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FIELD MUSEUM OF NATURAL HISTORY

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GENERAL GUIDE

CHICAGO, U. S. A.

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GENERAL GUIDE TO THE COLLECTIONS

Introduction

This handbook is designed to serve as a general guide to the collections in the Museum.

Field Museum of Natural History was established in 1893, at the close of the World's Columbian Exposition. The founding of an institution of this importance and character was made possible by Marshall Field, who, in addition to a gift of \$1,000,000, bequeathed on his death in January, 1906, a further sum of \$8,000,000, of which \$4,000,000 was allotted for the erection of a building, and \$4,000,000 for endowment.

The Museum is incorporated under State Law, and its active control rests in the Board of Trustees, with President, Secretary and Treasurer. The executive of the Museum is the Director, under whom there are five Curators and a number of divisional associate and Assistant Curators, Preparators, etc.

The Museum building is 700 feet long, 350 feet wide, 90 feet high, and covers an area of about 11 acres. The main central hall rises to the entire height of the building; the rest of the structure being divided into four floors. Of these, two, and a portion of the third, are devoted to exhibition purposes; the remainder serving as working space for the administrative and scientific staffs and maintenance force. The exterior, which is of white Georgia marble, is treated in a monumental manner based on Greek architecture of the Ionic order. The principal fronts are divided into a large pedimented central pavilion, with two long wings terminated by a smaller pavilion at each end. A notable feature is the terrace, which is sixty feet wide, and completely surrounds the building at a height of six feet above the surrounding level.

In this structure, the architects, D. H. Burnham and Co., and Graham, Anderson, Probst and White, have given to the City of Chicago and the country a masterpiece of monumental building possessing distinction and dignity commensurate with its purpose and origin.

The main hall, which is dedicated to Mr. Stanley Field, President of the Institution, contains four statues, designed by Mr. Henry Hering, which symbolize the aims and purposes of the Museum. The figures flanking the north archway represent Natural Science and the Dissemination of Knowledge, while those at the south archway typify Research and Record.

STANLEY FIELD HALL

Occupying the Nave of the Building

The exhibits in Stanley Field Hall are intended to convey an impression of the activities of the Museum as a whole and to serve as an introduction to the systematic collections assembled in the exhibition halls.

In the center of the hall are two African Elephants mounted in fighting attitude. They were secured on a Museum expedition to British East Africa in 1906.

CASE 1. Prehistoric American gold ornaments from Colombia and Ecuador, South America.

CASE 2. Ancient Roman bronze bath-tub, from Boscoreale, Italy.

CASE 3. Prehistoric races of man, illustrated by busts of the *Pithecanthropus erectus*, the Neanderthal man of La Châpelle-aux-Saints, and the Cro-Magnon man.

CASE 4. Synoptic exhibit of jade carvings from ancient Mexico, New Zealand, and China.

CASE 5. Marine Fauna. Various types of beautiful and characteristic marine animals, as sponges, precious corals, sea urchins, and shells.

CASE 6. Ancient bronze table and other bronze and glass objects from Boscoreale, Italy.

CASE 7. Select specimens of Chinese art, represented by ancient ceramics, bronze, and cloisonné enamel.

CASE 8. Gold and silver jewelry from India.

CASE 9. Amber and Amber-like Resins. This case, together with two others in Hall 29, Department of Botany, contains the finest collection of amber-like resins known.

CASE 10. A large iron meteorite, weighing 3,275 lbs., which ranks eleventh in size among known meteorites. It was found in 1908 near Tonopah, Nevada.

CASE 11. Bronze castings and carvings of wood and ivory from Benin, Africa.

CASE 12. Plant Models and Reproductions. This case contains a few models showing details of plant form and

structure together with some life-like reproductions of plants. These form an important feature of the installations of the Department of Botany, where some of the main divisions of the plant kingdom, and many of the families of flowering plants have thus been illustrated. These models are produced in the Museum laboratories.

CASE 13. Varieties of Quartz. The remarkable range of colors and forms of this mineral is illustrated.

