faculty of imitating the human voice in a degree not possessed by other birds. They are found chiefly in Africa, from whence we get the Grey Parrot, which is the favorite; South America, which is particularly rich in species, furnishes the well-known Green Parrot; and North America is the home of a single species, the Carolina Parrot. The parrots are forest birds, and are adepts at climbing, using for that purpose both the feet and the bill. Their food consists of seeds and fruits.

Partridge. A well-known bird of the grouse family. The common partridge is the most plentiful of all game-birds in Britain, and occurs in nearly all parts of Europe, in North Africa, and in some parts of Western Asia. The

wings and tail are short, the tarsi as well as the toes naked, and the tarsi not spurred. The greater part of the plumage is ash-grey finely varied with brown and black. They feed on grain and other seeds, insects and their larvæ and pupæ, and are chiefly found in cultivated grounds. Besides this species there are the red-legged, French, or Guernsey partridge, which may now be found in considerable numbers in different parts of England; the Greek partridge, the African partridge, the Arabian partridge, the Indian partridge. The name partridge is applied in the United States to several North American species of the genus *Ortyx* or quails.

Passion-flower. A large genus of twining plants belonging to the natural order Passifloraceæ. They are all twining plants, often scrambling over trees to a considerable length, and in many cases are most beautiful objects, on account of their large, rich, or gaily-colored flowers, which are often succeeded by orange-colored edible fruits, for which indeed they are chiefly valued in the countries where they grow wild. *Passiflora laurifolia* produces the water lemon of the West Indies, and *passiflora maliformis* bears the sweet calabash. The name is applied more especially to *passiflora cærulea*, which is commonly cultivated in England out of doors, and is the one to which the genus owes its name.

Peacock. The common name of a genus of beautiful birds, including only the common peacock and the Javanese peacock. The name properly belongs to the male, but it is popularly applied to the species in general; though the female is, for distinction's sake, called a peahen. Like other domesticated birds, the common peacock exhibits several varieties. The ordinary length of this splendid bird, from the tip of the bill to that of the full-grown fan-expanded tail, is about four feet. The female is rather less; and her train is not only very short, but destitute of those brilliant hues and striking beauties which adorn the male; her crest, too, is less developed, and her whole plumage partakes of a cinereous hue. When pleased, the peacock erects his tail, unfolds his feathers, and frequently turns round, as if to catch the sunbeams in every direction, accompanying this movement with a hollow murmuring. At other times his cry is very disagreeable, and often repeated, especially before rain. Every year he sheds his plumes, and courts the most obscure retreats till the returning spring renews his luster. The Javanese peacock resembles the common kind, but has a larger crest.

Peccary. A genus of quadrupeds, nearly allied to swine. These animals are exclusively confined to America, in which continent they represent the true swine of the Old World. In general form the peccaries resemble small pigs. The best-known species are the collared peccary and the white-lipped peccary. The former occurs abundantly in South America, and also extends into North America, living generally in small flocks, which do not hesitate to attack with their tusks any one who meddles with them. Their food consists of maize, potatoes, sugar-canes, and similar materials; and cultivated fields suffer much from their raids. This species of peccary is readily domesticated. The flesh is

savory, and less fat than pigs' flesh. The peccary possesses a glandular sac or pouch, situated in the loins, which secretes a strongly-smelling fluid of fœtid nature. This must be cut away immediately on killing a peccary, to avoid contaminating the flesh.

Pelican. The popular name applied to a species of a genus of birds, characterized by possessing a long, straight, broad, and much-depressed bill, the upper mandible being flat and terminating in a very strong hook, and the lower mandible being formed by two long branches, flexible and united at the tip. From these branches is suspended naked skin, in the form of a pouch, of considerable elasticity, and capable of holding a large number of fish. In this pouch these birds stow away the results of their fishing excursions, after having satisfied the immediate cravings of their stomachs. The pelicans are large, ungainly-looking birds, about six feet long, with an expanse of wing of about thirteen feet, and having webbed feet. In their habits they are gregarious, and frequent the banks of rivers and lakes or the sea-coast. There are nine species distributed over the temperate and tropical zones, and two of these occur in Eastern Europe.

Penguin. The name given to a group of birds which form in themselves the order *Impennes*, so called on account of their wings, which are very small in comparison with the size of their bodies. These wings are hard in texture, are covered with small stiff feathers of a bristly nature, and, being only movable at their base, are absolutely useless for flight; but the birds swim well, using both their webbed feet and their wings. The penguins of which there are about eighteen species, are entirely confined to the Southern Ocean and the Antarctic regions, where they represent the auks and divers of the Northern seas. During the breeding season they resort to rocky islands in immense numbers, and stand erect with their eggs under them. Their food consists chiefly of fish, in diving to obtain which their plumeless wings are used as fins.

Peony. A genus of plants very generally cultivated in gardens for the sake of their large showy flowers. The species are mostly herbaceous, having perennial tuberous roots and large deeply-lobed leaves. The flowers are solitary, and of a variety of colors, crimson, purplish, pink, yellow, and white. The flowers, however, have no smell, or not an agreeable one, except in the case of a shrubby species, a native of China, of which several varieties, with beautiful whitish flowers stained with pink, are cultivated in gardens. The roots and seeds of all the species are emetic and cathartic in moderate doses. The common peony of cottage gardens, was formerly in great repute as a medicine.

Pepper. A name applied to various plants having pungent, acrid, and aromatic properties. The most important is the black pepper, a native of the East Indies, and now extensively cultivated in the tropics for the fruit, which is used for various purposes, but chiefly as a spice and a condiment. It is a climbing shrub, with opposite leathery leaves, and spikes of hermaphrodite flowers. The fruit, which is about

the size of a pea, is gathered in an unripe state and dried, constituting the "black pepper" of commerce. The term "white pepper" is applied to the ripe fruit of the same plant after it is deprived of the outer fleshy portion. The dried fruiting spikes of a species of *Chavica* constitute "long pepper," used for culinary purposes and for pickling. Most of these plants owe their active properties to the presence of an acrid resin, and of a crystalline principle called piperine. Cayenne-pepper is the produce of *Capsicum*. Jamaica pepper is obtained from a species of *eugenia* belonging to the myrtle family.

Petroleum. A combustible fluid which exudes from the earth in various parts of the world, generally in or near the coal-formations, and is formed during the conversion of vegetable remains into coal, or derived from animal remains, as it is now maintained by some scientists. Petroleum varies greatly in color and consistence, being sometimes thin and pale, at others thick and dark-colored. The substances which mineralogists have distinguished by the names asphaltum, maltha, petroleum, and naphtha, are thought by some naturalists to be mere varieties of one species. Abundant supplies of petroleum are obtained from wells and springs in Pennsylvania, New York, Texas, California, and Canada, and the demand for it to serve as an illuminating agent, and for the lubrication of machinery, has created an important branch of commerce, innumerable quantities of rock-oil being sold under the names of petroleum, kerosene, sanoline, leucaline, etc.

Pheasant. A family of birds comprising peafowl, true pheasants, jungle fowl, turkeys, and Guinea fowl. The true pheasants, of which there are about fifteen species, whose home is Western Asia, are among the most gorgeous of the feathered tribe. No pheasant is indigenous to Europe, the British species being an introduction from Asia Minor, and supposed to have been imported into England by the Romans. At the present day, however, very few of this original breed exist in that country, for it has been crossed with the Chinese Ringnecked Pheasant to such a degree that pure-bred birds are rare. The pheasant chiefly frequents woods for the purpose of roosting, being in the daytime found in hedge-bottoms and thickets searching for its food, which consists of grain, seeds, green shoots, and insects. It is polygamous, and very tenacious of its own territory, not permitting intrusion from the males of its race. The female deposits her eggs, from six to ten in number, in a slight hollow, scantily lined with dry leaves; but, being a very timid bird, and easily made to desert her post, the eggs are in most cases removed from the nest, and the young hatched out under domestic fowls; and it is questionable, if this were not done, if the pheasant would not gradually become extinct in that country. Among the most beautiful of the pheasant family are the Golden Pheasant, the Reeves Pheasant, and the Impeyan Pheasant, all inhabitants of Central Asia.

Pigeon. The common name of a group of birds, forming in some systems a section of the order of rasorial or gallinaceous birds, in others a distinct order. The pigeons or doves as a

group have the upper mandible arched towards its apex, and of horny consistence; a second curve exists at its base, where there is a cartilaginous plate or piece through which the nostrils pass. The crop is of large size. The pigeons are generally strong on the wing. They are mostly arboreal in habits, perching upon trees, and building their nests in elevated situations. Both sexes incubate; and these birds generally pair for life; the loss or death of a mate being in many cases apparently mourned and grieved over, and the survivor frequently refusing to be consoled by another mate. The song consists of the well-known plaintive cooing. The pigeons are distributed in every quarter of the globe, but attain the greatest luxuriance of plumage in warm and tropical regions. The pigeon family is divided into various groups. The true pigeons are represented by the stock-dove, the common wild pigeon, from which, it was once supposed, most of the beautiful varieties of the Columbidae, which in a state of domestication are dependent upon man, derived their origin; but it is now believed the rock-dove is the parent stock. The passenger-pigeon is very abundant in North America. The numbers that sometimes move together are enormous. Numerous flocks of these pigeons associate together in a single roost. The house-pigeons, tumblers, fantails, pouters, carriers, and jacobins are the chief varieties of the rock-pigeon, and have been employed by Darwin to illustrate many of the points involved in his theory of "descent by natural selection." Other species of pigeons are the fruit-pigeons of India, the Eastern Archipelago, and Australia; and the ground-pigeons, the largest of the group, including the crowned pigeon of the Eastern Archipelago.

Pine. The popular name of trees of the genus *Pinus*, divided into the fir tribe and the cypress tribe. The pines belong to the former section, and are distinguished from the spruce, larch, fir, cedar, etc., chiefly by having persistent leaves in clusters of two to five in the axils of membranaceous scales. Most of the European species have only two leaves in a sheath; most of the Asiatic, Mexican, and Californian kinds have three, four, or five leaves, and those of the United States and Canada have generally three. The cones also afford an important ready means of distinction and classification. The Scotch pine or fir is a tall, straight, hardy tree, from sixty to 100 feet high; a native of most parts of Europe, flowering in May and June, and having many varieties. The leaves are rigid, in pairs, somewhat waved and twisted; the lower branches are somewhat pendent; the bark is of a reddish tinge, sometimes rough and furrowed. The leaves are distinguishable from those of all other pines in which they occur in pairs by their glaucous hue, especially when young. The Scotch pine almost always occurs in masses; it is considered full grown and fit to be cut down for timber in fifty or sixty years; but in the north of Scotland, where pine forests grew to perfection in former times, the tree continued to increase in bulk for three or four centuries. The tree is most abundant in the north of Europe. There are extensive forests of it in Russia, Poland, Sweden, Norway,

Germany, the Alps, the Pyrenees, and the Vosges. In Scotland it grows at the height of 2,700 feet on the Grampians. The Corsican pine grows to a height of from eighty to 100 feet, and in the island of Corsica it is said to reach an altitude of 140 to 150 feet. The pinaster, or cluster pine is indigenous to the south of Europe, to the west of Asia, the Himalayas, and, it seems, even to China. It is a large, handsome, pyramidal tree varying from forty to sixty feet in height. Its cones point upwards, in star-like clusters, whence the name of pinaster or star pine. In France, especially between Bayonne and Bordeaux, it covers immense tracts of barren sand, in which it has been planted to prevent the sand from drifting. The stone pine is a lofty tree in the south of Europe, where it is a native; its spreading head forms a kind of parasol; the trunk is fifty or sixty feet high, and clear of branches. In Britain the stone pine seldom exceeds the size of a large bush, although specimens have reached a height of thirty and forty feet. Sabine's pine was discovered in California in 1826. The leaves are in threes, rarely in fours, from eleven to fourteen inches long; the trees are of a tapering form, straight, and from forty to 120 feet high, with trunks from three to twelve feet in diameter. The Cembran pine is a native of Switzerland and Siberia. The red Canadian pine or yellow pine, inhabits the whole of Canada from the Atlantic to the Pacific, and is also found in the northern and eastern parts of the United States. The trunk rises to the height of seventy or eighty feet by about two in diameter at the base, and is chiefly remarkable for its uniform size for two-thirds of its length. The wood is yellowish, compact, fine-grained, resinous, and durable. The true yellow pine rises to the height of fifty or sixty feet, by fifteen or eighteen inches in diameter at base. The cones are small, oval, and armed with fine spines. The timber is largely used in shipbuilding and for house timber. The Labrador or Banks's pine is usually a low straggling tree, growing among barren rocks to a height of from five to eight feet, but may attain three times that height. The cones are recurved and twisted; and the leaves are regularly distributed over the branches. In Nova Scotia and the State of Maine it is known as the scrub pine, and in Canada as the gray pine. The other American pines are the Jersey pine, the trunk of which is too small to be of any utility in the arts; the pitch pine, which is most abundant along the Atlantic coast, and the wood of which, when the tree grows in a dry, gravelly soil, is compact, heavy, and contains a large proportion of resin; the loblolly pine, the timber of which decays speedily on being exposed to the air; the long-leaved pine, which abounds in the lower part of the Carolinas, Georgia, and Florida, furnishing resin, tar, pitch, and turpentine, and timber which is hardly inferior to the white oak in naval architecture; the Weymouth pine, the timber of which, though not without essential defects, is consumed in much greater quantities, and for a far greater variety of purposes, than almost any other; and Lambert's pine, which grows between the fortieth and forty-third parallels of latitude, and about 100

miles from the Pacific. It is of gigantic size, the trunk rising from 150 to upwards of 200 feet, and being from seven to nearly twenty feet in diameter.

Pink. A genus of plants of which more than 100 species are known, all, with perhaps one or two exceptions, natives of the northern and temperate parts of the European continent. Their roots are annual or perennial; the stems herbaceous and jointed; the leaves opposite and entire, and the flowers terminal, aggregate, or solitary, and always beautiful. The clove pink or carnation, and the garden pink, of which there are many varieties, are familiar species.

Pistachio (*pis-tā'shi-o*). A tree of several species, of the genus *Pistacia*, growing to the height of fifteen to twenty feet. The true pistachio yields the well-known pistachio-nut, which contains a kernel of a pleasant taste, resembling that of the almond, wholesome and nutritive, yielding a pleasant oil. It is a native of Western Asia, but is much cultivated in the south of Europe. The gum named mastic is obtained from the pistachio tree.

Polecat. A name common to several species of the weasel family. The common polecat is found in most parts of Europe and America. Its body is about seventeen inches long, and the tail six inches. The color is dark brown. It is a nocturnal animal, sleeping during the day and searching for its prey at night. It is especially destructive to poultry, rabbits, and game, as pheasants, so that in Britain it is being rapidly exterminated by gamekeepers, farmers, and others. Frogs, toads, newts, and fish are often stored as food by this voracious animal. It has glands secreting a fetid liquor, somewhat like that of the American skunk, which it ejects when irritated or alarmed. The name of "Foumart" is also applied to the polecat; and its fur, which is imported in large quantities from Northern Europe, is known as that of the "Fitch." Its hairs form a superior kind of artists' brushes.

Pomegranate. A dense spiny shrub, from eight to twenty feet high, supposed to have belonged originally to the north of Africa, and subsequently introduced into Italy. It was called by the Romans *malum punicum*, or Carthaginian apple. The leaves are opposite, lanceolate, entire, and smooth; the flowers are large and of a brilliant red; the fruit is as large as an orange, having a hard rind filled with a soft pulp and numerous red seeds. The pulp is more or less acid and slightly astringent. The pomegranate is extensively cultivated throughout Southern Europe, and sometimes attains a great size. Another species inhabits the West Indies and Guiana.

Poppy. The common name for plants of the genus *Papāver*. The species of poppy are herbaceous plants, all bearing large, brilliant, but fugacious flowers. The white poppy yields the well-known opium of commerce. Most of the species are natives of Europe, and four are truly natives of Britain. They often occur as weeds in fields and waste places, and are frequently also cultivated in gardens for ornament. The seeds of the white poppy yield a fixed harmless oil employed for culinary purposes; and the

oil-cake is used for feeding cattle. The roots of the poppy are annual or perennial; the calyx is composed of two leaves, and the corolla of four petals; the stamens are numerous, and the capsule is one-celled, with several longitudinal partitions, and contains a multitude of seeds.

Porcupine. A name of certain rodent quadrupeds, the best-known species of which belong to the genus *Hystrix*. The body is covered, especially on the back, with the so-called quills, or dense solid spine-like structures, intermixed with bristles and stiff hairs. There are two incisors and eight molar teeth in each jaw, which continue to grow throughout life from permanent pulps. The muzzle is generally short and pointed, the ears short and rounded. The anterior feet possess four, and the hinder feet five toes, all provided with strong thick nails. The common or crested porcupine, *hystrix cristata*, found in Southern Europe and in Northern Africa, is the best-known species. When fully grown it measures nearly two feet in length, and some of its spines exceed one foot. Its general color is a grizzled dusky black. The spines in their usual position lie nearly flat, with their points directed backwards; but when the animal is excited they are capable of being raised. The quills are loosely inserted in the skin, and may, on being violently shaken, become detached.

Porgy. A fish of the family *Sparidae*, with an oblong body, scaly cheeks, and one dorsal fin, found off the coasts of the United States. It is one of the most important food fishes, and attains a length of eighteen inches and a weight of four pounds.

Porpoise. A species of marine fish-like mammals, belonging to the same family as the Dolphin, and to the order *Cetacea*. It is an inhabitant of northern seas, and is familiar on our own shores. It is usually from four to five feet in length, though frequently more. In color it varies, but is mostly of a bluish-black tint on the upper surface, merging into pink, mottled grey, or white beneath. The porpoise is compelled continually to seek the surface of the water for breathing purposes; and it is then observed rolling over, as it were, and is heard discharging air from the crescent-shaped blowhole on the crown of the head, at the same time taking in a fresh supply at the mouth. Porpoises are frequently observed in great numbers in pursuit of shoals of herring, mackerel, and other small fish, among which, being of an exceedingly voracious nature, they commit sad havoc.

Prairie Dog. The name given to two species of small rodent animals of the squirrel family, found in America, on the plains east of the Rocky Mountains from the Upper Missouri to the Red River and Rio Grande. They much resemble their allies, the marmots, in appearance, and have well-developed claws on all the toes of the fore-feet; shallow cheek-pouches; and two rows of grinding teeth converging towards the back of the mouth. The best known species is about one foot in length, and has a tail of about four inches. On the upper surface it is reddish-brown variegated with grey. These animals live together in great so-

cieties on those portions of the prairies where their favorite food, the buffalo grass, grows luxuriantly. Here they excavate burrows in the ground in contiguity to each other, and, when the little creatures are out, quite a busy scene is presented. The name *Prairie Dog* is given to the animal on account of a resemblance which is supposed to exist between its cry and the bark of a small dog.

Precious Stones are those which, because of their beauty, hardness, and rarity, are prized for use in ornamentation, especially in jewelry. The diamond, ruby, sapphire, and emerald are the only stones which are, strictly speaking, entitled to be called "precious" in this sense; but the opal, on account of its beauty, is often classed with the precious stones; as is also the pearl, which is really not a stone, but a secretion of a shell fish.

Agate. A semipellucid, uncrystallized variety of quartz, presenting various tints in the same specimen. Its colors are delicately arranged in stripes or bands, or blended in clouds.

Alexandrite. A variety of chrysoberyl found in the mica slate of the Ural Mountains. It is of a rich garnet color by artificial light; by daylight of a dark moss green. It is the only stone that so changes. The finest specimens of alexandrite are nearly as valuable as diamonds.

Almandine. A common maroon-red variety of garnet.

Amethyst. A variety of crystallized quartz, of a purple or bluish violet color, of different shades. It is much used as a jeweler's stone. The lighter colored ones come from Brazil; the deep purple ones come from Siberia. In value they are about the same as the garnet.

Aquamarine. A transparent, sea-green variety of beryl, used as a gem.

Adventure. A variety of translucent quartz spangled throughout with scales of yellow mica.

Beryl. A very hard mineral of much beauty when transparent. It occurs in hexagonal prisms, commonly of a green or bluish green color, but also yellow, pink, and white. It is a silicate of aluminum and glucinum. Beryls are very rich in colors. Their value is about four dollars per carat.

Cameo. A figure cut in stone or shell that is composed of different colored layers. The value depends on the artistic merit of the engraved figure.

Bloodstone. A green siliceous stone sprinkled with red jasper, whence the name.

Carbuncle. A beautiful gem of a deep red color (with a mixture of scarlet), found in the East Indies. When held up to the sun, it loses its deep tinge, and becomes of the color of a burning coal. The carbuncle of the ancients is believed to have been a garnet. The name is now given also to the ruby sapphire and the red spinel. The ordinary carbuncle is a garnet cut *en cabochon*, and is worth about one dollar a carat.

Carnelian. A variety of chalcedony, of a clear, deep red, flesh-red, or reddish white color. It is moderately hard, capable of a good polish, and often used for seals. It is now used but little.

Cat's-eye. A variety of quartz or chalcedony exhibiting opalescent reflections from within, like the eye of a cat. The name is given to other gems affording like effects, especially the chrysoberyl. A fine specimen about three-eighths of an inch across would be worth from two to three hundred dollars.

Chalcedony. A crytocrystalline, translucent variety of quartz, having usually a whitish color, and a luster nearly like wax.

Chrysolite. A mineral, composed of silica, magnesia, and iron, of a yellow to green color. It is little used.

Chrysoprase. An apple-green variety of chalcedony. Its color is due to nickel contained in its composition.

Dendrite. A stone or mineral in which are branching figures, resembling shrubs or trees, produced by a foreign mineral, usually by an oxide of manganese; as in the moss agate.

Diamond. A precious stone or gem excelling in brilliancy and beautiful play of prismatic colors, and remarkable for extreme hardness. It is found in many hues—green, rose, straw, yellow, etc.; but the straw-colored ones are the most common. The diamond is a native carbon occurring in isometric crystals, often octahedrons, with rounded edges. It is the hardest substance

known. Diamonds are said to be of the first water when very transparent, and of the second and third water as the transparency decreases.

Diopside. A crystallized variety of pyroxene (a silicate of lime and magnesia), of a clear, grayish green color; also called *musivite*.

Emerald. A precious stone of a rich green color; it is the most valuable variety of beryl. See **BERYL**.

Epidote. A mineral, commonly of a yellowish green color, occurring granular, massive, columnar, and in crystals. It is a silicate of alumina, lime, and oxide of iron, or manganese.

Essonite. Cinnamon stone. A variety of garnet. It is not much used.

Fire Opal. See **OPAL**.

Fluorite. Calcium fluoride, a mineral of many different colors, white, yellow, purple, red, etc., often very beautiful. When crystallized it is commonly in cubes with perfect octahedral cleavage. Some varieties are used for ornamental vessels. Also called *fluorspar*, or simply *fluor*. The colored varieties are often called *false ruby*, *false emerald*, *false topaz*, *false sapphire*, and *false amethyst*. For jewelry purposes the chief value of the stone is the expense of cutting and mounting.

Flint. A massive, somewhat impure variety of quartz, in color usually of a gray to brown or nearly black, breaking with a conchoidal fracture and a sharp edge. See **QUARTZ**.

Fluor spar. Same as **FLUORITE**.

Garnet. A mineral having many varieties differing in color and in their constituents, but with the same general chemical formula. The commonest color is red; the luster is vitreous, or glassy; and the hardness is greater than that of quartz, about half as hard as the diamond.

The common crystal forms are the dodecahedron and trapezohedron. Besides the red varieties there are also white, green, yellow, brown, and black ones.

The garnet is a silicate with various bases such as alumina-lime (grossularite essonite or cinnamonstone), alumina-magnesia (pyrope), alumina-manganese (spessartite), and chromium-lime (ouvarovite, color emerald green). The transparent red varieties are used as gems. The garnet was the carbuncle of the ancients. Garnet is a very common mineral in gneiss and mica slate.

The finest specimens of red garnets come from Arizona and a single carat stone is worth about two dollars. A green variety that comes from Russia is worth about half as much as the diamond.

Golden Beryl. See **BERYL**.

Heliotrope or Bloodstone. A green siliceous stone sprinkled with jasper, as if with blood, whence the name.

Hematite. An important ore of iron, the sesquioxide, so called because of its red color when in the form of powder. It occurs in splendid rhombohedral crystals, and in massive and earthy forms, the last being called red ochre. It is now seldom used in jewelry.

Hyacinth. A red variety of zircon, sometimes used as a gem. It resembles closely a dark Spanish topaz, and is worth a little more than the garnet.

Idiocrase. A mineral occurring in tetragonal crystals and also massive, of a brown to green color, rarely sulphur yellow or blue. It is a silicate of alumina and lime, with some iron and magnesia. It is common at Mt. Vesuvius. It is little used.

Indicolite. A variety of tourmaline of an indigo-blue color.

Iolite. A silicate of alumina, iron, and magnesia, having a bright blue color and a vitreous or glassy luster. It is remarkable for its dichroism, and is also called *dichroite*.

Jacinth. Same as **HYACINTH**.

Jade. A stone commonly of a pale to dark green color, but sometimes whitish. It is hard and very tough, capable of a fine polish, and is used for ornamental purposes and for implements, especially in Eastern countries and among many primitive peoples.

Jasper. An opaque, impure variety of quartz, of red, yellow, and other dull colors, breaking with a smooth surface. See **QUARTZ**.

Kyanite. A mineral occurring in thin-bladed crystals and crystalline aggregates, of a sky-blue color. It is a silicate of aluminum. It is little used for jewelry.

Labradorite. A kind of felspar, commonly showing a beautiful play of bluish-gray colors, and hence, much used for ornamental purposes. The finest specimens come from Labrador.

Lapis-lazuli or Lazuli. A mineral of a fine azure-blue color, usually occurring in small rounded masses. It is essentially a silicate of alumina, lime, and soda, with some sodium sulphide. It is often marked by yellow spots or veins of sulphide of iron, and is much valued for ornamental work.

Moonstone. A nearly pellucid variety of felspar, showing pearly or opaline reflections from within. The best specimens come from Ceylon. Their value is not much more than the expense of cutting.

Nephrite. A hard, compact mineral, of a dark green color, formerly worn as remedy for diseases of the kidneys, whence its name *kidneystone*.

Obsidian. A kind of glass produced by volcanoes. It is usually of a black color and opaque, except in thin splinters.

Olivine. A common name of the yellowish green mineral chrysolite, especially of the variety occurring in eruptive rocks. See **CHRYSLITE**.

Onyx. Chalcedony in parallel layers of different shades of color. It is used for making cameos, the figure being cut in one layer with the next layer as a background (see **CAMEO**). It is stained black and used to make mourning jewelry.

Opal. A mineral consisting, like quartz, of silica, but inferior to quartz in hardness and specific gravity. The precious opal shows a peculiar play of colors of delicate tints and it is highly esteemed as a gem. One kind, with a varied play of color in a reddish ground, is called *harlequin opal*. The *fire opal* (which comes from Mexico) has colors like the red and yellow of flame. This is not the cheap variety commonly called "Mexican opal." A spherical opal about three-eighths of an inch in diameter, or an oval flat opal about half an inch long, would be worth about sixty dollars. A "Mexican opal" of the same size would be worth about fifteen dollars.

Pearl. A shelly concretion, usually rounded, having a brilliant luster, with varying tints, formed in the mantle, or between the mantle and shell, of certain bivalve mollusks (especially in the pearl oysters and river mussels) and sometimes in certain univalves. Its substance is the same as nacre, or mother-of-pearl. Pearls which are round, or nearly round, and of a fine luster, are highly prized as jewels. They are sold by carat grains, instead of carats.

Pyrope. A variety of garnet of a poppy-red or blood-red color, frequently with a tint of orange. It is used as a gem.

Rhodonite. Manganese spar, or silicate of manganese, a mineral occurring crystallized and in rose-red masses. It is almost entirely used for ornamental purposes, in slabs, blocks, etc.

Rock Crystal or Mountain Crystal. Any transparent crystal of quartz, particularly of limpid or colorless quartz. A sphere of rock crystal of absolutely perfect clearness, about five inches in diameter, is worth at least twenty thousand dollars.

Rose Quartz. A variety of quartz which is pinkish red.

Rubellite. A variety of tourmaline varying in color from a pale rose red, to a deep ruby, and containing lithium. It is a little more valuable than the garnet.

Ruby. A precious stone of a carmine-red color, sometimes verging to violet, or intermediate between carmine and hyacinth red. It is a crystallized variety of corundum. The ruby from Siam is of a dark color and is called ox-blood ruby. It has about the same value as the diamond. The ruby from Burmah, called the pigeon-blood ruby, is of a lighter color and several times more valuable than the ox-blood ruby. A fine pigeon-blood ruby of two carats would be worth upwards of six thousand dollars.

Rutile. A mineral, usually of a reddish-brown color and brilliant, metallic, adamantine luster, occurring in tetragonal crystals.

Sapphire. A variety of native corundum or aluminum sesquioxide. As the name of a gem the term is restricted to the transparent varieties of blue, pink, yellow, and other colors. The best specimens of the blue variety are nearly as valuable as the diamond. The sapphire is next to the diamond in hardness.

Sard. A variety of carnelian, of a reddish-yellow or brownish color.

Sardonyx. A variety of onyx consisting of sard and white chalcedony in alternate layers. See **ONYX**.

Spinel. A mineral occurring in octahedrons of great hardness and various colors, as red, green, blue, brown, and black, the red variety being the gem *spinel ruby*. It consists essentially of aluminum magnesium, but commonly contains iron and sometimes also chromium. The fine specimens of spinel ruby are worth rather more than half as much as the diamond.

Sundone. Aventurine felspar; aventurine.

Topaz. A mineral occurring in rhombic prisms, generally yellowish and pellucid, also colorless, and of greenish, bluish, or brownish shades. It sometimes occurs massive and opaque. It is fluosilicate of aluminum, and is used as a gem. It is but little more valuable than the garnet, except occasionally unusual fine specimens.

Tourmaline. A mineral occurring in three-sided prisms. Black tourmaline is the most common variety, but there are also other varieties, as the blue (*indicolite*), red (*rubellite*); also green, brown, and white. The red and green varieties, when transparent, are valued as jewels. The finest ones come from Maine, and are worth four or five times as much as garnets.

Turquoise. A hydrous phosphate of alumina containing a little copper. It has a blue, or bluish-green color, and usually occurs in kidney-shaped masses with a nodular surface, like that of a bunch of grapes. The fine specimens are worth nearly half as much as diamonds.

Urio-pearl. A single large pearl.

Uralian Emerald. A precious stone of a rich green color, a variety of beryl.

Verd antique (*ân-ték'*). A mottled-green, serpentine marble. Also a green porphyry, which is called *Oriental verd antique*.

Zircon. A mineral occurring in tetragonal crystals, usually of a brown or gray color. It consists of silicon and zirconium, and is harder than the garnet. The transparent varieties are used as gems. The red variety is called *Hyacinth*; a colorless, pale yellow, or smoky-brown variety from Ceylon is called *jargon*.

Prickly Pear, otherwise called Indian fig, is a fleshy and succulent plant, destitute of leaves, covered with clusters of spines, and consisting of flattened joints inserted upon each other. The fruit is purplish in color, covered with fine prickles, and edible. The flower is large and yellow. It is a native of the tropical parts of America, whence it has been introduced into Europe, Mauritius, Arabia, Syria, and China. It is easily propagated, and in some countries is used as a hedge-plant. It attains a height of seven or eight feet.

Primrose. A genus of beautiful low Alpine plants. Some are among the earliest flowers in spring, as the common primrose, the oxlip, and cowslip; and several Japanese and other varieties are cultivated in gardens as ornamental plants. Their roots are perennial; the leaves almost always radical; and the flowers supported on a naked stem, and usually disposed in a sort of umbel. The varieties of the common primrose which have arisen from cultivation are very numerous.

Puma or Cougar. A carnivorous animal peculiar to America, where it ranks next to the jaguar in importance as a destructive or dangerous creature. It is known as the American lion, probably from its resemblance in build and color to the lioness; but it is considerably less in size, and lacks a mane. Its length is about forty inches, exclusive of a tail of twenty-six inches; its height is about two feet. The geographical range of the puma is very extensive, though it is less abundant in North than in South America, where it haunts a variety of situations, seeming to be equally at home in the dense forests, the open plains, and the elevations of the Andes to at least 10,000 feet. It is of a cowardly nature, and is not regarded with fear by man. Unlike most of the larger members of the cat family, it is remarkably silent.

Python. A genus and family of serpents allied to the family of boas. They are not venomous, but kill their prey by compression. The pythons belong exclusively to the Old World, and are of enormous size, sometimes attaining a length of thirty feet. They are found in India and in the islands of the Eastern Archipelago, in Africa and in Australia. A rudimentary pelvis and traces of hinder limbs exist in the pythons, these structures terminating externally

in a kind of hooked claw. The head exceeds the neck in thickness, and the mouth is extremely large. Aided by their prehensile tails and rudimentary hinder limbs, the pythons suspend themselves from the branches of trees and lie in wait near water for animals which come to drink. The genus python contains various species, the best known of which is the West African python, common in menageries.

Quail. The Virginia quail is common throughout North America, and extends as far south as Honduras. It is larger than the European quail, and is better eating. The California crested quail is another American species. The quail, genus *Coturnix*, is widely distributed over the Eastern Hemisphere, visiting Europe in early summer and returning south in the autumn, when immense numbers are caught and fattened for the market. Length about seven inches, general color reddish-brown, with buff streaks on the upper surface; throat rufous; head, dark brown above, striped with ochraceous white; sides, reddish-brown, lower parts pale buff, fading into white on belly. Color less bright in the hen bird, and the rufous tinge absent from the throat. They nest on the ground, laying from nine to fifteen pyriform, yellowish-white eggs, blotched with dark-brown. The males are polygamous and extremely pugnacious.

Raccoon. A small family of plantigrade carnivorous mammals, bear-like in appearance and of small size. The raccoons are peculiar to America, where they range from British Columbia and Canada to Paraguay. The common raccoon is a pretty animal, about the size of a cat, but much stouter; it has a long brown or grizzled coat, a ringed and bushy tail, and a turned-up nose. Its legs are short, and are armed with strong claws, useful for digging or climbing. In its attitudes it is somewhat monkey-like, and usually sits upon its haunches when feeding, holding its food in its fore-paws. It has a curious habit, too, of washing articles given to it, and of soaking any food of a dry nature in water before eating it. Its skin is highly valued as a fur, and is consequently much sought after in North America, where the animal is widely distributed.

Redbreast. A bird of the family *Sylviadae*, familiarly known in the United States and the British Islands and throughout most parts of Europe. It is generally designated as the "robin redbreast," or more briefly "a robin," and has similar appellations in continental Europe significant of the kindly regard entertained for it. Its utmost length is about five and three-fourths inches, but it is of a rounder and fuller form than many of the *Sylviadae*, the slenderness of its legs rather strikingly contrasting with the form of the body. The wings are rather short, the fifth quill the longest. The tail is scarcely forked. The bill is rather broad and depressed at the base, narrower and slightly compressed at the point, the upper mandible bent down and notched. The general color is olive-brown, and the reddish orange-breast is a conspicuous characteristic, particularly of the male. The name robin is improperly given in the United States to a species of thrush.

