QL
696
A52E97
1869
Birds

EYTON

SYNOPSIS ON THE
ANATIDAE OR DUCK TRIBE

SMITHSONIAN
LIBRARY

QL

696

A 52697

1869

Birds

A

SYNOPSIS

ON

THE ANATIDÆ,

OR

DUCK TRIBE.

BY

Thomas Campbell
T. C. EYTON, ESQ., F.G.S., F.Z.S., &c.

*And Corresponding Member of the Natural History Society of
Philadelphia.*

270060

270060

WELLINGTON, SALOP :

PRINTED BY R. HOBSON, MARKET SQUARE.

MDCCCLXIX.

J. H. Riley,
Falls Church,
Va.

PREFACE.

THE present work may be taken as a second edition of my "Monograph on the Anatidæ," with great additions, bringing my knowledge of that family down to the present time. I have printed it in the present form, because it is more portable for travellers in foreign countries, and for those who wish to study this family in the Zoological Gardens.

I beg to present my thanks to Mr. G. Gray and to Mr. More for the facility they have given me in examining the collections under their care, as well as to those gentlemen who assisted me in my former work.

THOS. C. EYTON.

EYTON,

July 3, 1869.

LC Card: 6-22458

INDEX.

	PAGE		PAGE
Preface		Plectropterus Ruppelii	24
Anatidæ ...	1	Gambensis	24
Plectropterinae ...	1	Cereopsis Novæ Hollandiæ	25
Anseranas	2	Chloephaga cannagica	25
Plectropterus	2	Rubiniceps	26
Anserinæ	2	Sandvicensis	26
Cereopsis	3	inornata	27
Chloephaga	3	Magellanica	27
Bernicla ...	3	dispar	29
Nettapus	4	poliocephala	29
Anser	4	Bernicla Cyanoptera	30
Cygnus	5	Antarctica	30
Sarkidiornis	5	ruficollis	32
Chenalopex	6	Brenta	33
Anatinæ	6	leucopsis	33
Tadorna	7	jubata	34
Casarka	7	Nettapus Madagascariensis	35
Dendrocygna	8	Coromandelianus	36
Leptotarsis	8	pulchellus	37
Dafila	8	Anser Indicus	37
Pæcillonitta	9	brachyrhynchus	38
Mareca	9	erythropus	38
Aix	10	segetum	39
Querquedula	10	Rossii	40
Petrocyanea	11	hyperboreus	40
Spatula	11	melanopterus	41
Malacorhynchus	12	ferus	42
Chaulelasmus	12	Guineensis	42
Anas	13	Hutchinsii	43
Carina	13	Canadensis	44
Fuligulinæ	14	Cygnus olor	44
Micropterus	14	immutabilis	45
Melanitta	15	atratus	46
Somateria	15	nigricollis	46
Eniconetta	15	Bewickii	47
Hymenolaimus	16	Americanus	47
Kamptorhynchus	16	buccinator	49
Callichen	17	anatoides	49
Fuligula	17	ferus	50
Nyroca	18	Sarkidiornis regius	51
Harelda	18	Africanus	52
Clangula	19	Chenalopex Ægyptiaca	52
Erismaturinæ	19	jubatus	53
Thalassornis	20	Cana	54
Biziura	20	Tadorna Bellonii	55
Erismatura	21	radjah	56
Merginæ	21	Casarka rutila	56
Mergus	22	scutellata	57
Merganetta	23	tadornoides	58
Synopsis specierum	23	leucoptera	58
Anseranas semipalmatus	23	castanea	59

INDEX.

	PAGE		PAGE
<i>Dendrocygna major</i>	59	<i>Anas sparsa</i>	99
----- <i>arcuata</i>	60	<i>Carina moschata</i>	100
----- <i>guttulata</i>	60	<i>Micropterus Patachonicus</i>	100
----- <i>autumnalis</i>	61	----- <i>brachypterus</i>	101
----- <i>viduata</i>	61	<i>Melanitta Americana</i>	101
----- <i>arborea</i>	62	----- <i>nigra</i>	102
<i>Leptotarsis Eytoni</i>	63	----- <i>perspicillata</i>	103
<i>Dafila urophasianus</i>	64	----- <i>fusca</i>	104
----- <i>pyrogaster</i>	65	<i>Somateria Fischeri</i>	105
----- <i>caudacuta</i>	65	----- <i>spectabilis</i>	105
----- <i>marmorata</i>	66	----- <i>V nigrum</i>	106
<i>Pæcilonitta erythrorhyncha</i>	67	----- <i>St. Cuthberti</i>	106
----- <i>Bahamensis</i>	68	<i>Eniconetta Stelleri</i>	107
<i>Mareca Americana</i>	68	<i>Kamptorhynchus Labradorus</i>	108
----- <i>Chiloensis</i>	69	<i>Callichen caryophyllaceum</i>	109
----- <i>fistularis</i>	70	----- <i>rufinum</i>	110
----- <i>castanea</i>	71	<i>Fuligula valisneria</i>	111
<i>Aix galericulata</i>	71	----- <i>ferina</i>	112
----- <i>sponsa</i>	72	----- <i>Americana</i>	113
<i>Querquedula Javanensis</i>	74	----- <i>marilla</i>	114
----- <i>glocitans</i>	74	----- <i>affinis</i>	115
----- <i>crecca</i>	75	----- <i>rufitorques</i>	116
----- <i>Carolinensis</i>	76	----- <i>cristata</i>	117
----- <i>formosa</i>	77	<i>Nyroca melanocephala</i>	118
----- <i>Manillensis</i>	73	----- <i>Australis</i>	118
----- <i>falcaria</i>	78	----- <i>leucophthalmus</i>	118
----- <i>erythrorhyncha</i>	79	----- <i>brunnea</i>	119
----- <i>Puna</i>	81	<i>Harelda glacialis</i>	120
----- <i>creccoides</i>	81	<i>Clangula histrionica</i>	121
----- <i>Capensis</i>	82	----- <i>albeola</i>	123
----- <i>Hottentota</i>	83	----- <i>Barrovii</i>	124
<i>Petrocyanea inornata</i>	84	----- <i>vulgaris</i>	125
----- <i>circia</i>	84	----- <i>Americana</i>	126
----- <i>fretensis</i>	85	<i>Thalassornis leuconotus</i>	126
----- <i>discors</i>	86	<i>Biziura lobata</i>	127
----- <i>cyanoptera</i>	87	<i>Erisimatura Maccoa</i>	128
----- <i>Rafflesii</i>	88	----- <i>unifasciata</i>	129
<i>Spatula rhynchotis</i>	88	----- <i>ferruginea</i>	129
----- <i>maculatus</i>	89	----- <i>leucocephala</i>	129
----- <i>clypeata</i>	90	----- <i>rubida</i>	130
----- <i>Capensis</i>	91	----- <i>Australis</i>	131
<i>Malacorhynchus membrinaceus</i>	92	----- <i>Dominica</i>	132
<i>Chaulelasmus strepera</i>	93	<i>Nesonetta Auclandica</i>	133
<i>Anas gibbifrons</i>	94	<i>Mergus merganser</i>	133
----- <i>pæcilorhyncha</i>	94	----- <i>serrator</i>	134
----- <i>chlorotis</i>	95	----- <i>Brazilianus</i>	135
----- <i>specularis</i>	95	----- <i>squamatus</i>	136
----- <i>Luzonica</i>	96	----- <i>cucullatus</i>	137
----- <i>superciliosa</i>	96	----- <i>pusillus</i>	138
----- <i>obscura</i>	97	----- <i>albellus</i>	139
----- <i>boschas</i>	97	<i>Merganetta armata</i>	140
----- <i>flavirostris</i>	98	----- <i>Chilensis</i>	141

ORDER NATATORES.

FAM. ANATIDÆ.

EXT. CHAR. *Rostrum* magnum epidermide molli potius quam cornuo veritabili tectum; lateribus lamellis vel dentibus parvis armatis. *Lingua* magna carnosâ lateribus setis instructis. *Alæ* mediocres. *Pedes* fere vel omnino in equilibrio locati, digitis tribus anterioribus membrano junctis.

EXT. CHAR. *Bill* large, covered with a soft epidermis rather than true horn, the sides armed with lamellæ or small teeth. *Tongue* large, fleshy, with the margins toothed. *Wings* moderate. *Feet* placed in or near the equilibrium. *Toes* with the three anterior ones joined by a membrane. *Neck* long.

SUB FAM. I. PLECTROPTERINÆ.

EXT. CHAR. *Rostrum* magnum, ad apicem angustatum, et ungue magnâ instructâ. *Plumæ* inter oculos rostrumque carent. *Tibiæ* parte quarta denudatæ. *Pedes* validi, digitis unguibus magnis instructis.

EXT. CHAR. *Bill* large, narrow at the apex, and armed with a large claw. The space between the eyes and bill devoid of feathers. *Thighs* denuded for a quarter of their length. *Feet* strong, armed with sharp claws.

Affinities. This curious group appears to lead directly to the grallatorial birds, but with the flamingo in particular it coincides to a great degree in the intestinal anatomy; while its skeleton—at least the fragments of it we have inspected—is that of a true goose, that of the flamingo approaching most intimately the *Ardeidæ*, which in our opinion (although in some particulars its intestinal anatomy appears to accord with the *Anatidæ*) entirely precludes it from being admitted into the order.

GENUS I. ANSERANAS.

EXT. CHAR. *Pedes* digitis longis, semi-membrinatis, unguibus magnis incurvatis instructis. *Tarsi* magni. *Tibiæ* multum denudatæ. *Rostrum* longum acuminatum cerâ ad oculos tendente. *Caput* osseâ tuberculâ supra nares et ungue, magnâ.

ANAT. CHAR. *Trachea* longa convoluta.

TYPE. *Anseranas semipalmatus*, Less.

CHORISTOPUS nobis.

ANSER. Linn. Auct.

TYPE. *Anseranas semipalmatus*.

Affinity. This genus certainly approaches most nearly of any among the *Anatidæ* to the order *Grallatores*. To the genus *Plectropterus* it is nearly allied in form.

GENUS II. PLECTROPTERUS.

EXT. CHAR. *Pedes* membrinati digitis posterioribus longis, magnis, sed non lobatis, unguibus magnis et incurvatis instructis. *Rostrum* latum ungue magnâ instructâ. *Nares* ovales, in medio rostri positæ. *Alæ* unâ calcariâ armatæ.

EXT. CHAR. *Feet* with the posterior toes long, large, and not lobed; armed with large and curved claws. *Bill* broad, furnished with a large nail. *Nostrils* oval, placed in the middle of the bill. *Wings* armed with one spur.

ANAS. Linn.

PLECTROPTERUS. Steph.

TYPE. *Plectropterus gambersis*.

SUB FAM. II. ANSERINÆ.

EXT. CHAR. *Rostrum* altius-quam latum. *Pedes* mediocres validi, digitis posterioribus non lobatis.

EXT. CHAR. *Bill* higher than broad. *Feet* moderate, strong, the posterior toes not lobed.

HABIT. The birds contained in this family feed equally on the land and water; some species, however, scarcely ever approach it: the whole live almost entirely on vegetables. They have a very wide geographical range, and are mostly migratory.

TYPE. *Anser ferus*.

Affinities. The nearest affinity it appears to present to the

following sub-family is through the genus *Chenalopez*. On the other hand, the genus *Cereopsis* appears to approach the *Plectropterinae* in its anatomy and habit.

GENUS I. CEREOPSIS.

EXT. CHAR. *Pedes* similibus genere sequenti. *Rostrum* breve, obtusum; culmine arcuato. *Nares* cerâ tectæ, magnæ, et rotundatæ.

EXT. CHAR. *Feet* as in the preceding. *Bill* with a cere covering the nostrils; the culmen arched. *Nostrils* large, rounded.

CEREOPSIS. *Lath.*

TYPE. *Cereopsis Novæ Hollandiæ*.

Affinities. Another rather anomalous genus, more closely connected, however, with the geese than the preceding.

GENUS II. CHLOEPHAGA.

EXT. CHAR. *Pedes* robusti. *Digitis posterioribus* mediocribus, unguibus incurvatis instructis. *Membrana* inter digitos antè concavatis. *Tarsi* robusti longi. *Rostrum* robustum, culmine vix arcuatum, ungue magnâ instructâ. *Nares* lineares in medio rostri positæ. *Lamellæ* parvæ antice oblitteræ.

EXT. CHAR. *Feet* robust. *Posterior toes* moderate, armed with a curved claw, with the *membranes* between the toes scolloped out in front. *Tarsi* large and strong. *Bill* robust, with the culmen slightly arched; armed with a large nail. *Nostrils* linear, placed in the middle of the bill. *Lamellæ* small, obliterated anteriorly.

ANAS. *Linn.*

BERNICLA. *Steph.*

CHLOEPHAGA nobis. *Steph.*

TYPE. *Chloephaga Magellanica*.

GENUS III. BERNICLA.

EXT. CHAR. *Pedes* parvi, *digitis posterioribus* non lobatis, unguibus magnis instructis. *Tarsi* elongati. *Rostrum* parvum, capite brevius. *Nares* lineares, in medio rostri positæ.

EXT. CHAR. *Feet* small, with the posterior toes not lobated; the nails large. *Tarsi* elongate. *Bill* small, shorter than the head. *Nostrils* linear, placed in the middle of the bill.

BERNICLA. *Steph.*

ANAS. *Linn.*

TYPE. *Bernicla jubata*.

Affinity. Nearly allied, both in anatomy and habit, to the preceding and following.

GENUS IV. NETTAPUS.

EXT. CHAR. *Rostrum* parvum, ad basin elvevatum, valde altiusquam latum, et ungue magnâ instructâ. *Nares* rotundatæ, culmen versus positæ. *Pedes* magni. *Digit*i longi et acutis unguibus armati. *Tarsi* breves. *Cauda* rotundata.

EXT. CHAR. *Bill* small, elevated at the base, much higher than broad, and armed with a large nail. *Nostrils* rounded, placed towards the culmen. *Feet* large. *Toes* long, and armed with sharp claws. *Tarsi* short. The *tail* rounded.

ANAT. CHAR. Unknown.

NETTAPUS. *Bor.*

ANSER. *Linn., Lath.*

BERNICLA. *Steph.*

QUERQUEULA. *Gray.*

CHENISCUS. *Brookes' MSS.*

TYPE. *Nettapus Coromandelianus.*

Affinity. In the structure of the feet this genus bears considerable resemblance to the species of the genus *Anser*, adapted for swimming, though of extremely diminutive size. The bill, on the contrary, is that of *Bernicla*.

GENUS V. ANSER.

EXT. CHAR. *Pedes* digitis posterioribus non lobatis, unguibus magnis arcuatis. *Tarsi* robusti et magni. *Tibiæ* parte tertiâ denudatæ. *Rostrum* magnum, validum, ungue magna instructum, lateribus plerumque hiantibus. *Nares* ovales in medio rostri positæ. *Lingua* obtusa non ad apicem appendiculata, sed subtus cornea, in latera unâ ordine setarum brevium, et supra has setas multis rigidis spinis instructis ad apicem tendentibus.

EXT. CHAR. *Feet* with the posterior toes not lobated, armed with large claws. *Tarsi* robust and large. *Tibiæ* for a third part denuded. *Bill* large, strong, furnished with a large nail, the sides gaping. *Nostrils* oval, placed in the middle of the bill. *Tongue* obtuse, without an appendage, but below corneous, the sides armed with one rank of bristles; above and on the sides is a row of many stiff bristles extended to the tip.

ANSER. *Auct.*

ANAS. *Linn.*

TYPE. *Anser ferus.*

Affinities. Some of the species of this genus approach near the swans, as *Anser Canadenses*, while others present an affinity to the Bernicles, as *Anser indica*.

GENUS VI. CYGNUS.

EXT. CHAR. *Pedes* magni, digitis posterioribus parvis, gibbosis, mediis longissimis. *Rostrum* magnum, lateribus parallelibus. *Nares* subovales, in medio rostri positæ. *Cervix* longa.

EXT. CHAR. *Feet* large, with the posterior toes small, gibbous, the middle ones longest. *Bill* large, the sides parallel. *Nostrils* sub-oval, placed in the middle of the bill. *Neck* long.

CYGNUS. *Ray., Briss.*

ANAS. *Linn., Lath.*

TYPE. *Cygnus ferus.*

Affinities. Although we have placed the swans with the geese, we are not by any means certain that it is their proper place.

GENUS VII. SARKIDIORNIS.

EXT. CHAR. *Pedes* digitis posterioribus mediocribus, in tarsi altè locatis. *Tarsi* mediocres. *Rostrum* in maribus carunculâ magnâ compressâ culmine. *Nares* rotundatæ magnæ. *Alæ* una calcaria armatæ, et remigibus apices versus incurvatis. *Cauda* ad apicem truncata.

EXT. CHAR. *Feet* with the posterior toes moderate, placed high on the tarsi. *Tarsi* moderate. *Bill* in the males with a large compressed caruncle on the top. *Wings* each armed with a spur, and with the quills incurved towards the points. *Tail* squared at the end.

CARINA. *Steph.*

ANSER. *Linn.*

SARKIDIORNIS *nobis.*

PLECTROPTERUS. *Steph.*

TYPE. *Sarkidiornis melanotus.*

Various have been the genera in which the bird before us has been placed (*Anser melanotus*, *Linn.*), with none of which does it agree. We have therefore proposed a new one for it.

Affinities. We have placed it, as far as we have been able (no

anatomical character being known), in what appears to us to be its proper place—namely, between the genera *Chenalopex* and *Anser*. It agrees with the former in having a spur on the wing.

GENUS VIII. CHENALOPEX.

EXT. CHAR. *Pedes* digitis posterioribus gibbosis, et unguibus robustis. *Tarsi* longi. *Rostrum* validum ad basum tuberculatum. *Lamellæ* non ad marginem rostri continuatæ. *Nares* subrotundatæ in medio rostri positæ. *Alæ* calcaria una armatæ. *Cauda* ad apicem truncata.

EXT. CHAR. *Feet* with the posterior toes gibbous, and the claws strong. *Tarsi* long. *Bill* strong, at the base tuberculated. *Lamellæ* not continued to the margin. *Nostrils* rather rounded, placed in the middle of the bill. *Wings* armed with one spur. *Tail* squared at the end.

ANSER. *Auct.*

CHENALOPEX. *Steph. Antiq.*

TYPE. *Chenalopex Egyptiaca.*

Affinity. This genus, in possessing a bulb on the trachea, presents an affinity to the ducks; while its form and habit evidently point out its connection with the geese.

SUB FAM. III. ANATINÆ.

EXT. CHAR. *Rostrum* latitudine altitudini æquante. *Pedes* mediocres, digiti posteriores nunquam lobati, sed aliquando gibbosi.

EXT. CHAR. *Bill* in breadth and height equal. *Feet* moderate; posterior toes never lobated, but sometimes gibbous.

TYPE. *Anas.*

HABIT. Aquatic, frequenting fresh water in preference to the sea, feeding generally along the edges of lakes and rivers on small molluscous animals, in preference to diving for them; soft aquatic plants and weeds also substitute a considerable portion of their food: they often also feed on land. The species, having great power of flight, have a very wide geographical range.

Affinities. To the *Fuligininæ* this sub-family is connected by the musk duck (*Carina Moschata*), which, besides having a largely developed and slightly lobated hind toe, has the bulb situated at the inferior larynx compressed, and not altogether osseous, as is the case

in the rest of the family. The genus *Micropterus* has, on the other hand, a trachea very nearly resembling that of the true land duck. We prefer taking the genus *Anas*, as at present restricted, for the type of this sub-family, instead of *Rhynchaspis*, as proposed by Mr. Swainson, regarding that form and the nearly allied one of *Malacorhynchus* rather as ultra than typical, and not so well suited to what may be termed the true habit of the sub-family as that we have chosen.

GENUS I. TADORNA.

EXT. CHAR. *Pedes* digitis posterioribus non lobatis, unguibus robustis armatis. *Tarsi* robusti et longi. *Rostrum* mediocre validum recurvatum. *Lamellæ* vix elongatæ. *Nares* ovales, magnæ, in dimidio basali rostri positæ. *Cauda* rotundata.

EXT. CHAR. *Feet* with the posterior toes not lobated, armed with thick claws. *Tarsi* thick and long. *Bill* moderately strong. *Lamellæ* scarcely elongated. *Nostrils* oval, large, placed in the basal half of the bill. *Tail* rounded.

ANAS. *Linn.*, *Gmel.*, *Lath.*

TADORNA. *Leach.*, *Flem.*, *Steph.*

TYPE. *Tadorna Bellonii*.

Affinities. The common Sheldrake approaches near in external character to the following genus. Nothing being known of the anatomy of that genus, we cannot trace the affinity farther. To the *Anserinæ* it also approaches in its osteology and general habit, particularly to the genus *Chenalopez*.

GENUS II. CASARKA.