CASE 14. Vertebrate and Invertebrate Fossils. Fossils from some of the more recent geologic periods are shown. They include a mounted skeleton of an extinct saber-tooth tiger, a fossil fish, and some beautifully preserved fossil ammonites, all from localities in the western United States.

CASE 15. American Horned Owl and Cottontail Rabbit. Our most rapacious bird surprised with its prey in the solitude of a winter landscape.

CASE 16. Decorative art of New Guinea, as exemplified by string bags, wood-carvings, and shell-work.

CASE 17. Metalliferous Minerals. Minerals which are compounds of some of the important metals, such as copper, lead, zinc, and iron, are displayed, the specimens chosen being especially those which are strongly colored, in order to illustrate the colors often characteristic of these compounds.

CASE 18. American Red Fox. The common fox of eastern North America is shown suddenly arrested in his hunting and listening with interest to the sound of quarreling mice under a log.

CASE 19. Birds of Paradise. Selected examples of the most curiously and gorgeously plumaged group of birds from the islands of New Guinea.

CASE 20. Basketry from the Indian tribes of California.

CASE 21. Buckskin costume, bags, and war bonnet from the Indian tribes of the Great Plains.

CASE 22. Blankets of the Navaho, Arizona and New Mexico.

At the south end of the hall are a Chinese honorary gateway carved from teakwood and two pottery wine-jars of Roman times. Ten examples of exhibition cases used by the N. W. Harris Public School Extension are also shown.

DEPARTMENT OF ANTHROPOLOGY

First Floor:—Halls 2-10.

Second Floor:—Halls 23, 24, 30, 32 and 33.

Ground Floor:—Halls I and J.

Hall 2: Edward E. Ayer Hall. Archæology of Greece, Italy and Ireland.—The main section of this hall is occupied by exhibits of Greek, Etruscan and Roman antiquities in stone, bronze, iron, pottery and glass. Eighteen reproductions of antique furniture are openly displayed on bases. At the north end, two cases contain reproductions of notable Irish antiquities, including secular and ecclesiastic art.

Hall 3: Mary D. Sturges Hall. Eskimo and Tribes of the Northwest Coast of America.—Eskimo culture is illustrated in its wide geographical range, extending along the Arctic shores of America from Labrador to northeastern Siberia. The dependence of the Eskimo on hunting and fishing is well brought out, being particularly elucidated by four life-size groups showing the chase and capture of the seal, preparation of skins, and winter fishing through a hole in the ice. The east section of the hall is given over to the Indian tribes of the Northwest Coast in the following order: Tlingit, Tsimshian, Haida, and Kwakiutl. The religious and ceremonial aspect of life, which dominates the activities of these people, is well represented, notably in three life-size groups illustrating several stages in the Hamatsa dance of the Kwakiutl.

Hall 4: Salish and Woodland Tribes. Plateau Tribes and North American Archæology.—Beginning at the east end, the exhibits in this hall connect with those at the east end of Mary D. Sturges Hall. This section is occupied by the Salish tribes. The true Salish groups are introduced by a life-size group, showing their home life and industries. A single case, illustrating the life of the northern Athapascans of the Yukon Valley, deserves special mention because of the excellence of the garments and the decoration in porcupine-quill work. West from the center of the room, the Woodland tribes are introduced by two miniature villages, characterizing the summer and winter life of the Sauk and Fox.

Hall 5: Indian Tribes of the Great Plains.—The culture of this widely diffused stock of tribes is swayed by the hunt of the buffalo and the preparation of hide and buckskin. Hence, the center of this hall is dominated by a large, original tipi. Extensive collections of clothing, buffalo robes,

hide bags, pouches, beadwork, porcupine-quill work, shields, weapons, feather ornaments, games, and objects of ceremonial use, are shown from nearly all Plains tribes. Their principal religious observances are typified by two altars of the Sun Dance—one of the Cheyenne, the other of the Arapaho; and by miniature groups of the Thunder Ceremony, the sacrifice of the captive maiden, the animal dance of the medicine men, and the purification of the sacred bundles on the part of the Pawnee.