Redwood. The name of various sorts of wood of a red color, as the wood of the redwood of Jamaica; of Andaman wood; of the redwood of the Bahamas; and of a coniferous tree of California, the redwood of the timber trade. Redwood of California is found only in that State, and in but a comparatively contracted area even there. The available redwood is now confined to about 318 miles of coast. The annual product in this region is about 320,000,000 feet, and it is estimated, at the present rate of consumption, that enough standing timber exists to last for 150 years. The lumber is becoming more in demand for decorative purposes. Its color, a light salmon when first cut, afterwards turns to a deep red. When thoroughly dried there is no shrinkage and it readily yields to the chisel of the carver. Piano cases made from the wood are said to give increased resonance to the instrument. Large quantities are consumed for interior finishing with gratifying effects. In addition to other fine qualities the wood takes on a beautiful polish and even the stumpage, till recently considered worthless, is found to possess valuable qualities. The roots and woody excrescences at the base of the tree give fine effects in wavy outlines, and when polished the material is much valued for decorative purposes.

Reptiles. A class of vertebrate animals, which comprises the tortoises, crocodiles, snakes, lizards, etc. Reptiles are more closely related to birds than any other group of animals; and in some recent classifications birds and reptiles together are made to constitute the great division *Sauropsida* of the sub-kingdom *vertebrata*. Reptiles agree with birds and differ from all other vertebrates in the following characters: The skull articulates with the spinal column by a single condyle; the lower jaw articulates with the skull by the intervention of a peculiar bone, termed the *os quadratum*, or quadrate bone, and each half of the lower jaw consists of several pieces; at no period of their existence are branchial or water-breathing respiratory organs developed. The heart in reptiles consists of three chambers — two auricles and a ventricle, the latter being divided into two portions only by a partition which is generally incomplete, and allows the arterial and venous blood to mix, so that the blood is never so perfectly aerated as in the higher animals. The blood is consequently much colder than that of birds and all the more highly organized animals, where the oxygen obtains a freer access to its particles. In the crocodiles the heart has a complete septum, but there is an intermixture of the venous and arterial blood outside the heart. In consequence of this organization of the circulatory system, the whole character of reptiles differs from that of the higher animals. The cavity of the thorax, or chest, in reptiles is not shut off from the abdomen by a complete muscular partition or diaphragm, though traces of it are found in crocodiles. The lungs are usually less cellular than in birds and mammals; but are often of large size, extending into the abdominal cavity. In snakes there is usually only one active lung, the other being rudimentary or completely atrophied. The rectum opens in a

common cavity, or *cloaca*, which receives both excrementitious matters and the products of the generative organs. Reptiles are often provided with an exo-skeleton, or hardened skin, consisting of horny plates or scales. The strong and conspicuous outer shell of the body of tortoises and turtles is formed by this exo-skeleton uniting with the true endo-skeleton. Ribs are always present, but differ much in form. Teeth are generally present, but are not sunk in distinct sockets, except in crocodiles. In tortoises and turtles the jaws are sheathed in horn like the beak of a bird. The young of reptiles are produced from eggs, mostly hatched after being laid, but in some cases the eggs are hatched within the body.

Rhinoceros. The name of a family of mammals, represented by nine living species, characteristic of Africa to the south of the Sahara, India, Borneo, and Java. They have large unwieldy bodies; short thick legs, terminating in large pads, with hoof-bearing toes; large elongated heads, with a long horn or horns springing from the snout in existing forms; small eyes and ears; and short tails. Their hide is extremely thick, but is not bullet-proof, as is popularly supposed. The Asiatic species differ from the African in some dental characters, but resemble the latter in other respects. Five species belong to Africa, all possessing two horns. Of these, the white rhinoceros is the largest, attaining to a length of over twelve feet and a height of nearly six feet; but the black or common rhinoceros is the best known species. The Asiatic species are four in number, distinguished by the possession of incisors, or front teeth, which are entirely absent in the African ones, and the hide has much the appearance of armor-plates. They are also smaller in size, and two of the species possess double horns, and two a single one. The Indian rhinoceros, a one-horned species, is the one usually seen in menageries in this country. It leads a tranquil, indolent life, wallowing on the marshy borders of lakes and rivers. Owing to the keenness of its smell and hearing, the rhinoceros cannot be easily attacked; but, when brought to bay, it charges with great fury and impetuosity.

Rose. A large genus of plants found chiefly in north temperate regions. They are usually erect thorny shrubs, with compound leaves, and flowers of all shades of white, pink, or yellow. The calyx consists of five sepals, united in the lower part to form a fleshy tube, which encloses the fruits. There are normally five petals, but under cultivation the number is often much increased at the expense of the stamens, which are indefinite in number. Numerous species of rose are indigenous to Great Britain, the most familiar one being the Dog Rose, which is common almost everywhere. The fruit is pulpy, astringent, and antiseptic; the young leaves are infused as tea; and the root was formerly in repute as a specific against hydrophobia, whence the name "Dog Rose." The stems frequently present mossy galls termed *Robin Pincushion*, caused by the punctures of an insect. Innumerable varieties of the different species of rose are produced under cultivation — the tea rose, musk rose, moss rose, and cabbage rose,

being well-known examples. The rose of Provence yields honey of roses and conserve of roses. Rose water is obtained by distilling the petals of a number of species with water.

Sable. A carnivorous mammal, nearly allied to the common marten and pine marten, found chiefly in Siberia and Kamtchatka, and hunted for its fur. Its length, exclusive of the tail, is about eighteen inches. Its fur, which is extremely lustrous, and hence of the very highest value, is generally brown, grayish-yellow on the throat, and with small grayish-yellow spots scattered on the sides of the neck. It is densest during winter, and owing to the mode of attachment of the hairs to the skin it may be pressed or smoothed in any direction. Two other species of sable are enumerated, the Japanese sable and a North American species. The Tartar sable is the name given to a species of the weasel genus found in Northern Russia and Siberia, and the pekan of North America is sometimes known as the Hudson's Bay sable. The skins of all these varieties are frequently dyed and otherwise manipulated to imitate the true Russian sable. Sable hair is also used in the manufacture of artist's pencils. Sable fur has been of great value from very early times.

Sago. A starchy product obtained from the trunk of several species of a genus of palms. The one from which the finest sago is prepared, forms immense forests on nearly all the Moluccas, each stem yielding from 100 to 800 pounds of sago. The tree is about thirty feet high, and from eighteen to twenty-two inches in diameter. It is cut down at maturity, the medullary part extracted and reduced to powder like sawdust. The filaments are next separated by washing, and the meal laid to dry. For exportation the finest sago meal is mixed with water, and then rubbed into small grains of the size and form of coriander seeds. The Malays have a process for refining sago, and giving it a fine pearly luster, the method of which is not known to Europeans; but there are strong reasons to believe that heat is employed, because the starch is partially transformed into gum. The sago so cured is in the highest estimation in all the European markets. Sago forms a light, wholesome, nutritious food, and may be used to advantage in all cases where a farinaceous diet is required. It is also largely used in the manufacture of soluble cocoas, and for adulterating the common sorts of arrowroot.

Salmon. A well-known fish, forming the type of the family Salmonidæ. The salmon inhabits both salt and fresh waters, and ranks prominent among the food-fishes of the United States and other countries. It generally attains a length of from three to four feet, and an average weight of from twelve to thirty pounds, but these limits of size and weight are frequently exceeded. The typical color of the adult fish is a steel-blue on the back and head, becoming lighter on the sides and belly. It usually continues in the shallows of its native stream for two years after hatching, and during this period it attains a length of eight inches. When the season of its migration arrives, generally between March and June, the fins have become darker and the fish has assumed a silvery hue. It is now known as a *smolt* or *salmon fry*. The

smolts now congregate into shoals and proceed leisurely seaward. On reaching the estuary they remain in its brackish water for a short time and then make for the open sea. Leaving its native river as a fish, weighing it may be not more than two ounces, the smolt, after three months' absence, may return to fresh water as a *grilse*, weighing four or five pounds. In the grilse stage or *salmon peel*, as it is sometimes called, the fish is capable of depositing eggs. After spawning in the fresh water the grilse again seeks the sea in the autumn, and when its second stay in the ocean is over it returns after a few months' absence as the adult salmon, weighing from eight to ten pounds. The salmon returns as a rule to the river in which it passed its earlier existence. The fertility of the fish is enormous. Salmon are caught by the rod, and by means of nets. For purposes of commercial supply they are taken in nets of special construction and of various forms, the fishings being regulated by law not only as to their seasons and times, but also as to the forms and dispositions of the machines for the capture of the fishes. There are important fisheries in some European and North American rivers. In Europe the fish is found between the latitudes of 45° and 75°, in North America in corresponding latitudes. The flesh of the salmon when fresh is of a bright orange color, and is of highest flavor when taken from the sea-feeding fish. In the waters of Northwestern America are several salmon belonging to a distinct genus, including the quinnat or king-salmon, blue-back salmon or red-fish, silver salmon, dog salmon, and humpback salmon. The quinnat has an average weight of twenty-two pounds, but sometimes reaches 100 pounds. Both it and the blue-back salmon are caught in immense numbers in the Columbia, Sacramento, and Frazer (especially in spring), and are preserved by canning.

Salt, Common. A substance in common use as a seasoner and preserver of food from the earliest ages. It exists in immense quantities dissolved in sea-water, and also in the waters of salt springs, and in solid deposits, sometimes on the surface, sometimes at greater or less depths, in almost every geological series. Rock-salt, that is salt in the crystalline or solid form, is found in great abundance in England. It is also found in abundance in nearly every country of Europe. The supply in other continents is equally great. The basin of the Indus and other parts of India possess extensive salt plains. In China deep salt wells abound. The Sahara and Central and Southern Africa afford inexhaustible supplies. Most of the South American Republics, the West Indies, and the United States also have large natural supplies. Salt manufactured from sea-water is produced extensively along the Mediterranean and Atlantic sea-boards of Europe as well as in America. It is chiefly made by natural drying in shallow reservoirs, but also by boiling. Sun-dried salt is the purest. Salt from sea-water is usually known as *bay-salt*. Most salt, however, is produced from rock-salt or from brine springs, the latter being due to the melting of rock-salt by water. The salt-mines of Wieliczka in Galicia were worked in the Twelfth Century, and are the

most celebrated in the world. The chief manufacturing centers in England are in Cheshire and Worcestershire; Yorkshire has recently begun the manufacture. Cheshire yields the greater bulk, the chief supply being found in the basin of the Weaver; Norwich is the central point. The salt deposits of the United States extend widely through the geological strata. The most important salt yielding States are Michigan and New York, whose deposits are of remarkable richness. The wells, which are in the vicinity of Saginaw Bay, seem inexhaustible in supply. Some are over 1,900 feet in depth. In the valley of the Mississippi salt springs and wells are numerous. In Louisiana, on an island near New Iberia, is an immense deposit of rock salt of unusual purity. On Virgin River, Nevada, there is a bed of rock salt, extending as a bluff along the river, for over twenty-five miles; more than sixty per cent. of the eliff is salt of great purity. California has abundant salt springs and saline marshes.

Scorpion. Scorpions have an elongated body, suddenly terminated by a long slender tail formed of six joints, the last of which terminates in an arcuated and very acute sting, which effuses a venomous liquid. This sting gives rise to excruciating pain, but is usually unattended either with redness or swelling, except in the glands of the arm-pit or groin. It is very seldom, if ever, fatal to man. The animal has four pairs of limbs borne by the thorax or chest-segments, and the maxillary palpi (organs of touch belonging to the maxillæ or lesser jaws) are largely developed, and constitute a formidable pair of nipping claws. With these claws they seize their insect prey, which is afterwards killed by the sting. The eyes, which are of the simple kind, number six, eight, or twelve. The female scorpions are said to exhibit great care for their young, and carry them on their backs for several days after being hatched, whilst they tend them carefully for about a month, when they are able to shift for themselves. Scorpions generally live in dark places, and under stones. They are found in the South of Europe, in Africa, in the East Indies, and in South America. The rock scorpion of Africa, is one of the most familiar species.

Seal. The name given to the species of the family *Phocidæ*. The true seals are earless; and this, in addition to the fact that the construction of their limbs does not permit of their using those organs on land, at once distinguishes them from the allied family of Eared Seals, or Sea Lions. The fore limbs are short, and are so attached as to leave little free but the hand; in the hind limbs the thigh bones are very short, the leg bones relatively long and directed backwards in a line with the spine, and closely attached by membrane to the inconspicuous tail as far as the heel, a construction which prevents the leg being thrown forwards. The head is very round, and the eyes are large and expressive. In swimming they seldom use their fore feet, while the Eared Seals use them as powerful sweeps. In their distribution the twenty-one species are pretty equally divided between the Northern and the Southern Hemispheres, inhabiting temperate and cold regions. The

Alaskan seal fisheries are among the most prominent in the world. The members of this family are of considerable commercial importance on account of the oil they yield, for the sake of which great numbers are slaughtered. To the inhabitants of the polar regions they afford food, clothing, and fire.

Sea-wolf. A genus of fishes known as blennies and also by the names "sea-cat" and "swine-fish." The mouth is armed with sharp strong teeth of large size, and when captured it is said to bite the nets and even attack the fishermen. It is the largest of the blennies. Around the coast of Britain it attains a length of six or seven feet, but in more southern seas it is said to grow to a still larger size. The flesh is palatable, and is largely eaten in Iceland, whilst the skin is durable, and is manufactured into a kind of *shagreen*, used for making pouches and like articles.

Sequoia. A genus of conifers, otherwise called *Wellingtonia* or *Washingtonia*, consisting of two species only — the redwood of the timber trade, and the *Wellingtonia* of British gardens and shrubberies, the big or mammoth tree of the Americans. They are both natives of Western America, the latter having been discovered in the Sierra Nevada, in 1852. One specimen in Calaveras County, Cal., has a height of 325 feet, and a girth six feet from the ground or forty-five feet. The Mariposa Grove, sixteen miles south of the Yosemite Valley, contains upwards of 100 trees over forty feet in circumference, and one over ninety-three feet at the ground, and sixty-four feet at eleven feet higher. This grove is government property. This tree has been successfully introduced into England, where some of them have already attained a good height. Some of these trees indicate an age of over 2,000 years.

Shad, a name of several fishes, of the family *Clupeidæ* or herrings, and including two species, the common or allee shad, and the twaite shad. The common shad inhabits the sea near the mouths of large rivers, and in the spring ascends them for the purpose of depositing its spawn. The form of the shad is the same as that of the other herrings, but it is of larger size, and in some places receives the name of "herring king." Its color is a dark blue above, with brown and greenish lusters, the under parts being white. The twaite shad is about a half less than the common species, and weighs on an average about two pounds. An American species of shad varying in weight from four to twelve pounds, is highly esteemed for food, and is consumed in great quantities in the fresh state. They are found all along the coast from New England to the Gulf of Mexico, and have been successfully introduced on the Pacific coast.

Shark, the general name for a group of fishes, celebrated for the size and voracity of many of the species. The form of the body is elongated, and the tail thick and fleshy. The mouth is large, and armed with several rows of compressed, sharp-edged, and sometimes serrated teeth. The skin is usually very rough, covered with a multitude of little osseous tubercles or placoid scales. They are the most formidable and voracious of all fishes, pursue

other marine animals, and seem to care little whether their prey be living or dead. They often follow vessels for the sake of picking up any offal which may be thrown overboard, and man himself often becomes a victim to their rapacity. The sharks are now divided into several families, as the *Carcharidæ*, or white sharks; *Lamindæ*, or basking sharks; *Scymnidæ*, including the Greenland shark; *Seyllidæ*, or dog-fishes; etc. The basking shark is by far the largest species, sometimes attaining the length of forty feet, but it has none of the ferocity of the others. The white shark is one of the most formidable and voracious of the species. It is rare on the British coasts, but common in many of the warmer seas, reaching a length of over thirty feet. The hammer-headed sharks which are chiefly found in tropical seas, are very voracious, and often attack man. They are noteworthy for the remarkable shape of their head, which resembles somewhat a double-headed hammer, the eyes being at the extremities. Other forms are the porbeagle, blue shark, fox shark, sea-fox, sea-ape, or thresher, and Greenland or northern shark.

Sheep, the common name of the genus *Ovis*, belonging to the hollow-horned ruminant family. Naturalists are by no means agreed as to what was the original breed of this invaluable animal, which is in modern farming almost equally important for furnishing the farm with a dressing of manure, and the community at large with mutton, clothing and other necessities of life. The leading fact in the geographical history of this genus is that it occurs both in the New and the Old World, whereas the goat tribe are naturally unknown in America. It is usually regarded by naturalists as being not only specifically, but generically, distinguished from the goat tribe; but some authorities, on the other hand, are inclined to believe that the generic separation is founded chiefly on characters which have arisen from the influential power of man. In a state of nature, the sheep is scarcely less active or energetic than the goat; its dimensions are greater, its muscular strength at least equal both in force and duration. It is also an Alpine animal, and among its native fastnesses bounds from rock to rock with almost inconceivable swiftness and agility. The four unsubdued races of sheep are as follows: The Musmon, the bearded sheep of Africa; the Argali, or wild sheep of Asia; and the Rocky Mountain sheep of the United States. The latter is larger than the largest varieties of domestic breeds. The horns of the male are of great dimensions, arising a short way above the eyes, and occupying almost the entire space between the ears, but without touching each other at their bases. The hair in this species resembles that of a deer, and is short, dry, and flexible in its autumn growth; but becomes coarse, dry, and brittle as the winter advances. The most important breed of sheep as regards the texture of the wool is the Merino, in modern times brought to the greatest perfection in Spain, through their originals probably formed the flocks of the patriarchs thousands of years ago, and have been the stock of all the fine-wooled sheep. They readily form cross breeds, called demi-merinos, which

have been brought to great perfection in France, whence, as well as from Spain, they have been imported into the United States.

Silkworm, a term applied to the larvæ, or caterpillars, of numerous species of moths. The common silkworm moth is the most important of the silk-producing moths, and is a native of China, where it has been cultivated from a remote period. The caterpillar (*silkworm*) is of yellowish-grey color, and when full-grown is about three inches in length, with a horn-like projection on the last joint of the body. It feeds upon the white mulberry, and will also eat the black mulberry and lettuce, but the silk produced by larvæ fed on the latter is of an inferior quality. The silk is produced in a pair of specially-constructed vessels which contain a gelatinous substance, and become much enlarged at the time when the animal is about to spin. These silk-organs unite at the mouth to form a common duct termed the *spinneret*; and through this tube the semi-fluid substance is ejected, and on coming in contact with the air hardens into the soft fiber which is so largely used in commerce. The caterpillar employs the silk in constructing a cocoon in which it assumes the pupa state. The pupa is usually killed by plunging the cocoon into hot water, because the natural exit of the moth is injurious to the silk. The color of the silk varies from a bright orange to almost white. In Europe some moths produce one generation, others two generations annually; but the caterpillars from the former class produce the best silk. In India some forms produce eggs monthly while three or four generations annually are not uncommon in that country. A valued variety is the *Novi* race of Italy, which spins a large white oval cocoon. The Japanese race produces a cocoon having a divided appearance in the center. The Japanese oak-feeding silk-moth, produces a green cocoon, the silk of which is much used for embroidery. Another species inhabits Northern China and is also an oak-feeder. Its cocoon is large and grayish-brown in color. The *B. Cynthia* of China and North Asia manufactures a gray cocoon, from which the Chinese manufacture a silk recognized by its soft texture. From the cocoon of the Indian or "*tussur* moth," the natives manufacture the Tussur silk fabric. *Bombyx textor* of Bengal makes a pure white silk used by the natives. There are several other varieties of silk-producing moths, but they are less notable and commercially unimportant.

Silver, a brilliant white metal which was known to the ancients. It crystallizes in cubes. It melts at a heat estimated at about 1,000°. When melted, it absorbs oxygen, and just before solidifying it evolves it with effervescence, causing spiriting and projection of the metal. It is the best known conductor of electricity and heat; is extremely malleable and ductile, and has great tenacity; it is not oxidized at the ordinary temperature, and is unaffected by any atmospheric agent, except sulphur compounds which are sometimes present. It is found either in the native state or as sulphide or chloride. It also occurs in small quantities in galena, gray copper ore, pyrites, and other minerals, and frequently in sufficient quantity to pay for

extraction. It is usually produced on the large scale by fusing its ore with a lead compound, and then cupelling, or by amalgamation with mercury. Silver is found in different parts of the earth; but it is in the center of the Andes, in situations which, though exposed to the perpendicular rays of the sun, are constantly covered with snow, that nature has most abundantly distributed this metal. The silver-mines of Mexico, Peru, and the United States, far exceed in value the whole of the European and Asiatic mines.

Snail, a term popularly applied to the molluscous animals of the family *Helicidæ*, belonging to the class *Gasteropoda*. The snails have a well-developed, spirally-conical shell, into which the animal retires at the approach of winter, closing the aperture by an *epiphragm* (which is a hardened layer of mucus). The body is spiral, and distinct from the *foot*, with a short retractile head bearing four retractile tentacles, on the upper pair of which the eyes are carried. The mouth is armed with strong horny crescent-shaped lips, and is occupied by a well-developed *odontophore*—that is, a tongue-like organ, covered with an immense number of minute teeth, forming a sort of rasp. Snails lay round semi-transparent eggs, which are either deposited on the surface of the ground or buried beneath it. The large Garden Snail is abundant in England. This species, together with some of the smaller species, has been naturalized in the most remote colonies. *Helix pomatia* is the well-known Edible Snail, or Roman Snail. It was considered a great luxury by the ancient Romans, and in the Mediterranean region is still valued as an article of food, being fed in some parts in large numbers in places specially constructed for the purpose.

Sparrow, a well-known bird of the finch family which inhabits the British Islands and other parts of Europe, and has been introduced into North America and Australia. Their amazing fecundity, their strong attachment to their young, their familiarity, not to say impudence, and their voracity, are familiar to all. They often do great injury in cornfields and gardens, but they also do great service in destroying grubs, caterpillars, etc. The tree sparrow is also very widely distributed. It very closely resembles the common sparrow, but is of smaller size. Certain members of buntings are called "sparrows" in America.

Sparrow-hawk, the common name of several hawks, one of which is well-known in Britain, about twelve inches in length. The male is colored dark brown on the top of the head, and on the upper aspect of the body and wings. The under parts are of a reddish-brown color, marked with narrow bands of darker tint. The female bird is of a duller brown hue on the back and head; and her plumage is diversified by numerous white spots. It is a bold, active bird, very destructive to pigeons and small birds. The sparrow-hawk of Australia is marked by a collar of numerous bars of white. Its habits are very similar to those of the European sparrow-hawk. The American sparrow-hawk is similar in size to the European sparrow-hawk, but rather allied to the kestrel. It often preys on the chickens in poultry-yards.

Spider, the common name of insect-like animals, constituting a section of the class *Arachnida*. The head and chest are united to form one segment known as a cephalothorax; no wings are developed, and breathing is effected by means of pulmonary or lung sacs. The abdomen is furnished with from four to six cylindrical or conical mammillæ or processes, with fleshy extremities, which are perforated with numberless small orifices for the passage of silky filaments of extreme tenuity, with which they form webs, and which proceed from internal reservoirs. The spider's web is usually intended to entangle their prey (chiefly flies), but spiders also spin webs to make their abodes, and for other purposes. The legs number four pairs, and no antennæ are developed. Their mandibles are terminated by a movable hook, flexed inferiorly, underneath which, and near its extremity, is a little opening that allows a passage to a venomous fluid contained in a gland of the preceding joint. After wounding their prey with their hooked mandibles they inject this poison into the wound, which suddenly destroys the victim. The common garden or cross spider, with its geometrical web, is a very familiar species. The great crab spider and the Surinam spider, alleged to feed on small birds, are notable forms. To this family also belong the trap-door spiders, which excavate a nest in the ground, and fit to the aperture a curious little door or lid. The tarantula is regarded in Italy as capable of producing a kind of dancing madness by its bite. The English hunting or zebra spider is a pretty little arachnid. The *Clotho durandii*, inhabiting Spain and North Africa, is remarkable as constructing a kind of little tent, in the interior of which the eggs, inclosed in little pouches, are contained. The interesting water-spiders, denizens of fresh-water pools, lead a subaqueous life, and construct their nests somewhat in the form of diving-bells with the mouth opening downwards, together with thin webs in which their prey is captured.

Sponge. A term properly applied to the organisms which constitute the order *Spongiæ*, of the sub-kingdom *Protozoa*, but popularly applied to the dead skeleton only which is sold under that name. The true nature of sponges has long been a matter of doubt, but they are now almost universally regarded as animals. They are compound bodies, and the living part of the sponge appears to the naked eye as a soft and gelatinous substance, which, however, is seen by microscopic investigation to consist of an aggregation of extremely simple animals like *amæbæ*, some of which are furnished with long cilia. This living portion is supported on a skeleton, which, in ordinary sponges, is composed of horny elastic fibers which interlace in every direction, and pierced by numerous apertures, constituting the "sponge" of commerce. The horny skeleton is composed of a substance called *keratode*, and is usually strengthened by spiculae of lime or flint. Of the apertures which penetrate the sponge in every direction, some are large (the *exhalant* apertures), whilst others are much smaller and more numerous (the *pores*, or *inhalant* apertures). In the living sponge a constant current of water circulates through the

canals with which these apertures communicate. Sponges are of almost universal occurrence and are almost exclusively marine, being generally found attached to the under-side of projecting rocks, or clinging to the roofs of submarine caverns. The sponges of commerce are mostly obtained from the Grecian Archipelago and the Bahamas.

Spruce. The name given to several species of trees of the genus *Abies*. The Norway spruce-fir is *Abies excelsa*, which yields the valuable timber known under the name of white or Christiania deal. It is a native of great part of Northern Europe and is a noble tree of conical habit of growth, reaching sometimes the height of 150 feet. The white spruce is *Abies alba*, the black spruce-fir is *Abies nigra*, both natives of North America. The latter attains the height of seventy or eighty feet, with a diameter of from fifteen to twenty inches. Its timber is of great value on account of its strength, lightness, and elasticity, and is often employed for the yards of ships and the sides of ladders. From the young shoots is extracted the *essence of spruce*, a decoction used in making spruce beer. The hemlock spruce-fir is the *Abies Canadensis*, a noble species, rising to the height of seventy or eighty feet, and measuring from two to three feet in diameter. It grows abundantly over great part of Canada and part of the United States. The wood is employed for laths, fences, coarse indoor work, etc. The bark is exceedingly valuable for tanning. Douglas's spruce or fir, the *Abies Douglasii* of Northwestern America, reaches a height of 100 to 180 feet in its native forests, and has been introduced into Britain as an ornamental tree.

Squirrel. A small rodent mammal of the family *Sciuridæ*, the type of which is the genus *Sciurus*, or true squirrels. This family comprehends three groups—the true squirrels (*Sciurus*), the ground-squirrels (*Tamias*), and the flying-squirrels (*Pteromys* and *Sciuropterus*). The true squirrels are distinguished by their strongly compressed inferior incisors and by their long bushy tail. They have four toes before and five behind. The thumb of the fore-foot is sometimes marked by a tubercle. They have in all four grinders, variously tuberculated, and a very small additional one above in front, which very soon falls. In color they are usually of a rich ruddy brown on the upper parts, merging into reddish or grayish-white on the under parts of the body, but the fur varies with the season and climate so that in winter it may be of a gray appearance. The head is large, and the eyes projecting and lively. Several species are enumerated, as the common squirrel, which inhabits Europe and the north of Asia; while the cat-squirrel, gray-squirrel, black squirrel, red squirrel, and the great-tailed squirrel are American species. The common British squirrel, and several other species are remarkably nimble, running up trees and leaping from branch to branch with surprising agility. They subsist on nuts, acorns, seeds, etc., of which they lay up a store for winter, some of them in hollow trees, others in the earth. Their nest, which consists of woody fiber, leaves, and moss, is usually situated in a fork of a tree, and the young, of which

there are three or four, are born in June. When engaged in eating they sit on their haunches with their tail thrown upwards on the back, grasp, the eatables with their fore-paws and gnaw with their powerful teeth. The fur of some of the American species is an article of commerce.

Star-fishes. A term in its widest application embracing all the echinoderms comprised in the orders *Ophiuroidea* and *Asteroidea*, but more commonly restricted to the members of the latter order, of which the common genus *Asterias* may be taken as the type. The star-fishes proper are covered with a tough leathery skin beset with prickles, and have the form of a star, with five or more rays radiating from a central disc. In the middle of the under surface of the disc is situated the mouth, opening into a digestive system which sends prolongations into each ray. If the prickly skin be removed it will be seen to be supported by a series of plates beautifully jointed together. On the under surface of each ray the plates exhibit a series of perforations, through which, in the living state, the ambulacra or tubular feet can be protruded so as to effect locomotion. Star-fishes are found in almost all tropical, European and American seas, and some species are found as far north as Greenland.

Starling. Called also Stare, a bird belonging to the conirostral section of the order *Passeres*, genus *Sturnus* and family *Sturnidæ*, a family of birds widely distributed throughout the world, and allied to the crows. The common starling (*Sturnus vulgaris*), is found in almost all parts of Europe. It is between eight and nine inches in length; the color is blackish, with blue, purplish, or cupreous reflections, and each feather is marked at the extremity with a whitish triangular speck, giving the bird a speckled appearance. Starlings live mostly upon insects, build in old walls and hollow trees, and the eggs, usually five, are of a pale bluish tint. These birds are often kept in cages, and may be taught to whistle some tunes, and even to pronounce words and sentences. Allied species are the *Sturnus unicolor* found in Sardinia, the rose-colored pastor of Asia and Africa, and the red-winged starling which occurs in America.

Stork. A family of birds, whose members are chiefly confined to the old world. The true storks are contained in the genus *Ciconia*, and number six species, ranging over Europe, Asia, and Africa, and found also in South America. In form they resemble the herons, but are more robust, and have larger bills, shorter toes, with a non-serrated claw on the middle toe. They inhabit the vicinity of marshes and rivers, where they find an abundant supply of food, consisting of frogs, lizards, fishes, and even young birds. They are migratory birds, arriving from the south at their breeding haunts in the early spring, and departing again in the autumn. The *White Stork*, which is common in many countries of Europe, constructs a large nest, most frequently on the chimney of a cottage; it is a casual visitor to Britain during the period of migration. In plumage it is white, with black wings.

Sugar-cane, a plant from which great part of the sugar of commerce is obtained. It

is nowhere found in a wild state, but is probably a native of tropical Asia. It grows to the height of seven or eight feet or more, and has broad ribbed leaves, and smooth shining stems. It is now cultivated in all the warm parts of the globe, such as the West Indies, Brazil, Java, Louisiana, etc., but varies in growth according to the situation, the season, or the weather. The sugar-cane flowers only after the lapse of an entire year, and a plantation lasts from six to ten years. The juice of the cane is very palatable and nutritive.

Swallow, any one of the numerous passerine birds. In the United States the best known species are the barn swallow; the cliff, eaves, or chimney swallow; the white bellied or tree swallow, and the bank swallow. The species usually described by naturalists as the type of the family is *Hirundo rustica*, a well-known European visitor, whose arrival from Africa (usually about the middle of April) is eagerly looked for as a sign of approaching summer. Swallows usually arrive in pairs—a male and a female—though several pairs often form a small flight; but if a single bird is seen to arrive, there is a strong presumption that it has lost its mate. They return with unfailing regularity to their old haunts, and in May commence building their nests, which are in shape somewhat like a flattened cup, divided perpendicularly; they are made of clay, mud, and straw, lined with horse-hair or feathers, and the eggs, which are from four to six in number, are white, spotted with a purple-red.

Swan, a genus of swimming birds, distinguished as a group by the bill being of equal length with the head, and broad throughout its length; by the *cere* being soft; by the front toes being strongly webbed, whilst the hinder toe is not webbed, and has no lobe or underskin. The species which inhabit or visit Britain are the mute or tame swan, the whooper, whistling, or wild swan, and Bewick's swan. The mute or tame swan, so named from having little or no voice, is the only species which is permanently resident in Britain. The nest is constructed of reeds and grasses, and is generally situated near the edge of the water on some islet. The young ("cygnets") when hatched are of a light bluish-gray color. The food consists of vegetable matters, smaller fishes, worms, etc., and fish-spawn. The wild swan and Bewick's swan pass the winter in Great Britain, flying northward in the spring. The first is a native of Iceland, eastern Lapland, and northern Russia; the second has its home farther east. They have their representatives in North America in the trumpeter swan. South America produces one very distinct species, the beautiful black-necked swan. The black swan of Australia, like the white swan, is frequently kept as an ornament in parks or pleasure grounds.

Tapir. The name given to the hoofed quadrupeds forming the family *Tapiridae*. They are large and hog-like, and possess a short movable trunk, by means of which they convey food to the mouth. The fore-feet have four toes each, the little toe being smaller than the rest and not touching the ground; and the hind feet have three toes each; all the toes are encased in hoofs.

In color they are brownish-black. The skin is extremely thick and hairy, and the tail short. They inhabit dense forests, are vegetarians in diet, and nocturnal in their habits. About six species are known, and of these only one is an inhabitant of the Old World, occurring in the Malay Peninsula, Sumatra, and Borneo. The remaining species are South American.

Tiger. The largest and most dangerous of the Felidæ; exceeding the lion slightly in size, and far surpassing him in destructiveness. It is purely Asiatic in its habitat, but is not by any means confined to the hot plains of India, though there it reaches its highest development, both of size and coloration. According to Fayrer, the full-grown male Indian tiger is from nine to twelve, and the tigress from eight to ten feet from the nose to the tip of the tail, and from thirty-six to forty-two inches high at the shoulder. The ground color of the skin is rufous or tawny yellow, shaded with white on the ventral surface. This is varied with vertical black stripes or elongated ovals and brindlings. On the face and posterior surface of the ears the white markings are peculiarly well developed. The depth of the ground color and the intensity of the black markings vary, according to the age and condition of the animal. In old tigers the ground becomes more tawny, of a lighter shade, and the black markings better defined. The ground coloring is more dusky in young animals. Though possessed of immense strength and ferocity, the tiger rarely attacks armed men, unless provoked, though often carrying off women and children. When pressed by hunger or enfeebled by age and incapable of dealing with larger prey, like buffaloes, the tiger prowls around villages, and, having once tasted human flesh, becomes a confirmed man eater. In a government report it is stated that "one tigress caused the desertion of thirteen villages, and 250 square miles of country were thrown out of cultivation." The jaguar is sometimes called the American tiger.

Thrush. A genus of birds having a bill of moderate size, straight, the upper mandible convex, its point compressed, notched, and slightly curved downward, the gape furnished with a few hairs; the nostrils near the base of the bill oval, partly closed by a naked membrane; the first feather of the wing very short, the third and fourth longest; the tarsus longer than the middle toe, the outer toe connected with the middle toe at the base. The common species are the blackbird, fieldfare, redwing, ouzel, song thrush, and missel thrush. The song thrush or throistle, the mavis of the Scotch, is smaller than the blackbird, its whole length being not quite nine inches. Its plumage is brown, of various finely mingled shades; the throat, sides of the neck, breast, and flanks yellowish, spotted with dark brown, the belly nearly white, with a few spots of dark brown; a dark brown streak, with a lighter brown streak over it, passing from the bill to the eye. The latter is found in all parts of Europe, but, deserts some of the northern parts in winter, being thus partially a bird of passage.