EXT. CHAR. *Rostrum* mediocre lateribus parallelibus non recurvatum. *Nares* subovales, culminem versus positæ. *Lamellæ* elongatæ. *Pedes* robusti, digiti unguibus magnis armati.

EXT. CHAR. *Bill* moderate, with the sides parallel, not recurved. *Nostrils* suboval, placed near the culmen. *Lamellæ* elongated. *Feet* robust, the toes armed with large claws.

ANAS. *Linn.*, *Lath.*

TADORNA. *Selby*.

CASARKA. *Bonap.*

TYPE. *Casarka rutila*.

Affinity. This genus may be distinguished from *Tadorna*, to which it is closely allied, by the straighter and much shorter bill.

GENUS III. DENDROCYGNA.

EXT. CHAR. *Pedes* digitis posterioribus longis, non lobatis unguibus longis armatæ. *Tarsi* robusti et longi. *Rostrum* mediocre validum altius-quam latum. *Nares* ovales magnæ prope culmen in medio rostri positæ. *Lamellæ* abbreviatæ. *Cauda* flexilis rotundata. *Alæ* remigibus primariis magnâ incisurâ in medio parte.

EXT. CHAR. *Feet* with the posterior toes long, not lobated, and with long claws. *Tarsi* robust and long. *Bill* of moderate length, strong, higher than broad. *Nostrils* placed near the culmen in the middle of the bill. *Lamellæ* abbreviated. *Tail* flexible, rounded. *Primaries* with a deep notch in the middle.

ANAS. Linn.

DENDROCYGNA. Swainson.

TYPE. *Dendrocygna arcuata*.

This genus will be easily recognized by the great length of the tarsi, and at the same time rounded form of the tail. *Anas arcuata*, Hors., or *Anas viduata*, Linn., may be considered as typical species.

Affinities. The genus appears to form a beautiful connecting link between the true fresh-water ducks and the foregoing genus.

GENUS IV. LEPTOTARSIS.

EXT. CHAR. *Rostrum* mediocre ad basin, altius-quam latum, culmine complanatâ et ungue magno instructo. *Nares* parvæ, culmen versus locatæ. *Tarsi* longi et graciles. *Digit*i unguibus paululum incurvatis acutisque armati.

EXT. CHAR. *Bill* moderate at the base, higher than broad, the culmen much flattened and with a large nail. *Nostrils* small, placed near the culmen. *Tarsi* long and slender. *Toes* armed with curved and sharp claws.

LEPTOTARSIS. Gould.

Affinity. The structure of the bill appears to ally this genus to that of *Dendrocygna*; while, on the other hand, that of the tail, which, though not elongated, is acuminate, to the genus *Dafila*.

GENUS V. DAFILA.

EXT. CHAR. *Pedes* digitis posterioribus, non lobatis, mediis longissimis. *Tibiæ* paululum denudatæ. *Rostrum* longius capite lateribus parallelibus. *Nares* magnæ ovales, prope culmen ad basin positæ. *Lamellæ* ad marginem rostri continuatæ. *Lingua* subobtusâ

ad apicem appendiculata lateribus unâ ordine setarum brevium, supra has setas in medio octo spinis rigidis instructâ. *Cauda* longa.

EXT. CHAR. *Feet* with the posterior toe not lobed, the middle one longest. *Thighs* a little denuded. *Bill* longer than the head, the sides parallel. *Nostrils* large, oval, placed near the culmen at the base. *Lamellæ* continued to the edge of the bill. *Tongue* rather obtuse at the point, with an appendage; the sides furnished with one row of bristles, and above the bristles in the middle with eight stiff spines.

ANAS. Linn.

DAFILA. Leach, Steph.

TYPE. *Dafila acuta*.

Affinity. The tail in this genus is much elongated, presenting in that particular an affinity to the genus *Mareca*, which has it slightly so.

GENUS VI. PÆCILLONITTA.

EXT. CHAR. *Pedes* digitis posterioribus brevibus et parvis, non lobatis. *Rostrum* mediocre, altitudine latitudine æquante. *Nares* prope basi positæ, rotundatæ. *Cauda* mediocris, rotundata.

EXT. CHAR. *Feet* with the posterior toes short and small, not lobed. *Bill* moderate, the height equal to the breadth. *Nostrils* placed near the base, rounded. *Tail* moderate, rounded.

ANAS. Linn.

MARECA. Steph.

PÆCILLONITTA nobis.

TYPE. *Pæcillonitta Bahamensis*.

We have formed this genus for the reception of *Anas Bahamensis* and its near ally *Anas Erythrorhyncha*.

Affinity. In default of anatomical character, and from general structure, this genus appears to be nearly allied to *Dafila*.

GENUS VII. MARECA.

EXT. CHAR. *Pedes* digitis posterioribus non lobatis mediis longissimis. *Tibiæ* paululum denudatæ. *Rostrum* brevius capite, prope basin latissimum. *Nares* parvæ, ovales. *Lamellæ* ad marginem rostri continuatæ. *Lingua* subobtusa, ad apicem appendiculata latera unâ ordine setarum brevium et in medio duplici ordine instructis.

EXT. CHAR. *Feet* with the posterior toes not lobed, the middle one longest. The *Thighs* a little denuded. *Bill* shorter than the

head, broadest near the base. *Nostrils* small, oval. *Lamellæ* continued to the margin of the bill. *Tongue* rather obtuse, with an appendage at the tip.

ANAS. *Linn.*

MARECA. *Steph.*

TYPE. *Mareca fistularis.*

Affinity. To the next genus this presents an approach in the formation of the tail, which in some of the species is pointed and slightly elongated. To the following the form of the bill presents an affinity.

GENUS VIII. AIX.

EXT. CHAR. *Pedes* digitis posterioribus non lobatis, mediis longissimis. *Tibiæ* plumatæ. *Rostrum* brevius capite, baso ad apicem angustatum. *Lamellæ* abbreviatæ. *Nares* subovales, parvæ. *Cauda* mediocris.

EXT. CHAR. *Feet* with the posterior toes not lobated, the middle ones longest. *Thighs* feathered. *Bill* shorter than the head, narrowed from the base to the point. *Lamellæ* abbreviated. *Nostrils* suboval, small. *Tail* moderate.

ANAS. *Linn.*

AIX. *Boie.*

QUERQUEDULA. *Briss., Steph.*

DENDRONESSA. *Swain.*

TYPE. *Aix sponsa.*

Its habit of sitting and making its nest in trees is curious.

Affinity. Certainly more nearly allied to *Querquedula* and *Mareca* than any other genus of this sub-family.

GENUS IX. QUERQUEDULA.

EXT. CHAR. *Pedes* digitis posterioribus non lobatis. *Rostrum* lateribus parallelibus. *Lamellæ* paululum elongatæ. *Nares* rotundatæ mediocres. *Cauda* brevis. *Lingua* subobtusa, ad apicem appendiculata unâ ordine setarum brevium, ad apicem aliquando pene oblitteratæ, supra hæ setæ, in medio, lateraliter, septem spinis instructâ.

EXT. CHAR. *Feet* with the posterior toes moderate, and not lobated. *Bill* with the sides equal. *Lamellæ* slightly elongated. *Nostrils* rounded, moderate. *Tail* short. *Tongue* rather obtuse, with an appendage at the tip; the sides armed with one rank of short bristles towards the apex, very short; above these bristles, in the middle, on each side, armed with seven spines.

ANAS. Linn.

QUERQUEDULA. Ray, Briss.

TYPE. *Querquedula crecca*.

Affinity. More closely allied to the genera *Marcca* and *Aix* than any other in the sub-family.

GENUS X. PETROCYANEA.

EXT. CHAR. *Pedes* digitis posterioribus mediocribus, et non lobatis. *Rostrum* latius ad apicem quam ad basin. *Lamellæ* paululum elongatæ. *Nares* rotundatæ, magnæ. *Cauda* vix elongata. *Alæ* ptilis cæruleis.

EXT. CHAR. *Feet* with the posterior toes moderate, and not lobated. *Bill* broader at the tip than at the base. *Lamellæ* a little elongated. *Nostrils* rounded, large. *Tail* a little elongated.

PETROCYANEA. Bon.

ANAS. Linn.

QUERQUEDULA. Briss.

CYANOPTERUS nobis.

TYPE. *Petrocyanea Rafflesii*.

The above genus consists of that group commonly called the blue-winged teal; nor do we know one instance of a bird agreeing with the character which has not bright azure-blue wings, except the *Garganey*, which has, however, dull slate-coloured ones. *Anas Rafflesii*, King, may be considered as a good specimen of the form, which may be always distinguished by the peculiar abrupt termination to the upper mandible, which is bent, as it were, over the lower one, both in front and on the sides of the apex. The *Garganey* comes nearer to the common teal than the rest of the genus in external form, but in the form of the trachea differs from it. We have never observed a skeleton in any collection except that of the *Garganey*, which we do not consider typical.

Affinities. In the form of the bill and trachea this genus approaches that of *Chauliodus*, but differs from it in the former, not having the lamellæ so much elongated, and in the trachea being more enlarged above the inferior larynx. From the following genus it is very distinct in both particulars, but agrees with it in general colouring.

GENUS XI. SPATULA.

EXT. CHAR. *Pedes* digitis posterioribus parvis, et non lobatis. *Tibiæ* parte quarta denudatæ. *Rostrum* longum, ad apicem multum

latissimum. *Lamellæ* elongatæ. *Nares* ovales prope culmine et baso locatæ. *Lingua* obtusa ad apicem appendiculata lateraliter unâ ordine setarum brevium, et supra has setas postice novem spinis instructâ et duplice ordine centrali spinarum brevium ornata.

EXT. CHAR. *Feet* with the hind toe small, and not lobated. *Thighs* with a fourth part naked. *Bill* long, much the broader at the tip. *Nostrils* oval, placed near the culmen and base. *Tongue* obtuse, with an appendage at tip; furnished with one row of short bristles on the the sides, and above these bristles, behind, with nine spines; in the middle above with a double row of stout spines.

ANAS. *Linn., Sw.*

RHYNCHAPSIS. *Leach's MSS., Steph.*

SPATULA. *Flem.*

TYPE. *Spatula clypeata.*

Affinities. This and the two following, as well as the preceding genera, are very nearly connected, both in form and habit.

GENUS XII. MALACORHYNCHUS.

EXT. CHAR. *Pedes* digitis posterioribus parvis, et non lobatis. *Tibiæ* paululum denudatæ. *Rostrum* longum, ad apicem multum latissimum, et lateribus membranis flexilibus instructis. *Lamellæ* longæ. *Nares* ovales, parvæ, prope basin locatæ.

EXT. CHAR. *Feet* with the posterior toe small, and not lobated. *Thighs* little denuded. *Bill* long, at the apex much the broadest, and furnished on the sides with flexible membranes. *Lamellæ* long. *Nostrils* oval, small, placed near the base.

ANAS *Linn.*

RHYNCHAPSIS. *Leach.*

MALACORHYNCHUS. *Swainson.*

TYPE. *Malacorhynchus membrinaceus.*

GENUS XIII. CHAULELASMUS.

EXT. CHAR. *Pedes* digitis posterioribus mediocribus, et non lobatis. *Rostrum* non latius ad apicem quam ad basin. *Lamellæ* paululum elongatæ. *Nares* ovales, magnæ, vix elongatæ. *Lingua* obtusa, ad apicem appendiculata, lateribus unâ ordine setarum brevium, supra has setas laterater centrali parte quinque spinis, et in medio supra duplice ordine setarum brevium instructâ.

EXT. CHAR. *Feet* with the posterior toes of moderate size, and not lobated. *Bill* not broader at the tip than at the base. *Lamellæ* elongated. *Tongue* obtuse, with an appendage at the tip, the sides furnished with a rank of short bristles; above these, in the middle of the sides, with five spines, and in the middle of the upper surface with a double rank of short spines.

ANAS. *Linn., Gmel., Lath.*

CHAULIODES. *Swainson.*

CHAULELASMUS. *G. R. Gray.*

TYPE. *Chauliodus Strepera.*

Affinity. The elongated lamellæ ally this genus to the two preceding. It appears, indeed, to be precisely intermediate between them and the following.

GENUS XIV. ANAS.

EXT. CHAR. *Pedes* digitis posterioribus simplicibus, mediis longissimis. *Tibiæ* parte tertiâ inferiore denudatâ. *Rostrum* lateribus parallelibus. *Nares* ovaies, prope culmen ad basin locatæ. *Lingua* obtusa, ad apicem appendiculata, lateraliter unâ ordine setarum longarum et flexilum instructâ, supra has setas ad latera sex spinis instructâ, et in medio supra duplici ordine setarum brevium.

EXT. CHAR. *Feet* with the posterior toes simple, the middle one longest. *Thighs* with a third part naked. *Bill* with the sides parallel. *Nostrils* oval, placed near the culmen at the base. *Tongue* blunt at the point, with an appendage, the sides furnished with one rank of long and flexible bristles; above these bristles, in the middle of the sides, furnished with six spines, and in the middle above with a double rank of short bristles.

ANAS. *Linn.*

BOSCHAS. *Swainson.*

TYPE. *Anas Boschas.*

We have here retained the old Linnean name for this genus, instead of that of *Boschas* proposed by Mr. Swainson.

Affinity. In size and the form of the tongue this genus approaches nearest to the last of any among the *Anatinæ*.

GENUS XV. CARINA.

EXT. CHAR. *Pedes* digitis posterioribus gibbosis, mediis longissimis. *Tibiæ* plumatæ. *Rostrum* equale, et carunculâ subglobosâ

supra nares positâ. *Nares* ovales, magnæ, prope culmine basi locatæ. *Caput* ad oculos denudatum. *Lingua* obtusa, ad apicem appendiculata lateraliter unâ ordine setarum et supra has quatuoribus spinis instructis et in medio supra duplici ordine setarum brevium armata.

EXT. CHAR. *Feet* with the posterior toes gibbous, the middle longest. *Thighs* feathered. *Bill* with the sides equal, and with a subglobose tubercle placed above. *Nostrils* oval, large, placed at the base of the bill near the culmen. *Head* naked to the eyes. *Tongue* obtuse, with an appendage at the point, the sides armed with one row of bristles; above these with four spines, and in the middle, on the upper side, armed with a double row of short bristles.

ANAS. *Linn.*

CARINA. *Flem.*

TYPE. *Carina moschata.*

SUB FAM. IV. FULIGULINÆ.

EXT. CHAR. *Rostrum* ad basin altius-quam latum. *Pedes* magni, digitis posterioribus lobatis, externis vix brevioribus intermediis. *Rectrices Caudæ* plerumque breves et flexiles. *Alæ* mediocres.

EXT. CHAR. *Bill* higher than broad at the base. *Feet* large, posterior toe lobated, the outer slightly shorter than the middle one. *Tail feathers* generally short and flexible. *Wings* moderate.

TYPE. *Fuligula.*

HABIT. Aquatic and marine, feeding on small molusca, and occasionally small fish. Some of the species possess considerable power of flight.

Affinity. The sterna of some genera of this family, *Olangula* and *Harelda*, are furnished with an ensiform process, as in the *Mergansers*. In the former the trachea also much resembles that family. To the *Anatinæ*, as we have before stated, we believe it to be connected through the genus *Micropterus* and *Carina*.

GENUS I. MICROPTERUS.

EXT. CHAR. *Pedes* digitis posterioribus lobatis. *Rostrum* validum, rugosum. *Lamellæ* magnæ. *Nares* in medio rostri positæ. *Tibiæ* plumatæ. *Alæ* breves.

EXT. CHAR. *Feet* with the posterior toes lobated. *Bill* strong, wrinkled. *Lamellæ* large. *Nostrils* placed in the middle of the bill. *Thighs* feathered. *Wings* short.

ANAS. *Linn.*

MICROPTERUS. *King.*

TYPE. *Micropterus Patachonichus.*

Affinity. The structure of the hind toe and foot unites this genus to the *Fuligulinæ*; while, on the other hand, that of the trachea bears a great resemblance to the *Anatinæ*.

GENUS II. MELANITTA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, et externis longissimis. *Rostrum* magnum, basi elevatum. *Lamellæ* magnæ, ad marginem continuatæ. *Nares* ovales, magnæ, in medio rostri positæ.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer ones longest. *Bill* large, elevated at the base. *Lamellæ* large, continued to the margin. *Nostrils* oval, large, placed in the middle of the bill.

MELANITTA. *Boie.*

ANAS. *Linn.*

OIDEMIA. *Flem.*

TYPE. *Melanitta fusca.*

Affinities. The form of the bill in some of the species of the genus presents an affinity to the genus *Somateria*. In its general form, however, and the structure of the feet, it bears a close resemblance to the foregoing genus.

GENUS III. SOMATERIA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis mediis equalibus. *Rostrum* mediocre ad basin elevatum, et ad apicem, angustatum. *Lamellæ* non ad apicem continuatæ.

EXT. CHAR. *Feet* with the hind toes lobated, the external ones equal to the middle. *Bill* moderate, with the base elevated, and narrowed towards the tip. The *Lamellæ* not continued to the apex.

ANAS. *Linn.*

SOMATERIA. *Leach.*

TYPE. *Somateria mollissima.*

Affinity. In the form of the inferior larynx this genus approaches near the *Anatinæ*.

GENUS IV. ENICONETTA.

EXT. CHAR. *Pedes* magni, digitis posterioribus lobatis. *Rostrum* ad basin elevatum, ad apicem angustatum. *Caput* parvum, et cristatum maribus. *Cauda* brevis et acutâ. *Remiges* tertiæ longæ.

EXT. CHAR. *Feet* large, with the posterior toes lobated. *Bill* elevated at the base, narrowed towards the point. *Head* small, and crested in the male. *Tail* short, sharp. *Tertiaries* long.

ANAS. *Linn.*

ENICONETTA. *G. R. Gray.*

FULIGULA. *Gould.*

MACROPUS. *Nuttall.*

? — POLYSTICTA *nobis.* *not here*

TYPE. *Polysticta stelleri.*

Affinity. The long tertiary feathers and the form of the bill in this genus evidently point out a near affinity to *Somateria*.

GENUS V. HYMENOLAIMUS.

EXT. CHAR. *Pedes magni.* *Tarsi* digitis mediis æquantibus posterioribus lobatis. *Rostrum* lateribus ad apicem latum et flexile baso elevatum. *Nares* magnæ. *Unguis* moderata. *Lamellæ* graciles longæ.

EXT. CHAR. *Feet* large. *Tarsi* equal with the middle toe in length, hind toe lobed. *Bill* with the sides near the point wide and flexible, and elevated at the base. *Nail* of moderate size. *Lamellæ* thin and flexible.

MACRORHYNCHUS. *Wagl.*

HYMENOLAIMUS. *G. R. Gray.*

GENUS VI. KAMPTORHYNCHUS.

EXT. CHAR. *Pedes magni*, digitis externis mediis æquantibus, posterioribus lobatis. *Rostrum* lateribus ad apicem latum, et flexile. *Nares* magnæ, ovales, prope basum locatæ. *Unguis* magna et lata.

EXT. CHAR. *Feet* large, the outer toe equal to the middle one, posterior one lobated. *Bill* broad towards the point at the sides, flexible. *Nostrils* large, oval, placed near the base. *Nail* large and broad.

ANAS. *Linn.*

FULIGULA. *Ray, Leach.*

? — KAMPTORHYNCHUS *nobis.* *new*

KAMTOLAIMUS. *G. R. Gray.*

TYPE. *Kamptorhynchus Labradora.*

This genus we have formed on *F. Labradora Bonap*, the variety it exhibits being amply sufficient to distinguish it from any other genus.

Nothing that I am aware of is known concerning anatomical characters, besides those mentioned in Wilson, and quoted at length under the head *Kamp. Labradoræ*.

GENUS VII. CALLICHEN.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, intermediis vix longissimis. *Tibiæ* plumatæ. *Rostrum* capite equalè, prope basum latissimum. *Lamellæ* validæ, et ad marginem continuatæ. *Nares* subovales, magnæ. *Cauda* mediocris. *Caput* cristatum.

EXT. CHAR. *Feet* with the posterior toes lobated, the middle ones scarcely the longest. *Thighs* feathered. *Bill* equal to the head, broadest at the base. *Lamellæ* strong, and continued to the margin. *Nostrils* suboval, large. *Tail* moderate. *Head* crested.

ANAS. Linn.

FULIGULA. Ray, Leach.

GLAUCIUM, QUERQUEDULA. Briss.

CALLICHEN. Brehm.

MERGOIDES nobis. ~~not~~

TYPE. *Callichen rufina*.

We first instituted this genus on *F. rufina*, after having observed the trachea of that species. To this, however, will be added the beautiful species *Fuligula caryophyllacea*.

Affinities. In having bulbs on the tube of the trachea, and also in general form, this bird presents considerable affinity to the *Mergansers*.