Hall 6: Indian Tribes of California and Nomadic Tribes of Arizona and New Mexico.—The California tribes occupy the west half of the hall, being adequately represented by exhibits of ordinary and ceremonial costume, dance skirts and aprons, ornaments, implements, weapons, baskets, and games. Life-size figures of two Pomo medicine men, one conjuring seed, another holding a ceremony over the deceased, stand in the west entrance of the hall. A remarkable collection of Navaho blankets is on view in the southeast section of the hall.

Hall 7: Sedentary Tribes of Arizona and New Mexico.—The chief representative of this group is the Hopi of Arizona, whose religious and ceremonial life is represented with great care and detail. At the west entrance is placed a life-size group showing the interior of a Hopi home with various domestic pursuits, the figure of a Hopi bride, and a Hopi boomerang thrower, followed by two life-size groups representing Katsina dancers in costume. Accurate reproductions of Hopi altars, as erected in the yearly ceremonies of the tribe, are displayed in thirteen cases. Models of the pueblos of Walpi and Hano are also noteworthy. The series of Hopi tihus (images representing deities and given to girls) is no less remarkable and instructive.

Hall 8: Mexico, Central and South America.—The collections displayed in this hall illustrate both the ethnology and the archæology of the Indians of all America south of the United States. The ethnological material, chiefly coming from South America, is installed in the southwest part of the hall. On the opposite side, in the northwest section, are found collections illustrating the archæology of Mexico. Antiquities of Central America are displayed in the southeast portion. The archæology of Peru and Argentina is shown mainly in the northeast section. This group is of exceptional interest, consisting mainly of mummies and fine textiles from the prehistoric graveyard at Ancon, Peru.

Hall 9: Ethnology of the Philippines.—The collections in this hall, gathered between 1906 and 1911 by three members of the staff, Wm. Jones (deceased), S. C. Simms, and

F. C. Cole, under an endowment provided by the late Robert F. Cummings, are so arranged as to emphasize the outstanding characteristics of the principal pagan groups throughout the Archipelago. Comprehensive exhibits illustrate the economic and ceremonial life of the Tinguian. A miniature village of this people stands at the entrance of the room, while a life-size group pictures their most noteworthy industry—the forging of headaxes and spear-points. The Igorot are represented in the center of the hall. Of special interest are two groups—one, a miniature village illustrating the daily life and activities of the people; the other, a life-size group showing the making of pottery. Suits of armor, cannon, and other weapons from the Moro, are worthy of particular attention. The west third of the hall is devoted to the pagan tribes of the southern islands.

Hall 10: Joseph N. Field Hall. Melanesia, South Pacific.
—This hall contains general ethnographical material from Melanesia and New Guinea, chiefly obtained by the Joseph N. Field Expedition (1909-13) in charge of A. B. Lewis. At the north end are collections from New Britain and New Ireland, including large ceremonial masks and elaborately carved wooden figures. Next come New Hanover and St. Matthias with their peculiar types of decorated spears, clubs, clothing, and ornaments. The Admiralty Islands are represented by large wooden bowls, baskets, drums, carved figures, ornamented weapons, clothing, and ornaments. The central part of the hall is occupied by New Guinea, the most striking feature being four large feather masks from Hansa Bay. Next come the island groups of Solomons, New Hebrides, New Caledonia, and Fiji. On the west side of the hall are a few cases with material from some small coral islands situated north of the Solomon Group. These show the extensive use of bone and shell implements, and looms for the weaving of small fine mats.

Hall 24, East Gallery, second floor: China.—The collections from China, secured by the Blackstone Expedition (1908-10) in charge of B. Laufer, are intended to illustrate the development of Chinese civilization from its beginning to the present time. There are two main divisions: the ancient, original culture of China prior to the intrusion of Buddhism (Cases 1-38), and Buddhistic China, as influenced and modified by religious and artistic currents coming from India (from third century A. D. onward; Cases 39-59). In each division, the principle of arrangement of the material is strictly chronological.

South Gallery: A remarkable collection of 84 models of Chinese pagodas, made by Chinese orphans in the Jesuit Institution of Siccawei, is shown here.