Toad. The popular name of any species of the family *Bufo*nidae, which is almost uni-

versally distributed, but is rare in the Australian region, one species being found in Celebes and one in Australia. Three species are European. The common American species is more active than the European species, moving principally by leaping. The body is swollen and heavy-looking, covered with a warty skin, head large, flat, and toothless, with a rounded, blunt muzzle. There is a swelling above the eyes covered with pores, and the parotids are large, thick, and prominent, and secrete an acrid fluid; when handled or irritated, these animals can eject a watery fluid from the vent. But neither the secretion from the parotids nor the ejected fluid is harmful to man, and there is little doubt but that its effects on the lower animals have been much exaggerated. The toad has four fingers and five partially webbed toes. Toads are terrestrial, hiding in damp, dark places during the day, and crawling with the head near the ground. They are extremely tenacious of life, and can exist a long time without food.

Turtle. The popular name for any species of the Cheloniidae. They may be distinguished by their long, compressed, fin-shaped, non-retractile feet, with the toes inclosed in a common skin, from which only one or two claws project. The carapace is broad and much depressed, so that when these animals are on shore, and are turned over on their backs, they cannot regain the natural position. Turtles are marine animals; their pinnate feet and light shell renders them excellent swimmers. They sometimes live at a great distance from land, to which they periodically return to deposit their soft-shelled eggs (from 100 to 250 in number) in the sand. They are found in all the inter-tropical seas, and sometimes travel into the temperate zones. The flesh and eggs of all the species are edible, though the Indian turtles are less valuable in this respect than those of the Atlantic. The most highly valued of the family is the green turtle (*Chelonia viridis*), from which turtle soup is made. It attains a large size, sometimes from six to seven feet long, with a weight of from 700 to 800 pounds. The popular name has no reference to the color of the carapace, which is dark olive, passing into dingy white, but the green fat so highly prized by epicures. The edible turtle of the East Indies is also highly prized.

Walrus. A marine carnivorous mammal, closely related to seals and sea lions. It is known by its enormous down-turned tusks, or canine teeth, projecting from the upper jaw. They sometimes reach a length of sixteen inches beyond the sockets. Walruses have a thick clumsy body, deepest at the shoulders, and their feet, which are adapted for swimming, are also furrowed so as to hold on to smooth surfaces. They reach a length of twelve feet or more and a weight of 2,200 pounds. There are two living species, one found in the Atlantic and one in the Pacific. The Atlantic form is still found on the coast of Labrador and Hudson Bay, but formerly extended further south. The Pacific form is more northern, being rarely found on the mainland. They feed largely on clams and other mollusks, which they dig from the sea bottom with their

tusks. They visit islands and ice floes, and congregate in considerable numbers during the breeding period. They are hunted for their hides and oil.

Wasp. Any one of a considerable group of insects, forming, with bees and ants, the highest order of insects (Hymenoptera). These well-known insects show some variation in form, sometimes the thorax and abdomen are connected by a slender thread; in other forms these parts of the body merge into one another. The social wasps, like the hornet, or yellow jacket, are the best known. They build nests of paper attached to bushes, trees, roofs, and eaves of buildings. The paper is manufactured from wood fiber obtained from posts and unpainted boards. This is chewed in the jaws and united into sheets, often of considerable extent. The nests are often top-shaped or balloon-shaped, with layers of cells inside resembling honeycomb, all inclosed in a spherical paper envelop with a hole at the bottom for entrance and exit. These nests in tropical countries are sometimes six feet long. Other species of social wasps make nests in the ground, forming a more fragile sort of paper from decayed wood. The colonies include three forms, males, females, and workers. The males and workers die on the arrival of cold weather, but the females live over the winter in sheltered places, and start a new colony in the spring. The workers only have stings. The solitary wasps form another division of these insects which include miners, mud-daubers, and carpenters. The mason wasps, or mud-daubers, are the most familiar, as their mud nests are commonly seen on beams and walls. The carpenters cut tubular nests in wood and divide them by mud partitions. The miners dig tunnels in the earth. Wasps are endowed with a considerable degree of intelligence.

Water Lily is found in all temperate climates, and attains great size in the tropics. The white water lily is the familiar flower of ponds and placid streams throughout North America, its large and chaste flowers claiming precedence for beauty among the indigenous flora. The lotus has similar flowers, but tinted with pink, and has strongly toothed floating leaves; it is the white lotus of the Nile. The blue lotus has fragrant blue flowers. Several species and numerous varieties are in cultivation as ornamental plants. The *Victoria Regia* is the name given in honor of Queen Victoria to the most magnificent genus of the order. There is only one species recognized by botanists, a native of the Amazonian region of South America, where it was first observed by the unfortunate botanical traveler Hanke, in 1801, and said to have been met with by the French naturalist D'Orbigny, in 1827, but not made known to European horticulturists till after its discovery in British Guiana, ten years later. This noble water lily has floating leaves of a bright green above, and a deep purple or violet on the lower surface, measuring as much as seven and one-half feet in diameter, with a uniformly turned-up margin of about three inches, thus resembling huge shallow trays. The flowers, which are proportionately as large — some measuring fourteen inches in

diameter—are of all shades from white to pink, and are delightfully fragrant.

Weasel. The name of a number of small carnivorous mammals related to the sable, mink, and skunk. They have a remarkably slender, round body with a long neck, which gives the animal the appearance of having the fore legs set back too far. The legs are very short. The common weasel, found both in the Old and the New Worlds, reaches a length of eight or ten inches; it is light reddish brown and whitish below, and in northern districts becomes whitish in winter. It feeds on mice, moles, and rats, following them into their holes, and even rabbits fall a prey to it. It rarely visits hen-yards. It ranges in America east of the Rocky Mountains, and south to the border of the Southern States. The stoat, or ermine, likewise inhabits Europe, Asia, and America, ranging, east of the Rocky Mountains, from the extreme northern limit of terrestrial animals to the Southern States. It is eight to eleven inches long. In summer, its color is mahogany brown, with a black tip to the tail. In winter, it changes, in northern regions, to a pure white except the tip of the tail which remains black. Other examples are the brindled weasel of the western coast, found from California to Ecuador, and the long-tailed weasel of the northwest.

Whale. The popular name of the larger cetaceans, particularly of all those belonging to the families *Balanidæ* and *Physeteridæ* or *Catodontidæ*. In the *Balanidæ* the head is of enormous size, but is entirely destitute of teeth, instead of which the palate is furnished with an apparatus of *baleen*, or whalebone, for the purpose of straining out of the water the small crustaceans, which form the food of these whales. The fibrous structure of baleen, or whalebone, its elasticity, and its heaviness, are well known. The plates of it in the mouth of a whale are very numerous, several hundreds on each side of the mouth, and they are very closely placed together, so that the mouth is filled with them. The head of whales usually occupies from a third to a fourth of the whole length. The lower surface of the true skin extends into a thick layer of blubber, an open net-work of fibers, in which fat is held. The blubber is from one foot to two feet in thickness, the whole mass in a large whale sometimes weighing more than thirty tons. The most important species is that known as the Right whale or Greenland whale. It inhabits the seas of the northern parts of the world, and abounds chiefly in the arctic regions. It attains a size of sixty or seventy feet in length. It was formerly supposed that the Greenland whale was an inhabitant of the southern as well as the northern parts of the world; but the Southern or Cape whale is now regarded as a distinct species, the head being smaller in proportion than that of its northern congener, and the color a uniform black. The main physical characteristics of the whale are its distorted jaws, with upward directed nostrils, its great bulk, and rudimentary limbs. The huge bulk of the creature is driven forward by the flexible caudal fin, and while the body is rigid in front it exhibits great mobility behind. The blow-holes are placed on the top

of the head, and the animal can only respire when these are above water. The larger whales travel at the rate of about four miles an hour, but when pursuing their prey or goaded by pain they rush through the water at a much greater pace. They are aided in this by the broad and powerful tail, which is their chief organ of locomotion. Instead of being vertical, as in the fishes, this is horizontal, and the larger species can command immense driving power. The tail is also used as an offensive and defensive weapon. The smooth, shining skin is immediately underlaid by a thick coating of blubber, the great object of the whalers. This is at once dense and elastic, and while it preserves the animal heat it also serves to reduce the mighty bulk of the whale and to bring it nearer to the specific gravity of the element in which it spends its existence. It might be thought that the whale, with its vast bulk, would need sea creatures of a high organization to nourish it; but this is not so. Its chief food consists of minute mollusks, and with these its immense pasture-grounds in the north seas abound.

Whip-poor-will. A bird widely known on account of its oft-repeated cry of *whip-poor-will*. It is not often seen, although it is abundant in damp woods of the eastern United States. It usually rests on the ground during the day and is active at twilight and early nightfall, sending forth its cry, and also coursing low over the grass in search of insects. It is about ten inches long and of plain colors, being grayish, much variegated with black and buff. Its bill is very broad, its mouth large and provided with a tuft of long bristles. It builds no nest, but deposits its eggs on leaves or a slight depression in the ground. To the same family belong the chuck-will's-widow and the night-hawk.

Willow. A class of trees of the same family as the poplar. Willows vary in size from those of the Alps, which are an inch or two high, to trees of from fifty to eighty feet. They are found in most countries, with the exception of Australia, and they grow rapidly. They have many and large roots, which grow a long distance through moist soil, and bind it with a network of fibers, thus preventing the banks of streams from being worn away. The bark is tough and bitter; it is used in making fish nets, ropes, etc.; for tan-bark, and sometimes in Norway and Sweden for mixing with oatmeal. The wood is used in houses, vessels, farm tools, casks, etc.; as fuel and for charcoal. The twigs and young shoots are used in making baskets and light furniture. There are some sixty North American willows, ten of which are not found elsewhere. The most important of all kinds is the white willow, common throughout Asia, Europe, and America. It sometimes reaches the height of eighty feet. It is very useful on the prairies, as it is a fast grower, and also protects other trees from the wind. Other kinds are the golden, blue, brittle, varnished, and green willows. The weeping willow, a native of Asia and North Africa, has been introduced into America. It is a large tree, and one of the first to leaf out in the spring.

Wistaria. A genus of plants having pinnate leaves and flowers, in terminal racemes, the pod leathery. The species were formerly included in the genus *Glycine*. Some of them are among the most magnificent ornamental climbers. *Wistaria frutescens*, a native of Virginia, Illinois, and other parts of North America of similar climate, found chiefly in marshy grounds, attains the length of thirty feet, and has beautiful racemes of fragrant bluish-purple flowers.

Wolf. The name applied to several species of carnivorous animals, belonging to the Dog family. The common wolf is about five feet in length including the tail, which is twenty inches, and about thirty-two inches in height at the shoulders. The muzzle much resembles that of a sheep-dog; the ears are upright and pointed, and the eyes are set obliquely. The coat is subject to variation in tint, depending much upon the country the animal inhabits. Perhaps the most usual tint is a yellowish-grey; but it is sometimes almost black. In Europe the animal is still found in Lapland, Norway, Sweden, Russia, Poland, Hungary, some districts of Germany, France, Italy, Spain, and Greece. In Britain, the last wolf was slain in 1680, but in Ireland the species lingered until 1710. The wolf of India is considered a distinct species, and has a dingy reddish-white fur. The North American wolf has a wide range, extending from Greenland to Mexico, and is closely similar to the European race.

Woodcock. A famous game bird belonging to the snipe family, and found in northern parts of both the Old and New Worlds. The American woodcock is about eleven inches long, variegated in black, brown, gray, and rusty colors. The bill is very long and flexible at the end. It is thrust into the soft ground, in search of earthworms, and the presence of woodcocks can often be detected by a cluster of these holes. The European bird is larger. It is a winter resident in England, breeding in summer in North Scotland.

Woodpecker is the popular name of the old Linnæan genus *Picus*, now greatly divided. Woodpeckers have a slender body, powerful beak, and protrusile tongue, which is sharp, barbed, and pointed, and covered with a glutinous secretion derived from glands in the throat, this coating being renewed every time the tongue is drawn within the bill. The tail is stiff and serves as a support when the birds are clinging to the branches or stems of trees. Woodpeckers are very widely distributed, but abound chiefly in warm climates. They are solitary in habit, and live in the depths of forests. Fruits, seeds, and insects constitute their food, and in pursuit of the latter they

exhibit wonderful dexterity, climbing with astonishing quickness on the trunks and branches of trees, and when, by tapping with their bills, a rotten place has been discovered, they dig vigorously in search of the grubs or larvæ beneath the bark.

Wren. A genus of birds having a slender, slightly curved, and pointed bill; the wings very short and rounded; the tail short, and carried erect; the legs slender, and rather long. Their plumage is generally dull. They live on or near the ground, seeking for insects and worms among low brushes, and in other similar situations. The common or European wren is found in all parts of Europe, and in Morocco and Algeria, and in Asia Minor and Northern Persia. The common wren is more abundant in the north than in the central and southern parts of Europe. It frequents gardens, hedges, and thickets. Its flight is not long sustained; it merely flits from bush to bush, or from one stone to another, with very rapid motion of the wings. It sometimes ascends trees, nearly in the manner of creepers. The North American species of wren are numerous; but many of them are ranked under different genera. The house wren is larger than the European wren, being about five inches long. It is abundant in the eastern parts of the United States. It is less shy than the European wren, and often builds its nest near houses, and in boxes prepared for it. The nests are made to fill the boxes; and to effect this a large mass of heterogeneous materials is sometimes collected. The song of the house wren is very sweet. The male is a very bold, pugnacious bird, readily attacking birds far larger than itself, as the bluebird and swallows, and taking possession of the boxes which they have appropriated for their nests. It even attacks cats when they approach its nest.

Zebra. A name sometimes given to all the striped *Equidæ*, all of which are natives of South Africa; but also, in a more restricted use, designating a single species, *Equus* or *Asinus Zebra*, a native of the mountainous districts of South Africa. In the whole group the characters more resemble those of the ass than the horse. The zebra is about twelve hands high at the shoulder. It is of a light, graceful form, with slender limbs and narrow hoofs; the head light, the ears rather long and open; the ground color white or slightly tinged with yellow; the head, neck, body, and legs striped with black; the neck and body transversely, but not regularly; the head with bands in various directions, the legs with irregular cross stripes. The zebra lives in small herds, inhabiting the most secluded spots.

TENTH BOOK

MISCELLANY

CATHEDRAL OF SS. PETER AND PAUL, WASHINGTON

MISCELLANY

Arms and Armor. The former term is applied to weapons of offense, the latter to the various articles of defensive covering used in war and military exercises, especially before the introduction of gunpowder. Weapons of offense are divisible into two distinct sections — firearms, and arms used without gunpowder or other explosive substance. The first arms of offense would probably be wooden clubs, then would follow wooden weapons made more deadly by means of stone or bone, stone axes, slings, bows and arrows with heads of flint or bone, and afterwards various weapons of bronze. Subsequently a variety of arms of iron and steel were introduced, which comprised the sword, javelin, pike, spear, or lance, dagger, axe, mace, chariot scythe, etc., with a rude artillery consisting of catapults, ballistæ, and battering-rams. From the descriptions of Homer we know that almost all the Grecian armor, defensive and offensive, in his time was of bronze; though iron was sometimes used. The lance, spear, and javelin were the principal weapons of this age among the Greeks. The bow is not often mentioned. Among ancient nations the Egyptians seem to have been most accustomed to the use of the bow, which was the principal weapon of the Egyptian infantry. Peculiar to the Egyptians was a defensive weapon intended to catch and break the sword of the enemy. With the Assyrians the bow was a favorite weapon; but with them lances, spears, and javelins were in more common use than with the Egyptians. Most of the large engines of war, chariots with scythes projecting at each side from the axle, catapults, and ballistæ, seem to have been of Assyrian origin. During the historical age of Greece the characteristic weapon was a heavy spear from twenty-one to twenty-four feet in length. The sword used by the Greeks was short, and was worn on the right side. The Roman sword was from twenty-two to twenty-four inches in length, straight, two-edged, and obtusely pointed, and, as by the Greeks, was worn on the right side. It was used principally as a stabbing weapon. It was originally of bronze. The most characteristic weapon of the Roman legionary soldier, however, was the *pilum*, which was a kind of pike or javelin, some six feet or more in length. The *pilum* was sometimes used at close-quarters, but more commonly it was thrown. The favorite weapons of the ancient Germanic races were the battle-axe, the lance or dart, and the sword. The weapons of the Anglo-Saxons were spears, axes, swords, knives, and maces or clubs. The Normans had similar weapons, and were well furnished with archers and cavalry. The cross-bow was a comparatively late invention introduced by the Normans. Gunpowder was not used in Europe to discharge projectiles till the beginning of the Fourteenth Century. Cannon are first mentioned in England in 1338, and there seems to be no doubt that they were used by the English at the siege

of Cambrai, in 1339. The projectiles first used for cannon were of stone. Hand firearms date from the Fifteenth Century. At first they required two men to serve them, and it was necessary to rest the muzzle on a stand in aiming and firing. The first improvement was the invention of the match-lock, about 1476; this was followed by the wheel-lock, and about the middle of the Seventeenth Century by the flint-lock, which was in universal use until it was superseded by the percussion-lock, the invention of a Scotch clergyman early in the Nineteenth Century. The needle-gun dates from 1827. The only important weapon not a firearm that has been invented since the introduction of gunpowder is the bayonet, which is believed to have been invented about 1650. Some kind of defensive covering was probably of almost as early invention as weapons of offense. The principal pieces of defensive armor used by the ancients were shields, helmets, cuirasses, and greaves. In the earliest ages of Greece the shield is described as of immense size, but in the time of the Peloponnesian War (about B. C. 420) it was much smaller. The Romans had two sorts of shields; the *scutum*, a large oblong rectangular highly convex shield, carried by the legionaries; and the *parma*, a small round or oval flat shield, carried by the light-armed troops and the cavalry. In the declining days of Rome the shields became larger and more varied in form. The helmet was a characteristic piece of armor among the Assyrians, Greeks, Etruscans, and Romans. Like all other body armor it was usually made of bronze. The helmet of the historical age of Greece was distinguished by its lofty crest. The Roman helmet in the time of the early emperors fitted close to the head, and had a neck-guard and hinged cheek-pieces fastened under the chin, and a small bar across the face for a visor. Both Greeks and Romans wore cuirasses, at one time of bronze, but latterly of flexible materials. Greaves for the legs were worn by both, but among the Romans usually on one leg. The ancient Germans had large shields of plaited osier covered with leather, afterwards their shields were small, bound with iron, and studded with bosses. The Anglo-Saxons had round or oval shields of wood, covered with leather, and having a boss in the center; and they also had corselets, or coats of mail, strengthened with iron rings. The Normans were well protected by mail; their shields were somewhat triangular in shape, their helmets conical. Great variety is found in the pattern of the armor, and in some cases small pieces of metal were used instead of rings, forming what is called *scale-armor*. A suit of armor consisting of larger pieces of metal, called *plate-armor*, was now introduced, and the whole body came to be incased in a heavy metal covering. The various forms of ring or scale armor were gradually superseded by the plate-armor, which continued to be worn until long after the introduction of firearms and field-

artillery. A complete suit of armor was an elaborate and costly equipment, consisting of a number of different pieces, each with its distinctive name. In modern European armies the metal cuirass is still to some extent in use, the *cuirassiers* being heavy cavalry; and it is said that this piece of armor proves a useful defense against rifle bullets. During all the time that the use of heavy armor prevailed, the horsemen, who alone were fully armed, formed the principal strength of armies; and infantry were generally regarded as of hardly any account. England was, however, an exception, as the English archers were almost at all times, before the invention of gunpowder, an important and sometimes the chief force in the army. The bow (*long-bow*) of the English archers was from five to six feet in length, and the arrow discharged from it was itself a yard long. The long-bow continued in general use in England till the end of the reign of Elizabeth, and even as late as 1627 there was a body of English archers in the pay of Richelieu at the siege of La Rochelle.

Armies of the World.

COUNTRIES	AVAIL- ABLE FOR ACTIVE SERVICE	RE- SERVES	TOTAL WAR STRENGTH	AVAIL- ABLE FOR DUTY UNORG.
Germany, . . .	613,000	1,227,000	1,840,000	5,500,000
France, . . .	529,000	761,000	1,290,000	3,500,000
Russia, . . .	1,100,000	700,000	1,800,000	9,600,000
Austria-Hun- gary, . . .	409,000	381,000	790,000	4,700,000
Italy, . . .	240,000	390,000	630,000	3,000,000
Great Britain, . . .	263,000	487,000	750,000	4,000,000
Japan, . . .	220,000	380,000	600,000	5,000,000
Spain, . . .	130,000	180,000	310,000	1,850,000
Belgium, . . .	49,700	93,300	143,000	700,000
Netherlands, . . .	34,540	6,510	126,055	500,000
Denmark, . . .	14,000	36,000	50,000	270,000
Sweden, . . .	62,536	278,295	340,831	260,000
Norway, . . .	30,000	125,000	155,000	100,000
Portugal, . . .	40,000	84,000	124,000	475,000
Bulgaria, . . .	52,500	312,500	365,000	125,000
Servia, . . .	27,000	198,000	225,000	80,000
Rumania, . . .	136,000	34,000	170,000	550,000
Switzerland, . . .	143,000	135,000	278,000	125,000
Turkey, . . .	350,000	495,000	845,000	2,000,000
Greece, . . .	25,000	25,000	50,000	230,000
China, . . .	60,000	500,000	560,000	.....
Mexico, . . .	26,595	82,000	108,595	1,500,000
Brazil, . . .	25,000	75,000	100,000	2,000,000
Argentina, . . .	18,000	482,000	500,000	.....
Chile, . . .	15,000	50,000	65,000	.....
Peru, . . .	4,000	10,000	14,000	.....
Venezuela, . . .	9,600	20,000	29,600	.....
Bolivia, . . .	2,430	176,158	178,588	.....
Colombia, . . .	5,000	200,000	205,000	.....
Costa Rica, . . .	1,000	5,000	6,000	.....
Ecuador, . . .	4,379	90,000	94,379	.....
Salvador, . . .	3,000	18,000	21,000	.....
Nicaragua, . . .	4,000	36,000	40,000	.....
Uruguay, . . .	5,800	35,000	40,800	.....
Haiti, . . .	7,000	.....	7,000	.....
United States, . . .	69,871	95,000	.....	.....

Bridge. The earliest bridges were no doubt trunks of trees. The arch seems to have been unknown amongst most of the nations of antiquity. Even the Greeks had not sufficient acquaintance with it to apply it to bridge building. The Romans were the first to employ the principle of the arch in this direction, and after the construction of such a work as the great arched sewer at Rome, the *Cloaca Maxima*, a bridge over the Tiber would be of comparatively

easy execution. One of the finest examples of the Roman bridge was the bridge built by Augustus over the Nera at Narni, the vestiges of which still remain. It consisted of four arches, the longest of 142 feet span. The most celebrated bridges of ancient Rome were not generally, however, distinguished by the extraordinary size of their arches, nor by the lightness of their piers, but by their excellence and durability. The span of their arches seldom exceeded seventy or eighty feet, and they were mostly semicircular, or nearly so. The Romans built bridges wherever their conquests extended, and in Britain there are still a number of bridges dating from Roman times. One of the most ancient post-Roman bridges in England is the Gothic triangular bridge at Croyland, in Lincolnshire, said to have been built in 860, having three archways meeting in a common center at their apex, and three roadways. The longest old bridge in England was that over the Trent at Burton, in Staffordshire, built in the Twelfth Century, of squared freestone, and recently pulled down. It consisted of thirty-six arches, and was 1,545 feet long. Old London bridge was commenced in 1176, and finished in 1209. It had houses on each side like a regular street till 1756-58. In 1831, it was altogether removed, the new bridge, which had been begun in 1824, having then been finished. The art of bridge-building made no progress after the destruction of the Roman Empire till the Eighteenth Century, when the French architects began to introduce improvements, and the constructions of Perronet (Nogent-sur-Seine; Neuilly; Louis XVI. bridge at Paris) are masterpieces. Within the last half century or so the use of steam and iron, the immense developments of all mechanical contrivances, and the great demand for railway bridges and viaducts have given a great stimulus to invention in this department. Stone bridges consist of an arch or series of arches, and in building them the properties of the arch, the nature of the materials, and many other matters have to be carefully considered. It has been found that in the construction of an arch the slipping of the stones upon one another is prevented by their mutual pressure and the friction of their surfaces; the use of cement is thus subordinate to the principle of construction in contributing to the strength and maintenance of the fabric. The masonry or rock which receives the lateral thrust of an arch is called the *abutment*, the perpendicular supports are the *piers*. The width of an arch is its *span*; the greatest span in any stone bridge is about 250 feet. A one-span bridge has, of course, no piers. In constructing a bridge across a deep stream it is desirable to have the smallest possible number of points of support. Piers in the waterway are not only expensive to form, but obstruct the navigation of the river, and by the very extent of resisting surface they expose the structure to shocks and the wearing action of the water. In building an arch, a timber framework is used called the *center*, or *centering*. The *centering* has to keep the stones or *voussoirs* in position till they are keyed in, that is, all fixed in their places by the insertion of the keystone. The first iron bridges were erected from about 1777 to 1790.

The same general principles apply to the construction of iron as of stone bridges, but the greater cohesion and adaptability of the material give more liberty to the architect, and much greater width of span is possible. At first, iron bridges were erected in the form of arches, and the material employed was cast iron; but the arch has now been generally superseded by the beam or *girder*, with its numerous modifications; and wrought iron or steel is likewise found to be much better adapted for resisting a great tensile strain than cast-metal. Numerous modifications exist of the beam or girder, as the *lattice-girder*, *bow-string-girder*, etc.; but of these none is more interesting than the *tubular* or hollow girder, first rendered famous from its employment by Robert Stephenson in the construction of the railway bridge across the Menai Strait, and connecting Anglesey with the mainland of North Wales. This is known as the Britannia Tubular Bridge. The tubes are of a rectangular form, and constructed of riveted plates of wrought iron, with rows of rectangular tubes or cells for the floor and roof respectively. The bridge consists of two of these enormous tubes or hollow beams laid side by side, one for the up and the other for the down traffic of the railway, and extending each to about a quarter of a mile in length. Other tubular bridges of importance are the Conway Bridge, over the River Conway, an erection identical in principle with the Britannia Bridge, but on a smaller scale; the Brotherton Bridge over the river Aire; the tubular railway bridge across the Damietta branch of the Nile, which has this peculiarity, that the roadway is carried *above* instead of *through* the tubes; and the Victoria Bridge over the St. Lawrence, Canada. In many respects this structure is even more remarkable than the Britannia Bridge, being supported by twenty-four piers, and nearly two miles in length, or about five and a half times that of the bridge across the Menai Strait. A girder railway bridge across the Firth of Tay at Dundee was opened in 1887, being the second built at the same place, after the first had given way in a great storm. It is two miles seventy-three yards long, has eighty-five spans, is seventy-seven feet high and carries two lines of rails. The bridge over the Firth of Forth, at Queensferry, a notable structure, has two chief spans of 1,710 feet, two others of 680 feet, fifteen of 168 feet, and seven small arches, and will give a clear headway for navigation purposes of 150 feet above high-water of spring-tides. The great spans consist of a cantilever at either end, 680 feet long, and a central girder of 350 feet. Both the above bridges are built to carry the lines of the North British Railway. The Crumlin Railway Viaduct, South Wales, having lattice-girders supported on open-work piers is more remarkable for height than length, being 200 feet high. Suspension bridges, being entirely independent of central supports, do not interfere with the river, and may be erected where it is impracticable to build bridges of any other kind. The entire weight of a suspension bridge rests upon the piers at either end from which it is suspended, all the weight being below the points of support. Such bridges always swing a little, giving a vibratory movement which imparts a

peculiar sensation to the passenger. The modes of constructing these bridges are various. The roadway is suspended either from chains or from wire-ropes, the ends of which require to be *anchored*, that is attached to the solid rock or masses of masonry or iron. One of the earlier of the great suspension bridges is that constructed by Telford over the Menai Strait near the Britannia Tubular Bridge, finished in 1825; the opening between the points of suspension is 580 feet. The Hammer-smith Chain-bridge, the Union Suspension bridge near Berwick, and the suspension bridge over the Avon at Clifton are other British examples. On the European Continent, the Fribourg Suspension bridge in Switzerland, span 870 feet, erected, 1834, is a celebrated work; as is that over the Danube connecting Buda with Pesth. In America the lower suspension bridge over the Niagara, seven miles below the falls, supported by wire cables, is 822 feet long; it has two floors or roadways connected together but fifteen feet apart, the lower serving for ordinary traffic, the upper carrying three lines of rails, 245 feet above the river. Another bridge, close to the falls, has a span of 1,250 feet. The Cincinnati bridge over the Ohio has a span of 1,057 feet. A suspension bridge of great magnitude, connecting the city of New York with Brooklyn, was opened in 1883. The central or main span is 1,595½ feet from tower to tower, and the land spans between the towers and the anchorages 930 feet each; the approach on the New York side is 2,492 feet, long, and that on the Brooklyn side, 1,901 feet, making the total length 5,989 feet. The height of the platform at the center is 135 feet above high water, and at the ends 119 feet. The roadway is eighty-five feet broad, and is divided into five sections, the two outside for vehicles, the two inner for trolleys, the middle one, twelve feet above the rest, for foot-passengers. Cost over \$15,000,000. Though the oldest bridges on record were built of wood, like the Sublician Bridge at Rome, or that thrown by Cæsar across the Rhine, it is only in certain places and for certain purposes that wood is much used at present. In modern times Germany has been the school for wooden bridges. Perhaps the most celebrated of all wooden bridges was that which spanned the Rhine at Schaffhausen in Switzerland. This was 364 feet in length and eighteen feet broad. It was designed and executed by Ulric Grubenman, a village carpenter, in 1758, and was destroyed by the French, in 1799. In the United States, where timber is still in common use, we have some fine examples, the Trenton Bridge over the Delaware, erected in 1804; the bridge over the Susquehanna, etc.

Some of the most notable developments in the art of bridge construction are to be found in North America, where an enormous railway system, traversing a country of great rivers and ravines, has given an exceptional stimulus to the art. The main characteristics of American bridges are simplicity and boldness of design, the reduction of the number of members to a

minimum by the use of open trusses composed of simple systems rather than the plate, tubular, or closely-latticed girders of European engineers, thus offering less resistance to wind pressure.

NOTABLE BRIDGES

Albany (over the Hudson). Iron; length of draw, 400 feet.

Arcueil Aqueduct. Stone; length, 1,279 feet; semi-circular arch.

Barentin Viaduct. Stone; length, 1,545 feet; semi-circular arch.

Biscari Aqueduct. Stone; length, 1,222 feet; ogival.

Bombay (Madras). Length, 3,734 feet.

Boyer. Wrought iron; length, 1,760 feet; lattice.

Brighton Viaduct. Brick; length, 960 feet; semi-circular arch.

Britannia. Wrought iron; length, 1,488 feet; tubular.

Brooklyn (East River). Length, 5,989 feet; suspension.

Carpentras Aqueduct. Stone; length, 1,687 feet; semi-circular arch.

Chaumont Viaduct. Length, 1,968 feet; semi-circular arch.

Cincinnati and Covington (over the Ohio). Built, 1867; length, 1,067 feet; suspension.

Clifton (over Niagara River). Length, 1,268 feet; suspension.

Congleton Viaduct. Stone; length, 2,870 feet; arch, segment.

Crumlin Viaduct. Iron; length, 1,050 feet; truss-gird.

Danube (near Stadlan, Austria). Iron; length, 2,520 feet.

Dee Viaduct. Stone; length, 1,388 feet; semi-circular arch.

Dinting Vale Viaduct. Timber; length, 1,452 feet; arch, segment.

Dubuque (over the Mississippi). Iron; length, 1,758 feet.

Florence (over the Arno). Built 1569; marble; length, 322 feet; elliptical arch.

Forth Bridge. Over the Firth of Forth, Scotland; cantilever; iron and steel; length, nearly two miles, including approaches. Opened March 4, 1890.

Franzdorf Viaduct. Stone; length, 1,916 feet; semi-circular arch.

Godavery Irrigation Aqueduct. Stone; length, 2,356 feet; arch, segment.

Goetzschthal Viaduct. Stone; length, 1,900 feet; elliptical arch.

Harlem River Aqueduct (High Bridge). Stone; length, 1,450 feet; semi-circular arch.

Indre Viaduct. Stone; length, 2,463 feet; semi-circular arch.

Kinzua Viaduct (R. R.). On Bradford branch of New York, Lake Erie, and Western R. R., near Bradford, Pa.; iron; height, 301 feet; length, 2,052 feet.

Lisbon Aqueduct. Stone; length, 3,805 feet; ogival.

Louisville, Ky. (over the Ohio). Length, 5,310 feet.

Maintenon Aqueduct. Stone; length, 16,367 feet; semi-circular arch.

Minneapolis Suspension Bridge. Completed, 1876; length, with approaches, one mile.

Montpellier Aqueduct. Stone; length, 3,214 feet; semi-circular arch.

Niagara (built, 1855). Length, 2,220 feet; suspension.

Nogent-sur-Marne Viaduct. Stone; length, 2,722 feet; semi-circular arch.

Omaha (over the Missouri). Length, 2,800 feet.

Pavia. Stone; length, 620 feet; ogival.

Poughkeepsie. Iron; cantilever; length, 6,767 feet.

Quincy (over the Mississippi). Iron; length, 3,200 feet.

Rochester (new). Cast iron; length, 498 feet; arch, segment.

Royal Border Bridge (Berwick). Stone; length, 2,160 feet; semi-circular arch.

Schuykill. Timber; length, 1,000 feet; frame truss.

St. Anne's. Wrought iron; length, 1,350 feet; tubular.

St. Charles (Mo.). Iron; length, 6,536 feet.

St. Louis (across the Mississippi). Minnesota and North Western R. R.; iron; 1,825 feet long, draw span 412 feet long, the latter being one of the largest and heaviest in the world.

Susquehanna. Stone; length, 3,500 feet; semi-circular arch.

Trenton (Delaware). Timber; length, 960 feet; frame truss.

Victoria (St. Lawrence). Wrought iron; length, 9,437 feet; tubular.

Washington Bridge (across Harlem River valley, N. Y.); two steel arches of 510 feet span; roadway, 80 feet wide; length, 2,375 feet; height above the Harlem River, 133 feet.