GENUS VIII. FULIGULA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis inter mediis æquantibus. *Tibiæ* plumatæ. *Rostrum* prope apicem latissimum, obtusum. *Lamellæ* abbreviatæ et non ad marginem continuatæ. *Nares* subovales, parvissimæ. *Cauda* brevissima. *Lingua* obtusa ad apicem appendiculata, lateribus unâ ordine setarum flexilum instructis; in medio ad latera supra has setas quatuoribus spinis instructis.

EXT. CHAR. *Feet* with the hind toes lobated, the outer ones scarcely equal to the middle. *Thighs* feathered. *Bill* broadest at the point, blunt. *Lamellæ* abbreviated, and not continued to the margin. *Nostrils* suboval, very small. *Tail* very short. *Tongue*

obtuse, with an appendage at the tip, and the sides furnished with one row of flexible bristles; in the middle with the sides above the bristles furnished with four spines.

ANAS. *Linn.*

FULIGULA. *Ray, Leach.*

NYROCA. *Fleming.*

GLAUCIUM, QUERQUEDULA. *Briss.*

TYPE. *Fuligula Marilla.*

Affinities. To the following genus this bears a near affinity in the external form and that of the trachea and skeleton, as well as to the foregoing.

GENUS. IX. NYROCA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis mediis vix æquantibus. *Tibiæ* plumatæ. *Rostrum* brevius capite, prope apicem latissimum, obtusum. *Lamellæ* abbreviatæ, et non ad marginem continuatæ. *Nares* subovales, parvæ. *Cauda* brevis. *Lingua* obtusa, ad apicem appendiculata, lateribus unâ et in medio duplici ordine setarum flexilium instructis, ad latera supra has setas quinque spinis instructis.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer ones scarcely equal to the middle. *Tibiæ* feathered. *Bill* shorter than the head, broadest near the point, obtuse. *Lamellæ* abbreviated, and not continued to the margin. *Nostrils* suboval, small. *Tail* short. *Tongue* obtuse, with an appendage at the point; the sides with one, and the middle with a double rank of flexible bristles; above these bristles, on the sides, armed with five strong spines.

ANAS. *Linn.*

NYROCA. *Flem.*

TYPE. *Nyroca leucophthalmus.*

Dr. Fleming included the Scaup, Tufted Duck, and Pochards in his genus *Nyroca*. It is, however, now restricted to the Pochards which want the crested head.

Affinities. This genus, as before stated, presents an affinity to the last in general form, and also in that of the inferior larynx.

GENUS X. HARELDA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis mediis vix æquantibus. *Tibiæ* plumatæ. *Rostrum* mediocre, baso ad apicem

angustatum. *Lamellæ* extremo parte omnino obliterated. *Nares* lineares, versus media rostri positæ. *Cauda* maribus elongata.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer one scarcely equal to the middle. *Thighs* feathered. *Bill* moderate, narrowed from the base to the apex. *Lamellæ* altogether obliterated at the points. *Nostrils* linear, situated about the middle of the bill. *Tail*, in the male, elongated.

HARELDA. *Ray, Leach.*

ANAS. *Linn.*

QUERQUEDULA. *Briss.*

CLANGULA. *Flem.*

TYPE. *Harelda Glacialis.*

GENUS XI. CLANGULA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis mediis vix æquantibus. *Tibiæ* plumosæ. *Rostrum* parvum, capite brevius, a basi ad apicem angustatum. *Nares* ovales, medium versus rostri positæ. *Lamellæ* ad apicem pene obliterated. *Cauda* rectricibus rigidis, sed ad apicem flexilibus. *Lingua* obtusa, ad apicem appendiculatæ, lateribus ordine uno setarum flexilium instructis.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer ones scarcely equal to the middle. *Tibiæ* feathered. *Bill* small, shorter than the head, narrowed from the base to the point. *Nostrils* oval, placed towards the middle of the bill. *Lamellæ* obliterated at the top. *Tail* with the quills stiff, but flexible at the points. *Tongue* obtuse, with an appendage at the point, the sides garnished with one row of flexible bristles.

ANAS. *Pars., Linn.*

CLANGULA. *Leach, Flem.*

QUERQUEDULA. *Briss.*

TYPE. *Clangula vulgaris.*

SUB FAM. V. ERISMATURINÆ.

EXT. CHAR. *Rostrum* ad basin altius-quam latum. *Pedes* magni, digitis posterioribus lobatis, externis et intermediis inter se æqualibus. *Rectrices* *Caudæ* longæ et validæ. *Alæ* breves.

EXT. CHAR. *Bill* higher than broad. *Feet* large, posterior toes lobated, the outer toe equal to the middle. *Tail* feathers, long and stiff.

ANAT. CHAR. Unknown.

TYPE. *Erismatura*.

HABIT. Like the last, truly aquatic.

GENUS I. THALASSORNIS.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis intermediis vix æquantibus. *Tibiæ* plumosæ. *Rostrum* validum, latum; lateribus parallelibus; et ungue magnâ armatum. *Nares* parvæ, ovales, in medio rostri culminem versus positæ. *Cauda* rotundata, rectricibus brevibus et subrigidis instructâ. *Alæ* breves, remigibus ad apices incurvatis.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer ones scarcely equal to the middle. *Thighs* feathered. *Bill* strong, broad; the sides parallel, and armed with a large nail. *Nostrils* small, oval, placed in the middle of the bill towards the culmen. *Tail* rounded, furnished with short and slightly rigid feathers. *Wings* short, with the quills incurved at the apex.

THALASSORNIS *nobis*.

TYPE. *Thalassornis leuconotus*.

GENUS II. BIZIURA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis intermediis æquantibus. *Tibiæ* plumosæ. *Rostrum* validum, latum, ad apicem angustatum. *Mandibulæ* ambæ unguiculatæ, inferior in maribus paleâ magnâ pendente instructâ. *Nares* rotundatæ, in medio rostri, culminem versus positæ. *Cauda* rotundata, rectricibus rigidis et acutis instructâ. *Alæ* remigibus, ad apices incurvatis.

EXT. CHAR. *Feet* with the posterior toes lobated, the external ones equal to the middle. *Thighs* feathered. *Bill* strong, broad, narrowed towards the apex. Both *mandibles* furnished with nails; the inferior one, in the males, with a large hanging wattle. *Nostrils* rounded, placed in the middle of the bill towards the culmen. *Tail* rounded, furnished with stiff and acute quills. *Wings* with the quills at the points incurved.

BIZIURA. *Steph., Leach.*

TYPE. *Biziura lobata*.

Mons. Temminck included this genus, together with all the other aquatic ducks, in one large genus *Hydrobates*. The name of *Biziura*

was first given to it, according to Stephens, in Shaw's Zoology, by Leach, in his MSS., and was afterwards published by Mr. Stephens in the above work.

GENUS III. ERISMATURA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, externis mediis vix æquantibus. *Tibiæ* plumatæ. *Rostrum* validum, aut mediocre, prope apicem latissimum. *Mandibulæ* unguiculatæ. *Nares* ovales, parvæ, in medio rostri versus culminem positæ. *Cauda* rotundata, reetricibus rigidis. *Alæ* remigibus paululum incurvatis.

EXT. CHAR. *Feet* with the posterior toes lobated, the outer one scarcely equal to the inner. *Thighs* feathered. *Bill* moderate, broadest near the tip. *Mandibles* furnished with nails. *Nostrils* oval, small, placed in the middle of the bill towards the culmen. *Tail* rounded, with the quills stiff. *Wings* with the quills a little incurved.

ANAS. Linn.

OXYURA. Bonap.

ERISMATURA. Bonap.

UNDINA. Gould.

GYMNURA. Nuttall.

TYPE. *Erismatura rubida*.

The genus *Oxyura* was first instituted by the Prince of Musignano, for the reception of *Anas rubida*, Wils. Mr. Gorler having overlooked it, formed his genus *Undina*, or *Anas Leucocephala*, Linn., a bird of the same conformation. Mr. Nuttall having discovered that the name of *Oxyura* had been before used for a genus of creepers, substituted that of *Gymnura* for it. The Prince of Musignano had, however, in the appendix to the same work in which he named the genus *Oxyura*, also called it *Erismatura*, which name will stand, that of *Oxyura* having been before employed for another genus.

SUB FAM. VI. MERGINÆ.

EXT. CHAR. *Rostrum* mediocre, ad apicem angustatum acuminatum et dentibus ad latera instructum. *Digiti* posteriores lobati.

EXT. CHAR. *Bill* moderate, narrowed to the point, acuminate, and at the sides armed with teeth. *Posterior Toes* lobated.

TYPE. *Mergus*.

Affinities. Having, under the head *Lamellirostres*, stated some of the affinities which exist between the family generally and others, we have merely, under the head sub-families, stated those which hold between each contained in the above family. In both external and internal character the strongest relation exists between the above and that of *Fuligulinæ*, the genera *Clangula* and *Harelda* in particular, both of which possess the ensiform process on the posterior margin of the sternum, and the latter a bulb on the tube of the trachea, formed by enlarged rings. The genus *Callichen* possesses two bulbs, but the skeleton does not approach so nearly as that of the two genera before mentioned. To the *Erismaturinæ* we suspect the affinity is not so great, certainly not so far as relates to external character, although we have placed them contiguous, there being evidently a double point of affinity to the Divers.

HABIT. The habit of this sub-family is truly aquatic, its length of body, and legs being placed far backwards, give the birds contained in it great power of diving. Its food consists principally of small fish.

GENUS I. MERGUS.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, mediis vix longissimis. *Tibiæ* plumatæ. *Rostrum* a baso ad apicem angustatum, lateribus serratis, apice unguiculato. *Nares* subovales, mediocres, versus medium rostri positæ. *Lingua* acuminata, lateribus ordine uno, parte centrali duplici ordine setarum reflexarum instructâ.

EXT. CHAR. *Feet* with the posterior toes lobated, the middle ones scarcely the longest. *Thighs* feathered. *Bill* narrowed from the base to the point, the apex with a nail. *Nostrils* oval, moderate, placed towards the middle of the bill. *Tongue* pointed, the sides armed with one and the middle with two rows of bristles.

MERGUS. *Ray*, *Linn.*, *Gmel.*, *Briss.*

MERGANSER. *Briss.*

TYPE. *Mergus serrator.*

Mr. Stephens, in vol. XII. p. 156, of Shaw's Zoology, divides this genus, separating from it the Smew (*Mergus albellus*), and placing the other *Mergansers* under the genus *Merganser*, *Briss.*

We have spoken before of the affinities of this genus under the head of the sub-family *Merginæ*.

GENUS II. MERGANETTA.

EXT. CHAR. *Pedes* digitis posterioribus lobatis, mediis longissimis. *Rostrum* a baso ad apicem angustatum apices vix unguiculata. *Nares* ovales, parvæ, versus medium rostri positæ.

EXT. CHAR. *Feet* with the hind toe lobated, the middle toe longest. *Bill* tapering to the end, which is slightly unguiculated. *Nostrils* small, placed in the middle of the bill. *Tail feathers* long, and stiff.

MERGANETTA. *Gould.*

TYPE. *Merganetta armata.*

SYNOPSIS SPECIERUM.

ANSERANAS SEMIPALMATUS.

Ans.—Capite colloque nigro, dorso superiore albo.

SEMIPALMATED GOOSE.

Ans. with the head and neck black, the upper part of the back white.

	FT.	IN.		IN.
<i>Length</i>	3	4	<i>Tarsi</i>	4
<i>Bill</i>	4		<i>Middle toe</i>	4½

Ans.: with the upper part of the back, rump, and below, with the exception of the tibiæ, white; the remainder and the tibiæ glossy black; legs and bill orange; the nail of the latter horn-colour.

Anseranas semipalmatus *Less.*

Anas semipalmata *Linn. Trans.* iv. 103.

Lath. Ind. Orn. App. 69.

Semipalmated Goose ... *Lath. Gen. Syn. Sup.* 2, 347.

Anas melanoleuca *Lath. Ind. Orn. App.* 69.

Trachea..... *Linn. Trans.* vol. xv. p. 383, pl.

xiii, xiv.

Inhabits New Holland, and utters a shrill whistling note.

Mr. Yarrell, in vol. 15, p. 383, gives the following anatomical peculiarities of this bird. The trachea "was situated on the outside of the left pectoral muscle, under the skin, sufficiently raised under the wing that respiration would not be impeded when the bird rested with its breast on the ground, the parallel tubes being firmly attached

both to the muscle and the skin by cellular tissue. The clavicle on the right side of the bird is of the usual character, but that on the left is both shorter and wider, having an aperture about the middle, the sides diverging, with a projecting point on the inner side, to which the tube of the trachea is firmly attached about two inches above the bone of divarication. The trachea lying on the left side of the bird, the lower portion of the tube, in its passage to the lungs, crosses the left branch of the furcula at a right angle, but becoming attached to this projection of the clavicle, receives from the point described its central direction into the body. The whole length of the windpipe in this bird is four feet eight inches." In a young bird dissected by Mr. Yarrell, the trachea was not nearly so much convoluted.

PLECTROPTERUS RUPPELII.

PLEC. subtus brunneocatro; alis albis.

RUPELL'S GOOSE.

PLEC. bronze-black below, and wings white.

	FT.	IN.		IN.		IN.
Length...	3	1	Metatarsi...	4½	Middle toe...	3¾

PLEC. glossy-bronze, black; anterior portion of the wings and belly white; bill dark, red legs, and feet lighter.

Plectropterus ruppelii Selater *Proc. Zool. Soc.* 1860,
p. 42.

—————*Gambensis* Rup.

From Central Africa.

PLECTROPTERUS GAMBENSIS.

Plec.—Ater; subtus albus.

GAMBA GOOSE.

PLEC. black; below white.

	IN.		IN.		IN.
Length...	39½	Naked part of the bill...	5	Tarsi...	5

PLEC.: smaller wing coverts, belly, neck, and thighs white; the remainder deep purplish black; spur on the wing of the male one

inch long; male with a large knob on the culmen, at the base of the bill.

Female smaller than the male, and with the knob at the culmen of the bill smaller.

<i>Plectropterus Gambensis</i>	<i>Steph. Shaw Zool.</i> 12. 7.
<i>Anas Gambenses</i>	<i>Linn. Syst. Nat.</i> 1. 195.
	<i>Gmel. Syst. Nat.</i> 1. 503.
	<i>Lath. Ind. Orn.</i> 1. 839.
	<i>Shaw, Mus. Sev. pl.</i> p. 231.

An African species, inhabiting the Gamba.

CEREOPSIS NOVA HOLLANDIÆ.

Cer.—Cinerius tectricibus alarum atribus maculis ornatis.

NEW HOLLAND CEREOPSIS.

CER. blue-grey, spotted on the wing coverts with black.

	IN.		IN.
<i>Length</i>	34	<i>Middle toe</i>	3 $\frac{1}{4}$
<i>Tarsi</i>	4	<i>Outer</i>	3—2 $\frac{3}{4}$
		<i>Hind toe</i>	1 $\frac{1}{8}$

CER.: blueish grey, with the tail, under and upper tail coverts, and a few spots on the scapulars black; bill black; cere covering the nostrils greenish yellow; webs scalloped, as in the Sandwich Island goose; nostrils large and round; legs orange; feet black.

<i>Cereopsis Novæ Hollandiæ</i> ...	<i>Lath. Ind. Orn. Sup.</i> 67.
<i>Anser Griseus</i>	<i>Vieill. 2 edit. Dic. Hist. Nat.</i>
	23—338.
<i>Cèreopsis cendrée</i>	<i>Temm. Pl. col.</i> 206.

Now found in most of our large museums; has also been brought over alive. Appears to dread the water, and feed chiefly on grass. Inhabits New Holland.

CHLOEPHAGA CANNAGICA.

Chlo.—Grisea atro undulato.

CHLO. slaty grey, undulated with black.

	IN.		IN.		IN.
<i>Length</i> ...	26	<i>Metatarsus</i> ...	$2\frac{1}{2}$	<i>Middle toe</i> ...	$2\frac{1}{2}$

CHLO.: slaty grey; the edges of the feathers lighter, anterior to which, on each feather, is a band of black, giving an undulated appearance; head, back of the neck, and under tail coverts white. Cannagica Sewart, Nov., act. pelrop. 13, p. 346, t. 10. Inhabits the Aleutian Islands. In the British Museum.

Chloephaga Cannagica... Sewast, N. A. pelrop., p. 346.

CHLOEPHAGA RUBINICEPS.

Chlo.—*Poliocephala similis*.

CHLO.: Like *C. Poliocephala*, but lighter.

	FT.	IN.		IN.		IN.
<i>Length</i> ...	2	$\frac{1}{2}$	<i>Metatarsus</i> ...	2	<i>Middle toe</i> ...	2

Very similar to *C. Poliocephala*, but lighter coloured, and having the belly entirely rufous.

Chloephaga Rubiniceps *Sclater*.

Inhabits the Falkland Islands.

CHLOEPHAGA SANDVICENSIS.

Chlo.—*Brunnea*, vertice, genis, colloque parte posteriore, atris.

SANDWICH ISLAND GOOSE.

CHLO. brown, with the crown, cheeks, and line down the back of the neck black.

	IN.		IN.
<i>Length</i>	23	<i>Middle toe</i>	$3\frac{1}{4}$
<i>Bill</i>	$1\frac{1}{2}$	<i>Outer</i>	$2\frac{7}{8}$
<i>Tarsi</i>	$3\frac{1}{2}$	<i>Inner</i>	$2\frac{3}{8}$
<i>Hind toe</i>	$\frac{5}{8}$		

CHLO. : crown, cheeks, quills, and a line down the back of the neck black; remainder of the neck bright brownish grey; quills, tail, and upper tail coverts white; remainder ashy grey, darker on the back, with each feather tipped with brown or grey; ring round the neck brown; wings black, the edges of the feathers lighter; legs, feet, and bill black; webs deeply scalloped.

Bernicla Sandvicensis *Vig. Zool. Pro. May 27, 1834.*

Inhabits the Sandwich Islands.

An interesting account of the habits of this bird, while confined in Lord Derby's menagerie, by that nobleman, will be found in the Zoological Proceedings as above quoted, when he states they laid four eggs of a white colour, and large in proportion to the size of the bird, two of which were hatched, and one reared; since which time also another hatch has been reared by the Zoological Society.

CHLOEPHAGA INORNATA.

Chlo.—Albus atro strigato capite cinereo.

CHLO. white, barred with black; head grey.

	IN.		IN.		IN.
<i>Length...</i>	22	<i>Bill...</i>	1—2 $\frac{1}{4}$	<i>Metatarsus...</i>	2 $\frac{1}{2}$

CHLO. : head and neck grey; speculum and wing coverts white, remainder of the wings grey; back, tail, and quills black; upper part of back and lower parts more or less broadly barred with black and whitish grey; bill and feet reddish.

<i>Chloephaga Inornata</i>	<i>Eyton</i>
<i>Anser</i>	<i>King Pro. Zool. Soc. 1830-31,</i>
	<i>p. 15.</i>

Inhabits the Straits of Magellan.

CHLOEPHAGA MAGELLANICA.

Chlo. Mas.—Albus, dorso atro transversum strigato; rostro, pedibus, tarsisque nigris.

Chlo. Fem.—Ferruginea; subtus albus atro strigato; colloque canescente; tarsi rubris; pedibus nigris.

UPLAND MAGELLANIC GOOSE.

CHLO. Mas. with the back transversely barred with black; the bill, feet, and legs black.

CHLO. Fem. ferruginous; below white, barred with black; neck hoary; legs red; the feet black.

	IN.		IN.
Male: <i>Length</i>	26	<i>Inner toe</i>	1 $\frac{5}{8}$
<i>Bill</i>	1 $\frac{1}{4}$	<i>Middle</i>	2 $\frac{1}{2}$
<i>Tarsi</i>	3	<i>Outer toe</i>	2 $\frac{1}{8}$

Male: Head, neck, and back white, the two latter barred with black; wing coverts and secondaries white; tertiaries and bastard wings blue-black, tipped with white; bill and legs black; the latter approaching to orange in the female, black in the male.

	IN.		IN.
Fem.: <i>Length</i>	25	<i>Middle toe</i>	2 $\frac{1}{2}$
<i>Bill</i>	6 $\frac{3}{4}$	<i>Outer</i>	2
<i>Tarsi</i>	1 $\frac{1}{8}$	<i>Inner</i>	1 $\frac{5}{8}$

Fem.: lower part of the neck, upper part of the back, and breast light ferruginous, barred with black; head and neck grey or hoary brown; quills, tail, upper tail coverts, and lower part of the back black, glossed with green inflections; tertiaries long, grey; secondaries white, behind which is a bar of black; wing-spot (formed by the secondary coverts) metallic green; wing coverts, belly, and vent white; flanks white, barred with black; bill black; legs orange, with the inside black.

Young: the young birds of both sexes have the head and upper part of the neck brownish ash; below, greyish white, lineated with dark brown; upper part of the back grey, barred with black; rump and scapulars deep ash; thighs white, barred with light brown; vent brownish black; middle of the belly and wing coverts white; bill as in the adults; legs greenish black.