Hall 32, West Gallery, second floor.—A third of this hall, beginning at the south end, is occupied by exhibits illustrating the ethnology of Africa (Cases 1-22), in particular the art of ancient Benin. Exhibits in the center of the hall illustrate the culture of India (shields and weapons, ancient brasses and bidri ware, musical instruments). Special attention is called to the ancient stone sculpture from India, which includes both the early Gandhara period (first and second centuries A. D.) and the later and Jaina art. Further, there are exhibits from East Siberia, Korea (with a notable display of official and court costumes), Formosa, and Java (represented by good examples of batik cloth). The north portion of the hall contains collections from Tibet (Cases 44-80), likewise secured by the Blackstone Expedition of 1908-10. Weaving and textiles, clothing in a series of costumed figures, and jewelry are fully represented. Images, paintings, sculpture, musical instruments, and other objects used in worship in the Lama temples are displayed in twelve cases.

Hall 23 (at north end of East Gallery) contains selected examples of Chinese painting, tapestry, and screens; also ancient maps of China.

Hall 30: Frank W. Gunsaulus Hall (southeast corner, second floor): Japan. In the smaller room are displayed Japanese prints (Surimono, cards of greeting for special occasions). The larger room contains a collection of sword mounts (presented by Dr. Gunsaulus), armor and weapons, costumes of women, Buddhism illustrated by wood carvings, Nō masks, ivory carvings, and musical instruments. A set of dolls used for the Girls' Festival occupies the center of this room. On the walls are shown a wood-cut reproduction of a famous landscape by Sesshu, a large tapestry representing the dedication of the temples of Nikko, and a painted screen of the Tosa school (presented by Dr. Gunsaulus).

Ground Floor

Hall J: Archæology of Egypt. There are twenty-two cases containing coffins and mummies of men and animals, ranging from the pre-dynastic to the Roman period. Twelve cases are devoted to exhibits of pottery, marble and alabaster vases, bronze vessels, figures of deities in bronze and stone, bronze objects for temple use, ushebti figures, jewelry, charms, models of granaries, bricks, mortuary offerings of schist, Coptic objects in bronze and iron, portrait statues, and tomb tablets. Two cases contain Canopic jars, boxes, biers, stools, and coffin covers of stone and wood. In the southwest portion of the hall is a mortuary boat of Sesostris III, from his pyramid at Dashur. There are also shown

three sarcophagi, one of the Saitic period, one of the thirtieth dynasty (fourth century B. C.) and another of the Roman period (30 B. C. or later). In the walled-up portion of the northwest side, provision is made for the erection of two Mastaba tombs.

Hall I: Dramatic Performances of the Orient, arranged in geographical order. Proceeding from west to east, the exhibits are as follows:—

1. Chinese religious drama, showing the ten purgatories (Cases 1-4).
2. The Lion Dance, China (Case 5).
3. Chinese masks from an imperial play, illustrating gods and heroes of the Taoist religion (Cases 6-7).
4. Chinese shadow-play figures (Cases 8-9).
5. Masks used in Tibetan mystery-plays (Cases 10-12).
6. Masked figures of a Tibetan mystery-play (Cases 13-17).
7. Puppets or marionettes from Java and orchestra accompanying performances (Cases 18-21).
8. Masks, actors' head-dresses, and actors' costumes, Java (Cases 22-24).
9. Singhalese masks, Ceylon (Cases 25-28).

DEPARTMENT OF BOTANY

Halls 25-29, Second Floor

The installations in the halls of this department are designed to illustrate, as fully as possible, the forms of plant life and the products yielded by vegetation for the use of man.

Hall 25: Plant Economics.—The cases in this hall are a continuation of those in Hall 29, beyond. They show the principal plant products of the great families of the pines, the grasses and the palms. Here may be seen the products of the cereal grasses and the uses to which they may be

applied; indian corn, cereals of all countries and varieties, starches, sugar, liquors, papers, fibers, etc. Among the pine products will be found a full representation of turpentine orcharding (both conservative and destructive), paper making, and other utilizations, also edible nuts, fibers and cone forms in great variety. Among the palms may be seen a comprehensive exhibit of fibers and oil nuts, their useful character and application to arts and industries.