Burial is applied to the prevalent method among civilized nations of disposing of the dead by hiding them in the earth. The general tendency of mankind has been to bury the dead out of sight of the living; and various as the methods of accomplishing this end have been, they have resolved themselves into three great classifications: (1) The simple closing up of the body in wood or stone. (2) The burning of the body and the entombing of the ashes. (3) The embalming of the body. The first of these seems to be the earliest form of which we have any record, and it is the form most amply sanctioned by the existing practice of the civilized world. It is the method referred to in the earliest Scriptures; and all are familiar with the touching scene in which Abraham buries Sarah in the cave in the land of Canaan which belonged to Ephron, but was, after a solemn and courteous negotiation, secured to Abraham for a possession in which to bury his dead. There is frequent allusion in the later Scriptures, and especially in the New Testament, to the embalming of the body in antiseptics and fragrant substances. The Israelites may have learned the practice of embalming from the Egyptians, among whom it was an art so greatly cultivated and extensively practiced that Egyptian corpses, as inoffensive as any article of wood or stone, are scattered over Europe in museums, and are even to be found as curiosities in private houses. The soil and climate of Upper Egypt seem to have afforded facilities for embalming unmatched in any other part of the world; and in other places the vestiges of the practice are comparatively rare, though it is usual even yet to embalm royal corpses, and in some places to preserve a series of mummies, as in the vault of the monastery of Kreuzberg, at Bonn, where the monks have been successively preserved in their costume for centuries. The practice of incremation, of the burning of the body and the entombing of the ashes, deserves more inquiry than it has yet obtained. In Greece, in Etruria—both before and after it came under the Romans—and in the North of Europe, the simple burial of the body, and its prior reduction to ashes, were both practiced, and sometimes contemporaneously. The tombs of Etruria are rich in art, much of it going to the adornment of the urns of baked clay in which the ashes of the dead are kept. Vessels of terra cotta, or cooked earth, containing human remains, have been found, often so large that they appear to have served as coffins for containing the whole body. When human remains are connected with barrows, cromlechs, or the large, shapeless pillars commonly called Druidical, it is often very questionable whether the monument was made to receive such remains. It is certainly ascertained to have been a practice in ancient times to bury bodies in tombs which were themselves ancient when they received their inmates. Some of the grandest buildings in the world have been tombs; such are the

pyramids, the castle of St. Angelo, the tomb of Cecilia Metella, and many temples scattered over Hindustan. Thus, the respect paid by the living to the dead has preserved for the world many magnificent fruits of architectural genius and labor. A notion that the dead may require the things they have been fond of in life has also preserved to the existing world many relics of the customs of past ages. The tombs of Egypt have supplied an immense quantity of them, which have taught the present age more of the manners of ancient nations than all the learned books that have been written. It is an awful remembrance, at the same time, that inanimate things were not all that the dead were expected to take with them. Herodotus tells us of favorite horses and slaves sacrificed at the holocaust of the dead chief. The same thing has been done in our own day in Ashantee. In many countries the wives had the doom, or privilege, as it was thought, of departing with their husbands; and down to the present generation the practice has lived in full vigor in the Hindu suttee. Among the Jews, the Greeks, the Romans, and many ancient nations the dead were buried beyond the towns. In Christian countries, if the remains of the saint to whom a church was dedicated could be obtained—or anything passing for the remains—they were buried near the altar in the choir. It became a prevalent desire to be buried near these saints, and the bodies of men eminent for their piety, or high in rank, came thus to be buried in churches.

Catacombs. Subterraneous chambers and passages formed generally in a rock, which is soft and easily excavated, such as *tufa*. Catacombs are to be found in almost every country where such rocks exist, and, in most cases, probably originated in mere quarries, which afterward came to be used either as places of sepulture for the dead or as hiding-places for the living. The most celebrated catacombs in existence, and those which are generally understood when catacombs are spoken of, are those on the Via Appia, at a short distance from Rome. To these dreary crypts it is believed that the early Christians were in the habit of retiring, in order to celebrate their new worship in times of persecution, and in them were buried many of the saints and martyrs of the primitive Church. They consist of long, narrow galleries, usually about eight feet high and five feet wide, which twist and turn in all directions, very much resembling mines. The graves were constructed by hollowing out a portion of the rock, at the side of the gallery, large enough to contain the body. The entrance was then built up with stones, on which usually the letters D. M. (Deo Maximo), or X.P., the first two letters of the Greek name of Christ, were inscribed. Other inscriptions and marks, such as the cross, are also found. Though latterly devoted to purposes of Christian interment exclusively, it is believed that the catacombs were at one time used as burying-places by pagans also. At irregular intervals these galleries expand into wide and lofty vaulted chambers, in which the service of the Church was no doubt celebrated, and which still have the appearance of churches. The original extent of the catacombs is uncer-

tain, the guides maintaining that they have a length of twenty miles, whereas about six only can now be ascertained to exist, and of these many portions have either fallen in or become dangerous. When Rome was besieged by the Lombards in the Eighth Century, many of the catacombs were destroyed, and the popes afterward caused the remains of many of the saints and martyrs to be removed and buried in the churches. Art found its way into the catacombs at an early period, and many remains of frescoes are still found in them. Belzoni, in 1815 and 1818, explored many Egyptian catacombs built 3,000 years ago, and brought to England the Sarcophagus of Psammethichus, formed of Oriental alabaster exquisitely sculptured. In the Parisian catacombs, formerly stone quarries, human remains from the Cemetery of the Innocents were deposited in 1785, and many of the victims of the Revolution of 1792-94 are interred in them.

Chivalry, a term which indicates strictly the organization of knighthood as it existed in the Middle Ages, and in a general sense the spirit and aims which distinguished the knights of those times. The chief characteristics of the chivalric ages were a warlike spirit, a lofty devotion to the female sex, a love of adventure, and an undefinable thirst for glory. The Crusades gave for a time a religious turn to the spirit of chivalry, and various religious orders of knighthood arose, such as the Knights of St. John, the Templars, the Teutonic Knights, etc. The education of a knight in the days of chivalry was as follows: In his twelfth year he was sent to the court of some baron or noble knight, where he spent his time chiefly in attending on the ladies, and acquiring skill in the use of arms, in riding, etc. When advancing age and experience in the use of arms had qualified the page for war, he became an *esquire*, or *squire*. This word is from Latin *scutum*, a shield, it being among other offices the squire's business to carry the shield of the knight whom he served. The third and highest rank of chivalry was that of knighthood, which was not conferred before the twenty-first year, except in the case of distinguished birth or great achievements. The individual prepared himself by confessing, fasting, etc.; religious rites were performed; and then, after promising to be faithful, to protect ladies and orphans, never to lie nor utter slander, to live in harmony with his equals, etc., he received the *accolade*, a slight blow on the neck with the flat of the sword from the person who dubbed him a knight. This was often done on the eve of battle, to stimulate the new knight to deeds of valor; or after the combat, to reward signal bravery. Though chivalry had its defects, chief amongst which, perhaps, we may note a tendency to certain affectations and exaggerations of sentiment and profession, yet it is to be regarded as tempering in a very beneficial manner the natural rudeness of feudal society. As a system of education for the nobles, it taught them the best ideals, social and moral, which the times could understand, and filled a place in civilization which as yet the arts and letters could hardly occupy.

Cities, Popular Names of.

Aberdeen. Granite City.
Athens. City of the Violet Crown.
Bagdad. City of Peace.
Baltimore. Monumental City, from the number of monuments it contains.
Birmingham. The Midland Capital.
Brighton. Queen of Watering Places, "London-super-Mare."
Boston. City of Notions, from the amount of "Yankee notions," so called, manufactured there; Hub of the Universe, so called by Dr. Oliver Wendell Holmes; Tri-Mountain City, from the three hills on which it was originally built.
Brooklyn. City of Churches, from the number of churches it contains.
Buffalo. Queen City of the Lakes.
Calro. City of Victory.
Chicago. Garden City, from the number and beauty of its private gardens; Windy City, from the constant winds blowing from the lakes.
Cincinnati. Queen City, so called when it was the commercial metropolis of the Middle West.
Cleveland. Forest City, from the number of trees on its streets.
Constantinople. City of the Golden Horn.
Detroit. City of the Straits, from its location on the strait connecting Lake St. Clair and Lake Erie.
Edinburgh. Modern Athens.
Hannibal, Mo. Bluff City, from its location on the bluffs of the Missouri River.
Indianapolis. Railroad City, from its being a great railroad center.
Jerusalem. Holy City; City of David; City of Peace.
Keokuk, Ia. Gate City, from its situation at the foot of the Mississippi Rapids.

Liverpool. The Modern Tyre.
Louisville, Ky. Falls City, from the falls of the Ohio River, here located.
Lowell, Mass. City of Spindles, from its large manufacturing interests.
Manchester. Cottonopolis.
Nashville, Tenn. City of Rocks, from its natural surroundings.
New Haven. City of Elms, from the great number of these trees it contains.
New Orleans. Crescent City, from its position on a curve of the Mississippi.
New York. Empire City, from its being the chief city of the United States.
Paris. City of the Lily, or City of Louis.
Philadelphia. City of Brotherly Love, from the meaning of the name.
Pittsburg, Pa. Iron City, from the extent of its iron manufactures; and Smoky City, from the smoke which overhangs it.
Portland, Me. Forest City, from the number of trees in its streets.
Rochester, N. Y. Flour City, from the number of flour mills located there.
Rome. City of the Seven Hills.
San Francisco. City of the Golden Gate.
St. Louis. Mound City, from the artificial mounds found there.
Springfield, Mass. City of Homes, from the many people who own their own homes.
Springfield, O. Flower City, from the beauty of its surroundings.
Venice. City of St. Mark, City of the Seventy Isles.
Washington. City of Magnificent Distances, from its being laid out on a large and regular scale.
Worcester. The Faithful City, so called from its motto: *Floreat Semper Civitas Fœdels.*

DIAMONDS OF NOTE

CARATS (UNCUT)	CARATS (CUT)	NAME	DISCOVERED	POSSESSOR
1680(?)	<i>Never cut</i>	Braganza,	1741	King of Portugal.
787½	367½	Rajah of Mattan,	1756	Rajah of Mattan (Borneo).
....	194½	Orloff, . . . . .	.....	Czar of Russia (septer).
....	139½	Florentine, . . . . .	.....	Emperor of Austria.
242½	.....	Tavernier,	1668	Stolen in 1792.
150	138½	.....	1775	King of Portugal.
410	136½	Pitt or Regent,	1702	King of Prussia.
254	127	Star of the South,	1853	<i>A Brazilian diamond.</i>
186½	106½	Koh-i-noor,	B.C. 56	Queen of England.
....	86	Shah, . . . . .	.....	Czar of Russia.
89½	78½	Nassac, . . . . .	.....	Lord (Marquis of) Westminster.
288½	.....	<i>Light Yellow,</i> . . . . .	.....	Stewart (diamond).
150	.....	Porter Rhodes,	1872	<i>Found in South Africa.</i>
112	67½	<i>Blue,</i> . . . . .	.....	.....
83	52½	Sancy,	15th Cent.	Czar of Russia.
....	49	Pigott, . . . . .	.....	Bought by Messrs. Rundell and Bridge.
83½	46½	Star of South Africa,	1867	.....
88½	44½	Dudley, . . . . .	.....	Earl of Dudley.
....	49½	Hope, . . . . .	.....	Mr. Henry Hope's family.
....	40	Pacha of Egypt, . . . . .	.....	Khedive of Egypt.
....	28	Charles the Bold, . . . . .	.....	.....

Duel. A premeditated and prearranged combat between two persons, with deadly weapons, for the purpose of deciding some private difference or quarrel. The combat generally takes place in the presence of witnesses called seconds, who make arrangements as to the mode of fighting, place the weapons in the hands of the combatants, and see that the laws they have laid down are carried out. The origin of the practice of duelling is referred to the trial by "wager of battle," which obtained in early ages. This form of duel arose among the Germanic peoples, and a judicial combat of the kind was authorized by Gundebald, King of the Burgundians, as early as 501 A. D. When the judicial combat declined the modern duel arose, being probably to some extent an independent outcome of the spirit and institutions of chivalry. France was the country in which it arose,

the Sixteenth Century being the time at which it first became common. Upon every insult or injury which seemed to touch his honor, a gentleman thought himself entitled to draw his sword, and to call on his adversary to give him satisfaction, and it is calculated that 6,000 persons fell in duels during ten years of the reign of Henry IV. His minister, Sully, remonstrated against the practice; but the King connived at it, supposing that it tended to maintain a military spirit among his people. In 1602, however, he issued a decree against it, and declared it to be punishable with death. Many subsequent prohibitions were issued, but they were all powerless to stop the practice. During the minority of Louis XIV. more than 4,000 nobles are said to have lost their lives in duels. The practice of duelling was introduced into England from France in the reign of James I.; but

it was never so common as in the latter country. Cromwell was an enemy of the duel, and during the protectorate there was a cessation of the practice. It came again into vogue, however, after the Restoration, thanks chiefly to the French ideas that then inundated the court. As society became more polished duels became more frequent, and they were never more numerous than in the reign of George III. Among the principals in the fatal duels of this period were Charles James Fox, Sheridan, Pitt, Canning, Castlereagh, the Duke of York, the Duke of Richmond, and Lord Camelford. The last-mentioned was the most notorious duellist of his time, and was himself killed in a duel in 1804. A duel was fought between the Duke of Wellington and Lord Winchelsea in 1829, but the practice was dying out. It lasted longest in the army. By English law fatal duelling is considered murder, no matter how fair the combat may have been, and the seconds are liable to the same penalty as the principals. In 1813, the principal and seconds in a fatal duel were sentenced to death, though afterwards pardoned. An officer in the army having anything to do with a duel renders himself liable to be cashiered. In France duelling still prevails to a certain extent; but the combats are usually very bloodless and ridiculous affairs. In the German army it is common, and is recognized by law. The duels of German students, so often spoken of, seldom cause serious bloodshed. In the United States duels are now uncommon. In some of the States the killing of a man in a duel is punishable by death or by forfeiture of political rights, and in a large number the sending of a challenge is a felony. In the army and navy it is forbidden. During the Revolution there were a number of duels: Charles Lee was wounded by John Laurens; Gwinnett, a signer of the Declaration, was killed by Gen. McIntosh; Alexander Hamilton was slain by Aaron Burr. Decatur was killed and Barron wounded fighting a duel. Andrew Jackson killed Dickinson, and fought several other duels. Col. Benton killed Lucas, and had other encounters. Henry Clay and John Randolph fought in 1826. De Witt Clinton was a duellist.

Dwarf. A term applied to any animal or plant greatly below the usual size of its kind, particularly to a human being of small dimensions. Accounts of dwarf tribes have been common from early times, such tribes being located especially in Africa; and it would appear from the accounts of Du Chaillu, Schweinfurth, and other travelers that there are several dwarfish tribes throughout this continent. The Obongo, a race of dwarfs, are described as living in woods near the Okanda River, in wretched huts made of branches. Other races are the Mabongo, and the Akka dwarfs of Central Africa; and a race is said to exist in the Congo State, not as a distinct community, however, but mixed with other tribes. Individual dwarfs occur in all races, and were formerly a fashionable appendage to the courts of princes and the families of nobles. Jeffery Hudson, the favorite dwarf of Charles I., at the age of thirty is said to have been only eighteen inches high, though he afterwards grew to three feet and nine inches.

Bébé, the celebrated dwarf of Stanislas of Poland, was thirty-three inches; Wybrand Lolkes, a Dutch dwarf, when sixty years of age was only twenty-seven inches; Charles H. Stratton, "General Tom Thumb," was thirty-one inches high at the age of twenty-five; Francis Flynn, "General Mite," was only twenty-one inches at sixteen.

Earthquakes. A shaking of certain parts of the earth's surface, produced by causes not perceivable by our senses. This motion occurs in very different ways, having sometimes a perpendicular, sometimes a horizontal undulating, and sometimes a whirling motion. It also varies much in degrees of violence, from a shock which is hardly perceptible to one which bursts open chasms and changes the appearance of the ground itself. During these shocks sometimes smoke and flames, but more frequently stones and torrents of water are discharged. There is little doubt that earthquakes and volcanic eruptions are kindred phenomena, the latter differing from the former principally in proceeding from a permanent crater. All observations go to prove that both are due to disruptions produced by internal heat at a great depth beneath the surface of the earth. Of the particular way in which this force works, however, there are various theories. It has been thought by some that the center of earthquakes and volcanic disturbances is always near the sea or other large supplies of water, and that the disturbances are directly caused by the filtration of the water down to igneous matter, and the consequent generation of vast quantities of steam which frees itself by explosion. Others have sought to explain earthquakes as part of the phenomena of a planet cooling at the surface. The parts of the world most frequented by earthquakes are exhibited in the following table:

AREA	EARTHQUAKES
Scandinavia,	646
British Isles,	1,139
France,	2,793
Spain and Portugal,	2,656
Switzerland,	3,895
Italy,	27,672
Holland and North Germany,	2,326
Sicily,	4,331
Greece,	10,306
Russia,	258
Asia Minor,	4,451
India,	813
Japan,	27,562
Africa,	179
Atlantic Islands,	1,704
United States, Pacific Coast,	4,467
Atlantic Coast,	937
Mexico,	5,586
Central America,	2,739
West Indies,	2,561
South America,	8,081
Java,	2,155
Australia and Tasmania,	83
New Zealand,	1,925

The most remarkable earthquakes of history are the following:

	B. C.
One which made Eubœa an island,	425
Ellice and Bula, in Peloponnesus, swallowed up,	372
One at Rome, when, in obedience to an oracle, M. Curtius, armed and mounted on a stately horse, leaped into the dreadful chasm it occasioned (Livy),	358

	B. C.	A. D.
Duras, in Greece, buried, with all its inhabitants; and twelve cities in Campania also buried, . . .	345	1784
Lysimachia and its inhabitants totally buried, . . .	283	1789
Ephesus and other cities overturned, . . .	17	1761
One accompanied by the eruption of Vesuvius; the cities of Pompeii and Herculaneum buried, . . .	79	1794
Four cities in Asia, two in Greece, and two in Galatia overturned, . . .	107	1794
Antioch destroyed, . . .	115	1797
Nicomedia, Cæsarea, and Nicæa overturned, . . .	126	1800
In Asia, Pontus, and Macedonia, 150 cities and towns damaged, . . .	357	1804
Nicomedia again demolished, and its inhabitants buried in its ruins, . . .	358	1805
One felt by nearly the whole world, . . .	543	1810
At Constantinople; its edifices destroyed, and thousands perished, . . .	557	1812
In Africa; many cities overturned, . . .	560	1819
Awful one in Syria, Palestine, and Asia; more than 500 towns were destroyed, and the loss of life surpassed all calculations, . . .	742	1819
In France, Germany, and Italy, . . .	801	1826
Constantinople overturned; all Greece shaken, . . .	936	1829
One felt throughout England, . . .	1089	1834
One at Antioch; many towns destroyed, among them Mariseum and Mamistria, . . .	1114	1836
Catania, in Sicily, overturned, and 15,000 persons buried in the ruins, . . .	1137	1836
One severely felt at Lincoln, . . .	1142	1836
At Calabria; one of its cities and all its inhabitants overwhelmed in the Adriatic Sea, . . .	1186	1839
One again felt throughout England; Glastonbury destroyed, . . .	1274	1840
In England; the greatest known there, . . .	1318	1840
At Naples; 40,000 persons perished, . . .	1456	1842
At Lisbon; 1,500 houses and 30,000 persons buried in the ruins; several neighboring towns ingulfed with their inhabitants, . . .	1531	1843
One felt in London; part of St. Paul's and the Temple churches fell, . . .	1580	1851
In Japan; several cities made ruins, and thousands perished, . . .	1596	1851
Awful one at Calabria, . . .	1638	1854
One in China, when 300,000 persons were buried in Pekin alone, . . .	1662	1854
One severely felt in Ireland, . . .	1690	1855
One at Jamaica, which totally destroyed Port Royal, whose houses were ingulfed forty fathoms deep, and 300 persons perished, . . .	1692	1856
One in Sicily, which overturned fifty-four cities and towns, and 300 villages. Of Catania and its 18,000 inhabitants not a trace remained; more than 100,000 lives were lost, . . .	1693	1857
Palermo nearly destroyed; 6,000 lives lost, . . .	1726	1858
Again in China; and 100,000 people swallowed up at Pekin, . . .	1731	1859
In Hungary; a mountain turned round, . . .	1736	1859
One at Palermo, which swallowed up a convent; but the monks escaped, . . .	1740	1859
Lima and Callao demolished; 18,000 persons buried in the ruins, . . .	1746	1860
In London, a slight shock, February 8th: but severer shock, March 8th, . . .	1750	1861
Adrianople nearly overwhelmed, . . .	1752	1861
At Grand Cairo; half of the houses and 40,000 persons swallowed up, . . .	1754	1861
Quito destroyed, . . .	1755	1861
Great earthquake at Lisbon. In about eight minutes most of the houses and upward of 50,000 inhabitants were swallowed up, and whole streets buried. The cities of Coimbra, Oporto, and Braga suffered dreadfully, and St. Ubes was wholly overturned. In Spain, a large part of Malaga became ruins. One-half of Fez, in Morocco, was destroyed, and more than 12,000 Arabs perished there. Above half of the island of Madeira became waste; and 2,000 houses in the island of Mytilene, in the Archipelago, were overthrown. This awful earthquake extended 5,000 miles; even to Scotland, . . .	1755	1862
In Syria, extended over 10,000 square miles; Baalbec destroyed, . . .	1759	1862
At Martinico, 1,600 persons lost their lives, . . .	1767	1862
At Guatemala, which, with 8,000 inhabitants, was swallowed up, . . .	1773	1862
A destructive one at Smyrna, . . .	1778	1862
At Tauris; 15,000 houses thrown down, and multitudes buried, . . .	1780	1862
Messina and other towns in Italy and Sicily overthrown; 40,000 persons perished, . . .	1783	1862
Archlindsehan wholly destroyed, and 12,000 persons buried in its ruins, . . .		1784
At Borgo di San Sepolcro; many houses and 1,000 persons swallowed up, . . .		1789
Another fatal one in Sicily, . . .		1761
In Naples; Vesuvius overwhelmed the city of Torre del Greco, . . .		1794
In Turkey, where, in three towns, 10,000 persons lost their lives, . . .		1794
The whole country between Santa Fé and Panama destroyed, including Cosco and Quito; 40,000 people buried in one second, . . .		1797
At Constantinople, which destroyed the royal palace and an immensity of buildings, and extended into Rumania and Wallachia, . . .		1800
A violent one felt in Holland, . . .		1804
At Frosolone, Naples; 6,000 lives lost, . . .		1805
At the Azores; a village of St. Michael's sunk, and a lake of boiling water appeared in its place, . . .		1810
Awful one at Caracæ (which see), . . .		1812
Several throughout India; district of Kutch sunk; 2,000 persons buried, . . .		1819
Genoa, Palermo, Rome, and many other towns greatly damaged; thousands perish, . . .		1819
One in Calabria and Sicily, . . .		1826
In Spain; Mercia and numerous villages devastated; 6,000 persons perish, . . .		1829
In the Duchy of Parma; no less than forty shocks were experienced at Borgotaro; and at Pontremoli many houses were thrown down, and not a chimney was left standing, . . .		1834
In Calabria, Cosenza and villages destroyed; 1,000 persons buried, . . .		1835
In Calabria; 1,000 buried at Rossano, etc., . . .		1836
In many cities of Southern Syria, by which hundreds of houses were thrown down, and thousands of lives lost, . . .		1836
At Martinique; nearly half of Port Royal destroyed; nearly 700 persons killed, and the whole island damaged, . . .		1839
At Ternate; the island made a waste, and thousands of lives lost, . . .		1840
Awful and destructive earthquake at Mount Ararat, in one of the districts of Armenia; 3,137 houses were overthrown, and several hundred persons perished, . . .		1840
Great earthquake at Zante, where many persons perished, . . .		1840
At Cape Haytien, St. Domingo, which destroyed nearly two-thirds of the town; between 4,000 and 5,000 lives were lost, . . .		1842
At Point à Pitre, Guadaloupe, which was entirely destroyed, . . .		1843
At Rhodes and Macri, when a mountain fell in it the latter place, crushing a village, and destroying 600 persons, . . .		1851
At Valparaiso, where more than 400 houses were destroyed, . . .		1851
In South Italy; Melfi almost laid in ruins; 14,000 lives lost, . . .		1851
At Philippine Isles; Manila nearly destroyed, . . .		1852
In Northwest of England, slight, . . .		1852
Thebes, in Greece, nearly destroyed, . . .		1853
St. Salvador, South America, destroyed, . . .		1854
Amasea, in Japan, and Simoda, in Nippon, destroyed; Jeddo much injured, . . .		1854
Broussa, in Turkey, nearly destroyed, . . .		1855
Several villages in Central Europe destroyed, . . .		1855
Jeddo nearly destroyed, . . .		1855
At the island of Great Sanger, one of the Moluccas; volcanic eruption and earthquake; nearly 3,000 lives lost, . . .		1856
In the Mediterranean; at Candia, 500 lives lost; Rhodes, 100; and other islands, 150, . . .		1856
In Calabria, Montemurro and many other towns destroyed, and about 22,000 lives lost in a few seconds, . . .		1857
Corinth nearly destroyed, . . .		1858
At Quito; about 5,000 persons killed, and an immense amount of property destroyed, . . .		1859
At Erzeroum, Asia Minor; above 1,000 persons said to have perished, . . .		1859
At San Salvador; many buildings destroyed, no lives lost, . . .		1859
In Cornwall, slight, . . .		1859-1860
At Perugia, Italy; several lives lost, . . .		1861
At Mendoza, South America; about two-thirds of the city and 7,000 lives lost, . . .		1861
In Greece; North Morea, Corinth, and other places injured, . . .		1861
Guatemala; 150 buildings and fourteen churches destroyed, . . .		1862

A. D.

Rhodes; thirteen villages destroyed, about 300 persons perished, and much cattle and property lost.	1863
Manila, Philippine Isles; immense destruction of property; about 10,000 persons perished.	1863
Central, West, and Northwest of England.	1863
At Macehia, Bendinella, etc., Sicily; 200 houses destroyed, sixty-four persons killed.	1865
In San Francisco, California, great damage.	1865
On the Hawaiian (Sandwich) Islands, accompanied by an eruption of Mauno Loa. During a period of fifteen days over two thousand shocks were experienced. The eruption of lava was profuse, causing much destruction of life and property.	1868
Peru, Ecuador, and Chile were largely devastated by a violent earthquake, which destroyed several large cities along the coast. It is reported that between 30,000 and 60,000 people lost their lives.	1868
Island of Ischia.	1868
Charleston, South Carolina.	1864
Mentone and the Riviera of Italy.	1886
Japan, 4,000 killed; 50,000 houses destroyed.	1887
Greece, 200 people lost and many buildings destroyed.	1891
Constantinople and along the Dardanelles.	1894
Valparaiso, Chile, great loss of life and property.	1894
San Francisco, 1,000 lives lost and \$400,000,000 in property destroyed.	1906

Education, Cost of, in Various Countries. The figures given in the tables of the cost of higher education in various countries are from the report of the Commissioner of Education, and are intended to give an idea of the approximate amounts paid for higher education in the principal countries of the world. Educational systems differ greatly in different countries, and it is possible to make fair comparisons of cost only where it is possible to make fair comparisons of the systems employed. In Germany a great deal of such work as is done in higher educational institutions in this country is carried on in the secondary schools, or gymnasia. In a number of countries which might have place in these tables it was impossible to obtain data, according to the Commissioner's report, and no safe figures can be given. In other cases census figures had to be used, though dating back several years previous to the time of the report. The data for Greece was obtained shortly after the war with Turkey, and are much lower than might be expected.

The cost of higher education in the United States can be approximated only, as the expenses are met by so many different methods. For the same reason only an approximation of the per capita can be given.

COUNTRY	EXPENDITURE FOR HIGHER EDUCATION	PER CAPITA (CENTS)
Algeria.	\$ 128,535	2.9
Argentina.	250,000	6.0
Australia.	614,140	15.2
Austria.	2,692,370	11.3
Belgium.	748,267	11.4
Bulgaria.	75,498	2.3
Canada.	1,014,254	19.5
Denmark.	299,686	13.7
France.	4,391,012	11.4
Germany.	7,450,366	14.3
Great Britain and Ireland.	8,353,655	21.7
Greece.	103,636	4.3
Hungary.	1,240,246	7.1
Italy.	2,198,833	7.0
Liberia.	102,434	1.8
Netherlands.	767,229	15.3
Norway.	166,717	8.3
Portugal.	253,268	5.0
Rumania.	426,324	7.3
Russia (and Siberia).	4,740,709	3.7
Servia.	63,690	2.8
Spain.	457,892	2.8
Sweden.	653,209	13.0
Switzerland.	672,505	21.8
United States.	40,705,120	50.0

Fool, Court, or Jester. Among the more celebrated of French court-fools were Triboulet of the court of Francis I.; Chicot, the jester of Charles IX.; and Angely, the cynical buffoon of Louis XIII., and the last of his order in that country. England had also her special representatives in this field of Momus; the court-fool of Henry VIII., with their retinue of giants and Xit, the dwarf, and Archie Armstrong, James I.'s licensed joker, being the most celebrated. Court-fools in all European countries save Russia were discontinued soon after the first quarter of the Seventeenth Century. Peter the Great and the Empress Anne, however, kept up the practice much later.

Freemasonry. The name of a secret brotherhood which claims a very remote origin, and seems to have descended to us directly from the craft guilds of the mediæval period. Modern Masonry arose in England in the Nineteenth Century, and has no connection with the builder's craft. It was first established in the United States in 1723. There are now in the United States and British America, in 1906, a total of 1,129,000 members.

DEGREES IN FREEMASONRY

YORK RITE	SCOTTISH RITE
<i>Lodge</i>	<i>Councils of Princes of Jerusalem (Continued)</i>
1. Entered Apprentice.	16. Prince of Jerusalem.
2. Fellow Craftman.	
3. Master Mason.	<i>Chapters of Rose Croix</i>
<i>Chapter</i>	17. Knight of the East and West.
4. Mark Master.	18. Knight of the Rose Croix de H. R. D. M.
5. Past Master.	<i>Consistories of Sublime Princes of the Royal Secret</i>
6. Most Excellent Master.	19. Grand Pontiff.
7. Royal Arch Mason.	20. Master Ad Vitam.
<i>Council</i>	21. Patriarch Noahite.
8. Royal Master.	22. Prince of Libanus.
9. Select Master.	23. Chief of the Tabernacle.
10. Super Excellent Master.	24. Prince of the Tabernacle.
<i>Commandery.</i>	<i>Consistories of Sublime Princes of the Royal Secret</i>
11. Red Cross Knight.	25. Knight of the Brazen Serpent.
12. Knight Templar.	26. Prince of Mercy.
13. Knight of Malta.	27. Commander of the Temple.
	28. Knight of the Sun.
	29. Knight of St. Andrew.
	30. Grand Elect Knight, K. H., or Knight of the Black and White Eagle.
	31. Grand Inspector Inquisitor Commander.
	32. Sublime Prince of the Royal Secret.
	33. Sovereign Grand Inspector-General of the 33d and Last Degree.

Gardens of the World.

Garden of Eden. First abode of man, supposed to be located near the city of Babylon.

Garden of England. Worcestershire and Kent. Both so called.

Garden of Erin. Carlow, in Leinster.

Garden of Europe. Italy and Belgium. Both so called.

Garden of France. Amboise, in the *département of Indre-et-Loire*.

Garden of Gethsemane. East of Jerusalem, near the Brook Kedron.

Garden of Helvetia. Name given to Thurgau, Switzerland.

Garden of Hesperides. In the western part of the mythological world.

Garden of India. Oude.

Garden of Italy. Sicily.

Garden of South Wales. The southern division of Glamorganshire.

Garden of Spain. Andalusia.

Garden of the Argentine. Turcuman, a province of Argentina.

Garden of the East. Ceylon and Burmah. Both so called. Ceylon is also called "The Resplendent"; the "Jewel of the Eastern Sea"; the "Gem of Paradise." Its climate and productions are quite unrivaled.

Garden of the West. Illinois and Kansas. Both so called.

Garden of the World. The region of the Mississippi.

Giants. The following are among authentic instances of persons who attained to the stature of giants: The Roman Emperor Maximin, a Thracian, nearly 9 feet high; Queen Elizabeth's Flemish porter, 7 feet 6 inches; C. Munster, a yeoman of the guard in Hanover, who died in 1676, 8 feet 6 inches high; Cajanus, a Swedish giant, about 9 feet high, exhibited in London in 1742; C. Byrne, who died in 1783, attained the height of 8 feet 4 inches; Patrick Cotter O'Brien, who lived about the same time, was 8 feet 7½ inches; a Swede in the celebrated grenadier guard of Frederick William I. of Prussia stood 8½ feet. In 1844, died Pauline Wedde (called Marian), over 8 feet 2 inches at the age of 18. The following are still or were quite recently exhibiting: Anna Swan, a native of Nova Scotia, above 8 feet high; her husband, Captain Bates, a native of Kentucky, of the same height; Chang-wu-gon, the Chinese giant, 7 feet 9 inches high.

Holidays in the United States.

JANUARY 1st. *New Year's Day:* In all the States (including the District of Columbia, Arizona, and New Mexico), except Massachusetts, Mississippi, and New Hampshire.

JANUARY 8th. *Anniversary of the Battle of New Orleans:* In Louisiana.

JANUARY 19th. *Lee's Birthday:* In Florida, Georgia, North Carolina, South Carolina, Virginia, Alabama, and Arkansas.

FEBRUARY. *Mardi-Gras:* In Alabama and the parish of Orleans, Louisiana.

FEBRUARY 12th. *Lincoln's Birthday:* In Colorado, Connecticut, Delaware, Illinois, Kansas, Massachusetts, Minnesota, Nevada, New

Jersey, New York, North Dakota, Pennsylvania, Washington, and Wyoming.

FEBRUARY 22d. *Washington's Birthday:* In all the States, District of Columbia, and Arizona, except Mississippi, where it is observed by exercises in the public schools.

MARCH 2d. *Anniversary of Texan Independence:* In Texas.

APRIL. In Oregon, the forty-fifth day preceding general State Election, primary nominating election held. Every day on which an election is held throughout the State is a legal holiday.

APRIL 17, 1908. *Good Friday:* In Alabama, Delaware, Florida, Louisiana, Maryland, Minnesota, New Jersey, Pennsylvania, Tennessee.

APRIL 19th. *Patriot's Day:* In Maine and Massachusetts.

APRIL 21st. *Anniversary of the Battle of San Jacinto:* In Texas.

APRIL 26th. *Confederate Memorial Day:* In Alabama, Florida, Georgia, and Mississippi.

MAY 10th. *Confederate Memorial Day:* In North Carolina and South Carolina.

MAY (Second Friday) *Confederate Day:* In Tennessee.

MAY 20th. *Anniversary of the Signing of the Mecklenburg Declaration of Independence:* In North Carolina.

MAY (last Friday) *Pioneer Day:* In Montana, observed in public schools.

MAY 30th. *Decoration Day:* In all the States and Territories (and District of Columbia), except Florida, Georgia, Idaho, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas. In Virginia, known as "Confederate Memorial Day."

JUNE 3d. *Jefferson Davis's Birthday:* In Florida, Georgia, Alabama, Mississippi, Tennessee, Texas, and South Carolina. In Louisiana, known as "Confederate Memorial Day." In Virginia, in public schools.