<i>Bernicla leucoptera</i>	<i>Less. Traite d'Orn.</i> 627.
<i>Anas</i>	<i>Gmel. Syst.</i> 1. 505.
	<i>Lath. Ind. Orn.</i> 2. 835.
<i>Bernicla</i>	<i>Steph. Sh. Zool.</i> 12. 58.
<i>Anas Magellanica</i>	<i>Gmel. Syst. Nat.</i> 1. 505.
	<i>Lath. Ind. Orn.</i> 2. 836.
<i>Bernicla</i>	<i>Steph. Sh. Zool.</i> 12. 61.
	<i>Lath. Ind. Orn.</i> 2. 836.
<i>Bernicla</i>	<i>Steph. Sh. Zool.</i> 12. 60.
<i>White-winged Antaretic Goose</i>	<i>Brown. Illust. Zool. pl.</i> 40.
<i>Bastard Goose</i>	<i>Lath. Syn.</i> 6. 440.
<i>Magellanica Goose</i>	<i>Lath. Syn.</i> 6. 443.
<i>Painted Goose</i>	<i>Lath. Syn.</i> 6. 443.
<i>Oie des iles Malouines</i>	<i>Buff. Ois.</i> ix. 69.
	<i>Less. Traite Orn.</i> 627.
<i>L'Oie des terres Magellaniques</i>	<i>Buff. Ois.</i> ix. p. 58, <i>pl. En.</i>
	1006.

Inhabits the southern extremity of America and the Falkland Isles; found generally in flights, according to Lesson; though we are informed by Charles Darwin, Esq., that it is generally found in pairs.

CHLOEPHAGA DISPAR.

Chlo.—*Albus atro strigato.*

CHLO. white, barred with black.

	IN.		IN.
<i>Length</i>	31½	<i>Tarsi</i>	3¾
<i>Bill</i>	1½	<i>Middle toe</i>	3

Chloephaga dispar..... *Phillipi*

CHLO.: white, transversely barred with black; tail coverts, head, and wing coverts white.

Inhabits Chili.

CHLOEPHAGA POLIOCEPHALA.

Chlo.—*Brunnea pectore fasciâ albâ.*

CHLO. chestnut, with a white band across the breast.

	IN.		IN.
<i>Length</i>	27	<i>Metatarsi</i>	2½
<i>Bill</i>	1½	<i>Middle toe</i>	3½

CHLO.: head and upper part of neck grey; lower part of the neck, upper part of the back, and breast ferruginous, each feather being barred with dark brown; anterior part of wing and coverts, lower part of thighs and band across the breast white; flank light ferruginous, barred with black; the centre part of abdomen ferruginous; lower part of back and tail glossy black; legs orange; bill black.

Chloephaga Poliocephala Gray.
 ————— *Magellanicus* Wolff's Illustrations.

BERNICLA CYANOPTERA.

Ber.—*Brunnea alis cyanopteris*.

BER. dusky brown, with wing coverts blue.

	IN.		IN.
<i>Length</i>	23	<i>Metatarsa</i>	2½
<i>Bill</i>	1½	<i>Middle toe</i>	2¼

BER.: dusky brown; the edges of the feathers lighter, giving it a mottled appearance; head and neck light brown; wing coverts blue; tail coverts white.

Bernicla Cyanoptera Rupp. Atlas taff. 47.

Hab. Shoa, Abyssinia.

BERNICLA ANTARCTICA.

Ber. Mas.—*Albus, remigibus primariis apicibus nigris*.

Ber. Fem.—*Nigra, dorso subtusque albo transversim strigato; occipite brunneo; rostro aurantiaco*.

ANTARCTIC GOOSE.

BER. Mas. white, with the ends of the primary quills black.

BER. Fem. black, with the back and beneath transversely striped with white; the occiput brown; the bill orange.

	IN.		IN.
Male: <i>Length</i>	25	<i>Tarsi</i>	2½
<i>Bill</i>	1 7-12ths.		

Entirely white except the apical half of the primaries, which are ashy black. Legs orange; bill (in the preserved specimens we have seen black) with an orange patch over the nostrils: but Azara says it is orange.

	IN.		IN.
Fem.: <i>Length</i>	26	<i>Inner toe</i>	2
<i>Bill</i>	1½	<i>Middle</i>	3½
<i>Tarsi</i>	2½	<i>Outer</i>	¾

Neck, breast, and belly black, barred with white, the bars minute towards the head; back part of the head umber brown; scapulars and primaries very dark-brown, sometimes black; smaller wing coverts and secondaries white; tertiaries blue-green; tail, lower part of the back, under tail coverts, and thighs white; bill and legs orange; toes and webs black in dried specimens.

<i>Anas Antarctica</i>	Gmel. Syst. 1. 505.
	Lath. Ind. Orn. 2. 835.
<i>Bernicla</i>	Steph. Sh. Zool. 12. 59.
<i>Anser candidus</i>	Vieill. Nouv. Dict. Hist.
	Nat. 23. 331.
	En Method, 3. 351.
	Steph. Sh. Zool. 12. 38.
<i>Ganso Blanco</i>	Azara Parax del Para-
	guay, 3. 406.
<i>Die anaretque, fem.</i>	Voy. de la Coquille, pl. 50.
<i>Antarctic Goose</i>	Lath. Gen. Syn. 6. 442.

The male of this species appears to have been first discovered by Azara. A good plate of the female will be found in the "Voyage de la Coquille." It inhabits South America and the adjoining islands, frequenting the sea coast and the lowlands adjoining, from whence it is called by Mr. Darwin, in his amusing Journal, the Lowland Goose. For the trachea, from which our figure is taken, we are

indebted to the above-named friend. The bulb of the inferior larynx is not flattened above as in the last bird, but altogether bears considerable resemblance to it and the wading ducks; from which latter, in common with all other geese, it may be distinguished by the rings of the trachea being more massive, and also by the form of the tube, which is always contracted towards the inferior larynx; while in the wading ducks it always expands in that part.

The flesh is not good food. Skins of both sexes were in the Museum of the Zoological Society, brought home by Capt. King.

BERNICLA RUFICOLLIS.

Ber.—Vertice colloque posteriore atris; genis rufis.

RED-NECKED GOOSE.

BER. with the crown and neck posteriorly black; the cheeks red.

Length..... 21 inches.

BER.: crown, forehead, and back of the neck and throat black; on the cheek a patch of brown margined by a line of white, which afterwards passes down the neck and breast, beyond which is a bar of white; belly, wings, and tail black; abdomen, vent, upper and under tail coverts white; wing coverts margined with white; bill and legs fuscous.

<i>Anser ruficollis</i>	<i>Pall. Spic.</i> 6. 12.
<i>Anas ruficollis</i>	<i>Gmel. Syst.</i> 1. 511.
<i>Anas torquata</i>	<i>Gmel. Syst.</i> 1. 514.
<i>Bernicla ruficollis</i>	<i>Steph. Sh. Zool.</i> 12. 53.
<i>Red-breasted goose</i>	<i>Penn. Arct. Zool.</i> 4. 571.
	<i>Lath. Syst.</i> 6. 455.

A few specimens have at different times been killed in the British Isles. It is a native of the arctic region, and is said to retire to Siberia and the Frozen Ocean to breed. Temminck informs us that it is in abundance near the rivers Ob and Lena during the breeding season. Nothing, however, appears to be known of its nidification or habits.

BERNICLA BRENTA.

Ber.—Cinerea, capite colloque nigro; hoc lateribus albo maculatis.

BRENT BERNICLE.

BER. cinereous, with the head and neck black; the latter on the sides with a white patch.

	IN.		IN.
<i>Length</i>	29	<i>Tarsi</i>	2 2-5ths.
<i>Bill</i>	1 2-5ths.	<i>Middle toe</i>	2

BER.: head, neck, and breast black; on each side of the neck a patch of white; back and wing coverts brown, with the edges of the feathers paler; below dirty white, with a yellow tinge; the margin of the feathers pure white; back and upper tail coverts black; neck and bill black.

<i>Bernicla Brenta</i>	<i>Steph. Sh. Zool.</i> 12. 46.
<i>Anas Bernicla</i>	<i>Linn. Syst.</i> 1. 198.
	<i>Gmel. Syst.</i> 1. 513.
	<i>Lath. Ind. Orn.</i> 2. 844.
<i>Brent Goose</i>	<i>Penn. Arct. Zool.</i> 2 N. 478.
<i>Le Cravant</i>	<i>Buff. Ois.</i> 9. pl. 87.

Inhabits the same countries with *B. Leucopsis*; its nest is made of grass and sea-weed in morasses; it lays ten or twelve eggs, perfectly white.

Like its congeners, it is easily domesticated. The trachea and inferior larynx is that of the typical geese, but slightly expanded below the glottis.

BERNICLA LEUCOPSIS.

Ber.—Cinerea, capite colloque atro; facie albâ.

COMMON BERNICLE.

BER. cinereous, with the head and neck black; the face white.

	IN.		IN.
<i>Length</i>	25	<i>Tarsi</i>	2½
<i>Bill</i>	1½	<i>Middle toe</i>	2½

BER.: cheeks, forehead, and throat white; crown, neck, and breast black; above blue grey, with the margins of the feathers lighter, within which there is a line of black; tail and quills black; tail coverts and the under surface white; the flanks with some dark bars of grey.

Anser Leucopsis..... *Bechs. Nat. Deut.* 4. 921.

Anas Leucopsis..... *Temm. Man.* 2. 828.

Bernicle..... *Penn. Arct. Zool.* 2 N. 479.

Lath. Gen. Syn. 6. 466.

Le Bernache *Buff. Ois.* 9. 9. 3. f. 5.

An arctic species, and, like most of its genus, is only a winter visitant in these islands; is easily domesticated. Little is known of its nidification, it having only once or twice bred in confinement. The trachea is like that of *B. Brenta*, but of rather smaller diameter.

BERNICLA JUBATA.

Ber. Mas.—Capite cristato, colloque brunneis; corpore cinereo, atro alboque maculato; abdomine atro.

Ber. Fem.—Capite colloque brunneis albo sparsis; corpore cinereo-brunneo et albo maculato; abdomine albo.

HAWKSBURY BERNICLE.

BER. Male, with the head crested, together with the neck brown; body cinereous, spotted with black and white; abdomen black.

BER. Fem., with the head and neck brown, blotched with white; body cinereous, spotted with brown and white; abdomen white.

	IN.		IN.
<i>Length</i>	23	<i>Tarsi</i>	2
<i>Bill</i>	1 1-6th.	<i>Middle toe</i>	2 1-6th.

Male: with the head and upper part of the neck umber brown; the feathers on the occiput much elongated and darker; upper part of the back, wing coverts, and lower part of the neck, cinereous, in the latter each feather having on its lateral edges a spot of black, and being tipped with white; lower part of the back, tail, abdomen, and belly (in the centre) black; quills brown; tertiaries long, the largest cinereous, the smaller ones with the outer webs black, with

metallic green reflections; wing-spot metallic green, bordered anteriorly with a band of white, then with one of black, posteriorly with one of white; flanks white, beautifully barred and irrorated with narrow lines of black; bill and legs black.

Fem.: rather smaller than the male; head and neck as in the male, but spotted anteriorly with small white specks; a whitish line passes from the bill below the eye, and another above it; breast and flanks white, each feather having a transverse bar of brown, narrowest in the centre, and expanding at the edges; abdomen and vent white; tail coverts cinereous; remainder as in the male, with the exception of the bill, which is horn colour.

Bernicla Jubata *Steph. Sh. Zool.* 12. 63.

Anas Jubata..... *Lath. Ind. Orn. App.* 69.

Hawksbury Bernicle *Lath. Syn. Sup.* 2. 358.

Inhabits New South Wales, in the neighbourhood of the Hawksbury river; is said occasionally to perch in trees.

NETTAPUS MADAGASCARIENSIS.

Ber.—Dorso colloque maculâ viridi; subtus albus.

MADAGASCAR BERNICLE.

BER. with the back and neck with a patch of green; below white.

	IN.		IN.		IN.
<i>Length</i> ...	14 $\frac{3}{4}$	<i>Bill</i> ...	$\frac{7}{8}$	<i>Middle toe</i> ...	7-12ths.

Male: occiput, with a stripe down the back of the neck; scapulars and rump green, with purplish inflections; quills and primary coverts sooty black, the latter edged with white; upper part of the breast, tail coverts, and flanks reddish yellow; lower part of the breast, belly, forehead, chin, cheeks, and front of the neck white; a light green ovate patch on each side of the neck, with a black edge irrorated with white; under tail coverts black; bill gamboge yellow; nail, legs, and feet black.

Fem.: as in the male, but without the green marking on the neck, instead of which it is grey; the forehead is also grey; in other respects similar.

This bird, which is included in Col. Sykes's catalogue of birds, found in the Deccan, contained in the "Proceedings of the Zoological Society," is said by that gentleman to be "monogamous: vegetable matter and gravel were found in the stomach. These birds, when wounded, dive, and on returning to the surface show only the bill above water, keeping the body below at pleasure." It is called the "Cotton Teal" by the Europeans of the Deccan, from the quantity of white in the plumage.

NETTAPUS PULCHELLUS.

Net.—Coromandeliano similis sed collaris atro absit.

NET. similar to Coromandelianus, but without the black collar.

	IN.		IN.
<i>Length</i>	15	<i>Metatarsi</i>	1
<i>Bill</i>	1	<i>Middle toe</i>	1 $\frac{5}{8}$

Black, and a band round the upper part of the neck cinereous; below white; flanks and upper part of the neck, with each feather marked with a somewhat V-shaped bar; legs slaty; bill black.

Nettapus Pulchellus..... *Gould. Birds of Aust.*

Inhabits Western Australia.

ANSER INDICUS.

Ans.—Cinereous; capite albo; fasciâ lunatâ occipitali brunneâ.

BAR-HEADED GOOSE.

Cinereous goose; with the head white; a lunate fascia on the occiput brown.

	IN.		IN.
<i>Length</i>	27	<i>Tarsi</i>	3
<i>Bill</i>	1 $\frac{3}{4}$	<i>Middle toe</i>	2 $\frac{3}{4}$

Light grey goose, with the head and neck white; a brown lunule on the occiput, and an irregular fascia a little below it, from which extends down the back of the neck a broad streak, both of the same

colour as the lunule; anterior part of the neck brown grey, having a space of white down each side between it and the brown at the back; centre tail feathers and quills brown; lateral tail feathers, upper and under tail coverts, and under surface yellowish white; a brown patch undulated with grey on each side above the thighs; bill and legs orange.

<i>Anser Indica</i>	<i>Steph. Sh. Zool.</i> 12. 36.
<i>Anas Indica</i>	<i>Lath Ind. Orn.</i> 2. 839.
<i>Bar-headed Goose</i>	<i>Lath. Gen. Syn. Sup.</i> 277.
<i>Anser Indica</i>	<i>Gould. Cent. Birds.</i>

Found in most parts of India during the winter months.

ANSER BRACHYRHYNCHUS.

Anser.—Rostro brevi.

PINK-FOOTED GOOSE.

Goose with a short bill.

	IN.		IN.
<i>Length</i>	28	<i>Bill</i>	1 $\frac{5}{8}$

Bill shorter than the head, narrow, much contracted towards the tip; nail and the space from the nostrils to the base black, intermediate space pink; irides dark brown; head and neck dark ashy brown, lighter towards the lower part; wing coverts and tertiaries brownish grey, edged with white; wing feathers dark grey, shafts white; below, sides, and thighs grey.

<i>Anser Brachyrhynchus</i>	<i>Baellon.</i>
—— <i>Phœnicopus</i>	<i>Bartlet, Pro. Zool. Soc.</i> 1839. p. 3.

Has been killed several times in the British Isles. Is supposed to retire to the north of Europe for breeding.

ANSER ERYTHROPUS.

Ans.—Cinereus; maculâ albâ basum rostri cingente.

LAUGHING GOOSE.

Cinereous goose; with a white patch surrounding the base of the bill.

	IN.		IN.
<i>Length</i>	27	<i>Tarsi</i>	2½
<i>Bill</i>	2	<i>Middle toe</i>	2¾

Head, neck, chest, breast, and belly grey brown, the latter marked with irregular patches and bars of black; back brown, with each feather margined with lighter; quills dark hoary brown; vent, abodmen, and upper tail coverts white; tail grey brown, tipped with white; the two outer tail feathers entirely white; a white patch on each side the base of the bill.

<i>Anser Erythropus</i>	<i>Flem. Brit. An.</i> 127.
<i>Anas</i>	<i>Linn. Syst.</i> 1. 197.
<i>Anser albifrons</i>	<i>Steph. Sh. Zool.</i> 12. 25.
<i>Laughing Goose</i>	<i>Edw. Gle. pl.</i> 158.
<i>White-fronted Goose</i>	<i>Penn. Brit. Zool.</i> 2. 575.
	<i>Penn. Arct. Zool.</i> 2. 476.
	<i>Lath. Syn.</i> 6. 463.
<i>L'Oie rieuse</i>	<i>Buff. Ois.</i> 9. 81.

A regular winter resident in the British Islands, and is found in the northern portion of the continents of Europe, Asia, and America. Specimens are in our collection, received from the Himalayan range and from within the arctic circle. Dr. Richardson, in the "Fauna Boreali Americana," informs us that its breeding places are in the woody districts skirting the Mackenzie, to the north of 67 parallel.

ANSER SEGETUM.

Ans.—Cinereus; rostro nigro, fasciâ flavâ ad apicem.

BEAN GOOSE.

Cinereous goose; the bill black, with a yellow fascia towards the tip.

	IN.		IN.
<i>Length</i>	30	<i>Tarsi</i>	3½

Head and neck, back, wings, tail, breast, abdomen, and flank grey brown, each feather edged with lighter, and sometimes with white; vent, under tail coverts, and rump white; bill black, with a band of yellow (in some specimens strongly tinged with pink) surrounding both mandibles near the extremity.

<i>Anser segetum</i>	<i>Steph. Sh. Zool.</i> 12. 27.
<i>Anas segetum</i>	<i>Gmel. Syst.</i> 1. 512.
.....	<i>Lath. Ind. Orn.</i> 2. 843.

ANSER ROSSII.

Anser.—Pennis atris, rostro rubido.

White goose; with black quills; bill red.

	IN.		IN.
<i>Length</i>	22	<i>Metatarsus</i>	2 $\frac{3}{4}$
<i>Bill</i>	1 $\frac{1}{2}$	<i>Middle toe</i>	2

Precisely similar to *Hyperboreus*, but much smaller.

Anser Rossii *Baird*.

In the British Museum; was obtained from California and North America.

Besides the above, there is a mounted bird in the Derby Museum, with white quill feathers, but in other respects similar to *Hyperboreus*.

ANSER HYPERBOREUS.

Anser.—Albus pennis atris.

SNOW GOOSE.

White goose; with the quills black.

	IN.		IN.		IN.
<i>Length</i>	31 $\frac{1}{2}$	<i>Bill</i>	2 $\frac{1}{4}$	<i>Tarsi</i>	2 $\frac{3}{4}$

White, with the quills black; the legs orange; bill black. In the young state this bird has the wing coverts blue, and the remainder of the plumage more or less tinged with cinereous. The bill of this species gapes more at the sides than in any other of the genus.

<i>Anas hyperborea</i>	Gmel. Syst. Nat. 1. 504.
	Lath. Ind. Orn. 2. 837.
	Pall. Spic. vi. p. 26.
<i>Anser niveus</i>	Briss. Orn. 6. 288.
<i>Oie hyperborée ou le neige</i>	Temm. Man. d'Orn. 525.
	Cuv. Reg. An. 1. 531.
<i>Anas cærulescens</i>	Linn. Syst. Nat. 198.
.....	Caprin.
	Gmel. Syst. Nat. 1. 513.
	Lath. Ind. Orn. 2. 836.
<i>Oie des Esquimaux</i>	Buff. Hist. Nat. Ois. 9. 80.

Met with in the northern parts of America and Europe.

ANSER MELANOPTERUS.

Anser.—Albus; rectricibus majoribus, tertiis, et secundariis, atris.

BLACK-AND-WHITE GOOSE.

White goose; with the greater quills, tertiaries, and secondaries black.

	IN.		IN.
<i>Length</i>	28½	<i>Tarsi</i>	3½
<i>Bill</i>	1½	<i>Middle toe</i>	3½

White, with the greater quills and adjoining secondaries brown-black, glossed with brassy; a few of the tertiary coverts with a longitudinal stripe of brown on the shaft; head and neck inclining to grey; bill orange; nail black; legs orange.

<i>Anser melanopterus, nobis</i>	
<i>Bernicla anticola</i>	Tschudi.
<i>Anser montanus</i>	Tschudi. Weig. Arch. 1843.
	1. 390.
<i>Chloephaga melanopterus</i>	Bp.
<i>Bernicla melanopterus</i>	Gray. Voy. Beagle. p. 134.
	pl. 50.