Hall 26: North American Trees.—The cases in this hall present monographic displays of the trees of North America. They show: first the trunks in size ratio throughout; the tree in summer and winter; the wood in plain, quartered and figured boards; a branch in leaf and flower; a map, colored to show the area of distribution; and a descriptive label giving such other information of each species as the specimens themselves fail to convey.

Hall 27: Foreign Woods.—The cases in this hall are grouped geographically and contain specimens of the woods and timbers of Russia, Korea, Japan, Formosa, Australia, Philippines, Ceylon, India, Johore, Jamaica, Trinidad and various countries of Central and South America. The specimens are so prepared as to give as full an idea as possible of their character and grain. The Japanese series is the most valuable and comprehensive ever brought together.

Hall 28: Plant Life.—Beginning at the left of the entrance the exhibits in this hall represent plant life from the bacteria to the highest flowering plants. The main illustrative specimens are reproductions of typical plants in each natural group or family. Microscopic plants are represented as if seen through a microscope. Details of structure are shown enlarged. Fruits, seeds and other specimens further illustrate botanical characters and relationships.

Hall 29: Plant Economics.—The cases in this hall (continued through Hall 25) contain the products yielded by the plants exhibited in Hall 28. Here may be observed series of such interesting and useful products as cotton, linen, paper, lacquer, dyes, tanning substances, starches, sugars, gums, oils, crude drugs and other plant products; the whole with the descriptive labels, comprising an encyclopedia of plants illustrated by natural objects.

Third Floor: The Herbaria.—Three large collections, comprising over 500,000 specimens of mounted plants, are installed in rooms over Hall 25. These are accessible to those persons specially interested in botany.

DEPARTMENT OF GEOLOGY

Hall 34: Minerals, Crystals, Meteorites, Physical Geology.—The east half of the hall is occupied by the mineral collection, in which the minerals are arranged in the customary order. The collection begins at the east end of the hall with the native elements and ends with the hydrocarbons. The William J. Chalmers crystal collection follows. This collection illustrates, by means of carefully selected mineral specimens, the systems according to which minerals crystallize, and the varying development of crystal form in each system. Several types of twin crystals, and the laws of crystal grouping are illustrated, as well as various other features of crystal growth, such as zone structure, inclusions and phantoms.

An extensive meteorite collection occupies the larger portion of the western half of the hall. This collection contains specimens of the great majority of the known meteorites, arranged according to the established classification. Many of the specimens are in the form of polished and etched slabs, which display the interesting interior structure of meteorites. The exterior features peculiar to these bodies are shown by numerous complete and unbroken meteorites. Four of these, installed in separate cases, each weigh from 466 pounds to nearly two tons.

The west end of the hall is occupied by a part of the collection of physical geology which illustrates glacial phenomena, rock weathering and concretions. Two large rock slabs, displayed on bases in alcoves near by, show the effects in unusual perfection of glacial planing and grooving of rock. The rest of the physical geology collection is installed in Hall 35.

Hall 35: Physical Geology, Rocks, Relief Maps.—The collections at the east end of this hall are a continuation of those in the west end of Hall 34. The more important groups are those illustrating volcanic products, dendrites, tufas, veins and vein structure, faults, folds, joints and cave formations. A large case contains a cave rebuilt from selenite crystals from the original cave. A large fulgurite occupies another case. A model of the Natural Bridge of Virginia is placed in the aisle. Near the center of the hall a large collection of rocks fills eight cases.

More than half of the hall is occupied by a collection of relief maps, which show the topography of selected portions of the earth's surface. Some of these are representations of well known scenic areas. Others illustrate the topography of States and other political divisions. Portions of the earth's surface, which are of unusual geological interest, are also presented in relief. Of local interest are a group of relief maps of the region around Chicago, which

show the distribution of land and water during a number of stages following the glacial period.