JUNE (first Monday), even years, general State election in Oregon.

JULY 4th. *Independence Day:* In all the States, District of Columbia, and Territories.

JULY 24th. *Pioneers' Day:* In Utah.

AUGUST. *Primary Election Days:* In Missouri.

AUGUST 16th. *Bennington Battle Day:* In Vermont.

SEPTEMBER 7, 1908. *Labor Day:* In all the States and Territories (and District of Columbia), except North Dakota. In Louisiana, observed in Orleans Parish. In Wyoming, by proclamation of the governor.

SEPTEMBER (first Tuesday) *Primary Election Day:* In Wisconsin.

SEPTEMBER 9th. *Admission Day:* In California.

SEPTEMBER 12th. "Old Defenders' Day": In Baltimore, Md.

OCTOBER 31st. *Admission Day:* In Nevada.

NOVEMBER 1st. *All Saints' Day:* In Louisiana.

NOVEMBER — General Election Day: In Arizona, California, Colorado, Delaware, Florida, Idaho (Illinois in Chicago, Springfield and East St. Louis only), Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Hamp-

shire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio (from 5.30 A. M. to 9 A. M. only), Oklahoma, Oregon (vote for presidential elections only), Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, West Virginia, Washington, Wisconsin, and Wyoming, in the years when elections are held therein. In 1908 in States holding such elections the date is November 3d.

NOVEMBER — 1908. *Thanksgiving Day* (usually the fourth Thursday in November): Is observed in all the States, and in the District of Columbia, Arizona, and New Mexico, though in some States it is not a statutory holiday.

DECEMBER 25TH. *Christmas Day*: In all the States, District of Columbia, and Territories.

Sundays and Fast Days are legal holidays in all the States which designate them as such.

There are no statutory holidays in Mississippi, but by common consent the Fourth of July, Thanksgiving, and Christmas are observed. In New Mexico, Washington's Birthday, Decoration Day, Labor Day, Flag-Day (June 14), and Arbor Day are holidays when so designated by the governor. In South Carolina, Thursday of Fair Week is a legal holiday.

Arbor Day is a legal holiday in Arizona, Maine, Maryland, New Mexico, Wisconsin, and Wyoming, the day being set by the governor; in Texas, February 22d; Nebraska, April 22d; Utah, April 15th; Rhode Island, second Friday in May; Montana, second Tuesday in May; Georgia, first Friday in December; Colorado (school holiday only), third Friday in April; in Oklahoma, the Friday following the second Monday in March; in Arkansas, first Saturday in March.

Every Saturday after 12 o'clock noon is a legal holiday in California in public offices, Illinois (in cities of 200,000 or more inhabitants), Maryland, Michigan, New York, New Jersey, Ohio, Pennsylvania, Rhode Island, Virginia, the District of Columbia (for banking purposes), and in New Orleans, La., and Charleston, S. C.; in Louisiana and Missouri in cities of 100,000 or more inhabitants; in Tennessee, for State and county officers, and in Colorado during June, July, and August; in Indiana, first Saturday in June to last Saturday in October, inclusive, for all public offices in counties having a county-seat of 100,000 population or more.

There is no national holiday, not even the Fourth of July, Congress has at various times appointed special holidays. In the second session of the Fifty-third Congress it passed an act making Labor Day a public holiday in the District of Columbia, and it has recognized the existence of certain days as holidays for commercial purposes, but, with the exception named, there is no general statute on the subject. The proclamation of the president designating a day of Thanksgiving only makes it a legal holiday in the District of Columbia and the Territories.

CHURCH DAYS

Ember and Rogation Days are certain periods of the year devoted to prayer and fasting. Ember Days (twelve annually) are the Wednesday, Friday, and Saturday after the first Sunday in Lent, after the feast of Pentecost (Whit Sunday), after the festival of the Holy Cross, and after the festival of St. Lucia. Ember Weeks are the weeks in which the Ember Days appear.

Rogation Days are the three days immediately preceding Holy Thursday or Ascension Day.

Easter, the Christian passover and festival of the resurrection of Christ. The English name is probably derived from that of the Teutonic goddess of spring, Ostera or Eostre, whose festival occurred about the same time as the celebration of Easter. Those of the early Christians who believe the Christian passover to be a commemoration of Christ's death adhered to the

custom of holding the Easter festivity on the day prescribed for the Jewish pasch, the 14th day of the first month, that is, the lunar month of which the 14th day either falls on or next follows the day of the vernal equinox. But most of the Christian Churches, attaching greatest importance to the day of Christ's resurrection, held to Easter's being celebrated on the Sunday which followed the 14th day of the moon of March, the day on which Christ suffered. This question was the cause of a serious difference in the Church as early as the Second Century, and was not finally settled until the Council of Nice in 325. The rule was then adopted which makes Easter day to be always the first Sunday after the full moon which happens upon or next after March 21st; and if the full moon happen on a Sunday, Easter day is the Sunday after. By this arrangement Easter may come as early as March 22d, or as late as April 25th. This sacred festival is celebrated in every part of the Christian world with great solemnity and devotion, and generally also with proper sports and observances. Among the best known of the latter is the custom of making presents of colored eggs, called pasch or pace eggs. This custom originated from the old German legend of a white hare stealing into the house on Easter eve and secreting a number of beautifully colored eggs in odd corners for good little children. In America, where the hare is practically unknown, the custom has been transferred to the rabbit, its near relation. Hence, the colored Easter eggs are popularly referred to as "rabbit's eggs."

OLD ENGLISH HOLIDAYS

These holidays, with their names, had their origin in mediæval England when the state religion was that of the Church of Rome, and they are still observed generally or in some parts of England, Scotland, and Ireland.

JANUARY 6TH. *Twelfth Day*, or *Twelfth-tide*, sometimes called Old Christmas Day, the same as Epiphany. The previous evening is Twelfth Night, with which many social rites have long been connected.

FEBRUARY 2D. *Candlemas*: Festival of the Purification of the Virgin. Consecration of the lighted candles to be used in the church during the year.

FEBRUARY 14TH. *Old Candlemas*: St. Valentine's Day.

MARCH 25TH. *Lady Day*: Annunciation of the Virgin. April 6th is old Lady Day.

JUNE 24TH. *Midsummer Day*: Feast of the Nativity of John the Baptist. July 7th is old Midsummer Day.

JULY 15TH. *St. Swithin's Day*. There was an old superstition that if rain fell on this day it would continue forty days.

AUGUST 1ST. *Lammas Day*: Originally in England the festival of the wheat harvest. In the Church the festival of St. Peter's miraculous deliverance from prison. Old Lammas Day is August 13th.

SEPTEMBER 29TH. *Michaelmas*: Feast of St. Michael, the Archangel. Old Michaelmas is October 11th.

NOVEMBER 1ST. *Allhallowmas*: Allhallows or All Saints' Day. The previous evening is

Allhalloween, observed by home gatherings and old-time festive rites.

NOVEMBER 2D. *All Souls' Day*: Day of prayer for the souls of the dead.

NOVEMBER 11TH. *Martinmas*: Feast of St. Martin. Old Martinmas is November 23d.

DECEMBER 28TH. *Childermas*: Holy Innocents Day.

Lady Day, Midsummer Day, Michaelmas, and Christmas are quarter (rent) days in England, and Whitsunday, Martinmas, Candlemas, and Lammas Day, in Scotland.

Shrove Tuesday, the day before Ash Wednesday, and Maundy Thursday, the day before Good Friday, are observed by the Church. Mothering Sunday is Mid-Lent Sunday, in which the old rural custom obtains of visiting one's parents and making them presents.

Honor, Legion of. An order of merit instituted under the French Republic in 1802, by the First Consul, as a recompense for military and civil services. The order originally comprised three classes—grand officers, commanders, and legionaries. The class of grand officers was, on the coronation of Napoleon I., divided into knights of the grand eagle (the highest class) and grand officers. On the restoration of the Bourbons the legion was retained, but remodeled so as to lose much of its original character. The decoration was a star of five rays, white enamel, surrounded with oak and laurel branches. In the center of the star was the figure of Napoleon Bonaparte. On one side was the legend *Honneur et Patrie*, and the device was an eagle holding thunderbolts. It was suspended to a red-watered ribbon. Remodeled by Napoleon III. (January 22, 1853).

Badge for a *Chevalier*, a bow of red ribbon in the buttonhole of the coat, with medal attached.

Badge for an *Officer*, a rosette of red ribbon in the buttonhole of the coat, with medal attached.

Badge for a *Commander*, a collar-ribbon.

Badge for a *Grand Officer*, a broad ribbon under the waistcoat.

Badge for a *Grand Cross*, a broad ribbon with a star on the breast, and jewel cross pendant.

Horoscope. In astrology, an observation of the aspect of the heavens at the moment of a person's birth, by which the astrologer claimed to foretell the future. A scheme or figure of the 12 houses or 12 signs of the zodiac, in which is marked the disposition of the heavens at a given time, and by which astrologers formerly told the fortunes of persons, according to the position of the stars at the time of their birth. A kind of planisphere invented by John of Padua. A table of the length of the days and nights at all places.

Immigration to United States.

PERIOD	IMMIGRANTS ARRIVED
Year ending September 30 —	
1820,	8,385
1821,	9,127
1822,	6,911
1823,	6,354
1824,	7,912

PERIOD	IMMIGRANTS ARRIVED
1825,	10,199
1826,	10,837
1827,	18,875
1828,	27,382
1829,	22,530
1830,	23,322
1831,	22,633
October 1, 1831, to December 31, 1831, Year ending December 31 —	60,482
1833,	58,640
1834,	65,365
1835,	45,374
1836,	76,242
1837,	79,340
1838,	38,914
1839,	68,069
1840,	84,066
1841,	80,289
1842,	104,565
January 1st to September 30, 1843, Year ending September 30 —	52,496
1844,	78,615
1845,	114,371
1846,	154,416
1847,	234,968
1848,	226,527
1849,	297,024
1850,	310,004
October 1st to December 31, 1850, Year ending December 31st —	59,976
1851,	379,466
1852,	371,603
1853,	368,645
1854,	427,833
1855,	200,877
1856,	195,857
January 1st to June 30, 1857, Year ending June 30th —	112,123
1858,	191,942
1859,	129,571
1860,	133,143
1861,	142,877
1862,	72,183
1863,	132,925
1864,	191,114
1865,	180,339
1866,	332,577
1867,	303,104
1868,	282,189
1869,	352,768
1870,	387,203
1871,	321,350
1872,	404,806
1873,	459,803
1874,	313,339
1875,	227,498
1876,	169,986
1877,	141,857
1878,	138,469
1879,	177,826
1880,	457,257
1881,	669,431
1882,	788,992
1883,	603,322
1884,	518,592
1885,	395,346
1886,	334,203
1887,	490,109
1888,	546,889
1889,	444,427
1890,	455,302
1891,	560,319
1892,	579,663
1893,	439,730
1894,	285,631
1895,	258,536
1896,	343,267
1897,	230,832
1898,	229,299
1899,	311,715
1900,	448,572
1901,	487,918
1902,	648,743
1903,	857,046
1904,	812,870
1905,	1,027,421
1906,	1,100,735
1907,	1,285,349

Interest Tables. The tables following are compiled on the basis of 30 days to a month, or 360 days to a year, and at 6 and 7 per cent. To ascertain the interest at 4 per cent., first find the amount from the tables at 6 per cent., and then subtract one-third; the remainder will be the interest at 4 per cent. If 5 per cent. is required, find the amount at 6 per cent. and subtract one-sixth. If 8 per cent. is required, find the amount at 6 per cent. and add one-third. If 9 per cent. is required, find the amount at 6 per cent. and add one-half.

INTEREST AT 6 AND 7 PER CENT.

1 DOLLAR			2 DOLLARS			3 DOLLARS			4 DOLLARS			5 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
1 day	.00	.00	1 day	.00	.00	1 day	.00	.00	1 day	.00	.00	1 day	.00	.00
2	.00	.00	2	.00	.00	2	.00	.00	2	.00	.00	2	.00	.00
3	.00	.00	3	.00	.00	3	.00	.00	3	.00	.00	3	.00	.00
4	.00	.00	4	.00	.00	4	.00	.00	4	.00	.00	4	.00	.00
5	.00	.00	5	.00	.00	5	.00	.00	5	.00	.00	5	.00	.00
6	.00	.00	6	.00	.00	6	.00	.00	6	.00	.00	6	.01	.01
7	.00	.00	7	.00	.00	7	.00	.00	7	.00	.01	7	.01	.01
8	.00	.00	8	.00	.00	8	.00	.00	8	.01	.01	8	.01	.01
9	.00	.00	9	.00	.00	9	.00	.01	9	.01	.01	9	.01	.01
10	.00	.00	10	.00	.00	10	.01	.01	10	.01	.01	10	.01	.01
11	.00	.00	11	.00	.00	11	.01	.01	11	.01	.01	11	.01	.01
12	.00	.00	12	.00	.00	12	.01	.01	12	.01	.01	12	.01	.01
13	.00	.00	13	.00	.01	13	.01	.01	13	.01	.01	13	.01	.01
14	.00	.00	14	.00	.01	14	.01	.01	14	.01	.01	14	.01	.01
15	.00	.00	15	.01	.01	15	.01	.01	15	.01	.01	15	.01	.01
16	.00	.00	16	.01	.01	16	.01	.01	16	.01	.01	16	.01	.02
17	.00	.00	17	.01	.01	17	.01	.01	17	.01	.01	17	.01	.02
18	.00	.00	18	.01	.01	18	.01	.01	18	.01	.01	18	.02	.02
19	.00	.00	19	.01	.01	19	.01	.01	19	.01	.01	19	.02	.02
20	.00	.00	20	.01	.01	20	.01	.01	20	.01	.02	20	.02	.02
21	.00	.00	21	.01	.01	21	.01	.01	21	.01	.02	21	.02	.02
22	.00	.00	22	.01	.01	22	.01	.01	22	.01	.02	22	.02	.02
23	.00	.00	23	.01	.01	23	.01	.01	23	.02	.02	23	.02	.02
24	.00	.00	24	.01	.01	24	.01	.01	24	.02	.02	24	.02	.02
25	.00	.00	25	.01	.01	25	.01	.01	25	.02	.02	25	.02	.02
26	.00	.01	26	.01	.01	26	.01	.02	26	.02	.02	26	.02	.03
27	.00	.01	27	.01	.01	27	.01	.02	27	.02	.02	27	.02	.03
28	.00	.01	28	.01	.01	28	.01	.02	28	.02	.02	28	.02	.03
29	.00	.01	29	.01	.01	29	.01	.02	29	.02	.02	29	.02	.03
1 mo.	.01	.01	1 mo.	.01	.01	1 mo.	.02	.02	1 mo.	.02	.02	1 mo.	.03	.03
2	.01	.01	2	.02	.02	2	.03	.04	2	.04	.05	2	.05	.06
3	.02	.02	3	.03	.04	3	.05	.05	3	.06	.07	3	.08	.09
4	.02	.02	4	.04	.05	4	.06	.07	4	.08	.09	4	.10	.12
5	.03	.03	5	.05	.06	5	.08	.09	5	.10	.12	5	.13	.15
6	.03	.04	6	.06	.07	6	.09	.11	6	.12	.14	6	.15	.18
7	.04	.04	7	.07	.08	7	.11	.12	7	.14	.16	7	.18	.20
8	.04	.05	8	.08	.09	8	.12	.14	8	.16	.19	8	.20	.23
9	.05	.05	9	.09	.11	9	.14	.16	9	.18	.21	9	.23	.26
10	.05	.06	10	.10	.12	10	.15	.18	10	.20	.23	10	.25	.29
11	.06	.06	11	.11	.13	11	.17	.19	11	.22	.26	11	.28	.32
1 yr.	.06	.07	1 yr.	.12	.14	1 yr.	.18	.21	1 yr.	.24	.28	1 yr.	.30	.35

6 DOLLARS			7 DOLLARS			8 DOLLARS			9 DOLLARS			10 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
1 day	.00	.00	1 day	.00	.00	1 day	.00	.00	1 day	.00	.00	1 day	.00	.00
2	.00	.00	2	.00	.00	2	.00	.00	2	.00	.00	2	.00	.00
3	.00	.00	3	.00	.00	3	.00	.00	3	.00	.01	3	.01	.01
4	.00	.00	4	.00	.01	4	.01	.01	4	.01	.01	4	.01	.01
5	.01	.01	5	.01	.01	5	.01	.01	5	.01	.01	5	.01	.01
6	.01	.01	6	.01	.01	6	.01	.01	6	.01	.01	6	.01	.01
7	.01	.01	7	.01	.01	7	.01	.01	7	.01	.01	7	.01	.01
8	.01	.01	8	.01	.01	8	.01	.01	8	.01	.01	8	.01	.02
9	.01	.01	9	.01	.01	9	.01	.01	9	.01	.02	9	.02	.02
10	.01	.01	10	.01	.01	10	.01	.02	10	.02	.02	10	.02	.02
11	.01	.01	11	.01	.01	11	.01	.02	11	.02	.02	11	.02	.02
12	.01	.01	12	.01	.02	12	.02	.02	12	.02	.02	12	.02	.02

INTEREST AT 6 AND 7 PER CENT.—CON.

6 DOLLARS			7 DOLLARS			8 DOLLARS			9 DOLLARS			10 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
13	.01	.02	13	.02	.02	13	.02	.02	13	.02	.02	13	.02	.03
14	.01	.02	14	.02	.02	14	.02	.02	14	.02	.02	14	.02	.03
15	.02	.02	15	.02	.02	15	.02	.02	15	.02	.03	15	.03	.03
16	.02	.02	16	.02	.02	16	.02	.02	16	.02	.03	16	.03	.03
17	.02	.02	17	.02	.02	17	.02	.03	17	.03	.03	17	.03	.03
18	.02	.02	18	.02	.02	18	.02	.03	18	.03	.03	18	.03	.04
19	.02	.02	19	.02	.03	19	.03	.03	19	.03	.03	19	.03	.04
20	.02	.02	20	.02	.03	20	.03	.03	20	.03	.04	20	.03	.04
21	.02	.02	21	.02	.03	21	.03	.03	21	.03	.04	21	.04	.04
22	.02	.03	22	.03	.03	22	.03	.03	22	.03	.04	22	.04	.04
23	.02	.03	23	.03	.03	23	.03	.04	23	.03	.04	23	.04	.04
24	.02	.03	24	.03	.03	24	.03	.04	24	.04	.04	24	.04	.05
25	.03	.03	25	.03	.03	25	.03	.04	25	.04	.04	25	.04	.05
26	.03	.03	26	.03	.04	26	.03	.04	26	.04	.05	26	.04	.05
27	.03	.03	27	.03	.04	27	.04	.04	27	.04	.05	27	.05	.05
28	.03	.03	28	.03	.04	28	.04	.04	28	.04	.05	28	.05	.05
29	.03	.03	29	.03	.04	29	.04	.05	29	.04	.05	29	.05	.06
1 mo.	.03	.04	1 mo.	.04	.04	1 mo.	.04	.05	1 mo.	.05	.05	1 mo.	.05	.06
2	.06	.07	2	.07	.08	2	.08	.09	2	.09	.11	2	.10	.12
3	.09	.11	3	.11	.12	3	.12	.14	3	.14	.16	3	.15	.18
4	.12	.14	4	.14	.16	4	.16	.19	4	.18	.21	4	.20	.23
5	.15	.18	5	.18	.20	5	.20	.23	5	.23	.26	5	.25	.29
6	.18	.21	6	.21	.25	6	.24	.28	6	.27	.32	6	.30	.35
7	.21	.25	7	.25	.29	7	.28	.33	7	.32	.37	7	.35	.41
8	.24	.28	8	.28	.33	8	.32	.37	8	.36	.42	8	.40	.47
9	.27	.32	9	.32	.37	9	.36	.42	9	.41	.47	9	.45	.53
10	.30	.35	10	.35	.41	10	.40	.47	10	.45	.53	10	.50	.58
11	.33	.39	11	.39	.45	11	.44	.51	11	.50	.58	11	.55	.64
1 yr.	.36	.42	1 yr.	.42	.49	1 yr.	.48	.56	1 yr.	.54	.63	1 yr.	.60	.70

100 DOLLARS			200 DOLLARS			300 DOLLARS			400 DOLLARS			500 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
1 day	.02	.02	1 day	.03	.04	1 day	.05	.06	1 day	.07	.08	1 day	.08	.10
2	.03	.04	2	.07	.08	2	.10	.12	2	.13	.16	2	.17	.19
3	.05	.06	3	.10	.12	3	.15	.18	3	.20	.23	3	.25	.29
4	.07	.08	4	.13	.16	4	.20	.23	4	.27	.31	4	.33	.39
5	.08	.10	5	.17	.19	5	.25	.29	5	.33	.39	5	.42	.49
6	.10	.12	6	.20	.23	6	.30	.35	6	.40	.47	6	.50	.58
7	.12	.14	7	.23	.27	7	.35	.41	7	.47	.54	7	.58	.68
8	.13	.16	8	.27	.31	8	.40	.47	8	.53	.62	8	.67	.78
9	.15	.18	9	.30	.35	9	.45	.53	9	.60	.70	9	.75	.88
10	.17	.19	10	.33	.39	10	.50	.58	10	.67	.78	10	.83	.97
11	.18	.21	11	.37	.43	11	.55	.64	11	.73	.86	11	.92	1.07
12	.20	.23	12	.40	.47	12	.60	.70	12	.80	.93	12	1.00	1.17
13	.22	.25	13	.43	.51	13	.65	.76	13	.87	1.01	13	1.08	1.26
14	.23	.27	14	.47	.54	14	.70	.82	14	.93	1.09	14	1.17	1.36
15	.25	.29	15	.50	.58	15	.75	.88	15	1.00	1.17	15	1.25	1.46
16	.27	.31	16	.53	.62	16	.80	.93	16	1.07	1.24	16	1.33	1.56
17	.28	.33	17	.57	.66	17	.85	.99	17	1.13	1.32	17	1.42	1.65
18	.30	.35	18	.60	.70	18	.90	1.05	18	1.20	1.40	18	1.50	1.75
19	.32	.37	19	.63	.74	19	.95	1.11	19	1.27	1.48	19	1.58	1.85
20	.33	.39	20	.67	.78	20	1.00	1.17	20	1.33	1.56	20	1.67	1.94
21	.35	.41	21	.70	.82	21	1.05	1.23	21	1.40	1.63	21	1.75	2.04
22	.37	.43	22	.73	.86	22	1.10	1.28	22	1.47	1.71	22	1.83	2.14
23	.38	.45	23	.77	.89	23	1.15	1.34	23	1.53	1.79	23	1.92	2.24
24	.40	.47	24	.80	.93	24	1.20	1.40	24	1.60	1.87	24	2.00	2.33
25	.42	.49	25	.83	.97	25	1.25	1.46	25	1.67	1.94	25	2.08	2.43
26	.43	.51	26	.87	1.01	26	1.30	1.52	26	1.73	2.02	26	2.17	2.53
27	.45	.53	27	.90	1.05	27	1.35	1.58	27	1.80	2.10	27	2.25	2.63
28	.47	.54	28	.93	1.09	28	1.40	1.63	28	1.87	2.18	28	2.33	2.72
29	.48	.56	29	.97	1.13	29	1.45	1.69	29	1.93	2.26	29	2.42	2.82
1 mo.	.50	.58	1 mo.	1.00	1.17	1 mo.	1.50	1.75	1 mo.	2.00	2.33	1 mo.	2.50	2.92

INTEREST AT 6 AND 7 PER CENT.—CON.

100 DOLLARS			200 DOLLARS			300 DOLLARS			400 DOLLARS			500 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
2 mo.	1.00	1.17	2 mo.	2.00	2.33	2 mo.	3.00	3.50	2 mo.	4.00	4.67	2 mo.	5.00	5.83
3	1.50	1.75	3	3.00	3.50	3	4.50	5.25	3	6.00	7.00	3	7.50	8.75
4	2.00	2.33	4	4.00	4.67	4	6.00	7.00	4	8.00	9.33	4	10.00	11.67
5	2.50	2.92	5	5.00	5.83	5	7.50	8.75	5	10.00	11.67	5	12.50	14.58
6	3.00	3.50	6	6.00	7.00	6	9.00	10.50	6	12.00	14.00	6	15.00	17.50
7	3.50	4.08	7	7.00	8.17	7	10.50	12.25	7	14.00	16.33	7	17.50	20.42
8	4.00	4.67	8	8.00	9.33	8	12.00	14.00	8	16.00	18.67	8	20.00	23.33
9	4.50	5.25	9	9.00	10.50	9	13.50	15.75	9	18.00	21.00	9	22.50	26.25
10	5.00	5.83	10	10.00	11.67	10	15.00	17.50	10	20.00	23.33	10	25.00	29.17
11	5.50	6.42	11	11.00	12.83	11	16.50	19.25	11	22.00	25.67	11	27.50	32.08
1 yr.	6.00	7.00	1 yr.	12.00	14.00	1 yr.	18.00	21.00	1 yr.	24.00	28.00	1 yr.	30.00	35.00

600 DOLLARS			700 DOLLARS			800 DOLLARS			900 DOLLARS			1000 DOLLARS		
Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%	Time	6%	7%
1 day	.10	.12	1 day	.12	.14	1 day	.13	.16	1 day	.15	.18	1 day	.17	.19
2	.20	.23	2	.23	.27	2	.27	.31	2	.30	.35	2	.33	.39
3	.30	.35	3	.35	.41	3	.40	.47	3	.45	.53	3	.50	.58
4	.40	.47	4	.47	.54	4	.53	.62	4	.60	.70	4	.67	.78
5	.50	.58	5	.58	.68	5	.67	.78	5	.75	.88	5	.83	.97
6	.60	.70	6	.70	.82	6	.80	.93	6	.90	1.05	6	1.00	1.17
7	.70	.82	7	.82	.95	7	.93	1.09	7	1.05	1.23	7	1.17	1.36
8	.80	.93	8	.93	1.09	8	1.07	1.24	8	1.20	1.40	8	1.33	1.56
9	.90	1.05	9	1.05	1.23	9	1.20	1.40	9	1.35	1.58	9	1.50	1.75
10	1.00	1.17	10	1.17	1.36	10	1.33	1.56	10	1.50	1.75	10	1.67	1.94
11	1.10	1.28	11	1.28	1.50	11	1.47	1.71	11	1.65	1.93	11	1.83	2.14
12	1.20	1.40	12	1.40	1.63	12	1.60	1.87	12	1.80	2.10	12	2.00	2.33
13	1.30	1.52	13	1.52	1.77	13	1.73	2.02	13	1.95	2.28	13	2.17	2.53
14	1.40	1.63	14	1.63	1.91	14	1.87	2.18	14	2.10	2.45	14	2.33	2.72
15	1.50	1.75	15	1.75	2.04	15	2.00	2.33	15	2.25	2.63	15	2.50	2.92
16	1.60	1.87	16	1.87	2.18	16	2.13	2.49	16	2.40	2.80	16	2.67	3.11
17	1.70	1.98	17	1.98	2.31	17	2.27	2.64	17	2.55	2.98	17	2.83	3.31
18	1.80	2.10	18	2.10	2.45	18	2.40	2.80	18	2.70	3.15	18	3.00	3.50
19	1.90	2.22	19	2.22	2.59	19	2.53	2.96	19	2.85	3.33	19	3.17	3.69
20	2.00	2.33	20	2.33	2.72	20	2.67	3.11	20	3.00	3.50	20	3.33	3.89
21	2.10	2.45	21	2.45	2.86	21	2.80	3.27	21	3.15	3.68	21	3.50	4.08
22	2.20	2.57	22	2.57	2.99	22	2.93	3.42	22	3.30	3.85	22	3.67	4.28
23	2.30	2.68	23	2.68	3.13	23	3.07	3.58	23	3.45	4.03	23	3.83	4.47
24	2.40	2.80	24	2.80	3.27	24	3.20	3.73	24	3.60	4.20	24	4.00	4.67
25	2.50	2.92	25	2.92	3.40	25	3.33	3.89	25	3.75	4.38	25	4.17	4.86
26	2.60	3.03	26	3.03	3.54	26	3.47	4.04	26	3.90	4.55	26	4.33	5.06
27	2.70	3.15	27	3.15	3.68	27	3.60	4.20	27	4.05	4.73	27	4.50	5.25
28	2.80	3.27	28	3.27	3.81	28	3.73	4.36	28	4.20	4.90	28	4.67	5.44
29	2.90	3.38	29	3.38	3.95	29	3.87	4.51	29	4.35	5.08	29	4.83	5.64
1 mo.	3.00	3.50	1 mo.	3.50	4.08	1 mo.	4.00	4.67	1 mo.	4.50	5.25	1 mo.	5.00	5.83
2	6.00	7.00	2	7.00	8.17	2	8.00	9.33	2	9.00	10.50	2	10.00	11.67
3	9.00	10.50	3	10.50	12.25	3	12.00	14.00	3	13.50	15.75	3	15.00	17.50
4	12.00	14.00	4	14.00	16.33	4	16.00	18.67	4	18.00	21.00	4	20.00	23.33
5	15.00	17.50	5	17.50	20.42	5	20.00	23.33	5	22.50	26.25	5	25.00	29.17
6	18.00	21.00	6	21.00	24.50	6	24.00	28.00	6	27.00	31.50	6	30.00	35.00
7	21.00	24.50	7	24.50	28.58	7	28.00	32.67	7	31.50	36.75	7	35.00	40.83
8	24.00	28.00	8	28.00	32.67	8	32.00	37.33	8	36.00	42.00	8	40.00	46.67
9	27.00	31.50	9	31.50	36.75	9	36.00	42.00	9	40.50	47.25	9	45.00	52.50
10	30.00	35.00	10	35.00	40.83	10	40.00	46.67	10	45.00	52.50	10	50.00	58.33
11	33.00	38.50	11	38.50	44.92	11	44.00	51.33	11	49.50	57.75	11	55.00	64.17
1 yr.	36.00	42.00	1 yr.	42.00	49.00	1 yr.	48.00	56.00	1 yr.	54.00	63.00	1 yr.	60.00	70.00

Log. A contrivance used to measure the rate of a ship's velocity through the water. For this purpose there are several inventions, but the one most generally used is the following, called the *common log*. It is a piece of thin board, forming the quadrant of a circle of about six

inches radius, and balanced by a small plate of lead nailed on the circular part, so as to swim perpendicularly in the water, with the greater part immersed. One end of a line, called the *log-line*, is fastened to the log, while the other is wound round a reel. When the log is thrown

out of the ship while sailing, as soon as it touches the water it ceases to partake of the ship's motion, so that the ship goes on and leaves it behind, while the line is unwound from the reel, so that the length of line unwound in a given time gives the rate of the ship's sailing. This is calculated by knots made on the line at certain distances, while the time is measured by a sandglass running a certain number of seconds. The length between the knots is so proportioned to the time of the glass that the number of knots unwound while the glass runs down shows the number of nautical miles the ship is sailing per hour. Thus, if the glass be a half-minute one, it will run down 120 times in an hour. Now, since a nautical mile contains about 6,076 feet, the 120th part of this is about 50½ feet; so that if the spaces between the knots be 50½ feet, the number of knots and parts of a knot unwound from the reel in half a minute is the number of miles and parts of a mile the ship runs in one hour.

Mortality. In an extended sense, the condition of all organized bodies — of being subject to the cessation of life. In the sense in which it is most frequently employed, the *death rate*, i. e., the proportional quantity of individuals who, in a certain population, die in a given time. If we assume the population of the earth to be one thousand millions, and a generation to last thirty-three years; in that space of time, the one thousand millions must all die, and, consequently, the number of deaths will be, by approximation:

Each year,	30,000,000
Each day,	82,107
Each hour,	3,421
Each second,	1 nearly.

One-quarter of the population die at or before the age of 7; the half part of it die at or before the age of 17. One in 100,000 persons reaches the age of 100 years; one in 500 reaches the age of 90; one in 100, the age of 60.

DEATH RATES FROM CERTAIN CAUSES IN THE UNITED STATES (From the latest statistics.)

CAUSE	DEATH RATE PER 100,000		INCREASE OR DECREASE IN DEATH RATE, 1890 TO 1900	
	1900	1890	Increase	Decrease
Pneumonia,	191.9	186.9	5.0	....
Consumption, ¹	190.5	245.4	....	54.9
Heart disease, ²	134.0	121.8	12.2	....
Diarrheal diseases, ³	85.7	104.1	....	19.0
Diseases of the kidneys, ⁴	83.7	59.7	24.0	....
Apoplexy,	66.6	49.0	17.6	....
Cancer,	60.0	47.9	12.1	....
Old age,	54.0	44.9	9.1	....
Bronchitis,	48.3	74.4	....	26.1
Cholera infantum,	47.8	79.7	....	31.9
Debility and atrophy,	45.5	88.6	....	43.1
Inflammation of the brain and meningitis,	41.8	49.1	....	7.3
Diphtheria,	35.4	70.1	....	34.7
Typhoid fever,	33.8	46.3	....	12.5
Influenza,	23.9	6.2	17.7	....
Diseases of the brain,	18.6	30.9	....	12.3
Croup,	9.8	27.6	....	17.8
Malarial fever,	8.8	19.2	....	10.4

DEATH RATE IN VARIOUS OCCUPATIONS

OCCUPATION	POPULATION	DEATH RATE	
		1900	1890
Males. All occupations,	5,575,745	15.0	13.8
Professional,	203,104	15.3	15.7
Architects, artists, and teachers of art, etc.,	23,485	23.5	18.2
Clergymen,	19,587	11.7	12.4
Engineers and surveyors,	36,539	8.2	5.6
Journalists,	9,021	15.0	16.8
Lawyers,	28,597	17.2	17.7
Musicians and teachers of music,	16,008	15.2	16.0
Physicians and surgeons,	29,622	19.9	21.6
Teachers (school),	20,135	12.2	10.4
Others of this class,	20,110	16.0	....
Clerical and official,	424,781	13.5	9.8
Bookkeepers, clerks, and copyists,	278,137	13.6	11.2
Bankers, brokers, and officials of companies,	43,430	11.8	4.7
Collectors, auctioneers, and agents,	73,958	13.1	10.7
Others of this class,	29,256	15.1	....
Mercantile and trading,	493,994	12.1	12.3
Apothecaries, pharmacists, etc.,	14,728	18.3	16.2
Commercial travelers,	25,989	5.7	5.8
Merchants and dealers,	228,899	16.4	14.7
Hucksters and peddlers,	33,482	12.0	14.1
Others of this class,	190,896	7.4	....
Public entertainment,	87,888	15.4	14.5
Hotel and boarding-house keepers,	19,969	22.3	14.9
Saloon and restaurant,	67,919	13.3	14.4
Personal service, police, and military,	149,164	12.9	15.4
Barbers and hairdressers,	40,007	10.4	12.5
Janitors and sextons,	19,493	16.6	17.2
Policemen, watchmen, and detectives,	43,145	15.4	16.2
Soldiers, sailors, and marines (United States),	14,851	12.1	22.7
Others of this class,	31,668	10.9	....
Laboring and servant,	800,983	20.2	22.6
Labor (not agricultural),	719,647	20.7	25.3
Servants,	81,336	15.5	12.9
Manufacturing and mechanical industry,	1,796,928	13.8	13.0
Bakers and confectioners,	39,181	12.3	14.6
Blacksmiths,	56,840	18.3	15.6
Boot and shoe makers,	96,662	9.4	15.3
Brewers, distillers, and rectifiers,	5,840	19.7	14.7
Butchers,	38,228	16.1	14.9
Cabinetmakers and upholsterers,	24,787	18.0	15.3
Carpenters and joiners,	180,110	17.2	13.8
Cigar-makers and tobacco workers,	25,581	18.7	16.3
Compositors, printers, and pressmen,	54,374	12.1	11.1
Coopers,	11,020	23.8	21.5
Engineers and firemen (not locomotive),	71,388	15.7	13.6
Glass blowers and glass workers,	10,219	10.8	9.5
Hat and cap makers,	12,763	17.9	19.5
Iron and steel workers,	69,851	10.7	9.8
Leather makers,	16,697	12.3	10.3
Leather workers,	12,320	17.5	13.3
Machinists,	116,918	10.5	11.4
Marble and stone cutters,	26,272	14.9	13.8
Masons (brick and stone),	55,117	19.9	15.6
Mill and factory operatives (textile),	150,783	8.8	8.1
Millers (flour and grist),	6,044	26.6	17.3
Painters, glaziers, and varnishers,	108,992	16.2	13.0
Plasterers and whitewashers,	8,603	17.0	17.3
Plumbers and gas and steamfitters,	48,634	9.1	9.7
Tailors,	83,856	11.8	16.5

¹ Including general tuberculosis. ² Including pericarditis. ³ Including cholera morbus, colitis diarrhoea, dysentery, and enteritis. ⁴ Including Bright's disease.