Hab. South America.

Brought home by Captain King; obtained from the lake of Titicaca, Chili. In the Museum of the Zoological Society. We observed also specimens in the British Museum, and in that of Lord Derby, at Knowsley.

ANSER FERUS.

Ans.—Cinereus; rostro aurantiaco.

WILD GOOSE.

Cinereous goose; with the bill orange.

	IN.		IN.
<i>Length</i>	34	<i>Bill</i>	2 $\frac{3}{8}$

Head, neck, back, and wing coverts grey brown, the former rather the lightest; all the feathers edged with light grey; breast and belly dirty white, crossed by a stripe of grey; rump, vent, and under tail coverts white; bill deep orange, with the nail white; legs, tarsi, and feet red.

<i>Anser ferus</i>	<i>Steph. Sh. Zool.</i> 12. 28.
<i>Anas ferus</i>	<i>Gmel. Syst.</i> 1. 510.
	<i>Lath. Ind. Orn.</i> 2. 841.
<i>Grey lag Goose</i>	<i>Penn. Brit. Zool.</i> 2. 570.
	<i>Penn. Arct. Zool.</i> 2. 473.
	<i>Lath. Syn.</i> 6. 459.
<i>Oie cendree ou premiere</i>	<i>Temm. Man. Orn.</i> 2. 818.

We have followed Mr. Stephens and Mr. Gould in preserving to this species the name of *Ferus*, and to one of the foregoing *A. segetum*, as being better known than those of Dr. Fleming used by Mr. Selby. The above bird arrives here in the winter in great numbers, and, according to Temminck, the distribution of it is very wide, being over Europe, Nubia, and part of Western Africa, inhabiting lakes and marshes.

Breeds in the north, and formerly reared its young in this country, laying about ten eggs of a white colour.

ANSER GUINEENSIS.

Ans.—Griseo-cinereus; subtus albus, tuberculo ad basin rostri.

SWAN GOOSE.

Griseous-cinereous goose; below white, with a tubercle at the base of the bill.

Length..... 39 inches.

Above cinereous grey, with the edges of the feathers light grey; from the occiput down the back of the neck runs a dark-brown streak to the back; fore part of the neck, breast, and abdomen dirty white; bill (which has a large knob at its base) greenish white colour; legs orange.

The female is less than the male, and with the colours not so distinct; the knob at the base of the bill is also smaller.

<i>Anser Guineensis</i>	<i>Raii Syn.</i> 1. 38.
	<i>Briss. Orn.</i> 6. 280.
<i>Anser Cygnoides</i>	<i>Linn. Syst.</i> 1. 194.
	<i>Lath. Ind. Orn.</i> 2. 838.
<i>Chinese Goose</i>	<i>Penn. Arct. Zool.</i> 2. 571.
<i>Swan Goose</i>	<i>Bewick Brit. Birds,</i> 2. 281.
<i>L'Oie de Guinée</i>	<i>Buff. Ois.</i> 9. 72, <i>pl.</i> 3, <i>pl.</i>
	<i>Enl.</i> 347.

Said to inhabit (in a wild state) some parts of Siberia and Kamschatka, and to have been originally brought to this country from Guinea, but are now to be found in a semi-domesticated state in most parts of Europe.

This species crosses freely with the common tame goose, and their offspring are again productive.

ANSER HUTCHINSII.

Ans.—Minusquam sequenti, sed similis.

HUTCHINS' GOOSE.

Goose similar to the following, but smaller.

	IN.		IN.
<i>Length</i>	25	<i>Tarsi</i>	2½
<i>Bill</i>	1½	<i>Middle toe</i>	3½

Goose, with the head, neck, rump, and tail black; back and wings brown, with the edges of the feathers lighter; a small mark anterior to the eye, and a white kidney-shaped patch on the throat; below white, with the flank transversely barred with grey; bill and feet black.

- Anser Hutchinsii* Faun. Bo. Am. 2 p. 270.
Anas Bernicla, Var. B. Rich app. Parry 2 Voy. 1. 368.
Bernicla Leucoparcia Brandt.
Anser Canadensis Pall.

A common species in Hudson's Bay and the arctic parts of America, where it has, until separated by Dr. Richardson, been founded with the Canada goose, which it much resembles in every respect except in size.

ANSER CANADENSIS.

Anser.—Cinereus; capite colloque superiore atris; genis guttureque maculâ albâ.

CANADA GOOSE.

Cinereous goose; with the head and upper part of the neck black; the cheeks and throat with a white patch.

	IN.		IN.
<i>Length</i>	42	<i>Tarsi</i>	3½
<i>Bill</i>	2 1-6th.	<i>Middle toe</i>	4¼

Goose with the head, upper half of the neck, quills, tail, and rump velvet black; back and wings brown, with the edges of each feather lighter; the lower part of the neck anteriorly and under surface white, with a grey tinge at the root of the feathers; a large kidney-shaped patch on the throat and cheeks, with the small ends placed behind the eye white; upper tail coverts also white; bill and feet black.

- Anas Canadensis* Linn. Syst. Nat. 1. 198.
Anser Canadensis.. Bonap, Syn. Bir. Am. 377.
 Aud. Orn. Biog. 3. 18.

This species is easily kept in a semi-domesticated state, and breeds freely. In a wild state it breeds in the neighbourhood of Hudson's Bay, from whence they migrate southward over the American Continent during winter. Lays about five eggs.

CYGNUS OLOR.

Cyg.—Albus; rostro aurantiaco, tuberculâ culmine ad basin pedibusque atris.

MUTE SWAN.

Cyg. white; bill orange, with a knob on the culmen and feet black.

Length..... 5 feet 6 inches.

<i>Anas olor</i>	<i>Gmel. Syst.</i> 1. 501.
<i>Anas cygnus mansuetus</i>	<i>Linn. Syst. Nat.</i> 1. 194.
	<i>Raii Syn.</i> 133 A.
<i>Mute Swan</i>	<i>Penn. Arct. Zool.</i> 2. 470.
	<i>Lath. Gen. Syn.</i> 6. 436.
<i>Le Cygne</i>	<i>Buff. Ois.</i> 9. 3 pl. 1.

Supposed to have been introduced into this country from Asia, and is said at present to exist in a wild state in Russia and Siberia; now found commonly on large rivers and pieces of water, where it is half domesticated and breeds freely, laying six or seven eggs of a dirty white colour, or with a very slight tinge of greenish; sits about six weeks.

CYGNUS IMMUTABILIS.

Cyg.—Albus; rostro aurantiaco, tuberculâque culmine ad basin atro; pedibus flavicantibus.

POLISH SWAN.

White swan; with the bill orange, and a tubercle on the culmen at the base black; the feet yellowish.

Similar in size and in every other particular to the preceding, except in the colouring of the feet and legs, which are light drab colour.

The young of this species are white from the eggs, and do not exhibit any of the grey or brown colouring found invariably among the others.

Cygnus immutabilis..... *Yarrell.*

For what we have said concerning this species we are altogether indebted to the Earl of Derby and William Yarrell, Esq. We never have had an opportunity of minutely examining a specimen for ourselves. Several specimens have been killed this winter (1857-8) both

in Scotland and in England, from flocks varying in number from seven to thirty.

Mr. Yarrell also informs us that hitherto he was only acquainted with the bird as an article of commerce among the London dealers in live birds, who distinguished it by the name of the Polish Swan.

CYGNUS ATRATUS.

Cyg.—Niger, cinereo undulato.

BLACK SWAN.

	FT.	IN.		IN.
<i>Length</i>	4	2	<i>Outer toe</i>	4 $\frac{1}{2}$
<i>Tarsi</i>	4 $\frac{1}{4}$		<i>Inner toe</i>	3 $\frac{3}{4}$
<i>Centre toe</i>	5		<i>Hind toe</i>	$\frac{7}{8}$

Black, with the edges of the feathers cinereous; quills, secondaries, and greater coverts white, tipped with black; bill carmine red, marked transversely near the tip, with a white band; nail white; legs and feet dark yellowish ash, with the webs darkest.

<i>Anas atrata</i>	<i>Lath. Ind. Orn.</i> 2. 834.
<i>Anas plutonia</i>	<i>Shaw, Nat. Misc. pl.</i> 108.
<i>Cygnus atratus</i>	<i>Steph. Sh. Zool.</i> 12. 18.
<i>Black Swan</i>	<i>Lath. Gen. Syn. Sup.</i> 2. 343.
<i>Le Cygne noir</i>	<i>Cuv. Reg. An.</i> 1. 529.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 15, <i>tab.</i> 12.

Entirely an Australian species. The tube of the trachea does not enter the sternum, but is attached to the *os furcatum* by a ligament; in other respects the anatomy resembles that of the true swans.

CYGNUS NIGRICOLLIS.

Cyg.—Albus; capite colloque atris.

BLACK-NECKED SWAN.

White swan; with the head and neck black.

	FT.	IN.		IN.
<i>Length</i>	4	2	<i>Bill</i>	3 $\frac{3}{4}$

White swan ; with the head and neck black ; bill black, with two knobs at the base ; legs orange.

<i>Anas nigricollis</i>	<i>Gmel. Syst. Nat.</i> 1. 502.
	<i>Lath. Ind. Orn.</i> 2. 834.
<i>Anas melanocephalus</i>	<i>Gmel. Syst. Nat.</i> 1. 502.
<i>Cygnus nigricollis</i>	<i>Steph. Sh. Zool.</i> 12. 17.
<i>Anas melancorypha</i>	<i>Moll. French edit.</i> 213.

Inhabits the Falkland Isles and the Straits of Magellan.

CYGNUS BEWICKII.

Cyg.—Albus ; rostro atro, baso usque ad nares aurantiaco.

BEWICK'S SWAN.

White swan ; with the bill black, the base orange to the nostrils.

	FT.	IN.		IN.
<i>Length</i>	3	10½	<i>Tarsi</i>	4¾
<i>Bill</i>		3½	<i>Middle toe</i>	5

White ; with the bill black, the basal half yellow, the yellow marking truncated at the extremity ; legs and toes black.

Cygnus Bewickii, and *trachea*... *Yarr. Linn. Trans.* vol. 10.
Eyton, Hist. R. Brit. Birds,
p. 86.

Discovered by Mr. Yarrell and Mr. R. Wingate to be an inhabitant of the British Isles.

The trachea of this species during youth penetrates the keel of the sternum in a similar manner to that of *C. ferus*, but may always be distinguished by the greater length of the bronchiæ. As the bird approaches maturity the tube at the internal extremity of the portion penetrating the sternum takes a horizontal twist, increasing in size and the depth to which it penetrates with age.

CYGNUS AMERICANUS.

Cyg.—*Cygnus Bewickii* similis, sed majore.

AMERICAN SWAN.

Swan like *Cygnus Bewickii*, but larger.

	FT.	IN.		IN.
<i>Length</i>	4	1	<i>Tarsi</i>	4
<i>Ext. Alæ</i>	7	0	<i>Middle toe</i>	6
<i>Bill</i>	4		<i>Outer toe</i>	5½

The only specimen of this bird we have seen was shown to us by Mr. Audubon ; it appeared to have the bill more expanded towards the tip than is the case in *Cygnus Bewickii*, and altogether to be of larger size. The Prince of Musignano assures us that he is quite satisfied as to its distinctness from *C. Bewickii*.

Cygnus Americanus..... Sharpless in Siliman's Journal
Trachea Ditto ditto.
Cygnus Bewickii Faun. Bo. Am. 2. 465.

Inhabits North America.

The following is an extract from Dr. Sharpless's paper above quoted. We must not, however, forget to mention that the tracheal anatomy of this species is so very similar to that of *C. Bewickii*, that Dr. Sharpless has copied the illustrations of Mr. Yarrell's paper on that species, published in the Linnean Transactions, to illustrate his on *C. Americanus*.

SPECIFIC CHAR. Beak black, and semi-cylindrical ; sides of the base with a small orange or yellow spot ; body white ; tail feathers, twenty ; feet black.

	Hooper.	Bewick.	American.
Weight	24 lbs.	13¾ lbs.	21 lbs.
Point of bill to the end of tail ...	5ft.	3ft. 9in.	4ft. 6in.
————— edge of forehead	4¾in.	3½in.	4¾in.
————— eye	5¼in.	4¾in.	5in.
————— occiput	7¼in.	6¼in.	7½in.
Width of the beak at the widest part near the point			1½in. 1¼in.
———— with wings extended ...	7ft. 10in.	6ft. 1in.	7ft. 2in.
Carpus to the end of primaries...	2ft. 1½in.	1ft. 8½in.	1ft. 11in.
Length of middle toe	6½in.	5¼in.	6in.
———— intestine	12ft.	10ft. 2in.	10ft. 7in.
———— breast bone	8½in.	6¾in.	7½in.
Depth of insertion of trachea ...	3in.	5¾in.	6½in.
Length of bronchial tubes	3½in.	1½in.	1½in.
Tail feathers in number...	20	18	20

It is not improbable, as Mr. Yarrell suggests, that this species and *C. Buccinator* will be found to be confined to America; *C. Bewickii* and *C. ferus* representing them in Europe.

Dr. Richardson, in the "Fauna Boreali Americana," says that "this swan breeds on the sea coast within the arctic circle, and is seen in the fur countries on its passage only. It makes its appearance among the latest of the migratory birds in the spring, while the Trumpeter swans are, with the exception of the eagles, the earliest. Captain Lyon describes its nest as built of moss peat, nearly six feet long, four feet and three quarters wide, and two feet high exteriorly, the cavity a foot and half in diameter; the eggs brownish white, slightly coloured with darker tints."

CYGNUS BUCCINATOR.

Cyg.—Albus; rostro atro.

TRUMPETER SWAN.

White swan; with the bill black.

	IN.		IN.
<i>Length</i>	42	<i>Tarsi</i>	3½
<i>Bill</i>	2½	<i>Middle toe</i>	4¾

Cygnus Buccinator *Faun. Bo. Am.* 2. 464.

Trachea and sternum *Linn. Trans. vol. xvii. p. 1,*
T. 1.

Dr. Richardson informs us, in the "Fauna Boreali Americana," that "this is the most common of the genus in the interior of the fur countries. It breeds as far south as lat. 61, but principally within the arctic circle, and in its migrations generally precedes the geese a few days. A fold of its trachea enters a protuberance on the dorsal or interior aspect of the sternum at its upper part, which is wanting in *C. ferus* and *C. Bewickii*." It is to the Trumpeter that the bulk of the swan skins imported from Hudson's Bay belong.

CYGNUS ANATOIDES.

Cyg.—Albus; remigibus primariis, ad apicem nigris; rostro pedibusque rubris, illo lato, subdepresso, tuberculo nullo. (*King.*)

A^v winter visitant in the British Isles, particularly during hard weather; its true habitation, however, is within the arctic circle. In Iceland it also occasionally breeds.

Lives well and is prolific on large pieces of water, in a semi-domesticated state; sitting six weeks, and laying from four to six eggs of a greenish colour.

The trachea in this species perforates the keel of the sternum deeply in a vertical direction.

SARKIDIORNIS REGIUS.

Sar.—Supra niger-æneus, subtus albus; mas. carunculâ magnâ culmine restri.

BLACK-BACKED GOOSE.

Goose with the upper part brassy-black; below white; the male with a large caruncle at the base of the bill.

	IN.		IN.
Male: <i>Length</i>	30	<i>Tarsi</i>	2 $\frac{3}{4}$
<i>Bill</i>	2 $\frac{1}{2}$	<i>Middle toe</i>	3 $\frac{1}{4}$

Bill black, with a large caruncle on the culmen; head and neck white, spotted with metallic green; under parts white, and wings purplish black, glossed in some lights with brassy, a band of black extending from the back to the posterior part of the thighs; wings with a knob; lower part of the back white; tail coverts black.

	IN.		IN.
Fem.: <i>Length</i>	27	<i>Bill</i>	2

Bill without the caruncle, colouring similar, but with the white more or less tinged with brown, and without the band of black behind the thighs; bill and legs in both black.

<i>Anas regia</i>	<i>Gmel. Syst. Nat.</i> 1. 508.
	<i>Lath. Ind. Orn.</i> 2. 847.
	<i>Moll. Mist. du Chili.</i> p. 212.
<i>Carina</i>	<i>Steph. in the Zool.</i> vol. 12. 82.
<i>Anas melanotus</i>	<i>Gmel. Syst. Nat.</i> 1. 503.
	<i>Lath. Ind. Orn.</i> 2. 839.

L'Oie bronzee d'Coromandel ... Buff. Hist. Nat. des Ois.
pl. 937.

Black-backed Goose Lath. Gen. Syn. 6. 449.

Le cravant royal Vieill. En. Method. Orn.
vol. 1. 126.

L'Oie bronzee Buff. Ois. 115.

Found in Cayenne and most parts of India; is also included in the list of birds of the Deccan, by Colonel Sykes, who also says that seeds of water grasses, and the remarkable quadrangular hard seeds met with in the stomach of *Pterocles exustus*, were also found in the stomach of this bird. Colonel Sykes found the digastric muscle of the remarkable thickness of 1 1-5th inch.

SARKIDIORNIS AFRICANUS.

Sar.—Minusquam precedenti, sed in colore similis.

AFRICAN BLACK-BACKED GOOSE.

Less than the preceding, but in colour similar.

	IN.		IN.
Male: <i>Length</i>	23	<i>Tarsi</i>	2
<i>Bill</i>	2	<i>Middle toe</i>	2½
Fem.: <i>Length</i>	21	<i>Tarsi</i>	1¾
<i>Bill</i>	1¾	<i>Middle toe</i>	2½

Both sexes resemble perfectly in colouring the preceding species, except in admeasurement, in which they differ considerably. We have never seen a specimen with the caruncle, our specimen having evidently had it cut off, probably from the difficulty of preserving it.

Sarkidiornis Africanus nobis. ~~not here~~

The four specimens in our collection were received from the Gamba river. Specimens have also been brought home by Dr. Smith from Southern Africa, who has published a figure of this species.

CHENALOPEX ÆGYPTIACA.

Chen.—Dorso castaneo; subtus leviter flavo-ferrugineo, sparsus lineatusque brunneo.

ÆGYPTIAN CHENALOPEX.

With the back castaneous ; below slightly tinged with ferruginous yellow, sprinkled and lineated with brown.

	IN.		IN.
<i>Length</i>	27½	<i>Tarsi</i>	3
<i>Bill</i>	2⅛	<i>Middle toe</i>	3

Male : head and neck hoary, with the occiput and a stripe down the back of the neck approaching to ferruginous ; a patch round the eyes, and ring round the lower part of the neck deep castaneous ; upper part of the back, scapulars, tertiaries, and a triangular patch on the breast also castaneous, some of the feathers in the former being irrorated with black ; the inner webs also of some of the tertiaries hoary grey. The whole of the remainder of the breast and under surface is light yellow ferruginous, irrorated with brown, except the abdomen, which is pure white ; vent ferruginous ; lower part of the back, tail, quills, and spurious wings black ; secondaries bright metallic green, forming the wing-spot ; wing coverts white, the greater ones with a bar of black near the tips ; bill and legs orange.

Female : with the chestnut patches round the eyes and on the breast smaller.

<i>Anas Ægyptiaca</i>	<i>Linn. Syst.</i> 1. 197.
	<i>Gmel. Syst.</i> 1. 512.
	<i>Briss. Orn.</i> 6. 284. <i>pl.</i> 27.
	<i>Lath. Ind. Orn.</i> 2. 840.
<i>Chenalopex Ægyptiaca</i>	<i>Steph. Sh. Zool.</i> 12. 43.
<i>L'Oie d'Égypte</i>	<i>Buff. Pl. En.</i> 379, 982, 983.
<i>Egyptian Goose</i>	<i>Lath. Syn.</i> 6. 455.

Inhabits most parts of Africa, especially Egypt and the Cape of Good Hope. We have figured the trachea and skeleton of this bird in illustration of the genus.

CHENALOPEX JUBATUS, SPIX.

Che.—*Ægyptiaco similis sed majore et cristatus alisque anteriore æneus.*

CHE. similar to *Chenalopex Ægyptiacus*, but larger ; the head crested, and anterior part of the wing æneous.

	IN.		IN.
<i>Length</i>		<i>Tarsi</i>	2 $\frac{1}{2}$
<i>Bill</i>	1 $\frac{1}{2}$	<i>Middle toe</i>	2 $\frac{1}{4}$

CHE.: Very similar to *Chenalopex Ægyptiacus*, but with the wing coverts æneous instead of white; head, neck, and breast white; below and back ferruginous; the anterior under tail coverts black, the hinder ones white.

<i>Anas jubatus</i>	<i>Spix. Av. Sp. No. vol. 2.</i>
	<i>p. 84. pl. 118.</i>
<i>Anser polycomus</i>	<i>Cuv.</i>

Hab. Brazil.

CHENALOPEX CANA.