Hall 36: Petroleum, Coal, Clays and Sands.—The east end of this hall is occupied by the petroleum exhibits, beginning with oil sands of the American oil fields, followed by crude petroleums grouped geographically. The derivatives of petroleum, and specimens illustrating their uses, form another large collection. A model of the original Rockefeller refinery at Cleveland should be inspected. Near the center of the hall is the coal collection which is arranged according to kind and geography. Following is a collection of coal products, such as tars, antiseptics and dyes.

The west end of the hall is occupied by exhibits of clays, soils, sands, and other earthy materials. Two cases contain specimens which show how soil is formed, of what it is composed, the plant foods it contains and the nature of the several kinds of soils, such as loams and marls, which are ordinarily recognized by farmers. Another case contains soils grouped according to the more exact classification of the U. S. Department of Agriculture. This is followed by a collection of numerous soils arranged according to kind. In the large clay collection, the clays are arranged according to kind. A smaller group of clays occupies four cases, and illustrates the numerous kinds of clay, and the relation of these kinds to each other. As most clays are used in the form of brick, tile pottery or other burned ware, there appears with most of the specimens a little brick burned from the specimen itself. Other minerals of industrial importance represented are sands, fullers earth, cement rocks, mineral soaps, silicas and earthy pigments. Against the west wall is a model of the Chandler Iron Mine.

Near the center of the hall, asphalts, oil shales and graphites are exhibited, which contain, not only examples of the materials as mined, but also specimens illustrating their uses. A case in the center aisle contains diamonds, the rocks in which they are found, and minerals associated with them. Two cases contain peat and objects made from peat. The mode of formation of peat is illustrated by a model of a lake in which peat is forming.

Hall 37: Frederick J. V. Skiff Hall. Ores, Marbles and Alkalies.—The east half of the hall is occupied by a collection of ores of the precious and base metals. The metals are arranged separately, the ores of each metal forming a separate group, except in the case of gold, silver and lead, which are shown together. The ores of each metal are arranged in geographical order according to country, state and mining district from which they are obtained. With the ores, are displayed a number of models which illustrate methods of mining and treatment. Smaller groups of specimens illustrate the uses of several of the metals and their compounds.

In the west half of the hall fifteen cases are filled with marbles and other ornamental stones from many parts of the world. The specimens are large enough to display to advantage the characteristic patterns of each variety. Building stones in the form of four inch cubes fill five cases. Collections of various industrially important non-metallic minerals, which occupy the rest of the hall, include barite, fluorite, asbestos, mica, phosphates, grinding and polishing materials, gypsum and borax. At the end of the hall are soda and potash collections, which include a large group of the Stassfurt potash salts.

Hall 38: Historical Geology.—The collections illustrate historical geology and paleontology, and are so arranged that, beginning at the south end of the hall, the forms of life which have characterized successive stages of the earth's history are illustrated in order from the earliest up to recent times. Thus the fossils which represent the life forms of each geological period may be found in the portion of the hall corresponding in position to that period in time. Beginning with two introductory cases, one, illustrating methods of fossilization, and the other, comparisons of ancient and modern plants and animals, the fossils of the Age of Invertebrates, Age of Fishes, Age of Reptiles, Age of Mammals and Age of Man are shown successively. Especially noteworthy exhibits include part of a skeleton of the huge dinosaur, *Apatosaurus*, from Colorado, a very large skull of the horned dinosaur, *Triceratops*, a mounted skeleton of the extinct ungulate, *Allops*, shown partially imbedded, complete skeletons of the Mastodon, Mammoth, Cave Bear and Irish Deer, and several skeletons or parts of skeletons from the asphalt beds of Los Angeles, California.

DEPARTMENT OF ZOOLOGY

Halls 13, 15-22, First Floor

Hall 13: George M. Pullman Hall. Horned and Hoofed Mammals.—This hall, running north and south and immediately west of Stanley Field Hall, is devoted to horned and hoofed mammals—game animals from all parts of the world. In the north end is a large habitat group of Alaska Moose, and thence southward are various representatives of the deer family, the antelopes, gazelles, wild sheep, goats, and oxen, terminating at the south end of the hall with the Bison and Musk Ox.