OCCUPATION	POPULATION	DEATH RATE		CITY	DEATHS PER 1,000 INHABITANTS
		1900	1890		
Tinners and tinware makers, . . .	19,708	14.5	12.2	The Hague, . . .	26.05
Others of this class, . . .	446,140	13.9	....	Halifax, . . .	23.39
Agriculture, transportation and other outdoor, . .	1,528,241	15.8	12.1	Havana, . . .	37.70
Boatmen and canalmen, . .	8,178	18.8	20.1	Honolulu, . . .	110.35
Draymen, hackmen, teamsters, etc., . . .	185,552	11.0	12.1	Indianapolis, . . .	16.7
Farmers, planters, and farm laborers, . . .	958,778	17.6	11.9	Jacksonville, Fla., . .	28.4
Gardeners, florists, nurserymen, vinegrowers, . .	34,296	17.2	14.8	Jersey City, . . .	20.7
Livery stable keepers and hostlers, . . .	32,529	12.1	12.0	Kansas City, . . .	17.4
Lumbermen, raftsmen, . .	13,078	16.5	13.1	Lausanne, . . .	24.32
Miners and quarrymen, . .	38,890	9.6	7.8	Leghorn, . . .	31.37
Sailors, pilots, fishermen, and oystermen, . . .	47,747	27.7	22.0	Leicester, . . .	23.74
Steam R. R. employees, . .	129,472	10.8	9.0	Leipsic, . . .	26.08
Stockraisers, herders, and drovers, . . .	966	32.1	19.4	Liverpool, . . .	25.81
Others of this class, . . .	78,755	9.9	....	London, . . .	22.83
All other occupations, . .	90,662	6.5	....	Los Angeles, Cal., . .	18.1
Females. All occupations, .	1,587,874	8.3	10.5	Louisville, Ky., . . .	20.0
Musicians and teachers of music, . . .	16,566	5.0	2.4	Manchester, . . .	28.29
Teachers in schools, . . .	91,964	5.9	4.3	Mayence, . . .	29.40
Stenographers and typewriters, . . .	33,780	2.7	1.8	Memphis, Tenn., . .	25.1
Bookkeepers, clerks, and copyists, . . .	72,713	5.6	3.2	Messina, . . .	28.91
Hotel and boarding-house keepers, . . .	19,755	4.5	3.5	Mexico, . . .	30.94
Laundresses, . . .	59,300	5.1	6.7	Milan, . . .	34.19
Nurses and midwives, . .	41,912	9.5	11.2	Milwaukee, Wis., . .	15.9
Servants, . . .	403,801	17.1	18.2	Minneapolis, . . .	10.8
Artificial flower and paper-box makers, . . .	12,624	1.3	3.5	Mobile, Ala., . . .	24.4
Cigarmakers and tobacco workers, . . .	12,838	4.1	3.4	Montreal, . . .	30.02
Mill and factory operatives (textile), . . .	162,392	4.0	5.3	Munich, . . .	45.48
Milliners, . . .	29,122	5.9	4.4	Nashville, Tenn., . .	23.3
Dressmakers, seamstresses, .	195,176	5.2	4.1	Newark, N. J., . . .	19.8
Telegraph and telephone operators, . . .	7,801	5.4	4.1	Newcastle, . . .	29.76
All other occupations, . .	428,130	5.7	....	New Haven, Conn., . .	18.5
				New Orleans, . . .	28.9
				New York, . . .	20.4
				Nice, . . .	34.89
				Nottingham, . . .	21.18
				Palermo, . . .	28.46
				Paris, . . .	22.04
				Paterson, N. J., . . .	19.0
				Pesth, . . .	49.23
				Philadelphia, . . .	21.2
				Pittsburg, Pa., . . .	20.0
				Providence, R. I., . .	19.9
				Quebec, . . .	22.97
				Richmond, Va., . . .	27.6
				Rochester, N. Y., . .	15.6
				Rome, . . .	34.14
				Rotterdam, . . .	31.48
				Salt Lake City, Utah, .	20.4
				San Francisco, . . .	20.5
				Savannah, Ga., . . .	32.6
				Scranton, Pa., . . .	20.7
				St. Joseph, . . .	9.1
				St. Louis, . . .	17.9
				Stockholm, . . .	30.45
				St. Paul, . . .	9.7
				Stuttgart, . . .	25.68
				Sunderland, . . .	22.42
				Syracuse, N. Y., . . .	13.8
				Toledo, . . .	16.0
				Turin, . . .	26.07
				Valparaiso, . . .	64.58
				Venice, . . .	36.26
				Vienna, . . .	35.28
				Wolverhampton, . . .	24.65
				Worcester, Mass., . .	15.5
				Zurich, . . .	25.59
				Washington, D. C., . .	22.8

DEATH RATE IN CITIES

CITY	DEATHS PER 1,000 INHABITANTS
Algiers, . . .	30.08
Allegheny, Pa., . . .	18.4
Amsterdam, . . .	26.07
Antwerp, . . .	24.69
Atlanta, Ga., . . .	19.3
Baltimore, . . .	21.0
Basel, . . .	23.34
Berlin, . . .	21.81
Birmingham, . . .	25.28
Bologna, . . .	35.13
Bombay, . . .	24.31
Bordeaux, . . .	26.71
Boston, . . .	20.1
Brooklyn, . . .	24.0
Brussels, . . .	29.06
Buffalo, N. Y., . . .	14.8
Cadiz, . . .	28.23
Calcutta, . . .	25.82
Charleston, S. C., . .	31.9
Chicago, . . .	16.2
Christiania, . . .	21.53
Cincinnati, . . .	19.1
Cleveland, Ohio, . . .	17.1
Columbus, . . .	15.8
Denver, . . .	18.6
Detroit, . . .	17.1
Dresden, . . .	34.82
Edinburgh, . . .	21.67
Fall River, . . .	22.4
Frankfort-on-the-Main, .	20.08
Genoa, . . .	36.75
Glasgow, . . .	28.62

The following was the death rate per thousand in various countries in 1900: Austria, 25.4; Belgium, 19.3; Denmark, 16.9; England and Wales, 18.2; France, 21.9; German Empire, 22.1; Hungary, 26.9; Ireland, 19.6; Italy, 23.8; Netherlands, 17.8; Norway, 15.9; Scotland, 18.5; Spain, 28.9; Sweden, 16.8; Switzerland, 19.3; United States (registration area), 17.6.

Mourning. The colors used as badges of grief or bereavement in different countries. In this country, as in Europe, the ordinary color for mourning is *black*; in China, as with the ancient Spartan and Roman ladies, it is *white*; in Turkey, it is *blue or violet*; in Egypt, *yellow*; in Ethiopia, *gray*. Some have attempted to trace the associations which caused the adoption of the various colors to natural causes. Thus black, which is the privation of light, is supposed

very appropriately to denote the privation of life; white is an emblem of purity; yellow is the color of leaves when they fall, and represents that death is the end of all human hopes, etc. In the East, to cut the hair was considered a sign of mourning; among the Romans, on the contrary, it was deemed a mark of sorrow to let it grow. The duration of mourning varies in different countries, being always longer in proportion to the nearness of relationship. Among the ancients, as among the moderns, public mournings were common on the death of a distinguished public benefactor; and with the Greeks and Romans it was the custom, during the term prescribed for mourning, to lay aside all ornaments of dress, to abstain from the bath and other indulgences.

Mummies. Dead human bodies embalmed and dried after the manner of those taken from Egyptian tombs. An immense number of mummies have been found in Egypt, consisting not only of human bodies, but of various animals, as bulls, apes, ibises, crocodiles, fish, etc. The processes for the preservation of the body were very various. Those of the poorer classes were merely dried by salt or natron, and wrapped up in coarse cloths and deposited in

the catacombs. The bodies of the rich and the great underwent the most complicated operations, and were laboriously adorned with all kinds of ornaments. Embalmers of different ranks and duties extracted the brain through the nostrils, and the entrails through an incision in the side; the body was then shaved, washed, and salted, and after a certain period the process of embalming, properly speaking, began. The whole body was then steeped in balsam and wrapped up in linen bandages; each finger and toe was separately enveloped, or sometimes sheathed in a gold case, and the nails were often gilded. The bandages were then folded round each of the limbs, and finally round the whole body, to the number of fifteen to twenty thicknesses. The head was the object of particular attention; it was sometimes enveloped in several folds of fine muslin; the first was glued to the skin, and the others to the first; the whole was then coated with a fine plaster. The Persians, Assyrians, Hebrews, and Romans had all processes of embalming, though not so lasting as that of Egypt. The art also was practiced by the Guanches of the Canaries, the Mexicans, Peruvians, etc. Natural mummies are frequently found preserved by the dryness of the air.

NAVIES OF THE WORLD

POWERS	FIRST CLASS BATTLE-SHIPS	SECOND CLASS BATTLE-SHIPS AND COAST DEFENSE SHIPS	FIRST CLASS CRUISERS	SECOND CLASS CRUISERS	THIRD CLASS CRUISERS	SCOUT SHIPS	TORPEDO GUNBOATS	TORPEDO BOAT DESTROYERS	TORPEDO BOATS	SUBMARINES	OFFICERS	MEN
Great Britain,	55	11	48	27	46	8	17	154	86	40	4,355	95,000
United States,	27	11	5	7	16	2	40	16	36	9	2,550	38,500
Germany,	26	9	19	6	26	..	6	57	..	4	2,315	44,432
France,	23	17	15	13	22	..	28	53	323	50	3,500	53,000
Japan,	13	3	13	4	15	..	4	52	64	5	3,440	32,640
Russia,	8	10	10	2	14	..	14	84	68	33	3,338	57,000
Italy,	8	7	7	..	14	..	7	19	74	6	1,799	25,000
Austria-Hungary,	6	3	5	3	..	..	10	4	..	..	800	11,224
Sweden,	1	11	1	..	..	..	5	3	34	1	402	3,500
Norway,	..	4	..	..	..	..	3	..	21	..	280	1,000
Denmark,	..	5	..	2	3	..	..	..	7	..	380	4,000
Netherlands,	1	7	6	..	..	..	..	..	25	1	510	8,000
Spain,	..	4	3	..	..	..	15	5	..	..	700	5,000
Portugal,	..	..	..	2	4	..	15	..	1	..	250	3,000
Turkey,	1	..	..	2	2	..	1	..	..	..	929	30,000
Greece,	..	3	..	1	..	..	..	8	..	..	350	3,700
China,	..	..	..	..	4	..	6	..	..	..	..	..
Siam,	..	..	..	1	..	..	10	..	1	..	..	5,000
Argentina,	..	3	5	1	4	..	..	4	26	1	493	5,507
Brazil,	..	3	..	2	1	..	4	..	13	..	550	8,000
Chile,	1	1	4	1	..	..	3	6	6	..	500	8,000
Mexico,	..	..	..	..	5	..	2	..	..	..	200	965

Newspaper. Newspapers first came into existence when the reports of the Roman imperial army were transmitted to the generals in all parts of the country, but for the actual newspaper we are indebted to Germany, where in Augsburg, Vienna, Ratisbon, and Nuremberg, it was, early in the Fifteenth Century, the practice to issue news sheets in the form of letters. Yet the first newspaper that at all covered the same idea as those of the present day, was issued in Venice, by order of the Venetian Government in 1566, and called the *Notizie Scritte*. At first

they were not printed, but written out, and hung up in various public places, where the people could read them on payment of a small coin. The first actual English newspaper was the *Weekly News* of 1622, edited and published by Nathaniel Butler. The London *Weekly Courant* came out in the same year. The first daily paper was the *Daily Courant*, which appeared printed on one side only, in 1702. The first newspaper published in America was *Publick Occurrences* (1690), followed in 1704 by the *Boston News-Letter* and the *Boston Gazette*.

NEWSPAPERS AND PERIODICALS

STATES, TERRITORIES, AND CANADIAN PROVINCES	NO. OF TOWNS IN WHICH PAPERS ARE PUBLISHED	NO. OF TOWNS WHICH ARE COUNTY SEATS	ISSUES										TOTAL ALL ISSUES
			DAILY	TRI-WEEKLY	SEMI-WEEKLY	WEEKLY	FORTNIGHTLY	SEMI-MONTHLY	MONTHLY	BI-MONTHLY	QUARTERLY	MISCELLANEOUS	
NEW ENGLAND STATES													
Connecticut,	66	9	36	..	7	101	2	1	15	1	5	1	169
Maine,	76	15	14	1	3	93	..	1	31	..	2	..	145
Massachusetts,	203	19	84	2	6	384	5	13	132	5	31	3	665
New Hampshire,	63	13	14	1	1	130	..	..	9	..	..	..	155
Rhode Island,	18	4	15	..	3	29	..	1	7	1	..	..	56
Vermont,	66	12	9	..	..	86	1	2	5	..	..	..	103
NEW YORK													
New York,	492	72	172	4	20	823	8	18	199	7	38	4	1,293
	509	63	208	9	41	1,074	9	37	579	17	37	3	2,014
MIDDLE STATES													
Delaware,	13	3	3	..	..	24	..	..	3	..	..	..	30
District of Columbia,	..	..	4	..	..	20	..	1	37	3	3	..	68
Maryland,	65	23	15	1	1	132	..	2	27	..	5	1	184
New Jersey,	158	21	50	1	2	277	..	2	33	1	4	..	370
Pennsylvania,	471	67	216	8	40	902	6	11	237	9	27	1	1,457
	707	114	288	10	43	1,355	6	16	337	13	39	2	2,109
SOUTHERN STATES													
Alabama,	124	67	25	..	6	189	..	8	10	..	..	..	238
Arkansas,	168	83	29	..	4	268	..	2	14	..	1	..	318
Florida,	81	45	18	..	3	134	..	..	9	..	..	..	164
Georgia,	201	135	29	3	12	284	..	4	48	2	..	..	382
Kentucky,	155	108	30	2	22	234	..	8	22	..	2	1	321
Louisiana,	101	54	23	1	7	168	1	4	14	..	..	..	218
Mississippi,	145	81	18	..	8	202	1	5	9	..	..	..	243
North Carolina,	138	78	32	..	20	177	2	9	21	1	2	..	264
South Carolina,	72	41	13	..	18	110	..	1	10	..	..	1	153
Tennessee,	149	86	17	..	8	233	2	6	45	..	13	..	324
Texas,	509	209	93	..	21	728	..	6	61	..	4	..	913
Virginia,	128	70	31	2	9	163	1	2	32	4	4	..	248
West Virginia,	96	55	33	..	5	166	..	2	16	..	..	..	222
	2,067	1,112	391	8	143	3,056	7	57	311	7	26	2	4,008
WESTERN STATES													
California,	280	55	144	2	27	455	..	9	82	1	1	1	722
Colorado,	145	56	43	..	6	275	..	6	34	..	..	..	364
Idaho,	76	23	13	1	7	93	..	..	3	..	..	..	117
Illinois,	643	102	179	1	43	1,123	4	32	294	10	8	1	1,695
Indiana,	364	92	148	..	19	576	..	6	61	1	4	1	816
Iowa,	602	99	62	5	59	833	1	7	95	1	2	1	1,006
Kansas,	424	104	72	..	12	650	..	2	26	..	3	..	765
Michigan,	397	82	82	2	25	569	4	7	83	..	..	..	772
Minnesota,	413	83	43	..	6	638	2	13	62	1	2	..	767
Missouri,	468	113	91	..	12	778	4	8	117	1	11	..	1,022
Montana,	60	27	14	..	5	82	..	1	5	..	..	..	107
Nebraska,	371	89	28	4	14	546	1	2	25	..	..	..	620
Nevada,	37	12	14	1	2	46	..	1	1	..	..	..	65
North Dakota,	238	40	13	..	4	304	..	1	8	..	..	..	330
Ohio,	419	88	174	4	43	750	1	14	148	7	13	1	1,155
Oklahoma,	348	74	47	..	7	515	..	4	14	..	..	..	587
Oregon,	129	33	23	..	12	190	1	2	23	..	..	..	251
South Dakota,	236	51	19	..	3	325	1	3	15	..	..	..	366
Utah,	47	21	8	2	8	62	..	4	6	..	..	..	90
Washington,	171	37	31	..	7	261	..	4	32	..	1	..	336
Wisconsin,	335	71	64	..	19	560	1	2	51	..	3	1	701
Wyoming,	36	13	4	..	6	45	..	..	2	..	..	..	57
	6,239	1,365	1,316	22	346	9,676	20	128	1,187	22	48	6	12,771
TERRITORIES													
Alaska,	11	..	9	..	1	10	..	..	..	..	..	..	20
Arizona,	28	13	18	..	..	44	..	1	3	..	..	..	66
Hawaii,	5	..	6	1	3	19	..	..	9	..	..	..	38
New Mexico,	47	20	5	..	1	76	..	..	3	..	..	..	85
Philippines,	4	..	13	1	..	6	1	1	2	..	..	1	25
Porto Rico,	6	4	9	..	..	11	..	3	2	..	..	1	26
	101	37	60	2	5	166	1	5	10	..	..	2	260
CANADIAN PROVINCES													
Alberta,	33	..	7	..	2	44	..	1	1	..	..	..	55
British Columbia,	37	6	12	..	7	46	..	..	9	..	..	..	74
Manitoba,	63	..	9	..	1	93	..	3	18	..	..	..	124
Saskatchewan,	58	..	5	..	3	65	..	..	1	..	..	..	74
Yukon,	2	..	2	..	..	3	..	..	..	..	..	..	5
New Brunswick,	18	8	9	..	7	24	1	2	8	..	1	..	52
Nova Scotia,	37	15	14	1	5	47	1	2	7	..	..	..	77
Ontario,	281	43	52	..	16	436	4	11	108	..	8	1	636
Prince Edward Island,	3	2	3	..	1	9	..	..	..	..	..	..	13
Quebec,	44	22	13	1	2	97	2	1	29	..	1	..	146
Newfoundland,	6	3	3	..	..	8	..	..	4	..	..	..	15
	582	99	129	2	44	872	8	20	185	..	10	1	1,271

Oddfellows. A large and extensively ramified friendly society, having its headquarters in Manchester. It was originally an association of a convivial kind, modeled on freemasonry, and still retains watchwords and secret signs. It assumed its present form at a convention in Manchester (1813), and has spread widely in Britain and elsewhere. The unparalleled prosperity of the order of Odd Fellows in the United States has excited the wonder of the leading men in all fraternal organizations. The first lodge was organized in Baltimore, Md., April 26, 1819; in 1825 the Grand Lodge of the United States was formed. In 1839 there were fifteen grand lodges, 135 subordinate lodges, 11,000 members; in 1893 over 800,000 members, and 8,000 lodges; and in 1907, in excess of 1,362,310 members. The American system has become popular in France, Germany, Switzerland, Holland, Sweden, Denmark; also in Canada, Mexico, West Indies, South America, Australia, and Japan. The total relief paid by the Independent Order of Odd Fellows, up to 1907, was \$5,006,000.

Pestilence and Plague.

BEFORE CHRIST

In 767 a great plague, mentioned by Petavius, prevailed throughout the world.

In 534, at Carthage, multitudes perished by an infectious distemper; children were offered in sacrifice as an atonement with the gods.

In 461, in Rome, 100,000 persons died.

In 430, beginning in Athens, a peculiar disease, described by Thucydides, extended over Egypt and Ethiopia, causing frightful loss of life.

In 188 a plague raged throughout Egypt, Syria, and the Grecian colonies; according to Pliny, 2,000 persons perished every day.

ANNO DOMINI

In 80, in and about Rome, by an infectious disease, for a considerable time, 10,000 died daily.

In 167, and again in 169 and 189, the Roman Empire suffered in almost every part by a contagious and fatal sickness.

From 250 to 265 the Empire was again ravaged; many provincial towns were depopulated; in Rome itself for some time 5,000 died every day.

In 430 Britain was devastated by a strange disease; there were not enough survivors to bury the dead.

In 558, and during many subsequent years almost without intermission, a plague prevailed through Europe, Asia, and Africa.

From 746 to 749, 200,000 Constantinopolitans died of a contagious disease, which prevailed also in Greece, Sicily, and Calabria.

In 772 an epidemic disease carried off 34,000 persons at Chichester, England.

In 954, in Scotland, 40,000 persons perished.

In 1094 many died in London of an epidemic; which the following year extended into Ireland.

In 1111 a distemper in London, causing great mortality among both human beings and domestic animals.

In 1172 a plague in Ireland, which drove back the English invaders.

In 1204, in Ireland, a similar disease again appeared.

In 1267 the plague prevailed in England; mortality great.

In 1340 the "Black Death" first appeared in Italy. This plague spread throughout Christendom, and raged during many years, causing unprecedented mortality.

In London alone 200 persons were buried daily in the Charter House yard, 1348. In Germany, 1340, thousands perished.

In 1362, 1367, 1370, and 1379, there was frightful mortality in Western Europe, especially near Paris and London, and in portions of Ireland; 57,376 died in England in 1362.

In 1383 the "fourth pestilence" in Ireland destroyed many people.

In 1407, in London, a dreadful plague caused the death of 30,000 persons.

In 1466, in Ireland, a famine, followed by a fearful pestilence, caused the death of hundreds.

In 1470 the mortality in Dublin was very great.

In 1471 and 1478, at Oxford and throughout all England, a plague so destructive to human life that more people died than in the constant wars of the fifteen years previously.

In 1485, in London, an awful distemper prevailed called Sudor Anglicus, or sweating sickness, by which very many lost their lives.

In 1499 to 1500 plague in London; the royal court was in consequence removed to Calais.

In 1506; and again in 1517 the "sweating sickness" revisited London and prevailed over all England; the mortality was frightful, the disease proving fatal in three hours; half the inhabitants died in most of the large towns; some towns being depopulated.

In 1522 Limerick was devastated by a plague by which many thousands lost their lives.

In 1528, in England, the "sweating sickness" again made its appearance; North Germany was also visited by it in 1529, and England ravaged for the fifth time in 1548 and 1551.

In 1603 and 1604 dreadful mortality in England by the plague; in London alone 30,578 persons perished; Ireland also suffered severely by it.

In 1611 a pestilence raged in Constantinople by which 200,000 of the inhabitants perished.

In 1625 London again visited by a fearful plague; the mortality great; 35,417 persons died.

In 1632, in France, large numbers perished; at Lyons alone 60,000 died.

In 1656, at Naples, the plague raged with such violence that it carried off 400,000 persons in six months; it had been brought by a transport with soldiers on board from Sardinia.

In 1664 and 1665 the great plague of London is said to have swept away 68,596 persons; some say 100,000; to destroy the contagion fires were kept burning day and night; but not until the great fire of London in 1666 was the city free of infection.

In 1720, at Marseilles and vicinity, 60,000 perished by the plague, which was brought in a ship from the Levant.

In 1741 and 1742 New York City was visited by yellow fever.

In 1743 Messina was ravaged by the plague.

In 1760 an awful plague prevailed in Syria.

In 1773 infectious distemper in Persia; 80,000 died in Bassora.

In 1773 Saulica, in France, was visited by a putrid fever, which broke out at the opening of a grave; out of 180 persons present, 174 were attacked.

In 1784, at Smyrna, 20,000 people were carried off by the plague; it raged in Tunis the same year.

In 1791 and 1795 yellow fever swept along the Atlantic Coast of North America.

In 1798 yellow fever in Baltimore, Philadelphia, and New York; in the latter city one out of every twenty-seven died; in and about Philadelphia several thousands died — 117 in one day, and 50,000 out of 70,000 inhabitants fled from the city.

In 1799, on the coast of Africa, particularly in Barbary, 3,000 died daily of the plague, and at Fez 247,600 were swept away.

In 1800, at Morocco, 1,800 died in one day, and the plague continued to rage.

In 1804 and 1805 pestilence in Spain and Gibraltar.

In 1805 yellow fever in North American ports; 37,000 out of a total population of 70,000 fled from New York City.

In 1813, at Malta, fearful ravages by plague.

In 1814 plague desolated Asia Minor, Palestine, and Grecian Archipelago; Smyrna lost 30,000.

In 1816 plague raged at Naples.

In 1817 the spasmodic or Asiatic cholera appeared in India, at Jesson, a town about a hundred miles northeast of Calcutta.

In 1817 the city of Calcutta was attacked by cholera, and its ravages soon extended to Behar, Benary, Allahabad, Lucknow, Delhi, and many other towns; it carried off a large proportion of soldiers, both European and natives, and ravaged many parts of India with great mortality.

In 1818 cholera visited Bombay; from thence spread into Ceylon, Siam, Malacca, China, and the Islands of Mauritius and Bourbon, causing alarm, desolation, and death, carrying off vast numbers; the season of the year did not modify its virulence.

In 1819 and 1822 great alarm in seaports of United States because of spread of yellow fever, but the mortality was not so great as on former visits of that disease.

In 1819 Tunis lost half its population by plague.

In 1821 Persia visited by Asiatic cholera.

In 1823 the cholera extended to the Mediterranean Sea. Aleppo, Antioch, and other places were visited by it.

In 1828 epidemic fever at Gibraltar — great mortality. In 1830 Astrakhan visited by cholera; it soon advanced up the River Volga and into the heart of Russia in Europe, attacking many towns, until it reached Moscow, where it continued four months; 8,576 were attacked, of whom 4,630 died.

In 1830, at Sunderland, the Asiatic cholera first made its appearance in England. Haddington in Scotland was visited the same year.

In 1831 the Russian and Polish armies were attacked in their encampments by cholera; at Warsaw in seven weeks, 3,012 were taken ill, of whom 1,462 died; its ravages continued in Poland; it appeared at St. Petersburg in Russia, same year; and 7,567 cases were reported, of whom 3,804 died in forty-eight days. Hamburg in Germany also suffered from this disease.

In 1832 cholera first appeared at Belfast, Ireland, and at many places in Great Britain, Newcastle, Edinburgh, Greenock, London, Dublin, etc., but until January 1, 1832, the mortality did not exceed 6,000 in both islands.

In 1832 Paris visited by cholera, mortality in sixteen days amounted to more than 8,000; it continued in Paris for some weeks, and the total mortality in that city has been estimated at 15,000, out of a population of 750,000.

In 1832 cholera crossed the Atlantic Ocean and appeared at Quebec and Montreal, in Canada; about 2,000 in each of these cities died. The city of New York was visited by cholera the same year; in less than two months 6,000 persons had been attacked, of whom 3,000 died, one-third of the inhabitants having left the city. The distemper spread to Albany, Brooklyn, Rochester, Buffalo, and other towns in the State of New York, and afterward to Philadelphia, Newcastle, Baltimore, Norfolk, Portsmouth, Petersburg, and Richmond.

In 1848 and 1849 England and America visited by cholera.

In 1865 at Smyrna and Constantinople large numbers perished by cholera; it also appeared at Paris, Marseilles, and Naples, from July to December.

In 1878 yellow fever raged in Southern towns, especially Memphis.

In 1884, 1885, and 1892 cholera raged in various parts of Europe.

Poisons. A poison is commonly defined to be a substance which, when administered in small quantity, is capable of acting deleteriously on the body. Poisons are divisible into three classes, according to their mode of action on the system, viz: *Irritants*, *Narcotics*, and *Narcotico-irritants*. The *Irritants*, when taken in ordinary doses, speedily occasion intense vomiting and purging, and severe abdominal pain. They act chiefly on the stomach and intestines, which they irritate, inflame, and frequently corrode, and may thus occasion ulceration, perforation, or gangrene. The *Narcotics* act specially on the brain and spinal cord. Among their most common symptoms are giddiness, headache, obscurity of sight, or double vision, stupor, loss of power of the voluntary muscles, convulsions, and finally complete coma. The *Narcotico-irritants* have, as their name implies, a mixed action. "At variable periods," says Dr. Taylor, "after they have been swallowed, they give rise to vomiting and purging, like irritants, and sooner or later produce stupor, coma, paralysis, and convulsions, owing to their effect on the brain and spinal marrow. Under the head of *Irritant Poisons* may be included (1) Mineral Acids, as sulphuric, nitric, and hydro-chloric acids; vegetable acids, and other salts, as oxalic acid, binoxalate of potash, and tartaric acid; the alkalies, as pearl-ash, soap lees, ammonia and its sesquicarbonate; metallic compounds, as white arsenic, yellow arsenic, corrosive sublimate, bichloride of mercury, permanganate and other salts of this metal, acetate of lead in doses of an ounce and upward, carbonate of lead, sul-

phate of copper, subacetate of copper, arsenite of copper, tartarized antimony, chloride of antimony, chloride of zinc, nitrate of silver, sulphate of iron, and bichromate of potash. (2) Vegetable substances, viz: colocynth and gamboge in large doses, savin, croton oil, the leaves and flowers of the common elder; and (3) animal substances, such as cantharides, to which must be added the occasional cases in which sausages, and certain fish and mollusks, usually quite innocuous, act as irritant poison. The *Narcotico Poisons* include opium, hydrocyanic acid, oil of bitter almonds, cyanide of potassium, henbane, especially the seeds, alcohol, ether, chloral, and chloroform; while *Narcotico-irritant Poisons* are nux vomica, meadow saffron, white hellebore, foxglove, common hemlock, water-hemlock, hemlock water-dropwort, fool's parsley, thorn-apple, monk's-hood, or wolf's-bane, deadly nightshade, tobacco, Indian tobacco, the bark and seeds of the common laburnum, the berries and leaves of the yew-tree, and certain kinds of fungi.

Antidotes for Poisons. In all cases of poisoning the first step is to evacuate the stomach. This should be effected by an emetic which is *quickly* obtained and most powerful and speedy in its operation. Such are, powdered mustard (a large tea-spoonful in a tumbler full of warm water), powdered alum (in dessert-spoonful doses), sulphate of zinc (gr. x to xxx), tartar emetic (gr. i to ii), combined with powdered ipecacuanha (gr. xx), and sulphate of copper (gr. ii to v). When vomiting has already taken place copious draughts of warm water or warm mucilaginous drinks should be given, to keep up the effect till the poisoning substance has been thoroughly evacuated. If vomiting cannot be produced the stomach-pump must be used. This instrument will be found particularly useful when narcotics in liquid form have been taken. In cases of corrosive poisoning it is liable to lacerate the stomach. Where the stomach-pump is not at hand a rubber tube, used to fill the stomach with water first, then inverted as a siphon, answers a good purpose, as by its use thus the stomach can be thoroughly washed out. Inflammation of the stomach, congestion of the brain, and other symptoms are to be treated on general principles, viz: by blood-letting, cold applications, revulsives, cool mucilaginous drinks, milk, lime-water, etc. When prostration exists stimulants should be resorted to. The following is a list of substances which produce poisoning, with their antidotes:

POISONS Acids.

The Alkalies. Common soap (soft or hard) in solution is an efficient remedy, and has the advantage of being always at hand. It should be followed by copious draughts of tepid water or flaxseed-tea. For *nitric* and *oxalic* acids, the carbonate of magnesia and lime (chalk or whiting and water) are the best antidotes. When sulphuric acid has been taken, the use of much water is improper.

Alkalies and their salts.

The Vegetable Acids. Common vinegar, being always at hand, is most frequently used. The fixed oils, as castor, flaxseed, almond, and olive oils, form soaps with the alkalies, and thus also destroy their caustic effect. They should be given in *large quantity*.

POISONS	ANTIDOTES	POISONS	ANTIDOTES
<i>Baryta and its salts.</i>	<i>Epsom or Glauber's Salt</i> in solution, or diluted sulphuric acid. The fixed oils also have the same effect as with the alkalis proper when these bases are uncombined.	<i>Mercury, Salts of.</i>	diluted sulphate acid, lemonade, opium. Albumen, as white of egg, milk, or wheat-flour beaten up with water, to be followed by an emetic.
<i>Lime.</i>		<i>Silver, Salts of</i>	Common salt, freely in solution.
<i>Iodine.</i>	Starch, wheat-flour, or arrowroot, in large quantities, first well boiled with water. Let the patient drink freely of boiled starch, of boiled wheat-flour and water, and afterward of a strong mixture of vinegar and water (any acid in which there is oxygen). When this is done the whole process of saving the patient's life is accomplished, and it will only be necessary to evacuate the bowels.	<i>Tin, Salts of.</i>	Albumen, white of eggs, milk, or flour.
<i>Iodide of potassium.</i>		<i>Zinc, Salts of.</i>	Albumen, or carbonate of soda, with copious draughts of warm water and especially milk.
<i>Cyanide of potassium and prussic acid.</i>	Cold effusion by douche, etc.; chlorine water, solution of chlorinated soda, aqua ammonia.	<i>Phosphorus.</i>	Sulphate of copper, magnesia, with water and copious draughts of mucilaginous drinks; oil of turpentine (old), pills of animal charcoal.
<i>Antimony and its salts.</i>	Astringent infusions, as of galls, oak-bark, Peruvian bark, or very strong green tea.	<i>Gases.</i>	Ammonia, cautiously inhaled, is recommended for chlorine. Asphyxia, produced by noxious gases, must be treated by copious cold effusions, especially to the head; blood-letting, artificial respiration, and stimulants carefully administered.
<i>Arsenic and its compounds.</i>	Any oil or fat (sweet oil, butter, milk, magnesia in large quantity). Dialyzed iron in tablespoonful doses, frequently repeated, to the extent of eight or ten are taken, followed by ten or fifteen grains chloride sodium after each dose. Hydrated oxide of iron (recently made), in tablespoonful doses, every five or ten minutes.	<i>Creosote.</i>	Albumen, or white of egg, milk, or wheat-flour.
<i>Bismuth and its compounds.</i>	Albumen; copious draughts of milk, with sweet mucilaginous drinks.	<i>Carbolic acid.</i>	Glauber's or Epsom salts.
<i>Copper and its compounds.</i>	Albumen, as milk or white of egg in solution, should be freely administered. Ferro-cyanide of potassium (freely). Vinegar must be avoided.	<i>Opium and other narcotics.</i>	The chief reliance is to be placed on the most active emetics (as mustard, alum, tartar emetic, or sulphate of zinc), and the stomach-pump. Emetics are preferable to the stomach-pump when the narcotic has been taken in substance. The patient should be kept in motion, and cold water dashed on the head and shoulders. Should the above means fail, the electro-magnetic battery, or, if that cannot be obtained, artificial respiration must be resorted to. Belladonna and opium, antidotal to each other. Give strong coffee in poisoning by opium.
<i>Gold, Salts of.</i>	Sulphate of iron, with free use of mucilaginous drinks.	<i>Strychnia.</i>	Emetics should be freely given. Ether or chloroform by inhalation, chloral hydrate, bromide of potassium.
<i>Iron, Salts of.</i>	Carbonate of soda, with mucilaginous drinks; tea and coffee.	<i>Aconite.</i>	Stimulants, externally and internally; digitalis.
<i>Lead, Salts of.</i>	Albumen, sulphate of magnesia (Epsom salt), sulphate of soda (Glauber's salt),	<i>Veratrum viride.</i>	Laudanum, alcohol.