Che.—Mas. castaneus capite albo; occipite colloque canis.

Che.—Fem. Mari similis sed capite omnino cano.

GREY-HEADED SPURWING.

	IN.		IN.
<i>Length</i>	25	<i>Tarsi</i>	2 $\frac{1}{4}$
<i>Bill</i>	1 $\frac{3}{4}$	<i>Middle toe</i>	2 $\frac{1}{4}$

Male: castaneous chenalopex, with the whole of the head excepting the crown white; neck and crown grey; wing coverts white; secondaries with the outer webs green; quills, tail, and vent hoary brown, the latter with a black band; bill and legs black; the bend of the wing armed with a spur.

Female: similar to the male, but with the whole of the head hoary.

<i>Anas Cana</i>	<i>Gmel. Syst. 1. 510.</i>
	<i>Lath. Ind. Orn. 2. 840.</i>
<i>Bernicla Cana</i>	<i>Steph. Sh. Zool. 12. 61.</i>
<i>Grey-headed Goose</i>	<i>Lath. Syn. 6. 458.</i>
<i>L'Oie sauvage a tête grise de</i> } <i>Coromandel</i>	<i>Sonn. Voy. 2. 220.</i>

The above descriptions were taken from two specimens brought home by Dr. Smith, and exhibited in the South African Museum,

having been obtained in the neighbourhood of the Cape. It has, however, been introduced alive into this country, and kept in confinement both by Lord Derby, at Knowsley, and in the gardens of the Zoological Society. Specimens were in the Museum of that Society.

TADORNA BELLONII.

Tad.—Albus; capite colloque atris; rostro cruribusque rubris.

COMMON SHELDRAKE.

White sheldrake; with the head and neck black; the bill and legs red.

	IN.		IN.
<i>Length</i>	23½	<i>Tarsi</i>	2
<i>Bill</i>	2	<i>Middle toe</i>	2¼

Head and upper part of the neck black, glossed with green; fore part of the wings, back, tail, abdomen, and tail coverts white; tail feathers tipped with black; a line down the middle of the abdomen black; upper part of the back and band across the breast deep ferruginous; quills black; wing-spot green; bill and legs reddish orange, the latter in some specimens inclining to flesh-colour.

<i>Anas Tadorna</i>	<i>Linn. Syst. Nat.</i> 1. 195-4.
	<i>Raii Syn.</i> 140 <i>A.</i> 1.
<i>Tadorna vulpanser</i>	<i>Flem. Brit. An.</i> 1. 122.
<i>Le Tadorne</i>	<i>Buff. Ois.</i> 9. 205.
<i>Canard Tadorne</i>	<i>Temm. Man.</i>
<i>Tadorna vulpanser</i>	<i>Selb. Illust. Brit. Orn.</i> 11. 289.
	<i>Gould, Birds of Europe.</i>
<i>Tadorna Bellonii</i>	<i>Steph. Sh. Zool.</i> 12. 72.
<i>Trachea</i>	<i>Linn. Trans. vol. iv. tab.</i> 15,
	<i>fig.</i> 9, 10.

Found over nearly the whole of Europe and some parts of Asia and America; lays twelve eggs of a whitish colour, generally in rabbit holes; frequents the sea. Trachea of male slightly enlarged about an inch and half above the inferior larynx, and again contracted immediately above it, as among the *Anserinæ*. The inferior larynx is furnished with two large compressed bulbs, the one on the right side being nearly double the size of that on the left; but neither are of such strength as in those species of the last family which possess that adjunct.

TADORNA RADJAH.

Tad.—Capite, collo, ventre, ptilisque albis; collo inferiore lato castaneo cingulo ornato, sparso atro.

RADJAH SHELDRAKE.

Head, neck, belly, and anterior part of the wing white; lower part of the neck surrounded by a band of deep castaneous, irrorated with black.

	IN.		IN.		IN.
<i>Length</i>	22½	<i>Bill</i>	1½	<i>Tarsi</i>	2

Head, neck, belly, and anterior part of the wing white; lower part of the neck surrounded by a collar of deep castaneous, thickly and beautifully irrorated with black; wing-spot bright green, anterior to which there is a white stripe, then a very narrow one of black, posteriorly a narrow black stripe followed by one of white; scapulars dark-sienna brown, irrorated with black; tertiaries with the outer webs sienna brown; inner webs, quills, tail, back, and under tail coverts black; vent black, irrorated with white; bill and legs orange.

<i>Anas leucomelas</i>	<i>Garnot.</i>
— <i>Radjah</i>	<i>Duperrey, Voy. de la Coquille,</i> <i>pl. 49.</i>
<i>Radjah Eytoni</i>	<i>Richenback.</i>

Specimens are in most museums. Received from Australia, but from what part we cannot say. Although we have examined many specimens, no sexual difference has been observed.

CASARKA RUTILA.

Cas.—Ferruginea; caudâ remigesque primariis atris; speculo viridi.

FERRUGINOUS SHELDRAKE.

Ferruginous sheldrake; with the tail and quills black; the wing-spot green.

	IN.		IN.		IN.
<i>Length</i>	24½	<i>Bill</i>	1½	<i>Tarsi</i>	2

Ruddy ferruginous, with the head and anterior part of the wing lighter, sometimes nearly white; tail and lower part of the back black, glossed with green; quills black; secondaries bright glossy green, with the inner webs hoary; bill and legs black; sometimes a black ring round the neck is visible.

<i>Casarka rutila</i>	<i>Bonap. Cat. Am. and Europ.</i>
	<i>Birds.</i>
<i>Anas Casarka</i>	<i>Linn. Syst. 3 App. 224.</i>
— <i>rutila</i>	<i>Pall. Nov. Com. Petrop.</i>
	14. 579.
<i>Tadorna rutila</i>	<i>Steph. Sh. Zool. 12. 71.</i>
	<i>Selb. Illust. Brit. Orn. 2. 293.</i>
<i>Canard Casarka</i>	<i>Temm. Man. Orn. 2. 832.</i>
<i>Ruddy Sheldrake</i>	<i>Gould, Birds of Europe.</i>
<i>Ferruginous Duck</i>	<i>Bew. Brit. Birds, 2. 313.</i>
<i>Ruddy Goose</i>	<i>Lath. Syn. 6. 456.</i>

Met with occasionally in most parts of the European continent, India, and Africa; lays eight white eggs; frequents chiefly fresh water. Colonel Sykes found these birds for the most part of the year in pairs in the Deccan; but on the Nerbudda river, in Guzerat, he has seen them congregated in hundreds in April. He found the stomachs of many of them filled with grass seeds and vegetable matter only.

CASARKA SCUTELLATA.

Cas.—Capite albo nigro strigato.

CAS. with the head striped with black.

<i>Casarka scutellata</i>	<i>Muller.</i>
— <i>leucoptera</i>	<i>Strickland, Blyth.</i>
— <i>scutellata</i>	<i>Sclater, Wolf's Sketches,</i>
	<i>pl. 49.</i>

Sheldrake, with the bill orange; back brown; head white, barred with black; breast aeneous, below dark-brown; wing coverts white; speculum blue; primaries and tail black.

First found in Java by Muller, afterwards in India from the Tesarim provinces, and described by Mr. Blyth under the name of *Casarka leucoptera*.

CASARKA TADORNOIDES.

Cas.—Capite, caudâ, ventreque atris, hoc castaneo sparso; cingulo albo collo.

NEW HOLLAND SHELDRAKE.

Sheldrake, with the head, tail, back, and belly black, the latter irrorated with castaneous; a white ring round the neck.

	IN.		IN.		IN.
<i>Length</i>	27	<i>Bill</i>	$1\frac{7}{8}$	<i>Tarsi</i>	2

Head, back, belly, and tail black; the back and belly irrorated with ferruginous; lower part of the back and tail slightly tinged with green; upper part of the back, breast, and outer webs of the tertiaries ferruginous; a white collar round the neck; fore part of the wing white; wing-spot light green; quills black; legs and bill black. In the female a white band surrounds the base of the bill, from which another passes through the eye.

Anas Tadornoides Jard. and Selb. Illus. Orn.
pl. 411.
— *variegata* Gm.

Inhabits New Holland.

CASARKA LEUCOPTERA.

Cas.—Capite collo et alis anterioribus albis.

Cas. with the head, neck, and wing coverts white.

	IN.		IN.		IN.
<i>Bill.....</i>	$2\frac{1}{8}$	<i>Tarsi.....</i>	$2\frac{1}{4}$	<i>Middle toe.....</i>	$2\frac{1}{4}$

Head, neck, and wing coverts white; secondary wing coverts grey; remainder dark-chocolate brown.

Casarka leucoptera.. Blyth. Jerd.
Anas scutellata Mull.

Hab. Java and Burmah.

CASARKA CASTANEA

Cas.—Castanea; capite colloque albo.

CASTANEOUS SHELDRAKE.

Castaneous sheldrake; with the head and neck white.

	IN.		IN.
<i>Length</i>	29	<i>Tarsi</i>	2½
<i>Bill</i>	2½	<i>Middle toe</i>	2½

Sheldrake, with the body below castaneous; the head, neck, and greater wing coverts white; the back, rump, and tail brown, the former speckled with white; tertiaries, with the external webs castaneous, the internal ones and some of the secondary coverts blueish grey; bill black; legs crimson.

Casarka castanea nobis.

Purchased from Mr. Leadbeater, who received it from New Holland.

DENDROCYGNA MAJOR.

Dend.—Collo posteriore atro.

DEND. with the back of the neck black.

	IN.		IN.
<i>Length</i>	12	<i>Metatarsus</i>	2½
<i>Bill</i>	2	<i>Middle toe</i>	3½

Back black, the edges of the feathers edged with brunneous; below brunneous; under and upper tail coverts yellowish white; tail dark-brown; a black stripe down the back of the neck, from which about the middle is a collar about an inch wide encircling the neck, and composed of small whitish feathers, edged with light brown; head and upper part of the neck brownish chestnut; vertex darker.

<i>Dendrocygna Major</i>	<i>Jerd. Ind. Illus. Orn. pl. 22.</i>
———— <i>vagans</i>	<i>Fraser.</i>
———— <i>arcuata</i>	<i>Gould. B. Aust.</i>
———— <i>Badia</i>	<i>Mull.</i>
———— <i>arcuata</i>	<i>Newton. Ibis. 1863. p. 175. 460.</i>

Hab. Madagascar.

DENDROCYGNA ARCUATA.

Dend.—Fusca; marginibus pennarum vinaceis, subtus castanea; vertice brunneo.

ARCUATED WHISTLING DUCK.

Fuscous duck; with the margins of the feathers vinaceous, below castaneous; the head brown.

<i>Length</i>	IN. 19	<i>Tarsi</i>	IN. $1\frac{3}{4}$
<i>Bill</i>	$\frac{5}{8}$	<i>Middle toe</i>	$2\frac{3}{4}$

Duck, with the head and neck whitish, slightly tinged with yellow vinaceous; crown brown; back hoary fuscous, the edges of each feather vinaceous, forming arcuated lines; wing and upper tail coverts deep chestnut; below ferruginous; under tail coverts white; quills and tail black; bill and feet also black.

Female smaller, and the colours less distinct.

<i>Anas arcuata</i>	<i>Hors. Zool. Res. Java.</i>
— <i>Javanica</i>	<i>Hors. Arrang. of the Birds</i> <i>of Java: Linn. Trans.</i> <i>vol. xiii. p. 199.</i>
<i>Mareca Ausuree</i>	<i>Sykes, Proc. Zool. Soc. 1832,</i> <i>p. 168.</i>

Found by Dr. Horsfield in Java, and by Colonel Sykes in the Deccan. It appears to be generally dispersed over India. Colonel Sykes, in his Synopsis, says it is "gregarious, and abundant in the Deccan. Sexes alike in plumage." "These birds are characterised by a very peculiar whistle when disturbed."

DENDROCYGNA GUTTULATA.

Dend.—Arborea similis sed majore et alis anterioribus non punctatus.

DEND. similar to *Dendrocygna arborea*, but larger, and the wing coverts without spots.

<i>Bill</i>	IN. 2	<i>Tarsi</i>	IN. $1\frac{3}{4}$	<i>Middle toe</i>	IN. $2\frac{1}{8}$
-------------------	----------	--------------------	-----------------------	-------------------------	-----------------------

Very similar to *Dendrocygna arborea*, but larger; the feet not so long, and the lower parts marked with brown spots instead of white.

Dendrocygna guttulata Wallace, *Birds of Borou.*
Anas guttata Forst.

Hab. Bourou, Ceram.

DENDROCYGNA AUTUMNALIS.

Dend.—Fusca; vertre atro; rostro pedibusque rubris.

AUTUMNAL WHISTLING DUCK.

Fuscous; with the belly black; bill and legs red.

	IN.		IN.
<i>Length</i>	24	<i>Tarsi</i>	2
<i>Bill</i>	2	<i>Middle toe</i> ..	2½

Back, crown, head, collar on the neck, and tertiary coverts vinaceous; streak down the back of the neck black fuscous; throat, cheeks, and upper part of the breast grey, inclining to vinaceous on the former; secondaries, top of the primaries, tail, belly, and lower part of the back black; under tail coverts barred with black and dirty white; base of the primaries, and some of the primary coverts white.

<i>Anas Autumnalis</i>	<i>Linn. Syst.</i> 1. 205.
	<i>Gmel. Syst.</i> 1. 537.
	<i>Lath. Ind. Orn.</i> 2. 852.
<i>Red-billed Whistling Duck</i>	<i>Edw. Glea. pl.</i> 194.
	<i>Lath. Gen. Syn.</i> 6. 498.
<i>Siffleur a bec rouge et narines</i> } jaune.....	<i>Buff. Ois.</i> 9. 183.

Inhabits the West Indian Isles; is common also in South America. We have received it from Peru, where it is not uncommonly kept tame as in this country.

DENDROCYGNA VIDUATA.

Dend. Mas.—Capite anteriore guttureque albis; subtus atro.

Dend. Fem.—Mari similis, sed obscurior.

WIDOW WHISTLING DUCK.

Male duck with the fore part of the head and throat white; below black.

Fem. duck similar, but with the marking not so bright.

	IN.		IN.		IN.
<i>Length</i>	20	<i>Bill</i>	$1\frac{7}{8}$	<i>Tarsi</i>	$1\frac{3}{4}$

Fore part of the head and throat whitish; crown white, with the tip of the feathers stiff, like hair, and olive-brown; occiput and hind neck black; upper part of the neck and breast dark chestnut; back fuscous olive, the edge of each feather lighter; smaller wing coverts chestnut; quills and secondaries black; remainder of the wing fuscous, with a tinge of green; tail, middle of the abdomen, and thighs black; flanks yellowish white, barred with black; legs and bill black.

Female similar, but with the colours not so bright.

<i>Anas viduata</i>	<i>Linn. Syst.</i> 1. 205.
	<i>Gmel. Syst.</i> 1. 536.
	<i>Lath. Ind. Orn.</i> 2. 858.
<i>Spanish Duck</i>	<i>Penn. Genera of Birds,</i>
	<i>pl.</i> 13.
<i>Canard a face blanc de</i> }	<i>Buff. Ois.</i> 9. 255.
<i>Maragnon</i>	

Inhabits both South America and Senegal. Is represented by travelers as having, like the rest of its genus, a peculiar whistling note.

DENDROCYGNA ARBOREA.

Dend.—*Brunnea albo maculato* ; vertex nigro.

BLACK-BILLED WHISTLING DUCK.

Brown duck, mottled with white; the crown black.

	IN.		IN.
<i>Length</i>	$19\frac{1}{2}$	<i>Middle toe</i>	3
<i>Bill</i>	$2\frac{1}{8}$	<i>Outer toe</i>	2 3-5ths
<i>Tarsi</i>	3	<i>Hind toe</i>	1
<i>Inner toe</i>	2 1-5th		

Crown black; fore part of the head, breast, and wings dark-brown; lighter on the edges of the feathers; breast and neck dirty white, at the lower part slightly spotted with black and brown; a streak down the back of the neck dark-brown; under surface white, each feather barred with black and brown; thighs the same; tail and lower part of the back black; bill lead-coloured; legs and feet black.

<i>Anas Arborea</i>	<i>Linn. Syst. Nat.</i> 1. 207.
	<i>Gmel. Syst. Nat.</i> 1. 540.
	<i>Lath. Ind. Orn.</i> 2. 852.
<i>Anas fistularis Jamaicensis</i>	<i>Raii Syn.</i> 192.
<i>Black-billed Whistling Duck</i> ..	<i>Edw. Gla. pl.</i> 193.
<i>Canard Siffleur de St Dominique</i>	<i>Buff. Ois.</i> 804.

Inhabits the West Indies and the adjacent portions of America.

LEPTOTARSIS EYTONI.

Lep.—Brunneus; lateribus axillaribusque ferrugineis.

BROWN SLENDERLEGS.

Brown duck; with the flanks axillaries ferruginous.

	IN.		IN.
<i>Length</i>	21	<i>Tarsi</i>	2 1-5th
<i>Bill</i>	1½	<i>Middle toe</i>	2½

Duck, with the wings, back, and scapulars vandyke brown, inclining to slaty blue on the upper part of the back; flanks posteriorly bright ferruginous buff, ornamented with very long axillary feathers, each of which are edged with black, and entirely covered when the wing is closed; tail coverts also buff; the flanks anteriorly and under wing coverts bright ferruginous, the former beautifully barred with black; crown and streak down the back of the neck sienna brown, the feathers on the former rather stiff; below luteous, inclining to dirty lemon colour; the chin and throat lighter; two-thirds of the bill towards the base black; the remainder, with the legs, approaching to orange yellow.

Leptotarsis Eytoni..... *Gould's MSS.*

This beautiful bird, which Mr. Gould has done us the honour to call by our name, was in the possession of the Zoological Society, and was received from Australia; but since then many more specimens have been brought over.

DAFILA UROPHASIANUS.

Daf.—Mas.—Caudâ pallidé rufis; dorso, capite, colloque brunneis, marginibus pennarum saturationibus.

Daf. Fem.—Mare similis, sed subtus fuscus.

PINTAIL.

Pintail, with the tail pale rufous; the back, head, and neck brown; the edges of the feathers lighter.

Fem. like the male, but below fuscous.

	IN.		IN.		IN.
<i>Length</i>	24½	<i>Bill</i>	2	<i>Tarsi</i>	1¾

Male: with the head, neck, and body grey-brown; the edges of the feathers light fuscous; cheeks, throat, and upper part of the fore neck white; wing coverts fuscous; speculum bright green, anterior to which there is a stripe of pale-red fuscous; posteriorly a narrow one of black, then a broad one of pale-reddish fuscous; tail and upper tail coverts pale reddish; bill and legs fuscous, the former with an orange patch on each side.

Female: similar to the male, but much smaller; and below brownish fuscous.

Anas urophasianus, King *Zool. Jour.* 4. 351.

Although some difference exists in length between our specimens of this bird and that described by Captain King as above, and also a trifling one in colouring, we have been induced to place them as one, both having been received from the west coast of South America, placing ours the smallest as the female. Mr. Vigors, however, makes no mention of the orange-marking on each side of the bill, which we suspect to be only apparent in all old birds during the season of love. The buff colour on the wing also changes to white during certain times of the year in all the Pintails.

DAFILA PYROGASTER.

Daf.—Subtus alba, singulis pennis marginatis apices versus lunulis brunneis.

BROWN-BELLIED PINTAIL.

Pintail: below white, with each feather edged near its tip with a lunule of bright brown.

	IN.		IN.
<i>Length</i>	24	<i>Inner toe</i>	$1\frac{3}{4}$
<i>Bill</i>	1 4-5ths	<i>Middle toe</i>	$2\frac{1}{8}$
<i>Tarsi</i>	2	<i>Outer toe</i>	2

Under parts, breast, and upper part of the back dirty white, each feather having near its tip a lunule of brown, brighter on the breast and shaded off at the edges; tail black; wing coverts brown; wing-spot brassy purplish, edged posteriorly with brassy green, and then with a broad band of white, formed by the secondaries; neck dirty white, slightly spotted with brown and black; head slightly crested; crown and crest brown; bill lead-coloured; legs black.

Anas pyrogaster..... *Meyen Nova acta.*

In the Museum of the Zoological Society, in Lord Derby's collection, and in my own collection. Inhabits Chili.

DAFILA CAUDACUTA.

Daf. Mas.—Capite colloque anteriore brunneis; posterioriter atro, albo marginato.

Daf. Fem.—Brunnea, marginibus pennarum suturationibus; speculo flavo-rufo.

PINTAIL.

Male pintail, with the head and upper part of the neck brown; the posterior part black, bordered with white.

Fem. brown, with the edges of the feathers lighter; wing-spot buff.