Hall 15: Mammals-Systematic.—This hall is at the right of the main north entrance to the Museum, and is entered

by passing through the north end of Pullman Hall. With the exception of those represented in Pullman Hall, it contains members of the principal groups of mammals of the world, arranged so far as practicable, according to their relationships. Beginning with the lower forms, the monotremes or egg-laying mammals of Australia and the pouched mammals or marsupials, it shows successively various groups, as the horse family, the tapirs, sea-cows, rodents, cat family, dog family, and terminates with the highest mammals, the monkeys and man-like apes.

In the northwest corner of the hall is a large habitat group of American beavers.

Hall 16: American Mammals-Habitat Groups.—Hall 16, next on the south from Hall 15, contains ten habitat groups of North American large mammals. From east to west, these are as follows: Virginia Deer, showing the difference in their appearance and habits, in the four seasons, Stone's Mountain Sheep, Polar Bear, Musk Ox, Prongbuck, Sonora Grizzly Bear, American Bison.

Hall 17: Osteology-Skeletons.—Contains skeletons of the principal vertebrates or backboned animals. These include fishes, frogs and their relatives, birds, and mammals. At the right of the east entrance are the lower forms, fishes, etc., and at the left are the higher apes and man. In the center toward the west end is the huge skeleton of a right whale.

Hall 18: Fishes, Reptiles, Marine Fauna.—The east half of this hall is devoted to fishes and the west half to amphibians, reptiles, and marine invertebrates.

The fishes are arranged in two series; one showing representatives of the principal orders and families of fishes, and another showing habitat groups and special collections of Atlantic and Pacific food and game fishes, and also Chicago market fishes.

The collection of reptiles includes representatives of the lizards, snakes, turtles, and crocodiles. A special exhibit in the center of the hall contains North American amphibians and reptiles reproduced in celluloid.

The invertebrates include many of the myriad forms of life found in the sea—corals, crinoids, sponges, sea urchins, star fishes, crustaceans, and many others.

Hall 19: Shells—Insects.—A very large collection of land and marine shells is housed here. Some 30,000 specimens are shown in such a manner as to indicate their relationships. At the western end of the hall are several cases of insects. One contains poisonous insects, like tarantulas, centipedes, scorpions and their allies; another contains specimens and

enlarged models illustrating the various stages, diseases and product of the silkworm, as well as the life history of a swallowtail butterfly and two common American giant silkworms. In a third case are two habitat groups with illustrated labels, the one showing the insect life of the dune region near Miller, Indiana, and the other portraying the life history of the destructive Tomato Worm Moth.

Hall 20: Birds—Habitat Groups.—Eighteen bird groups with painted backgrounds are shown, mostly in large sectional cases with four groups to each case. The majority of the groups are of North American birds, conspicuous among which are the Northern Loon, Golden Eagle, California Condor, Whooping Crane, Wild Turkey, White Pelican, and Ruffed Grouse. Near the west end of the hall is a large case containing four groups from tropical America and including the Flamingo, the Jabiru Stork, Horned Screamer, Scarlet Ibis, and Oilbird or Guacharo. At the extreme west end of the hall is a group of Alaskan water birds from the Pribilof Islands, and a group of albatrosses and other mid-Pacific birds from the island of Laysan.

Hall 21: Birds-Systematic—A systematically arranged collection of birds including representatives of the more important orders and families. Cases on the north side of the hall are devoted to North American birds, and those on the south side to birds of foreign countries.

Hall 22: African Game Animals.—This, the largest hall, occupies the entire western end of the building. In the northern half are groups of large African mammals collected and prepared by C. E. Akeley—Koodoos, Zebras, Buffaloes, and various antelopes. In the southern half are other antelopes, Wart-hogs, Hyaenas, a collection of large apes, mostly Gorillas and Chimpanzees, and also a group of Bornean Orangs and of Proboscis Monkeys.

H. N. HIGINBOTHAM HALL

Hall 31: Gems and Jewels.—Second floor at head of staircase leading from the south end of Stanley Field Hall.