STATES, MOTTOES, AND POPULAR NAMES

STATE	MOTTO	TRANSLATION	POPULAR NAME OF STATE	POPULAR NAME OF PEOPLE
Alabama,	Here we rest.			
Arizona,	Sitat Deus,	Founded by God.		
Arkansas,	Mercy, justice. Regnat populi,	The people rule,	Bear,	Toothpicks.
California,	Eureka,	I have found it,	Golden.	
Colorado,	Nil sine numine,	Nothing without Providence,	Centennial.	
Connecticut, . . .	Qui transtulit sustinet, .	He who transplanted still sustains,	Land of Steady Habits. Nutmeg,	Wooden Nutmegs.
Delaware,	Liberty and Independence,		Blue Hen. Diamond,	Blue Hens. Chickens.
Dist. of Columbia, Florida,	Justitia omnibus, In God is our trust, . .	Justice to all.	Flower.	
Georgia,	Obverse: Wisdom, justice, moderation. Reverse: Agriculture and commerce,		Empire State of the South, . .	Buzzards.
Idaho,	Salve,	Hail.		
Illinois,	National Union, State Sovereignty,		Prairie,	Suckers.
Indiana,	None,		Hoosier,	Hoosiers.
Iowa,	Our liberties we prize and our rights we will maintain,		Hawkeye,	Hawkeyes.
Kansas,	Ad astra per aspera, . .	To the stars through all difficulties,		Jayhawkers.
Kentucky,	United we stand, divided we fall,		Blue Grass. Dark and Bloody Ground, . . .	Cornercrackers.
Louisiana,	Union, justice, and confidence,		Creole, Pelican.	
Maine,	Dirigo,	I direct,	Pine Tree. Lumber,	Foxes.

STATES, MOTTOES, AND POPULAR NAMES—Continued

STATE	MOTTO	TRANSLATION	POPULAR NAME OF STATE	POPULAR NAME OF PEOPLE
Maryland, . . .	Fatti maschii parole femine, [At one time the seal was mislaid, and the new die carried the motto, "Crescite et Multiplicamini." Grow or increase and multiply.] Coronasti nos. Scuto bonae voluntatis tuae,	Manly deeds, womanly words, [Seal originally pendant, for wax, when screw introduced the reverse was abandoned.] You have crowned us with the shield of your good will.		Crawthumpers.
Massachusetts, .	Ense petit placidam sub libertate quietem, . .	With the sword she seeks quiet peace under liberty,	Bay,	Beaneaters.
Michigan, . . .	Si quaeris peninsulam amoenam circumspice,	If thou seekest a beautiful peninsula, behold it here, The Star of the North, .	Wolverine, North Star. Gopher, Bayou.	Wolverines. Gophers.
Minnesota, . . .	L'etoile du nord,			
Mississippi, . . .	None,			
Missouri,	Salus populi suprema lex esto, United we stand, divided we fall,	The welfare of the people is the supreme law.		
Montana,	Oro y plata,	Gold and silver,	Mountain.	
Nebraska,	Equality before the law.		Silver,	Sage Hens.
Nevada,	All for our country, . .		Granite,	Granite Boys. Jersey Blues.
New Hampshire, .	None,			
New Jersey, . . .	None,			
New Mexico, . . .	Crescit eundo,	It increases by going.	Empire,	Knickerbockers.
New York,	Excelsior,	Higher, more elevated, .	Old North. Turpentine,	Tar heels.
North Carolina, .	None,			
North Dakota, . .	Liberty and union, one and inseparable now and forever,		Sioux,	Tuckoes.
Ohio,	None,		Buckeye,	Buckeyes.
Oregon,	The Union,		Beaver. Sunset, . .	Webb feet.
Pennsylvania, . .	Obverse: None, Reverse: Both can't survive,	[The State "Coat of Arms" carries the motto, "Virtue, Liberty, and Independence".]	Keystone. Little Rhody.	
Rhode Island, . .	Hope,			
South Carolina, .	Animis opibusque parati,	Prepared in mind and resources; ready to give life and property, . . .		
	Dum spiro, spero. Spes,	While I breathe I hope.	Palmetto,	Weasels.
South Dakota, . .	Under God the people rule,		Coyote,	
Tennessee,	Agriculture, Commerce, .		Volunteer,	Butternuts.
Texas,	None,		Lone Star.	
Utah,	None,			
Vermont,	Freedom and unity, . .		Green Mountain, .	Green Mountain Boys.
Virginia,	Obverse: Sic semper tyrannis, Reverse: Perseverando, .	Ever so to tyrants. Perseverance,	Old Dominion.	
Washington, . . .	Al-Ki,	Bye-bye.		
West Virginia, . .	Obverse: Montani semper liberi,	Mountaineers are always free men,		
	Reverse: Libertas et fidelitas,	Liberty and fidelity, . .	Panhandle,	Panhandlers.
Wisconsin,	Forward,		Badger,	Badgers.
Wyoming,	Cedant arma togae, . .	Let arms yield to the gown.		

Alabama, Arkansas, Colorado, Connecticut, Illinois, Minnesota, Mississippi, Missouri, Ohio, Tennessee, and Wisconsin were named from their principal rivers. Carolina from Charles IX. of France; Georgia from George II.; Louisiana from Louis XIV. of France; Maryland from Henrietta Maria, queen of Charles I.; New York from the Duke of York, afterward James II.; Virginia from Queen Elizabeth, the virgin queen; Pennsylvania from William Penn, and Delaware from Lord Delaware. Dakota, Massachusetts, and Texas took their names from Indian tribes, and Idaho, Iowa, Kansas, Kentucky, Michigan, Nebraska, Oklahoma, Oregon, Utah, and Wyoming were derived from Indian words.

State Flowers.

The following are "State Flowers," adopted in most instances by the vote of the public school scholars of the respective States:

Alabama,	Golden Rod
Arkansas,	Apple Blossom
California,	California Poppy (Eschscholtzia)
Colorado,	Columbine
Connecticut,	Mountain Laurel
Delaware,	Peach Blossom
Idaho,	Syringa
Indiana,	Corn
Iowa,	* Wild Rose
Kansas,	Sunflower
Kentucky,	Golden Rod
Louisiana,	Magnolia
Maine,	* Pine Cone and Tassel
Maryland,	Golden Rod
Michigan,	Apple Blossom
Minnesota,	Moccasin
Mississippi,	Magnolia
Montana,	Bitter Root
Nebraska,	Golden Rod
New York,	Rose
North Dakota,	* Wild Rose
Ohio,	Scarlet Carnation
Oklahoma,	Mistletoe
Oregon,	Oregon Grape
Rhode Island,	* Violet
South Dakota,	* Pasque
Tennessee,	Daisy
Texas,	Blue Bonnet
Utah,	Sego Lily
Vermont,	Red Clover
Washington,	Rhododendron
West Virginia,	Rhododendron

In other States the scholars or State Legislatures have not yet taken action.
* Adopted by State Legislature, not by public school scholars.

Suicide (Lat. "self-murder") is a heinous crime, though it was treated as venial by the Roman law, and was the subject of panegyric by Stoic philosophers. The law of the United States treats it as a felony, and hence there may be accessories to it, so that if A persuades B to kill himself, and B does so, A is guilty of murder. Suicide, or *felo de se*, not only includes one who deliberately kills himself, but also one who in maliciously attempting to kill another is himself killed. If A, however, requests B to kill him, and B does so, A is not a *felo de se*, though B is a murderer. If A and B mutually agree to commit suicide together, and in the attempt one only dies, the other is guilty of murder. When it is said that a man was a suicide, this implies that he was in his senses, for otherwise he committed no crime; hence, an insane person, unless when in a lucid interval, cannot commit the crime. Suicide, as a rule, is a symptom of some form of insanity, permanent or temporary, in which the emotions or passions are excited or perverted. Suicide is likewise a concomitant of certain bodily diseases; for example, of dilatation and fatty degeneration of the heart, of blood degeneration, of affections of the intestinal mucous membrane, of the uterus, and of the brain and nervous matter; and it may be regarded as a frequent sequence of the melancholic, the morose, and hypochondriacal temperament. It has appeared as an epidemic; it has been observed as an hereditary tendency in certain families; and as a tendency more frequently exhibited by males than females; more frequently by the educated and affluent than by the industrial and ignorant classes; most frequently in large cities; and as directly engen-

dered by luxury, political agitation, gambling, intemperance, and demoralization. It would appear, however, that indulgence and asceticism, riches and extreme poverty, claim nearly an equal number of victims. Race, climate, country, and the distinguishing polity of different societies to a certain extent affect the proportion of suicides to the population.

SUICIDE STATISTICS

COUNTRY	RATE PER 100,000 POPULATION
Saxony,	31.1
Denmark,	25.8
France,	23.6
Austria,	21.2
Switzerland,	20.2
German Empire,	14.3
New Zealand,	9.0
Sweden,	8.1
Norway,	7.5
Belgium,	6.9
England and Wales,	6.9
Hungary,	5.2
Scotland,	4.0
Italy,	3.7
Netherlands,	3.6
United States,	3.5
Russia,	2.9
Ireland,	1.7
Spain,	1.4

CITIES

San Francisco,	52
Dresden,	51
Paris,	42
Genoa,	31
Berlin,	36
Hoboken,	30
Lyons,	29
Vienna,	28
Stockholm,	27
St. Louis,	27
Oakland,	25
Christiania,	25
Chicago,	23
London,	23
New York,	22
Milwaukee,	22
Newark,	22
Cincinnati,	21
Indianapolis,	18
Brussels,	15
Amsterdam,	14
Constantinople,	12
Geneva,	11
Moscow,	11
Rome,	08
St. Petersburg,	7
Milan,	6
Madrid,	3
Lisbon,	2

STATISTICS OF 10,000 SUICIDES, SHOWING MOTIVE

	TOTALS	MALES	FEMALES
Despondency,	2,207	1,596	431
Business loss,	1,398	1,300	98
Insanity,	1,013	1,013	348
Ill health,	1,309	969	340
Disappointment in love,	900	627	273
Domestic trouble,	773	544	229
Fear of disgrace,	539	429	110
Grief,	427	267	160
Alcoholism,	413	390	23
Chagrin,	294	225	69
Miscellaneous and unknown,	559	421	138
Totals,	10,000	7,781	2,219

Weather Signals. When black triangular flag is placed above white or blue flag it indicates warmer; when placed below, colder, weather; when omitted, stationary temperature. For example—3, 1, 2 indicates warmer, fair weather, followed by rain or snow.

1st. A cautionary signal: A yellow flag with white center will indicate that the winds expected are not so severe but well-found and

seaworthy vessels can meet them without great danger.

2d. A storm signal: A red flag with black center will indicate that the storm is to be of more marked violence.

3d. A red pennant will indicate that the winds are to be easterly — that is, from northeast to south, inclusive — and that the storm center is approaching.

4th. The white pennant will indicate westerly winds — that is, from north to southwest, inclusive — and that the storm center has passed.

5th. When red pennant is hoisted above cautionary or storm signal, winds are expected from the northeast quadrant; when below, from the southeast quadrant.

6th. When white pennant is hoisted above cautionary or storm signal, winds are expected from the northwest quadrant; when below, from the southwest quadrant.

7th. Night storm signals: A red light for easterly winds, and a red light and white light for westerly winds.

WEIGHT AND HEIGHT OF MEN

Based upon reliable insurance statistics.

HEIGHT	AGE 15-24	AGE 25-29	AGE 30-34	AGE 35-39	AGE 40-44	AGE 45-49	AGE 50-54	AGE 55-59	AGE 60-64	AGE 65-69
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
5 feet.	120	125	128	131	133	134	134	134	131	...
5 feet 1 inch.	122	126	129	131	134	136	136	136	134	...
5 feet 2 inches.	124	128	131	133	136	138	138	138	137	...
5 feet 3 inches.	127	131	134	136	139	141	141	141	140	140
5 feet 4 inches.	131	135	138	140	143	144	145	145	144	143
5 feet 5 inches.	134	138	141	143	146	147	149	149	148	147
5 feet 6 inches.	138	142	145	147	150	151	153	153	153	151
5 feet 7 inches.	142	147	150	152	155	156	158	158	158	156
5 feet 8 inches.	146	151	154	157	160	161	163	163	163	162
5 feet 9 inches.	150	155	159	162	165	166	167	168	168	168
5 feet 10 inches.	154	159	164	167	170	171	172	173	174	174
5 feet 11 inches.	159	164	169	173	175	177	177	178	180	180
6 feet.	165	170	175	179	180	183	182	183	185	185
6 feet 1 inch.	170	177	181	185	186	189	188	189	189	189
6 feet 2 inches.	176	184	188	192	194	196	194	194	192	192
6 feet 3 inches.	181	190	195	200	203	204	201	198	...	..

WEIGHT AND HEIGHT OF WOMEN

The following table gives the relative height and weight of women, all ages. The weight of ordinary clothing, however, is included:

HEIGHT	AVER- AGE	MINI- MUM	MAXI- MUM	HEIGHT	AVER- AGE	MINI- MUM	MAXI- MUM
5 feet.	115	98	132	5 feet 7 inches.	145	123	167
5 feet 1 inch.	120	102	138	5 feet 8 inches.	148	126	170
5 feet 2 inches.	125	106	144	5 feet 9 inches.	155	131	179
5 feet 3 inches.	130	111	150	5 feet 10 inches.	160	136	184
5 feet 4 inches.	135	115	155	5 feet 11 inches.	165	138	190
5 feet 5 inches.	140	119	161	6 feet.	170	141	196
5 feet 6 inches.	143	121	165				

Weights and Measures.

AVOIRDUPOIS WEIGHT

Drachm.	dr.	= 27½ grains (27.34375).
Ounce.	oz.	= 16 drachms, 437.5 grains.
Pound.	lb.	= 16 oz., 256 dr., 7,000 grains.
Legal Stone.	st.	= 14 lbs.
Quarter (Eng.).	qr.	= 28 lbs.
Quarter (Can.).	qr.	= 25 lbs.
Cental or Quintal.	cent.	= 100 lbs.
Hundredweight (Eng.).	cwt.	= 4 qrs., 112 lbs.
Hundredweight (Can.).	cwt.	= 4 qrs., 100 lbs.
Ton (Eng.).	T.	= 20 cwt., 2,240 lbs.
Ton (Can.).	T.	= 20 cwt., 2,000 lbs.

TROY WEIGHT

Carat.		= 3.17 grains.
Pennyweight.	dwt.	= 24 grains.
Ounce.	oz.	= 20 dwts., 480 grains.
Pound.	lb.	= 12 oz., 240 dwts., 5,760 grs.
Hundredweight.	cwt.	= 100 lbs.

Troy is the weight used by goldsmiths and jewelers. The grains Troy, Apothecaries', and Avoirdupois are equal, and the same in England, France, the United States, Holland, and in most other countries.

The oz. Troy and Apothecaries' = 1.09714 oz. avoirdupois; but the lb. Troy and lb. Apothecaries' = only 0.82286 lb. avoirdupois; while 175 lb. Troy and Apothecaries' = 144 lb. avoirdupois.

APOTHECARIES' WEIGHT

Seruple	℥	= 20 Grains.	= 20 grains.
Drachm	℥	= 3 Seruples.	= 60 grains.
Ounce	℥	= 8 Drachms.	= 480 grains.
Pound	lb	= 12 Ounces.	= 5,760 grains.

LIQUID MEASURE

The Pint contains 8.665 cubic inches.
The Gilt contains 4 gills or 34.660 cubic inches.
Quart = 2 pints = 8 gills.
Gallon = 4 quarts = 32 gills.

APOTHECARIES' FLUID MEASURE

60 Minims ℥ (drops).	= 1 Fluid Drachm.	℥	5
8 Drachms.	= 1 Ounce.	℥	3
20 Ounces.	= 1 Pint.	℥	0
8 Pints.	= 1 Gallon.	℥	C, or Cong.
1 Drachm.	= 1 Teaspoonful.		
2 Drachms.	= 1 Dessertspoonful.		
4 Drachms.	= 1 Tablespoonful.		
2 Ounces.	= 1 Wineglassful.		
3 Ounces.	= 1 Tencupful.		

CUBIC OR SOLID MEASURE

Cubic Foot = 1,728 Cubic Inches.
Cubic Yard = 27 Cubic Feet, 21,033 bushels.
Cord of Wood = 128 Cubic Feet.
Shipping Ton = 40 Cubic Feet merchandise.
Shipping Ton = 42 Cubic Feet of timber.
Ton of displacement of a Ship = 35 Cubic Feet.

LINEAR MEASURE

3 barleycorns, or,	} 1 inch (in.).
12 lines, or,	
72 points, or,	
1,000 mls (mi.),	
3 inches,	1 palm.
4 inches,	1 hand.
9 inches,	1 span.
12 inches,	1 foot (ft.).
18 inches,	1 cubic.
3 feet,	1 yard (yd.).
2½ feet,	1 military pace.
5 feet,	1 geometrical pace.
2 yards,	1 fathom.
5½ yards,	1 rod, pole, or perch.
66 feet, or,	} Gunter's chain.
4 rods,	
40 poles, or,	} 1 furlong (fur.).
220 yards,	
8 furlongs, or,	} 1 mile.
1,760 yards, or,	
5,280 feet,	} 1 league.
3 miles,	

The hand is used to measure horses' height. The military pace is the length of the ordinary step of a man. One thousand geometrical paces were reckoned to a mile.

LAND MEASURE (LINEAR)

7.92 inches,	1 link.
100 links, or,	} 1 chain (ch.).
66 feet, or,	
22 yards, or,	} 1 furlong (fur.).
4 poles,	
10 chains,	} 1 mile.
80 chains, or,	
8 furlongs,	

LAND MEASURE (SQUARE)

144 sq. inches,	1 square foot (sq. ft.).
9 square feet,	1 square yard (sq. yd.).
30¼ square yards,	1 sq. pole, rod, or perch.
16 square poles,	1 square chain (sq. ch.).
40 square poles, or,	} 1 square rood.
1,210 square yards,	
4 rods, or,	} 1 acre.
10 square chains, or,	
160 square poles, or,	
4,840 square yards, or,	
43,560 square feet,	
640 acres, or,	
3,097,600 square yards,	1 square mile.
30 acres,	1 yard of land.
100 acres,	1 hide of land.
40 hides,	1 barony.

GEOGRAPHICAL AND NAUTICAL MEASURE

6086.44 feet, or,	} = 1 nautical mile.
1000 fathoms, or,	
10 cables, or,	
1.1528 statute miles,	} = 1 knot.
1 nautical mile per hour,	
60 nautical miles, or,	} = 1 degree.
67.168 statute miles,	
360 degrees,	} = 1 circumference of the earth at the equator.
1 league,	
1 cable's length,	= 3 nautical miles.
	= 120 fathoms.

DRY MEASURE, UNITED STATES

		Cu. In.
2 pints,	1 quart (qt.)	= 67.20
4 quarts,	1 gallon (gal.)	= 268.80
2 gallons, or,	} 1 peck	= 537.60
8 quarts,		
4 pecks,	1 struck bushel	= 2150.42

LIQUID MEASURE, UNITED STATES

		Cu. In.
4 gills,	1 pint (O.)	= 28.875
2 pints,	1 quart (qt.)	= 57.75
4 quarts,	1 gallon (gal.)	= 231.
63 gallons,	1 hoghead (hhd.).	
2 hogheads,	1 pipe or butt.	
2 pipes,	1 tun.	

HOUSEHOLD MEASURES

120 drops water,	= 1 teaspoon.
60 drops thick fluid,	= 1 teaspoon.
2 teaspoons,	= 1 dessertspoon.
3 teaspoons,	= 1 tablespoon.
16 tablespoons,	= 1 cup.

1 cup,	= ½ pt.
1 cup water,	= ½ lb.
4 tablespoons flour,	= 1 oz.
2 tablespoons butter,	= 1 oz.
3 teaspoons soda,	= ½ oz.
4 teaspoons baking powder,	= ½ oz.
2 cups granulated sugar,	= 1 lb.
2½ cups confectioners' sugar,	= 1 lb.
2½ cups wheat flour,	= 1 lb.
3½ cups whole wheat flour,	= 1 lb.
2½ cups buckwheat flour,	= 1 lb.
5½ cups coffee,	= 1 lb.
6½ cups tea,	= 1 lb.
2 cups rice,	= 1 lb.
2 cups lard,	= 1 lb.
2 cups butter,	= 1 lb.
2 cups graham flour,	= 1 lb.
2 cups rye flour,	= 1 lb.
2 cups corn meal,	= 1 lb.
2 cups rolled oats,	= 1 lb.
2 cups powdered sugar,	= 1 lb.
2 cups brown sugar,	= 1 lb.
2 cups raisins,	= 1 lb.
2 cups currants,	= 1 lb.
2 cups bread crumbs,	= 1 lb.
9 eggs,	= 1 lb.

TIME

The unit of time measurement is the same among all nations. Practically it is ^{varying} the mean solar day, but really it is a perfectly arbitrary unit, as the length of the mean solar day is not constant for any two periods of time. There is no constant natural unit of time.

1 minute	= 60 seconds.
1 hour	= 60 minutes, 3,600 seconds.
1 day	= 24 hours, 1,440 minutes, 86,400 seconds.
1 sidereal day	= 86,164.1 seconds.
1 sidereal month	= 27.321661 mean solar days (average).
1 lunar month	= 29.530589 mean solar days (average).
1 anomalistic month	= 27.544600 mean solar days (average).
1 tropical month	= 27.321582 mean solar days (average).
1 nodical month	= 27.212222 mean solar days (average).
Mean solar year	= 365 d. 5 h. 48 m. 46.045 s. with annual variation of 0.00539.

The change in the length of the mean sidereal day, i. e., of the time of the earth's rotation upon its axis, amounts to 0.01252 s. in 2,400 mean solar years.

ANGULAR MEASURE

There is perfect unanimity as to the standard angle (i. e., the right angle) and practical unanimity as to its subdivision, for the subdivision into grades, etc., once favored by the French, is now abandoned.

1 minute of angle or arc	= 60 seconds.
1 degree " " " "	= 60 minutes.
90 degrees " " " "	= 1 right angle or ¼ of circumference.
Radian " " " "	= arc same length as radius.
	= 57.295779513082°.
Length of arc of 1°	= 0.017453292520.
" " " " 1'	= 0.000290888209.
" " " " 1"	= 0.015707963268.

METRIC SYSTEM

The French Metrical System is based upon the (assumed) length of the fourth part of a terrestrial meridian. The ten-millionth part of this arc was chosen as the unit of measures of length, and called a *Metre*. The cube of the tenth part of the metre was adopted as the unit of capacity, and denominated a *Litre*. The weight of a litre of distilled water at its greatest density was called a *Kilogramme*, of which the thousandth part, or *Gramme*, was adopted as the unit of weight. The multiples of these, proceeding in decimal progression, are distinguished by the employment of the prefixes *deca*, *hecto*, *kilo*, and *myria*, from the Greek, and the subdivisions by *deci*, *centi*, and *milli*, from the Latin:

MEASURES OF LENGTH (UNIT METER)

EQUAL TO	Inches	Feet	Yards	Fathoms	Miles
Millimeter,	0.03937	0.003	0.001	0.000	0.000
Centimeter,	0.39371	0.032	0.010	0.005	0.000
Decimeter,	3.93708	0.328	0.109	0.054	0.000
METER,	39.37079	3.280	1.093	0.546	0.000
Decameter,	393.70790	32.808	10.936	5.468	0.006
Hectometer,	3937.07900	328.089	109.363	54.681	0.062
Kilometer,	39370.79000	3280.899	1093.633	546.816	0.621
Myriameter,	393707.90000	32808.991	10936.330	5468.165	6.213

CUBIC, OR MEASURES OF CAPACITY (UNIT LITER)

EQUAL TO	Cu. In.	Cu. Ft.	Pints	Gallons	Bushels
Milliliter, or cubic centimeter,	0.06103	0.000	0.001	0.000	0.000
Centiliter, 10 cubic centimeter,	0.61027	0.000	0.017	0.002	0.000
Deciliter, 100 cubic centimeter,	6.10271	0.003	0.176	0.022	0.002
LITER, or cubic Decimeter,	61.02705	0.035	1.760	0.220	0.027
Decaliter, or Centistere,	610.27052	0.353	17.607	2.200	0.275
Hectoliter, or Decistere,	6102.70515	3.531	176.077	22.009	2.751
Kiloliter, or Stere,	61027.05152	35.316	1760.773	220.096	27.512
Myrialiter, or Decastere,	610270.51519	353.165	17607.734	2200.966	275.120

MEASURES OF WEIGHT (UNIT GRAM)

EQUAL TO	Grains	Troy oz.	Avoir. lb.	Cwt.= 112 lb.	Ton = 20 cwt.
Milligram,	0.01543	0.000	0.000	0.000	0.000
Centigram,	0.15432	0.000	0.000	0.000	0.000
Decigram,	1.54323	0.003	0.000	0.000	0.000
GRAM,	15.43235	0.032	0.002	0.000	0.000
Decagram,	154.32349	0.321	0.022	0.000	0.000
Hectogram,	1543.23488	3.215	0.220	0.001	0.000
Kilogram,	15432.34880	32.150	2.204	0.019	0.000
Myriagram,	154323.48800	321.507	22.046	0.196	0.009

SQUARE, OR MEASURES OF SURFACE (UNIT ARE)

EQUAL TO	Sq. Feet	Yards	Perches	Roods	Acres
Centiare, or square meter,	10.764299	1.196	0.039	0.000	0.000
ARE, or 100 square meters,	1076.429934	119.603	3.953	0.098	0.024
Hectare, or 10,000 sq. meters,	107642.993419	11960.332	395.382	9.884	2.471

APPROXIMATE EQUIVALENTS OF THE FRENCH (METRIC)
AND ENGLISH MEASURES

1 yard,	$\frac{1}{3}$ meter.
11 meters,	12 yards.
To convert meters into yards,	Add $\frac{1}{3}$ th.
1 meter = 1.1 yd.; 3.3 ft.,	{ 3 ft. $3\frac{1}{3}$ inches ($\frac{1}{3}$ th less).
1 meter, by the Standards Commission,	{ 40 inches (1.6 per cent. less).
1 meter, by the Act of 1878,	{ = 39.38203 inches.
1 foot,	{ = 39.37079 inches.
1 inch,	{ 3 decimeters (more exactly 3.048).
1 mile,	{ 25 millimeters (more exactly 25.4).
1 kilometer,	{ 1.6 or $1\frac{1}{3}$ kilometers (more exactly 1.60931).
1 chain (22 yards),	{ $\frac{5}{8}$ of a mile.
5 furlongs (1,100 yards),	{ 20 meters (more exactly 20.1165).
1 square yard,	{ 1 kilometer (more exactly 1.0058).
1 square meter,	{ $\frac{9}{10}$ square meter (more exactly .8361).
1 square inch,	{ $10\frac{1}{4}$ square feet.
1 square mile (640 acres),	{ $1\frac{1}{4}$ square yards.
1 acre (4840 square yards),	{ $6\frac{1}{4}$ square centimeters (more exactly 6.45).
1 cubic yard,	{ 260 hectares (0.4 per cent. less).
1 cubic meter,	{ 4,000 square meters (1.2 per cent. more).
1 cubic meter,	{ $\frac{3}{4}$ cubic meter (2 per cent. more).
1 cubic meter,	{ $1\frac{1}{4}$ cubic yards ($1\frac{1}{3}$ per cent. less).
1 cubic meter of water,	{ $35\frac{1}{4}$ cubic feet (.05 per cent. less).
1 kilogram,	{ 1 long ton nearly.
1,000 kilograms,	{ 2.2 pounds fully.
1 metric ton,	{ 1 long ton nearly.
1 long hundredweight,	{ 51 kilograms nearly.
1 United States hundredweight,	{ $45\frac{1}{4}$ kilograms nearly.

ELECTRICAL UNITS

NAME	SYMBOL	UNIT OF	HOW OBTAINED	CGS*	EQUIVALENT
Ohm	R	Resistance	The electrical resistance of a column of mercury 106 centimeters long and of 1 square millimeter section.	10 ⁹	1 true ohm = 1.0112 British Association ohms.
Ampère	C	Current	Is that current of electricity that decomposes .00009324 gram of water per second.	10 ¹	Deposits 1.118 milligrams of silver per second.
Volt	E	Electromotive force	One ampere of current passing through a substance having 1 ohm of resistance = 1 volt.	10 ⁸	.926 of a standard Daniel Cell.
Coulomb	Q	Quantity	A current of 1 ampère during 1 second of time.	10 ¹	Deposits 1.118 milligrams of silver.
Farad	K	Capacity	The capacity that a current of 1 ampere for 1 second (= 1 coulomb) charges it to potential of 1 volt.	10 ⁹	2.5 knots of D. U. S. cable.
Microfarad	K		1 millionth of farad.	10 ¹⁵	
Watt	Pw.	Power	Power of 1 ampere current passing through resistance of 1 ohm.	10 ⁷	.0013405 or ($\frac{1}{746}$) of a horse power.
Joule	W j.	Work	Is the work done by 1 watt of electrical power in 1 second.	10 ⁷	.238 unit of heat (Therm).

* C. G. S. = Electro-magnetic units. Consult technical works in electricity.

WEIGHTS AND MEASURES OF THE BIBLE

WEIGHTS

	AVOIRDUPOIS.			TROY.			
	Lbs.	Oz.	Drs.	Lbs.	Oz.	Dwt.	Gr.
A gerah,	0	0	0.439 =	0	0	0	12
10 gerahs = 1 bekah,	0	0	4.39 =	0	0	5	0
2 bekahs = 1 shekel,	0	0	8.78 =	0	0	10	0
60 shekels = 1 maneh,	2	0	14.628 =	2	6	0	0
50 manehs = 1 talent,	102	13	11.428 =	125	0	0	0

MEASURES

LONG MEASURE.				Ft.	In.
A digit, or finger (Jer. lii. 21),				0	0.912
4 digits = 1 palm (Exod. xxv, 25),				0	3.648
3 palms = 1 span (Exod. xxviii, 16),				0	10.944
2 spans = 1 cubit (Gen. vi, 15),				1	9.888
4 cubits = 1 fathom (Acts xxvii, 28),				7	3.552
1.5 fathoms = 1 reed (Ezek. xl, 3, 5),				10	11.328
13.3 reeds = 1 line (Ezek. xl, 3),				145	11.04
LAND MEASURE.				Paces	Ft.
A cubit,		Eng. Miles.		0	1.824
400 cubits = 1 furlong (Luke xxiv, 13),		0		145	4.6
5 furlongs = 1 sabbath day's journey (John xi, 18; Acts i, 12),		0		727	3.0
10 furlongs = 1 mile (Matt. v, 41),		1		399	1.0
24 miles = 1 day's journey,		33		76	4.0
LIQUID MEASURE.				Gals.	Pts.
A caph,				0	0.625
1.3 caphs = 1 log (Lev. xiv, 10),				0	0.833
4 logs = 1 cab,				0	3.333
3 cabs = 1 hin (Exod. xxx, 24),				1	2
2 hins = 1 seah,				2	4
3 seahs = 1 bath, or ephah (1 Kings vii, 26; John ii, 6),				7	4.5
10 ephahs = 1 kor, or homer (Isa. v, 10; Ezek. xiv, 14),				75	5.25
DRY MEASURE.				Pecks.	Gals.
A gachal,				0	0.1416
20 gachals = 1 cab (2 Kings vi, 25; Rev. vi, 6),				0	2.8333
1.8 cabs = 1 omer (Exod. xvi, 36),				0	5.1
3.3 omers = 1 seah (Matt. xiii, 33),				1	1
3 seahs = 1 ephah (Ezek. xlv, 11),				3	3
5 ephahs = 1 letech (Hosea iii, 2),				16	0
2 letechs = 1 kor, or homer (Num. xi, 32; Hos. iii, 2),				32	0

N. B.—The foregoing table will explain many texts in the Bible. Take, for instance, Isa. v, 10. "Yea, ten acres of vineyard shall yield one bath, and the seed of an homer shall yield an ephah." This curse upon the covetous man was, that 10 acres of vines should produce only 7 gallons of wine, i. e., one acre should yield less than 3 quarts; and that 32 pecks of seed should only bring a crop of 3 pecks, or, in other words, that the harvest reaped should produce but one-tenth of the seed sown.

TIME

The *Natural Day* was from sun-rise to sun-set.

The *Natural Night* was from sun-set to sun-rise.

The *Civil Day* was from sun-set one evening to sun-set the next; for, "the Evening and the Morning were the first day."

NIGHT (*Ancient*).

First Watch (Lam. ii, 19), till midnight.

Middle Watch (Judg. vii, 19), till 3 A. M.

Morning Watch (Exod. xiv, 24), till 6 A. M.

NIGHT (*New Testament*).

First Watch, *evening* = 6 to 9 P. M.

Second Watch, *midnight* = 9 to 12 P. M.

Third Watch, *cock-crow* = 12 to 3 A. M.

Fourth Watch, *morning* = 3 to 6 A. M.

DAY (*Ancient*).

Morning till about 10 A. M.

Heat of day till about 2 P. M.

Cool of day till about 6 P. M.

DAY (*New Testament*).

Third hour = 6 to 9 A. M.

Sixth hour = 9 to 12 midday.

Ninth hour = 12 to 3 P. M.

Twelfth hour = 3 to 6 P. M.

JEWISH MONEY

With its value in English and American money; the American dollar being taken as equal to 4s. 2d.