	IN.		IN.		IN.
<i>Length</i>	24	<i>Bill</i>	2	<i>Tarsi</i>	1 $\frac{3}{4}$

Male: crown, throat, cheeks, and upper part of the neck brown, with purple inflections; back part of the neck black, bordered on each side with white; fore neck and below white; speculum green, bordered above with buff, below with white; scapulars black, with light-buff edges; back and flanks white, undulated with lines of black; middle tail feathers (elongated) grey-black; bill lead-coloured; feet and tarsi reddish; eyes brown.

Fem.: smaller than the male; brown, with the edges of the feathers light; lower parts lighter; scapulars buff, margined above with lighter, below with white; middle tail feathers slightly elongated. During the summer months the male assumes nearly the plumage of the female, being ferruginous below.

<i>Anas caudacuta</i>	<i>Raii Syn.</i> 147. <i>A.</i> 5.
<i>Dafila caudacuta</i>	<i>Steph. Sh. Zool.</i> 12. 127.
<i>Anas acuta</i>	<i>Linn. Syst.</i> 1. 202.
	<i>Gmel. Syst.</i> 1. 528.
	<i>Wils. Am. Orn.</i> 8. 75.
<i>Querquedula acuta</i>	<i>Selb. Illust. Brit. Orn.</i>
	<i>vol. ii.</i> 311.
<i>Trachea</i>	<i>Linn. Trans. vol. 4, tab.</i> 13,
	<i>fig.</i> 6.

A very widely distributed species, being found over Asia, Europe, America, and the north of Africa as far as the Gamba, from whence we have received them in the summer state of plumage. Breeds in Holland and Germany in morasses, building its nest of flags and grass, and laying eight eggs of a greenish blue colour.

DAFILA MARMORATA.

Daf.—Toto corpore marmorato obscuro et subfusco.

MARBLED DUCK.

Duck, with the whole body marbled with dark and light brown.

	IN.		IN.
<i>Length</i>	18	<i>Inner toe</i>	1 $\frac{3}{8}$
<i>Bill</i>	1 4-5ths	<i>Middle toe</i>	1 $\frac{7}{8}$
<i>Tarsi</i>	1 $\frac{1}{8}$	<i>Outer toe</i>	1 $\frac{3}{4}$

The whole body beautifully marbled with light sepia brown and dusky white; the edges of the feathers white, the base bright brown, except those on the breast, which have the base lighter; head slightly crested; the forehead, crown, and occiput light brown, the former barred with black; neck white, with minute longitudinal black dashes; tail ashy brown, the tip of each feather lighter; bill and legs deep lead-colour.

Fuligula marmorata Gould, *Birds of Europe*.

Anas marmorata Temm.

Sexes not known, or the same in plumage.

Inhabits southern Europe and the adjoining portions of Asia; it is, however, rare. We suspect the male has not yet being discovered.

PÆCILONITTA ERYTHRORHYNCHA.

Pæc.—Cinereo brunnea, jugulo genisque albis; rostro coccineo.

RED-BILLED MARBLED DUCK.

Cinereous brown duck, with the throat and cheeks white; the bill red.

	IN.		IN.
<i>Length</i>	17½	<i>Tarsi</i>	1½
<i>Bill</i>	2	<i>Middle toe</i>	2

Slaty brown duck, with the bill red; at first sight very similar to *P. Bahamensis*—the white markings on the throat and cheeks are, however, more extensive, and the bird altogether rather larger; the tertiaries and scapulars, instead of being elongate as in *Bahamensis*, are broad and short; the tail has all the feathers of equal length; the wing-spot is white, bounded posteriorly with buff.

Anas erythrorhyncha..... Gmel. *Syst.* 1. 517.

Lath. Ind. Orn. 2. 855.

Crimson-billed Duck *Lath. Gen. Syn.* 6. 507.

Pæcilonitta Smith.

Brought home from the Cape of Good Hope by Dr. Smith, to whom we are indebted for permission to take the above description.

PÆCILONITTA BAHAMENSIS.

Pæc.—Guttur albo; speculo violaceo utrinque subflavo marginato; rostro duabus coccineis maculis lateribus.

BAHAMA MARBLED DUCK.

Throat white; wing-spot metallic violet, bounded on each side by a streak of buff; the bill with two red markings on the sides.

	IN.		IN.
<i>Length</i>	18 $\frac{1}{2}$	<i>Tarsi</i>	1 $\frac{1}{2}$
<i>Bill</i>	1 $\frac{3}{4}$	<i>Middle toe</i>	1 $\frac{3}{4}$

Bill lead-coloured, lighter on the sides; tail and back brown, edged with lighter; crown immaculate sepia brown; breast grey, spotted with brown; wing-spot metallic violet, bounded anteriorly with a narrow stripe of buff, posteriorly with a broad one; legs and bill fuscous, the latter with a triangular patch of red on each side behind the nostrils.

Sexes similar.

In the young bird the bill is reddish brown.

<i>Anas Bahamensis</i>	<i>Linn. Syst.</i> 1. 199.
	<i>Gmel. Syst.</i> 1. 516.
	<i>Lath. Ind. Orn.</i> 2. 835.
<i>Plathera Duck</i>	<i>Catesb. Carol.</i> 1. pl. 63.
	<i>Penn. Arct. Zool.</i> 2. pl. 95.
	<i>Lath. Gen. Syn.</i> 6. 507.
<i>Mareca Bahamensis</i>	<i>Steph. Sh. Zool.</i> 12. 137.
<i>Le Marec</i>	<i>Buff.</i>

Inhabits Brazil and the Bahamas.

MARECA AMERICANA.

Mar. Mas.—Speculo viridi, utrinque atro marginato, et fascia latâ viridi post oculari.

Mar. Fem.—Brunnea, marginibus pennarum suturationibus.

AMERICAN WIDGEON.

Mas. speculum metallic green, broadly bounded on each side by black; a broad fascia of green behind the eye.

Fem. brown, the edges of each feather lighter.

	IN.		IN.		IN.
<i>Length</i>	23	<i>Bill</i>	1 $\frac{5}{8}$	<i>Tarsi</i>	1 $\frac{5}{8}$

Male: has a cream-coloured patch extending from the culmen of the bill to the crown; behind the eye a green patch extending to the occiput; remainder of the head and neck cream-colour, blotched and dotted with black; breast vinaceous, the edges of the feathers lightest; back grey, narrowly barred with black and cream-colour; wing coverts and abdomen white; under tail coverts black; quills and tail grey; tertiaries grey, with the outer webs black, edged with cream-colour; bill lead-colour, tipped with black; legs reddish; two centre tail feathers elongated.

Fem.: with the upper surface brown; each feather edged with lighter; without the green on the head, and rather smaller than the male.

<i>Anas Americana</i>	<i>Gmel. Syst.</i> 1. 526.
	<i>Lath. Ind. Orn.</i> 2. 861.
<i>American Widgeon</i>	<i>Penn. Aret. Zool.</i> 2. 502.
	<i>Wils. Am. Orn. p.</i> 86, <i>pl.</i> 69,
	<i>f.</i> 4.
<i>Mareca Americana</i>	<i>Steph. Sh. Zool.</i> 12. 135.

Inhabits, America, the West Indies, and Cayenne, frequenting inland lakes and rivers, as well as the sea coast; breeds in the northern part of America in swamps, laying six or eight eggs. This bird is curious, as presenting a connecting link between the widgeon and pintail. The bill is that of the former, and the two elongated tail feathers show an affinity to the latter.

MARECA CHILOENSIS.

Mar.—Fronte genis pteromatibus subtusque albis, strigâ post occulari purpurescente-æneâ.

CHILOE WIDGEON.

Widgeon, with the forehead, cheeks, wing coverts, and under surface white; a post ocular streak æneous-purple.

	IN.		IN.
<i>Length</i>	19	<i>Middle toe</i>	2 $\frac{1}{8}$
<i>Bill</i>	1 $\frac{3}{8}$	<i>Inner toe</i>	1 $\frac{1}{2}$
<i>Tarsi</i>	1 $\frac{1}{2}$	<i>Outer toe</i>	1 $\frac{7}{8}$

Widgeon, with the forehead, cheeks, abdomen, breast, upper and under wing coverts, and upper tail coverts white; a streak from the eye to the occiput brassy purple; neck, remainder of the head, lower part of the back, and numerous transverse bars across the breast dark-brown; tertiaries and scapulars also dark-brown; with the edges of the feathers white; quills light brown; speculum velvet black; flanks white, clouded with ferruginous; tail brown; legs, feet, and bill brown.

Anas Chiloensis, King Zool. Proc. 1831. 15.

Inhabits the Island of Chiloe. We have also received specimens from Cayenne.

MARECA FISTULARIS.

Mar. Mas.—Vertice flavo; capite cristâque castaneis.

Mar. Fem.—Brunnea, marginibus pennarum suturationibus.

WIDGEON.

Male, crown cream-coloured; head crested chestnut.

Fem., brown, with the edges of the feathers lighter.

	IN.		IN.		IN.
<i>Length</i>	20	<i>Bill</i>	1½	<i>Tarsi</i>	1½

Widgeon, with the crown cream-coloured; cheeks, throat, and neck chestnut, occasionally spotted with black; breast vinaceous; back white, each feather minutely barred and waved with dark-grey; flanks the same; belly white; under tail coverts black; speculum metallic green, bounded by black; wing coverts white; remainder of the quills and coverts grey; bill lead-coloured; legs and feet black.

Fem.: with the back fuscous grey, the edges of the feathers lighter; head and neck fuscous, spotted with black; below white; remainder as in the male.

Mareca fistularis Steph. Sh. Zool. 12. 131.

Anas fistularis Briss. Orn. 6. 391, p. 35. f. 2.

— *Penelope*..... Linn. Syst. 1. 202.

Gmel. Syst. 1. 527.

Lath. Ind. Orn. 2. 860.

<i>Widgeon</i>	<i>Penn. Brit. Orn.</i> 2. 268. <i>Lath. Gen. Syn.</i> 6. 518.
<i>Canard siffleur</i>	<i>Buff. Ois.</i> 9. 169, <i>pl.</i> 10, 11.
<i>Trachea</i>	<i>Linn. Trans. vol. iv. tab.</i> 13, <i>fig.</i> 9.

Common in the British Islands during winter, frequenting both the sea and fresh water. It is a very widely distributed species, being found throughout Africa, America, and Asia.

MARECA CASTANEA.

Mar. Mas.—*Castaneus atro maculato*; *speculoque viridi*.

Mar. Fem.—*Brunnea cinerea*, *marginibus pennarum saturationibus*.

CASTANEOUS WIDGEON.

Mas. castaneus spotted with black; the wing-spot green.

Fem. cinereous brown, with the edges of the feathers lighter.

	IN.		IN.		IN.
<i>Length</i>	17½	<i>Bill</i>	1 3-5ths	<i>Tarsi</i>	1½

Male: under parts, neck, and upper part of the back castaneous, spotted with black; lower part of the back black, each feather edged with castaneous; wing coverts brown, slightly tinged with greenish; quills brown; secondary coverts tipped with white; tail and under coverts black, glossed with green and purplish; wing-spot bright green; head black, glossed with green; bill, legs, and feet black.

Fem.: rather smaller than the male; light brownish grey, spotted with dark; wing-spot green, edged anteriorly with white, and posteriorly with black; bill and legs as in the male.

Mareca castanea nobis.

Inhabits New Holland. The first specimens we observed were in the collection of the Natural History and Antiquarian Society of Shrewsbury, presented (together with many other birds from the same country) by Major Wakeman.

AIX GALERICULATA.

Aix Mas.—*Vertice occipiteque viridibus*; *fasciâ latâ supra-occulari albâ*; *tectricibus tertiis ad apices expandentibus*.

Aix Fem.—*Fasciis duabus alis*.

MANDARIN DUCK.

Male, with the crown and occipital crest green; a broad white band over the eye; tertiaries expanded at the tip, and prominent.

Fem., with two white bars on the wing.

	IN.		IN.
<i>Length</i>	18½	<i>Inner toe</i>	1⅜
<i>Bill</i>	1⅜	<i>Middle toe</i>	1⅞
<i>Tarsi</i>	1½	<i>Outer toe</i>	1¾

Male: head with a long occipital crest and crown purplish green; above the eye a broad band of white; throat, cheeks, and remainder of the neck bright reddish ferruginous, the shaft of each feather lighter; breast bright purple; back, tail, and wings hair-brown; scauplars with the outer webs black, the inner ones white; one tertiary prolonged and expanded on each side, prominent over the back; on the lower part of the breast a broad band of black, not meeting in front, on which there are one or two narrow ones of white; flanks ferruginous, beautifully undulated with narrow bands of black; belly, vent, and under tail coverts white; bill and legs orange.

Fem.: similar to the summer duck *A. sponsa*, but may be distinguished from it (according to Latham) by having two bars of white on the wing, and by the white spots on the breast being round instead of triangular.

<i>Aix galericulata</i>	Boie.
<i>Anas galericulata</i>	Linn. Syst. 1. 206.
	Gmel. Syst. 1. 539.
	Lath. Ind. Orn. 2. 871.
<i>Querquedula sinensis</i>	Briss. Orn. 6. 450.
<i>Chinese Teal</i>	Edw. Glea. pl. 102.
	Lath. Gen. Syn. 6. 548.
<i>Sarcelle de la Chine</i>	Buff. Ois. 9. 276.

Inhabits China and Japan, where it is kept (as in this country) for the sake of its beauty, in a state of domestication. Nothing is known of its habits in a wild state.

AIX SPONSA.

Aix Mas.—Capite colloque viridibus; gutture albo.

Aix Fem.—Brunnea, rostro cinguloque oculari etiam ad basin rostri, et fasciâ alis albis.

SUMMER DUCK.

Mas. head and upper part of the neck metallic green; throat white; crest long.

Fem. dark brown, with the belly, space round the eye, and bill white; one white band across the wing.

	IN.		IN.
<i>Length</i>	20	<i>Tarsi</i>	$1\frac{3}{8}$
<i>Bill</i>	$1\frac{3}{8}$	<i>Middle toe</i>	2

Crown, neck, and occipital crest glossy green; line extending from the bill over the eye, another from the lower part of the eye to the occiput, together with the throat, white; neck and upper part of the breast purplish, and sprinkled with spots of white; scapulars, wing coverts, and tail black, beautifully glossed in some lights with green, and purple inflections; on the lower part of the breast is a white bar, posteriorly to which is a black one; flanks yellowish ferruginous, barred and undulated with dusky; under tail coverts and quills sooty black; below white; bill and legs orange.

Fem.: dusky slate brown, with a space round the eye, a band round the bill, the throat, and belly white; breast dusky, marked with triangular spots of white; quills and tail as in the male; legs and bill dusky.

<i>Aix sponsa</i>	<i>Boie Isis.</i> 1826.
<i>Dendronessa sponsa</i>	<i>Faun. Bo. Am.</i> 2. 446.
<i>Anas sponsa</i>	<i>Linn. Syst.</i> 1. 207.
	<i>Gmel. Syst.</i> 1. 539.
	<i>Lath. Ind. Orn.</i> 2. 871.
<i>Anas Æstiva</i>	<i>Briss. Orn.</i> 6. 351. <i>pl.</i> 32,
	<i>fig.</i> 2.
<i>Summer Duck</i>	<i>Catesb. Carol.</i> 1. <i>pl.</i> 97.
	<i>Edw. Glea.</i> <i>p.</i> 101.
	<i>Lath. Gen. Syn.</i> 6. 546.
<i>Beau canard, Huppe</i>	<i>Buff. Ois.</i> 9. 254.
<i>Trachea</i>	<i>Mont. Orn. die, Sup.</i> <i>fig.</i> 5,
	<i>et nobis.</i>

Inhabits America, from Hudson's Bay to Mexico, and the Antilles, throughout the whole of which space it breeds, seldom frequenting the sea. It generally makes its nest in decayed trees hanging over the water, laying twelve or thirteen eggs.

This species is often kept in confinement in this country, and breeds freely, as well as its congener.

QUERQUEDULA JAVANENSIS

Quer.—Capite viridi, maculâ ad basum rostri; gutture et fasciâ occipitali albis.

JAVA TEAL.

Head green, with a spot at the base of the bill; throat and patch extending to the occiput white.

	IN.		IN.
<i>Length</i>	18	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Exp. al.</i>	27	<i>Middle toe</i>	2
<i>Bill</i>	1 $\frac{1}{2}$		

Head bright glossy green; spot behind the culmen of the bill, throat, and streak towards the back of the neck from the latter, white; collar white; breast with each feather beautifully marked with lunules of black; vent coverts white, undulated with black; wing-spot purplish green, above which is a conspicuous spot of velvet black; tertiaries very long, with the shaft and a narrow edging exteriorly white, and the edge of the posterior or inner web grey; quills and tail feathers grey; upper and under tail coverts black; vent buff, anteriorly to which there is a band of black; feet and bill black.

Anas Javanensis..... *Vieill. En. Method. Orn.*
1. 160.

Sarcelle de l'Ile de Java *Buff. Ois. tom. xvii. p. 395.*

Inhabits Java. I have never seen but one specimen of this beautiful species; it was in Lord Derby's collection at Knowsley, now in the Liverpool Museum. The British Museum also has specimens.

QUERQUEDULA GLOECITANS.

Quer. Mas.—Capite viridi, maculâ rotundatâ castaneâ ante oculari et post oculari ornato.

Quer. Fem.—Brunneâ, marginibus pennarum suturationibus.

BIMACULATED TEAL.

Male teal, with the head green, ornamented with a rounded chestnut patch before and behind the eyes.

Fem. brown teal, with the margin of the feathers lighter.

	IN.		IN.		IN.
<i>Length</i>	15	<i>Bill</i>	1 $\frac{7}{8}$	<i>Tarsi</i>	1 9-20ths

Male: head and neck green, with a dark chestnut patch before and behind the eyes; the throat approaching to black; back and flanks white, undulated with black lines; breast and abdomen ferruginous, with a few black spots; wing coverts fuscous; speculum velvet black, bordered anteriorly with violaceous, posteriorly with white; quills brown, margined with lighter; bill, feet, and legs lead-coloured; the webs black.

Fem.: slightly smaller than the male; head and neck light ferruginous, with the crown and base of each feather darker; abdomen white; back and flanks fuscous ferruginous, with the base of each feather brown.

<i>Anas glocitans</i>	<i>Pall. Acta. Stock.</i> 1.779, 40, <i>tab. 33. fig. 1.</i> <i>Gmel. Syst.</i> 1. 526. <i>Lath. Ind. Orn.</i> 862.
<i>Querquedula glocitans</i>	<i>Vig. Lin. Trans. vol. xiv.</i> 559. <i>Gould, Birds of Europe.</i>
<i>Bimaculated Teal</i>	<i>Penn. Brit. Zool.</i> 2. 602.
<i>Canard Glousseur</i>	<i>Vieill. En Method. Orn.</i> 1. 126.

Said to inhabit Siberia and the neighbourhood of Lake Baikal. One or two specimens only have been met with in England.

QUERQUEDULA CRECCA.

Quer. Mas.—Capite colloque castaneis, fasciâ occipitali viridi.

Quer. Fem.—Brunneâ, marginibus pennarum saturationibus; subtus alba.

COMMON TEAL.

Teal, with the head and neck chestnut, with a green occipital fascia.

Fem. brown teal, with the margin of the feathers lighter; below white.

	IN.		IN.
<i>Length</i>	14 $\frac{1}{2}$	<i>Tarsi</i>	1 1-6th
<i>Bill</i>	1 5-12ths	<i>Middle toe</i>	1 $\frac{5}{8}$

Male: head, cheeks, and neck chestnut; from the eye to the occiput passes a band of metallic green, bordered by a stripe of yellowish; below white; the breast dotted with black; the scapulars, back, and flanks white, undulated with black; wing coverts brown; quills hoary fuscous; speculum metallic green, bounded above and below by velvet black; lateral tail coverts with a band of black.

Fem.: brown, with the edges of the feathers lighter; below yellowish white; speculum green, without the black edging; crown brown.

<i>Querquedula crecca</i>	<i>Steph. Sh. Zool.</i> 12. 146.
<i>Anas crecca</i>	<i>Linn. Syst.</i> 1. 264.
	<i>Gmel. Syst.</i> 1. 532.
	<i>Lath. Ind. Orn.</i> 2. 872.
<i>Common Teal</i>	<i>Penn. Arct. Zool.</i> 2. 577.
<i>Green-winged Teal</i>	<i>Wils. Am. 8. Orn.</i> 106,
	<i>pl.</i> 70, <i>fig.</i> 40.
<i>Petite sarcelle</i>	<i>Buff. Ois.</i> 9. 265.
<i>Canard sarcelle d'Hiver</i>	<i>Temm. Man. d'Orn.</i> 2. 846.
<i>Trachea</i>	<i>Linn. Trans. vol. 4. tab.</i> 12,
	<i>fig.</i> 1.