This hall contains large and valuable collections of gems and jewels of both ancient and modern origin. In the five central cases of the hall are shown examples of nearly every known gem, represented both by cut and uncut specimens. Many of the specimens are of historical interest and of high intrinsic value. Special note may be made of the DeVrees engraved diamond, the Hope and Tiffany aquamarines, the Russian topazes, the series of cut amethysts

and the Sun God opal. A valuable collection of crystallized and wire gold and of gold nuggets may also be seen here.

The nine wall-cases contain Egyptian and classical jewelry, Roman and Italian cameos and intaglios, jewelry of the Near East, Algerian jewelry, a remarkable collection of jewelry from India, and prehistoric American gold ornaments.

THE N. W. HARRIS PUBLIC SCHOOL EXTENSION OF FIELD MUSEUM OF NATURAL HISTORY

In addition to the collections in the Museum, the scope of the institution is extended by means of maintaining a system of Museum Extension to the Public Schools of Chicago. This was accomplished through the benefaction of the late Norman Wait Harris, who provided an endowment of \$250,000, the income from which is utilized for this purpose. This endowment has been supplemented by a contribution of \$25,000 from the heirs of the Harris Estate.

The cases prepared for this work, numbering nearly 800, are circulated to the public schools of Chicago by means of a motor car, especially designed for the purpose. Ten examples of these cases are exhibited at the south end of Stanley Field Hall.

GENERAL INFORMATION

LOCATION

The Museum is situated in Grant Park with the main entrance facing Roosevelt Road extended east. The Illinois Central main and suburban station at Park Row is within two blocks of the Museum. Street car and elevated lines on Wabash Avenue or State Street to Roosevelt Road also provide transportation to within a few blocks of the Museum.

HOURS AND RULES OF ADMISSION

The Museum is open to the public during the following hours:

November, December, January	10 a. m. to 4 p. m.
February, March, April, October	10 a. m. to 5 p. m.
May, June, July, August, September	10 a. m. to 6 p. m.

On Sundays, Thursdays, and Saturdays admission is free. On other days adults are charged an admission fee of 25c. Children Free. Students, professors and teachers in attendance at any recognized University, College, School or Institute are admitted free upon presentation of proper credentials. No return admission checks are issued.

MUSEUM GUIDE-LECTURER

At the hours of eleven and three, on Monday, Tuesday, Wednesday and Friday of each week, the Guide-lecturer conducts tours through various sections of the Museum. Each tour lasts about an hour and may be taken, without charge, by any Museum visitor. The services of the Guide-lecturer may also be engaged, without charge, by clubs, conventions, classes from public, parochial and private schools, or other parties of ten or more individuals. Written application for this service should be made to the Director of the Museum at least a week in advance of the intended visit.

CHECKING

Canes, umbrellas and parcels must be checked at the entrance. A fee of 5c is charged for this service.

INFORMATION

Information concerning the Museum and its activities may be obtained at the main entrance, where the scientific Publications of the Museum, Guides, Photographs and Picture Post Cards are sold.

THE LIBRARY

The Library is open for reference daily except Sundays. The Library contains approximately 80,000 volumes and pamphlets.

TELEPHONE

A Public Telephone will be found to the east of the main entrance.

PHOTOGRAPHS

Copies of many photographs made by the Museum photographer are on sale at the main entrance.

Photographing and sketching in the Museum are permitted under certain restrictions, details of which may be obtained upon application at the Director's office.

RESEARCH COLLECTIONS

The research collections and laboratories of the Museum are established on the third floor. They are not open to the general public, but may be consulted by students, specialists, and investigators upon request to the Curators in charge.

MEMBERSHIP CONTRIBUTIONS

Life members	- - - - -	\$500.00
Associate members	- - - - -	100.00
Sustaining members (annually)	- - - - -	25.00
Annual members (annually)	- - - - -	10.00

RESTAURANT

The Restaurant is on the ground floor, where meals and refreshments may be obtained at reasonable prices, from 12 m. to 2:30 p. m. Accommodation is provided for school children who bring their lunch.