Jewish.	English.		American.	
	£	d.	Dols.	Cents.
A gerah (Exod. xxx, 13),	0	0 1.36	0	2.73
10 gerahs = 1 bekah (Exod. xxxviii, 26),	0	1 1.68	0	27.37
2 bekahs = 1 shekel (Exod. xxx, 13; Isa. vii, 23),	0	2 3.37	0	54.74
50 shekels = 1 maneh,	5	14 0.75	27	37.50
60 manehs = 1 kikkar (talent),	342	3 9	1,642	50
A gold shekel,	1	16 6	8	76
A kikkar of gold,	5,475	0 0	26,280	0

N. B.—A *shekel* would probably purchase nearly ten times as much as the same nominal amount will now. Remember that one *Roman penny* (8*ld.*) was a good day's wages for a laborer.

The Hebrew *maneh*, according to 1 Kings x, 17, compared with 2 Chron. ix, 16, contained 100 shekels; though according to one interpretation of Ezek. xiv, 12, it contained 60, but more probably 50. The passage reads thus: "Twenty shekels, five and twenty shekels, fifteen shekels shall be your maneh." This is variously interpreted: (1) 20 + 25 + 15 = 60. (2) 20, 25, 15 are different coins in gold, silver, and copper, bearing the same name. It is well to remark the meaning of these names: *Shekel* = simply, *weight*: *Bekah* = *split*, i. e., the shekel divided into two: *Gerah* = a *grain*, as in our weights, a grain and a *barley-corn*, the original standard weight: *Maneh* = *appointed*, equivalent to *sterling*, a specific sum: *Kikkar* = a *round* mass of metal, i. e., a weight or coin. Hebrew names of weights and coins are not found in the New Testament: *mina* in Luke xix, 13, is Greek, though possibly identical with the Hebrew *maneh*.

ROMAN MONEY

Roman.	English.		American.
	d.		Cents.
A "farthing," <i>quadrans</i> (Matt. v, 26) = nearly,	0.125	=	0.25
A "farthing," as in 4 <i>quadrantes</i> (Matt. x, 29) = nearly,	0.5	=	1
A "penny," <i>denarius</i> = 16 <i>asses</i> (Matt. xxii, 19) = nearly,	8.50	=	17

[The Roman *sestertius* = 2½ *asses*, is not named in the Bible.]

N. B.—Here we learn that:—

Naaman's offering to Elisha of 6,000 pieces (shekels) of gold amounted to more than £10,000 = 48,000 *dollars*.

The Debtor (Matt. xviii, 24), who had been forgiven 10,000 talents, i. e., £3,000,000 = 14,400,000 *dollars*, refused to forgive his fellow-servant 100 pence, i. e., £3 10s. 10*ld* = 17 *dollars*.

Judas sold our Lord for 30 pieces of silver, i. e., £3 10s. 8*ld* = 16 *dollars*, 96 *cents*, the legal value of a slave, if he were killed by a beast.

Joseph was sold by his brethren for 20 pieces, i. e., £2 7s. = 11 *dollars*, 28 *cents*.

FORCE OF WIND WHEN BLOWING PERPENDICULARLY UPON A SURFACE OF ONE SQUARE FOOT

VELOCITY OF WIND			PERPENDICULAR FORCE ON ONE SQUARE FOOT in Pounds	DESCRIPTION
Miles per Hour	Feet per Minute	Feet per Second		
1	88	1.47	.005	Hardly perceptible.
2	176	2.93	.020	Just perceptible.
3	264	4.40	.044	Just perceptible.
4	352	5.87	.079	Gentle breeze.
5	440	7.33	.123	Gentle breeze.
10	880	14.67	.492	Pleasant.
15	1,320	22.00	1.107	Pleasant.
20	1,760	29.30	1.968	Brisk gale.
25	2,200	36.60	3.075	Brisk gale.
30	2,640	44.00	4.428	High wind.
35	3,080	51.30	6.027	High wind.
40	3,520	58.60	7.872	Very high wind.
45	3,960	66.00	9.963	Very high wind.
50	4,400	73.30	12.300	Storm.
60	5,280	88.00	17.712	Great storm.
70	6,160	102.7	24.108	Great storm.
80	7,040	117.3	31.488	Hurricane.
100	8,800	146.6	49.200	Hurricane.

TABLE OF TEMPERATURE

Degree of Fahr.	
2,785.	Cast iron melts (Daniell).
1,998.	Copper melts (Daniell).
1,947.	Gold melts.
1,873.	Silver melts (Daniell).
1,750.	Brass (containing 25% of zinc) melts (Daniell).
1,000.	Iron, bright cherry red (Poillet).
980.	Red heat, visible in daylight (Daniell).
941.	Zinc begins to burn (Daniell).
773.	Zinc melts (Daniell).
644.	Mercury boils (Daniell), 662 (Graham).
640.	Sulphuric acid boils (Magrignac), 620 (Graham).
630.	Whale oil boils (Graham).
617.	Pure lead melts (Rudberg).
600.	Linseed oil boils.
518.	Bismuth melts (Gmelin).
442.	Tin melts (Crichton).
380.	Arsenious acid volatilizes.
356.	Metallic arsenic sublimes.
315.	Oil of turpentine boils (Kaure).
302.	Etherification ends.
257.	Saturated sol. of sal ammoniac boils (Taylor).
256.	Saturated sol. of acetate of soda boils.
239.	Sulphur melts (Miller), 226 (Fownes).
238.	Saturated sol. of nitre boils.
221.	Saturated sol. of salt boils (Paris Codex).
220.	Saturated sol. of alum, carb. soda, and sulph. zinc, boil.
218.	Saturated sol. of chlorate and prussiate potash, boil.
216.	Saturated sol. of sulph. iron, sulph. copper, nitrate of lead, boil.
214.	Saturated sol. of acetate lead, sulph. and bitartrate potash, boil.
213 or (213.5).	Water begins to boil in glass.
212.	Water boils in metal, barometer at 30°.
211.	Alloy of 5 bismuth, 3 tin, 2 lead, melts.
201.	Alloy of 8 bismuth, 5 lead, 3 tin, melts (Kane).
207.	Sodium melts (Regnault).
185.	Nitric acid 1.52 begins to boil.
180 (about).	Starch forms a gelatinous compound with water.
176.	Rectified spirit boils, benzol distils.
173.	Alcohol (sp. gr. .796 to .800) boils
151.	Beeswax melts (Kane), 142 (Lepage).
150.	Pyroxylic spirit boils (Scanlan).
145.	White of egg begins to coagulate
141.8.	Chloroform, and ammonia of .945, boil.
132.	Acetone (pyroacetic spirit) boils (Kane).
122.	Mutton suet and styracin melt
116.	Bisulphuret of carbon boils (Graham).
115.	Pure tallow melts (Lepage), 92 (Thomson).

Degree of Fahr.	
112.	Spermaceti and stearin of lard melt.
111.	Phosphorus melts (Miller).
98.	Temperature of the blood
95.	Ether (.720) boils.
95.	Carbolic acid crystals become an oily liquid.
88.	Acetous fermentation ceases, water boils <i>in vacuo</i> .
77.	Vinous fermentation ends, acetous fermentation begins.
64.4.	Oil of anise liquefies.
59.	Gay Lussac's <i>Alcomètre</i> graduated at.
55.	Sirups to be kept at.
30 (about).	Olive oil becomes partially solid.
32.	Water freezes.
5.	Cold produced by snow 2 parts and salt 1 part.
-37.9.	Mercury freezes.

Degree of Fahr.

STRENGTH OF MATERIALS

METALS	
NAME OF METAL	TENSILE STRENGTH IN POUNDS PER Sq. IN.
Aluminum wire,	30,000-40,000
Brass wire, hard drawn,	50,000-150,000
Bronze, phosphor, hard drawn,	110,000-140,000
Bronze, silicon, hard drawn,	95,000-115,000
Copper wire, hard drawn,	60,000-70,000
Gold wire,	38,000-41,000
Iron, cast,	13,000-29,000
Iron, wire, hard drawn,	80,000-120,000
Iron, wire, annealed,	50,000-60,000
Lead, cast or drawn,	2,600-3,300
Palladium,	39,000
Platinum wire,	50,000
Silver wire,	42,000
Steel, mild, hard drawn,	100,000-200,000
Steel, hard, hard drawn,	150,000-330,000
Tin, cast or drawn,	4,000-5,000
Zinc, cast,	7,000-13,000
Zinc, drawn,	22,000-30,000

STONES AND BRICKS	
NAME OF SUBSTANCE	RESISTANCE TO CRUSHING IN POUNDS PER Sq. IN.
Basalt,	18,000-27,000
Brick, soft,	300-1,500
Brick, hard,	1,500-5,000
Brick, vitrified,	9,000-26,000
Granite,	17,000-26,000
Limestone,	4,000-9,000
Marble,	9,000-22,000
Sandstone,	4,500-8,000
Slate,	11,000-30,000

TIMBER		
NAME OF WOOD	TENSILE STRENGTH IN POUNDS PER Sq. IN.	RESISTANCE TO CRUSHING IN POUNDS PER Sq. IN.
Ash,	11,000-21,000	6,000-9,000
Beech,	11,000-18,000	9,000-10,000
Birch,	12,000-18,000	5,000-7,000
Chestnut,	10,000-13,000	4,000-6,000
Elm,	12,000-18,000	6,000-10,000
Hackberry,	10,000-16,000	
Hickory,	15,000-25,000	7,000-12,000
Maple,	8,000-12,000	6,000-8,000
Mulberry,	8,000-14,000	
Oak, burr,	15,000-20,000	7,000-10,000
Oak, red,	13,000-18,000	5,000-7,000
Oak, water,	12,000-16,000	4,000-6,000
Oak, white,	20,000-25,000	6,000-9,000
Poplar,	10,000-15,000	5,000-8,000
Walnut,	8,000-14,000	4,000-8,000

LEGAL WEIGHTS PER BUSHEL

(From Bureau of Standards, Department of Commerce and Labor.)

LEGAL WEIGHTS (IN POUNDS) PER BUSHEL

STATE OR TERRITORY	APPLES			BEANS			BEETS	BLUE-GRASS SEED	BRAN *	BROOM-CORN SEED	BUCKWHEAT	CARROTS	CLOVER SEED	COAL	COKE	CORN					
	APPLES *	DRIED APPLES	BARLEY	BEANS *	CASTOR BEANS, SHELLED	CORN IN EAR										SHELLED CORN	CORN MEAL*	CORN MEAL, BOLTED	CORN MEAL, UN-BOLTED		
United States, . . .	...	...	48	...	50	...	...	...	...	...	42	...	...	80	...	...	...	...	...	...	
Alabama, . . .	...	24	47	60	...	...	...	...	...	...	...	...	...	...	...	...	70	56	46	...	48
Arizona, . . .	...	...	45	a55	...	...	...	...	...	...	...	...	...	...	...	...	...	54	...	...	...
Arkansas, . . .	b50	24	48	a60	...	...	...	14	20	48	52	...	60	...	...	...	70	56	48	...	...
California, . . .	...	...	50	...	...	...	...	...	...	...	40	...	...	...	...	...	...	52	...	...	...
Colorado, . . .	...	...	48	60	...	...	...	14	...	...	52	...	60	80	...	...	70	56	50	...	...
Connecticut, . . .	48	25	48	60	...	c60	...	...	20	...	48	50	60	80	...	...	...	56	...	...	...
Delaware, . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Florida, . . .	b48	24	48	d60	48	...	...	...	20	...	...	...	...	...	...	...	70	56	...	44	48
Georgia, . . .	...	24	47	c60	...	...	...	14	20	...	52	...	60	80	...	...	70	56	48	...	...
Hawaii, . . .	...	...	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56	...	...	...
Idaho, . . .	b45	28	48	...	...	...	...	...	...	...	42	...	60	...	...	...	...	56	...	...	...
Illinois, . . .	...	24	48	c60	46	...	...	14	20	...	52	...	60	80	...	...	70	56	48	...	...
Indiana, . . .	...	25	48	60	46	...	...	14	...	...	50	...	60	80	...	...	68	56	50	...	...
Iowa, . . .	48	24	48	60	46	...	...	14	20	30	52	...	60	80	38	...	70	56	...	...	...
Kansas, . . .	b48	24	48	60	46	...	...	14	20	...	50	...	60	80	...	...	70	56	50	...	...
Kentucky, . . .	...	24	47	c60	*45	...	...	14	20	...	56	...	60	76	...	...	70	56	50	...	...
Louisiana, . . .	...	...	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56	...	...	...
Maine, . . .	44	...	48	60	...	60	...	...	...	48	50	...	...	...	...	...	...	56	50	...	...
Massachusetts, . . .	48	25	48	k60	...	...	...	...	20	...	48	50	60	...	...	...	...	56	50	...	...
Michigan, . . .	48	22	48	60	46	...	...	14	...	...	48	...	60	80	...	...	70	56	50	...	...
Minnesota, . . .	b50	28	48	60	...	50	14	...	...	57	50	45	60	80	...	...	70	56	...	...	...
Mississippi, . . .	...	26	48	a60	46	...	...	14	20	...	48	...	60	80	...	...	72	56	48	44	48
Missouri, . . .	48	24	48	m60	46	...	...	14	20	...	52	50	60	80	...	...	70	56	50	...	...
Montana, . . .	45	48	60	...	...	50	14	20	...	...	52	50	60	78	...	...	70	56	50	...	...
Nebraska, . . .	...	24	48	c60	46	...	14	20	...	...	52	...	60	80	...	...	70	56	50	...	...
N. Hampshire, . . .	...	...	62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56	...	...	...
New Jersey, . . .	50	25	48	60	...	...	...	...	...	50	...	...	64	...	...	...	...	56	...	...	...
New York, . . .	48	25	48	60	...	...	...	...	20	...	48	50	60	...	...	...	...	56	50	...	...
North Carolina, . . .	...	...	48	...	...	...	...	...	...	...	50	...	60	...	...	...	...	56	...	46	48
North Dakota, . . .	50	...	48	60	...	60	...	...	20	30	42	...	60	80	...	...	70	56	...	...	...
Ohio, . . .	50	24	48	60	...	56	...	...	...	...	50	50	60	n80	40	...	68	56	...	...	...
Oklahoma, . . .	...	24	48	60	...	60	...	...	20	30	42	...	60	80	...	...	70	56	...	...	...
Oregon, . . .	45	28	46	...	...	...	...	...	...	...	42	...	60	...	...	...	...	56	...	...	...
Pennsylvania, . . .	...	28	47	...	...	...	...	...	...	...	48	...	60	78	40	...	...	56	...	...	...
Rhode Island, . . .	48	25	48	60	46	50	...	...	20	...	48	50	60	80	40	...	70	56	...	...	...
South Carolina, . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46	48
South Dakota, . . .	...	...	48	60	...	60	...	...	20	30	42	...	60	80	...	...	70	56	...	...	...
Tennessee, . . .	b50	24	48	p60	46	50	14	20	42	50	50	...	60	80	40	...	70	56	...	50	48
Texas, . . .	45	28	48	c60	...	...	...	...	20	...	42	...	60	80	...	...	70	56	...	...	...
Vermont, . . .	46	...	48	62	...	60	...	...	...	...	48	50	60	...	...	...	...	56	...	...	...
Virginia, . . .	...	28	48	c60	...	...	...	14	...	...	52	...	60	80	...	...	70	56	50	...	...
Washington, . . .	b45	28	48	...	...	...	...	...	...	...	42	...	60	...	...	...	...	56	...	...	...
West Virginia, . . .	...	25	48	60	...	...	...	...	...	...	52	...	60	80	...	...	...	56	...	...	...
Wisconsin, . . .	50	25	48	60	...	50	...	...	20	...	50	50	60	...	...	...	...	56	50	...	...

* Not defined.

a Small white beans, 60 pounds.

b Green apples.

c Sugar beets and mangel-wurzels.

d Shelled beans, 60 pounds; velvet beans, 78 pounds.

e White beans.

f Wheat bran.

g Corn in ear, 70 pounds until December 1st next after growth; 68 pounds thereafter.

h English blue-grass seed, 22 pounds; native blue-grass seed, 14 pounds.

i Rice corn.

j Corn in ear from November 1st to May 1st following, 70 pounds; 68 pounds from May 1st to November 1st.

k Soy beans, 58 pounds.

l Cracked corn, 50 pounds.

m Green unshelled beans, 30 pounds.

n Cannel coal, 70 pounds.

o Standard weight in borough of Greensburg, 75 pounds.

p Dried beans; green unshelled beans, 30 pounds.

q Red and white.

LEGAL WEIGHTS (IN POUNDS) PER BUSHEL—Continued

STATE OR TERRITORY	COTTON SEED		CRANBERRIES	FLAXSEED (LINSEED)	GOOSEBERRIES	PLASTERING HAIR	HEMP SEED	HERDES GRASS	HUNGARIAN GRASS SEED	MILLET	OATS	ONIONS		ORCHARD GRASS SEED	ORANGE SEED	PARSNIPS	PEACHES		
	COTTON SEED *	SEA-ISLAND										ONIONS *	ONION SETS				PEACHES *	DRIED, PEEL'D	DRIED, UNPEEL'D
United States, . . .	...	...	...	56	...	...	...	...	...	...	32	...	...	...	...	...	...	...	...
Alabama, . . .	32	...	...	...	...	...	...	...	...	...	32	...	...	...	...	...	...	38	33
Arizona, . . .	...	...	...	...	...	...	...	...	...	...	32	...	...	...	...	...	...	...	...
Arkansas, . . .	33½	...	...	56	...	...	...	...	...	50	32	57	...	...	...	...	...	33	33
California, . . .	...	...	...	...	...	...	...	...	...	...	32	57	...	...	...	...	...	...	...
Colorado, . . .	...	...	...	...	...	...	44	...	...	...	32	57	...	...	...	...	...	...	...
Connecticut, . .	30	44	...	55	...	...	...	45	...	...	32	52	...	...	...	45	...	33	33
Florida, . . .	32	46	...	...	...	...	...	...	...	50	32	56	...	...	...	...	...	33	...
Georgia, . . .	30	...	...	56	...	8	44	...	...	...	32	57	...	...	...	...	...	38	33
Hawaii, . . .	...	...	...	...	...	...	...	...	...	...	32	...	...	...	...	...	...	...	...
Idaho, . . .	...	...	...	56	...	...	...	...	...	...	36	...	...	...	...	...	...	...	28
Illinois, . . .	...	...	...	56	...	8	44	...	...	...	32	57	...	...	...	...	...	...	33
Indiana, . . .	...	33	...	...	...	...	44	...	...	50	32	48	...	14	33	55	...	...	33
Iowa, . . .	...	...	...	56	40	...	44	...	50	50	32	57	...	...	32	...	48	...	33
Kansas, . . .	...	...	...	56	...	68	44	...	50	50	32	57	...	...	...	...	...	...	33
Kentucky, . . .	...	...	...	56	...	8	44	...	50	50	32	57	c36	14	...	...	...	39	...
Maine, . . .	...	...	...	...	...	11	...	45	...	...	32	52	...	...	...	45	...	...	...
Maryland, . . .	...	...	...	...	...	...	...	...	...	26	...	...	...	...	...	...	...	...	...
Massachusetts, .	30	44	...	55	...	...	...	45	...	...	32	52	...	...	...	...	...	33	...
Michigan, . . .	...	...	40	56	...	...	44	...	50	50	32	54	...	14	33	...	...	28	...
Minnesota, . . .	...	...	36	...	40	68	50	...	48	48	32	52	...	14	...	42	...	28	...
Mississippi, . .	32	...	...	56	...	...	44	...	50	50	32	57	...	...	...	...	...	33	...
Missouri, . . .	33	...	...	56	...	...	44	...	48	50	32	57	d28	14	36	44	48	33	...
Montana, . . .	...	...	...	56	...	...	44	...	50	...	32	57	...	...	...	50	...	...	...
Nebraska, . . .	...	...	...	56	...	8	44	...	50	50	32	57	25	...	32	...	...	33	...
New Hampshire, .	...	...	...	...	...	...	...	...	...	...	32	...	...	...	...	...	...	...	...
New Jersey, . .	...	...	...	55	...	...	...	...	...	...	30	57	...	...	...	...	...	33	...
New York, . . .	30	44	...	55	...	...	...	45	...	...	32	57	...	...	...	...	...	33	...
North Carolina, .	30	...	...	55	...	...	...	...	...	...	32	...	...	...	...	...	...	...	...
North Dakota, .	...	...	...	56	...	...	...	...	50	32	52	...	...	...	...	...	...	...	...
Ohio, . . .	...	...	...	56	...	...	44	...	50	50	32	55	...	...	...	...	48	33	...
Oklahoma, . . .	...	...	...	56	...	...	...	...	...	...	32	52	...	...	...	...	...	...	...
Oregon, . . .	...	...	...	...	...	...	...	...	...	...	32	...	...	...	...	...	...	28	...
Pennsylvania, . .	...	...	...	...	...	...	...	...	...	...	32	50	...	...	...	...	...	...	...
Rhode Island, . .	30	44	...	56	...	...	44	...	50	50	32	50	...	...	...	50	48	33	...
South Carolina, .	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Dakota, . .	...	...	...	56	...	...	...	...	...	...	32	52	...	...	...	...	...	...	...
Tennessee, . . .	28	...	...	56	48	8	44	...	48	50	32	56	e28	14	33	50	f50	26	...
Texas, . . .	32	...	...	56	...	...	44	...	48	50	32	57	...	...	...	...	50	28	...
Vermont, . . .	...	...	...	...	...	...	...	45	...	...	32	52	...	...	...	...	...	...	...
Virginia, . . .	32	...	...	56	...	8	44	12	48	50	30	57	28	14	34	...	...	40	32
Washington, . . .	...	...	...	56	...	...	...	...	...	...	32	...	...	...	...	...	...	28	...
West Virginia, . .	...	...	...	56	...	...	...	...	...	...	32	...	...	...	...	...	...	33	...
Wisconsin, . . .	30	44	...	56	...	8	44	...	48	50	32	57	...	...	...	44	...	33	...

* Not defined.

a Green.

b Unwashed plastering hair, 8 pounds; washed plastering hair, 4 pounds.

c Bottom onion sets.

d Top onion sets.

e Button onion sets, 32 pounds.

f Matured.

STATE OR TERRITORY	PEANUTS	PEARS *	PEAS		POTATOES	SWEET POTATOES	REDTOP SEED	ROUGH RICE	RUTA-BAGAS	RYE MEAL	RYE	SHORTS *	SORGHUM SEED	TOMATOES	TIMOTHY SEED	TURNIPS	WHEAT
			GREEN PEAS, UNSHELLED	PEAS *													
United States, . . .	...	...	...	60	60	...	...	...	...	...	56	...	...	...	...	...	60
Alabama, . . .	...	...	...	60	60	55	...	...	...	...	56	...	...	...	...	55	60
Arizona, . . .	...	...	...	...	60	...	...	...	...	...	56	...	...	...	...	...	60
Arkansas, . . .	...	...	...	60	60	50	14	...	...	...	56	...	...	...	...	...	60
California, . . .	...	...	...	...	...	...	...	...	...	...	54	...	...	...	...	...	60
Colorado, . . .	...	...	...	...	60	...	...	...	...	...	56	...	...	...	...	45	60
Connecticut, . .	...	...	...	60	60	54	...	45	60	50	56	20	...	...	...	50	60
District of Columbia, .	...	...	...	...	60	...	...	...	...	...	...	...	...	...	...	...	60
Delaware, . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60
Florida, . . .	...	...	...	...	60	60	...	...	...	...	56	...	6	...	...	...	60
Georgia, . . .	...	...	...	...	60	55	...	...	...	...	56	...	...	...	...	...	60
Hawaii, . . .	22	60	...	...	60	...	43	...	...	...	56	...	...	...	45	55	60
Idaho, . . .	...	...	...	...	60	...	...	...	...	...	56	...	...	...	...	...	60
Illinois, . . .	...	a45	...	...	60	50	...	...	...	...	56	...	...	...	45	55	60

LEGAL WEIGHTS (IN POUNDS) PER BUSHEL—Continued

STATE OR TERRITORY	PEANUTS	PEARS *	PEAS		POTATOES	SWEET POTATOES	REPTOP SEED	ROUGH RICE	RUTA-BAGAS	RYE MEAL	RYE	SHORTS *	SORGHUM SEED	TOMATOES	TIMOTHY SEED	TURNIPS	WHEAT
			GREEN PEAS, UNSHELLED	PEAS *													
Indiana,	..	..	..	..	60	55	..	..	..	..	56	..	..	..	45	55	60
Iowa,	..	..	..	..	60	43	..	..	..	..	56	..	630	..	45	..	60
Kansas,	..	..	..	..	60	50	..	..	..	..	56	..	53	..	45	55	60
Kentucky,	..	..	..	60	60	55	..	..	..	..	56	..	..	..	45	60	60
Louisiana,	..	..	..	..	..	..	..	..	..	..	56	..	..	..	..	..	60
Maine,	..	..	..	60	60	..	..	..	60	50	50	..	..	..	..	50	60
Maryland,	..	..	..	..	56	..	..	..	..	..	..	..	..	60	..	..	..
Massachusetts,	..	..	..	60	60	54	..	45	..	50	56	20	..	..	45	..	60
Michigan,	..	..	..	60	60	56	14	..	..	..	56	..	..	..	45	58	60
Minnesota,	..	..	..	60	60	55	14	..	52	..	56	..	57	..	45	..	60
Mississippi,	..	..	..	60	60	60	..	..	..	..	56	..	..	..	45	55	60
Missouri,	..	48	56	c60	60	56	14	..	50	..	56	..	42	45	45	42	60
Montana,	..	45	..	60	60	..	..	..	..	..	56	..	..	..	45	50	60
Nebraska,	..	..	..	60	60	50	..	..	..	..	56	..	30	..	45	55	60
New Hampshire,	..	..	..	60	60	..	..	..	..	50	56	..	..	..	..	..	60
New Jersey,	..	..	..	60	60	54	..	..	..	..	56	..	..	..	..	..	60
New York,	..	..	..	60	60	50	..	45	..	50	56	20	..	..	45	..	60
North Carolina,	22	..	..	60	..	..	..	44	..	..	56	..	..	..	..	..	60
North Dakota,	..	..	..	60	60	46	..	..	..	..	56	..	..	..	45	60	60
Ohio,	..	..	..	60	60	50	..	..	..	..	56	..	..	56	45	60	60
Oklahoma,	..	..	..	60	60	46	..	..	..	..	56	..	..	..	42	60	60
Oregon,	..	45	..	60	..	..	..	..	..	..	56	..	..	..	..	..	60
Pennsylvania,	..	..	..	56	..	..	..	..	..	..	56	..	..	..	..	..	60
Rhode Island,	..	..	..	c60	60	54	..	..	..	50	56	20	..	56	45	50	60
South Dakota,	..	..	..	60	60	46	..	..	..	..	56	..	..	..	42	60	60
Tennessee,	23	d55	30	60	60	50	14	..	..	..	56	..	50	56	45	50	60
Texas,	..	..	..	60	60	55	..	..	..	..	56	..	..	55	45	55	60
Vermont,	..	..	..	60	60	..	..	..	..	..	56	..	..	..	45	60	c60
Virginia,	22	..	..	60	56	56	12	..	..	..	56	..	..	..	45	55	60
Washington,	..	a45	..	60	..	..	..	..	..	..	56	..	..	..	..	..	60
West Virginia,	..	..	..	60	..	..	..	..	..	..	56	..	..	..	45	..	60
Wisconsin,	..	..	..	60	60	54	..	45	56	50	56	20	..	..	45	42	60

* Not defined.

a Green.

b Sorghum saccharatum seed.

c Including split peas.

d Dried pears, 26 pounds.

e India wheat, 46 pounds.

COMMODITIES FOR WHICH LEGAL WEIGHTS PER BUSHEL HAVE BEEN FIXED IN BUT ONE OR TWO STATES

(From Bureau of Standards, Department of Commerce and Labor.)

ARTICLE	WEIGHT	STATES
	Pounds	
Apple seeds,	40	Rhode Island and Tennessee.
Beggar-weed seed,	62	Florida.
Blackberries,	32	Iowa, Tennessee, 48 pounds; dried, 28 pounds.
Blueberries,	42	Minnesota.
Bromus inermis,	14	North Dakota.
Cabbage,	50	Tennessee.
Canary seed,	60	Tennessee.
Cantaloupe melon,	50	Tennessee.
Cement,	80	Tennessee.
Cherries,	40	Iowa, Tennessee, with stems, 53 pounds; without stem, 64 pounds.
Chestnuts,	50	Tennessee, Virginia, 57 pounds.
Chufa,	54	Florida.
Cotton seed, staple,	42	South Carolina.
Cucumbers,	48	Missouri and Tennessee. Wisconsin, 50 pounds.
Currants,	40	Iowa and Minnesota.
Feed,	50	Massachusetts.
Grapes,	40	Iowa, Tennessee, with stems, 48 pounds; without stems, 60 pounds.
Guavas,	54	Florida.
Hickory nuts,	50	Tennessee.
Hominy,	60	Ohio, Tennessee, 62 pounds.
Horseradish,	50	Tennessee.
Italian rye-grass seed,	20	Tennessee.
Johnson grass,	28	Arkansas.
Kafir corn,	53	Kansas.
Kale,	30	Tennessee.
Land plaster,	100	Tennessee.
Middlings, fine,	40	Indiana; coarse, 30 pounds.
Millet, Japanese barnyard,	35	Massachusetts.
Mustard,	30	Tennessee.
Plums,	40	Florida, Tennessee, 64 pounds.
Plums, dried,	28	Michigan.
Pop corn,	70	Indiana and Tennessee. Ohio, in the ear, 42 pounds.
Prunes, dried,	23	Idaho; green, 45 pounds.

COMMODITIES FOR WHICH LEGAL WEIGHTS PER BUSHEL HAVE BEEN FIXED IN BUT ONE OR TWO STATES—Continued

(From Bureau of Standards, Department of Commerce and Labor)

ARTICLE	WEIGHT	STATES
	Pounds	
Quinces,	48	Florida, Iowa, and Tennessee.
Rape seed,	50	Wisconsin.
Raspberries,	32	Kansas. Tennessee, 48 pounds.
Rhubarb,	50	Tennessee.
Sage,	4	Tennessee.
Salads,	30	Tennessee.
Sand,	130	Iowa.
Spelt or spiltz,	40	North Dakota. South Dakota, 45 pounds.
Spinach,	30	Tennessee.
Strawberries,	32	Iowa. Tennessee, 48 pounds.
Sugar-cane seed,	57	New Jersey.
Velvet-grass seed,	7	Tennessee.
Walnuts,	50	Tennessee.

WALL PAPER

The following table from the "New York Newsdealer" shows how many rolls of wall-paper are required to cover a room of the dimensions indicated by the figures in the left-hand column, also the number of yards of border necessary.

SIZE OF ROOM	HEIGHT OF CEILING	NUMBER OF DOORS	NUMBER OF WINDOWS	ROLLS OF PAPER	YARDS OF BORDER
7 × 9,	8	1	1	6	11
7 × 9,	9	1	1	7	11
7 × 9,	10	1	1	8	11
7 × 9,	12	1	1	10	11
8 × 10,	8	1	1	7	12
8 × 10,	9	1	1	8	12
8 × 10,	10	1	1	9	12
8 × 10,	12	1	1	11	12
9 × 11,	8	1	1	8	14
9 × 11,	9	1	1	10	14
9 × 11,	10	1	1	11	14
9 × 11,	12	1	1	13	14
10 × 12,	8	1	1	9	15
10 × 12,	9	1	1	10	15
10 × 12,	10	1	1	11	15
10 × 12,	12	1	1	13	15
11 × 12,	8	2	2	8	16
11 × 12,	9	2	2	9	16
11 × 12,	10	2	2	10	16
11 × 12,	12	2	2	13	16
12 × 13,	8	2	2	8	17
12 × 13,	9	2	2	10	17
12 × 13,	10	2	2	11	17
12 × 13,	12	2	2	14	17
12 × 15 or 13 × 14,	8	2	2	10	18
12 × 15 or 13 × 14,	9	2	2	11	18
12 × 15 or 13 × 14,	10	2	2	12	18
12 × 15 or 13 × 14,	12	2	2	15	18
13 × 15,	8	2	2	10	19
13 × 15,	9	2	2	11	19
13 × 15,	10	2	2	13	19
13 × 15,	12	2	2	16	19
14 × 16,	9	2	2	12	20
14 × 16,	10	2	2	14	20
14 × 16,	12	2	2	17	20
14 × 18,	9	2	2	13	22
14 × 18,	10	2	2	15	22
14 × 18,	12	2	2	19	22
15 × 16,	10	2	2	15	21
15 × 17,	12	2	2	19	22

Deduct one-half roll of paper for each ordinary door or window extra—size 4 × 7 feet.

PIPES

Usual inclination of pipes.

1 in. in	12 ft.	= minimum fall for house drains;
1 in. in	16 ft.	= minimum fall for land drains;
1 in. in	40 ft.	= minimum fall for sub-drains for houses;
1 in. in	100 ft.	= minimum fall for main drains for houses;
1 in. in	150 ft.	= fall of mountain torrents;
1 in. in	230 ft.	= fall of rivers and rapid currents;
1 in. in	280 ft.	= fall of strong currents;
1 in. in	340 ft.	= fall of ordinary rivers with good currents;
1 in. in	440 ft.	= fall of winding rivers subject to inundations with slow current;
1 in. in	480 ft.	= fall of water channels, supply pipes to reservoirs and small canals;
1 in. in	570 ft.	= fall of large canals;
1 in. in	1,000 ft.	= very slow current, approaching to stagnant water.

Discharge through pipes.

Discharge in 24 hours divided by 1,440 = discharge per minute; discharge in cubic feet per minute × 9,000 = imperial gallons per day of 24 hours; discharge in cubic feet per minute × 11,000 = United States gallons per day of 24 hours; discharge in cubic feet per second × 2.2 = cubic yards per minute; discharge in cubic feet per second × 6.24 = imperial gallons per second; discharge in cubic feet per second × 7.48 = United States gallons per second; discharge in cubic feet per second × 133 = cubic yards per hour; discharge in cubic feet per second × 375 = imperial gallons per minute; discharge in cubic feet per second × 450 = United States gallons per minute; discharge in cubic feet per second × 2,400 = long tons per day of 24 hours; discharge in cubic feet per second × 2,700 = short tons per day of 24 hours; velocity in feet per second × 0.68 = mile per hour; velocity in feet per second × 60 = feet per minute; pressure head of water in feet = pressure of water in pounds per square foot × 0.016; pressure of water in pounds per square foot = head in feet × 62.32.

HARDNESS OF MINERALS

1. Talc.	} Scratched by finger nail.
2. Rock Salt,	
3. Calcite,	} Scratched by a knife blade.
4. Fluor,	
5. Apatite,	
6. Orthoclase,	
7. Quartz,	} May be roughly distinguished by a file.
8. Topaz,	
9. Corundum,	
10. Diamond,	

INDEX

NOTE.—In addition to the general index, which follows, there are a number of special indexes in the body of the book that should also be carefully consulted in connection with it. For example, under Colleges and Universities will be found a list of colleges, universities, and technical schools throughout the United States; under Councils, a list of the notable councils of history; under Treaties, a list of notable treaties; under Synonyms, the principal words are arranged alphabetically; under Noted Names in Fiction, Literary Characters, and Plots are many names not found in the general index, etc. In many instances these special indexes, as well as the general index, should be consulted.

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