Breeds in most marshy lakes in the north of Europe, America, Asia, and the British Isles; migrates southwards during winter, when it frequents almost entirely fresh water. Mr. Selby, in his "Illustrations of British Ornithology," mentions that he is inclined to think that our indigenous broods seldom quit the immediate neighbourhood of the place in which they were bred. The nest is formed of grass; lays from eight to ten eggs of a whitish colour.

QUERQUEDULA CAROLINENSIS.

Quer.—*Precedenti similis, sed distingueri potest fasciâ albâ ante alis.*

AMERICAN TEAL.

Quer. similar to *Q. crecca*, but distinguished from it by a white bar on each side of the breast.

	IN.		IN.		IN.
<i>Length</i>	15	<i>Bill</i>	1½	<i>Tarsi</i>	1

Precisely similar to *Q. crecca*, with the exception of the under tail coverts, which are black, and in having a white band on each side opposite the point of the wing.

Anas Carolinensis Gmel. *Syst. Nat.* 1. 533.

Lath. Ind. Orn. 2. 874.

Jard. Illus. Orn. pl. 148.

American Teal Penn. *Arct. Zool.* 2. 584.

Inhabits America, where it takes the place of the preceding species.

QUERQUEDULA FORMOSA.

Quer.—Vertice, gutture, fasciâque ab hoc ad oculos atris, utrinque albo marginato.

BAIKAL TEAL.

Teal, with the crown, throat, and a streak proceeding from the latter to the eye black, bounded on each side with white.

	IN.		IN.
<i>Length</i>	15½	<i>Tarsi</i>	1⅜
<i>Bill</i>	1 5-12ths	<i>Middle toe</i>	1 4-5ths

Male: crown and throat black, with each feather slightly tipped with ferruginous brown; from the latter proceeds a black waved streak to the eye, bounded on each side by a narrow one of white, and enclosing a patch of fawn-colour; from the bill through the eye proceeds a broad band of glossy green to the occiput, where it is broadest, and trifurcate below, the centre branch extending down to the back of the neck, the lateral ones curved to the fore neck, but do not meet, the whole bounded by a narrow edging of white; fore part of the neck bright reddish fawn-colour, spotted with black; back brown; lower part of the neck (behind) black, thickly irrorated with white; flanks the same; belly white; quills and coverts brown; middle coverts tipped with brown; primary coverts glossy purplish black, tipped with white; tertiaries long, outer webs black, edged with ferruginous; inner webs light fawn-colour; tail brown; tail coverts the same, edged with lighter; under tail coverts black, having on the sides anteriorly a broad band of white; the under coverts bounded laterally with a bar of ferruginous; bill brown; legs light yellow; wing-spot bounded anteriorly by brown, posteriorly by white.

Fem.: unknown.

<i>Querquedula formosa</i>	<i>Steph. Sh. Zool. vol. 12. 151.</i>
<i>Anas formosa</i>	<i>Gmel. Syst. Nat. 1. 523.</i>
	<i>Lath. Ind. Orn. 2. 876.</i>
<i>Baikal Teal</i>	<i>Lath. Gen. Syn. 6. 557.</i>

Inhabits Russia and Lake Baikal. (*Lath.*) Specimens are in the Museum of the Zoological Society, brought over by R. Reeves, Esq., in 1832, from China; and also in our own.

QUERQUEDULA MANILLENSIS.

Quer.—Genis albis, fasciâ brunneâ occipite ad collum inferiorem tendente.

MANILLA TEAL.

Teal, with the cheeks dirty white, with a streak from the occiput to the lower part of the neck, when it expands into a collar, brown.

	IN.		IN.
<i>Length</i>	15	<i>Tarsi</i>	1 $\frac{3}{8}$
<i>Bill</i>	2	<i>Middle toe</i>	1 $\frac{5}{8}$

Allied to *Q. formosa*; tertiaries not acuminate, and ferruginous; breast as in the last; upper parts of the back olive-brown; tail and rump black, glossed with green; belly white, irrorated with black; middle vent coverts black; lateral coverts white; secondary quills with the outer webs brassy green; coverts white, tipped with black; small coverts black; quills brown; head, neck, and crown dark-brown; cheeks dirty white; from the occiput proceeds a streak of brown to the lower part of the neck, when it expands into a collar; bill lead-colour; feet and legs light orange.

<i>Anas Manillensis</i>	<i>Gmel. Syst. Nat. 1. 523.</i>
	<i>Lath. Ind. Orn. 2. 876.</i>
<i>Sarcelle de l'Isle de Lucon</i>	<i>Sonn. Voy. Ind. 91, pl. 54.</i>
<i>Manilla Teal</i>	<i>Lath. Gen. Syn. 6. 557.</i>

Inhabits the Manillas. Specimens are in my collection, and in that of the Liverpool Museum.

QUERQUEDULA FALCARIA.

Quer. Mas.—Capite brunneo; cingulo collari guttateque purpureis.

Quer. Fem.—Brunneâ, marginibus pennarum suturationibus.

FALCATED TEAL.

Teal, with the head deep brown; ring round the neck and throat purple.

Fem. brown teal, with the margins of the feathers lighter.

	IN.		IN.
<i>Length</i>	17	<i>Tarsi</i>	1½
<i>Bill</i>	1½	<i>Middle toe</i> ..	2

Male: head and crown deep brown; ring round the neck and throat brassy purple; remainder of the neck and a spot behind the upper part of the base of the bill white; belly, breast, flanks, and upper part of the back white, each feather lunulated with ashy black; tail ashy; upper tail coverts and centre of the under ones black, laterally buff, anteriorly to which there is a black streak, then a patch of white; quills ashy brown; tertiaries long, inner webs brown-grey, outer glossy green, edged with light grey, the edging broader at the base; wing-spot green; primary coverts light ashy brown, lightest on the edge.

Fem.: about half an inch shorter than the male; brown, each feather lunulated with darker; crown dark brown; neck light brown, streaked with dark brown; tertiaries long; wings and tail as in the male; coverts brown; belly light; legs and bill in both sexes lead-colour.

<i>Anas falcaria</i>	<i>Gmel. Syst. Nat.</i> 8. 521.
	<i>Lath. Ind. Orn.</i> 2. 860.
<i>Falcated Duck</i>	<i>Penn. Arct. Zool.</i> 2. 574.
	<i>Lath. Gen. Syn.</i> 6. 516.
<i>Anas falcaria</i>	<i>Steph. Sh. Zool. vol.</i> xii.
	p. 100.

The specimens from which the above descriptions were taken are in the British Museum, and were brought home by R. Reeves, Esq., from China.

QUERQUEDULA ERYTHORHYNCHA.

Quer.—*Brunneâ, ptilis atris, tectrices majores speculoque æneis.*

CRIMSON-BILLED DUCK.

Brown, with the upper coverts velvet black, the greater ones and speculum brassy green.

	IN.		IN.		IN.
<i>Length</i>	18	<i>Bill</i>	1½	<i>Tarsi</i>	1¼

Above brown, with the edges of the feathers brighter; throat inclining to grey; back, lesser wing coverts, and tail velvet black; below the upper tail coverts and flanks grey, the latter with two or three deep brown spots; the breast sometimes slightly waved with brown; the remainder of the wing beautiful æneous green, with the exception of the two outer quill feathers, which are black, and the terminal half of the secondaries, which are white; bill and legs bright red in the male, fuscous in the female; bill brown, with a red patch on each side at the base.

<i>Anas Erythrorhyncha</i>	<i>Spix. N. Sp. avium.</i>
<i>Querquedula Braziliensis</i>	<i>Lath.</i>
<i>Ipecuteri a Zara</i>	<i>N. 347.</i>
<i>Anas paturi</i>	<i>Spix. vol. 2.</i>
<i>Braziliensis</i>	<i>P.</i>
<i>Ipecuteri</i>	<i>Vieill. G. R. Gray.</i>
<i>Mareca Braziliensis</i>	<i>Gen.</i>
<i>Anas notata</i>	<i>111.</i>

Inhabits South America.

We had an opportunity of dissecting this bird through the kindness of the Earl of Derby, who had a pair alive for some time.

The trachea and inferior larynx is that of a typical teal. It may, however, be distinguished from that of *Q. crecca* (which it in other respects resembles) by the bulb being more oblique, and swelling more in an upward direction.

The tube of the trachea in both sexes is acted upon by two pairs of muscles of voice, the first pair the usual sterno-tracheal ones; in the female the second pair diverge from the tube, where it penetrates the cavity of the chest, and are inserted into the membrane stretched between the *rami* of the *os furcatum* and the *coracoids*. In the male they diverge similarly, and are inserted in the *rami* of the *os furcatum*, having also a slight attachment along the internal surface of the membrane stretched between the *rami* of the *os furcatum*, which is not the case in the female.

QUERQUEDULA PUNA.

ANAS PUNA TSCHUDI.

Found in the elevated plains. The crown, the sides of the head to below the eyes, and neck are black, faintly dark green, shining; this colour extends along the middle line of the neck nearly to the fore part of the back, gradually changing into smoky brown. The back is brown, each feather having a whitish-brown edge; there is sometimes a transverse light streak in the middle of the feathers; on the hind part of the back this colour changes to olive-green. The upper wing coverts are dull lead-colour. The "Spiegel" is light green, bordered by a blackish band, which is edged by a white band. There is a white band in front of the "Spiegel." The wing feathers are brown, sometimes lighter along the inner edge; there is an oblique whitish margin at the tips. The "Eckflügel" are long brown purplish violet, shining. There is a more or less broad whitish-brown streak along the margin of the short feathers of the Uropygium. Uropygium and tail feathers greyish brown, with fine white transverse lines. The lower part of the face below the eyes, the sides of the neck, and the throat are dirty white. The breast is light whitish-brown, with dark-brown nearly heart-shaped spots, which are smaller and more numerous on the front part of the neck; these spots are always in the middle of the feathers, behind the tip, which is edged with light brown; each of these feathers has two or three alternate white and brown cross bands. Abdomen light grey, with numerous fine white and brown cross bands, which are broader and darker on the inguinal region. The bend of the wing and the lower marginal wing coverts are lead-coloured, like the upper smaller wing coverts; the middle are white. Beak greenish, blackish on the base of the upper jaw and along the median line. Tarsi dark purplish red, passing into greenish black. Total length one foot eight inches. Bill two inches three lines. Wing eight inches six lines. Tarsus one inch. Proportion of tarsus to wing 1. 2. 2.—*From Tschudi Fauna Peruana*, p. 308.

QUERQUEDULA CRECCOIDES.

Quer.—Pallide brunnea-grisea, sparsa notataque dorso imo ptilisque fascis hic apice rufo, speculo nigro, fulvo marginato.

MOTTLED TEAL.

	IN.		IN.		IN.
<i>Length</i>	16½	<i>Bill</i>	1¾	<i>Tarsi</i>	1¼

The head and neck of this bird are finely marked with fuscous dots, those of the neck being mostly in transverse lines, thus forming several undulating fascia; the feathers of the upper part of the back are of a brownish grey, and are marked in the centre by oval fuscous spots; the scapular feathers are similarly marked by long, central, black strigæ, which in some lights are of a beautiful green; the lower part of the back is of a uniform fuscous colour; the upper wing coverts are fuscous, the apices of the lowest range of feathers being also terminated with rufous, which colour forms a narrow fascia across the wing immediately over the speculum; the external secondary quill feathers are black on their outside margin, and are terminated with light buff; the internal webs are fuscous on their outside webs, with a shade of deep green, and slightly margined with buff; the breast and middle of the abdomen are whitish, the feathers of the former being strongly marked with round black spots in the centre, those of the latter being more strongly marked, so as to exhibit irregular fasciæ; bill yellow, with a black apex.

Anas creccoides, King Zool. Jour. 4. 99.

Inhabits the Straits of Magellan. A specimen was in the Museum of the Zoological Society.

QUERQUEDULA CAPENSIS.

Quer.—Rostro coccineo; marginibus capituloque basali atris.

CAPE TEAL.

Teal, with the bill crimson; the margins and a band round the base black.

	IN.		IN.
<i>Length</i>	18½	<i>Tarsi</i>	2½
<i>Bill</i>	1½	<i>Middle toe</i>	2¾

Light-brown teal; all the dorsal aspect with the feathers edged with lighter; those on the breast and under parts very light brown, with a lunule of darker on each feather; the throat white;

the head and neck spotted, and minutely streaked with dark and light brown; wing-spot bright green, margined on every side but the upper with a band of white; wing coverts, quills, and tail blue slate-colour, the latter with each feather edged with much lighter; legs reddish brown.

Female similar, but rather smaller.

Querquedula Capensis..... Smith, Cat. S. Afric. Mus.

Inhabits Southern Africa, and brought home by Dr. Smith, by whom it has been figured in his work on South African Zoology.

QUERQUEDULA HOTTENTOTA.

Quer. Mas.—Brunnerus, marginibus pennarum suturationibus; tectricibus caudæ juguloque pallidé brunneis, illo atro fasciato.

Quer. Fem.—Mari similis, sed tectricibus caudæ toto corpori similibus.

HOTTENTOT TEAL.

Male, brown teal, with the margins of the feathers lighter; the tail coverts and throat light brown; the latter fasciated with black.

Fem. like the male, but with the quill feathers like the rest of the body.

	IN.		IN.
<i>Length</i>	14½	<i>Tarsi</i>	1
<i>Bill</i>	1½	<i>Middle toe</i>	1½

Male: umber brown, with the edges of the feathers lighter; the crown, occiput, and quills dark brown; chin, throat, cheeks, rump, and under tail coverts light brown, the latter narrowly barred with darker; breast and lower part of the neck and under surface darker than on the rump; the abdomen barred with black; speculum and secondaries bright brassy green, the former edged posteriorly with black, then white white; coverts brown, slightly glossed with brassy; tail dark brown.

Fem.: similar to the male, but with the markings generally not so distinct, and the whole plumage below lighter; legs in both sexes brown; bill lead-colour, with the nail horn-colour.

Querquedula Hottentota..... Smith, Cat. S. Afric. Mus.

Brought home by Dr. Smith from the western coast of South

Africa, near the Orange River. A specimen is also in my collection, but I am not aware from what locality.

PETROCYANEA INORNATA.

Petro. Fem.—Rostro atro collo albido nigro sticto.

PETRO. with the bill black; the neck white, marked with black.

	IN.		IN.
<i>Length</i> ..	15 $\frac{3}{4}$	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Bill</i>	8-10ths	<i>Middle toe</i>	1 $\frac{3}{4}$

Irides hazel; beak black; feet dusky clay-colour, in summer yellow; crown and hind head dark brown, speckled with pale dashes; sides of the head paler brown, with black specks; throat and chin drab-white; lower neck, back, and tail coverts bistre, with horse-shoe lines of pale brown; scapulars dark brown, with a green gloss, and a narrow border of pale brown; wing coverts pale blue; winglet, primaries, and primary coverts blackish, with pale inner webs; secondary greater coverts white, with large spots of metallic green, which sometimes become darker; secondaries with the outer webs rich golden green; edge of tips pale; tertials long, pointed brown, with pale shafts slightly glossed; tail feathers dark brown, with pale edges and transverse spots on the outmost; breast, belly, vent, and under tail coverts silky drab, irregularly mottled, and spotted blackish; sides marked with horse-shoes of dark brown and pale; inner surface of wings white.—*Gosse non vidi.*

Cyanopterus inornatus *Gosse, Fem.*

Hab. Spanish Town, Jamaica.

PETROCYANEA CIRCIA.

Petro. Mas.—Undulatus brunneo et albo; ptilis azureis-cinereis.

Petro. Fem.—Brunneâ, marginibus pennarum suturationibus.

GARGANEY TEAL.

Male teal, undulated with brown and white; lesser coverts blueish grey.

Fem. brown teal, with the margin of the feathers lighter; coverts as in the male.

	IN.		IN.
<i>Length</i>	16½	<i>Tarsi</i>	1 1-10th
<i>Bill</i>	1½	<i>Middle toe</i>	1 ⅝

Male: crown, back of the neck, cheeks, and sides of the neck brown, the latter inclining to chestnut in some specimens; a white stripe from the bill under each eye; lower part of the neck and breast whitish, marked with brown lunules; back brown, with the edges of the feathers lighter; scapulars brown, with a white stripe down the shaft of each; wing coverts blue-grey; the rump and tail brown; below white, undulated with dark brown on the flanks; speculum green; bill, tarsi, and feet lead-coloured; eyes brown.

Fem.: brown, each feather edged with lighter; throat white; below yellowish white; wings as in the male.

<i>Petrocyanea</i>	<i>Bp.</i>
<i>Querquedula circia</i>	<i>Steph. Sh. Zool.</i> 12. 143.
<i>Anas circia</i>	<i>Linn. Syst.</i> 1. 204.
	<i>Gmel. Syst.</i> 1. 553.
	<i>Lath. Ind. Orn.</i> 2. 873.
<i>Anas Querquedula</i>	<i>Linn. Syst.</i> 1. 263-2.
	<i>Gmel. Syst.</i> 1. 531.
	<i>Raii Syn.</i> 148. 8.
<i>Garganey</i>	<i>Penn. Arct. Zool.</i> 2. 576.
	<i>Lath. Ind. Orn.</i> 6. 550.
<i>Le Sarcelle d'ete</i>	<i>Buff. Ois.</i> 9. 208.
————— <i>commun</i>	<i>Buff. Ois.</i> 9. 260.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 4, <i>tab.</i> 13,
	<i>fig.</i> 2, 3.

Found over the whole of Asia, the northern part of Africa, and Europe; visits the British Isles in May, frequenting fresh water; breeds in Holland; its nest is constructed of grass, placed by the water side; lays from ten to twelve white eggs.

Trachea with the tube smaller about one inch below the glottis, then slightly swelled, and again slightly contracted about an inch above the inferior larynx, from which point it gradually expands to the end. The inferior larynx with an osseous bulb extending anteriorly and on both sides, and not swelling out so abruptly as in the preceding genus or among the true teal.

PETROCYANEA FRETENSIS.

Petro. Mas.—Gulâ colloque anteriore pallide Badiis; dorso, abdomineque, imis caudaque, albis, nigro fasciatis; ptilis cæruleis.

Petro. Fem.—Gulâ colloque ut in mare; dorso imo ptilisque atro-cæruleis; abdomine ferrugineo, sparso et fasciato atro.

FASCIATED TEAL.

	IN.		IN.
<i>Length</i>	14	<i>Inner toe</i>	1 1-6th
<i>Bill</i>	1½	<i>Middle toe</i>	1½
<i>Tarsi</i>	1	<i>Outer toe</i>	1 5-12ths

Male teal, with the back, breast, fore part of the neck, and cheeks light yellowish brown, the two former having in the centre of each feather a dark-brown patch; flanks, abdomen, tail, and rump white, the former broadly and the latter narrowly barred transversely with black; vertex as far down as the eyes, and a streak down the back of the neck, deep brown; feet, legs, and bill blueish brown, the latter with a yellow patch on each side of the bill, extending beyond the nostrils; wing coverts slaty blue, the greater ones tipped with white; secondaries æneous green, also tipped with white; quills and tertiaries, which are long, dusky, the latter with the centre of each feather darker.

Female and young similar to the male, but with the abdomen and flanks ferruginous, irregularly barred, and irrorated with dark brown; rump black; the bill without the yellow markings on the sides.

Petrocyanea Bp.
Anas fretensis, King Zool. Proc. Dec. 14, 1830.

Inhabits the Straits of Magellan and other localities on the western coast of South America.

PETROCYANEA DISCORS.

Petro.—Capite cinereo brunneo, lunulâ albâ ante oculos.

BLUE-WINGED TEAL.

Teal, with the head ashy brown; a large white lunule before the eye.

	IN.		IN.		IN.
<i>Length</i>	16	<i>Bill</i>	1½	<i>Tarsi</i>	1½

Head ashy brown, slightly glossed at the tip of each feather with brassy; crown darkest; between the eye and bill, and partially surrounding the former, a large lunate spot of white, the horns projecting backwards; breast and neck ferruginous, beautifully spotted with dark brown; quills, tail, and back dark brown, the latter slightly lunated with ferruginous; under tail coverts deep black or brown, on the sides a patch of white; wing coverts bright blue, lower ones marked with a streak of white, then with one of green; anterior tertiaries with the outer webs blue; on the inner side of the shaft a streak of ferruginous; the remainder black.

Female: length 15 inches; wing coverts as in the male; tertiaries and remainder brown, lunated with ferruginous; crown darker.

<i>Petrocyanea</i>	<i>Bp.</i>
<i>Querquedula discors</i>	<i>Steph. in Sh. Zool. vol. 12.</i>
	149.
	<i>Linn. Syst. Nat. 1. 205.</i>
	<i>Lath. Ind. Orn. 2. 854.</i>
<i>Sarcelle soucrourou</i>	<i>Buff. Pl. Enl. 966, mas.</i>
— <i>soucrourette</i>	403, <i>fem.</i>
<i>White-faced Duck</i>	<i>Catesb. Carol. 1. 100, mas.</i>
<i>Blue-winged Teal</i>	1. 99, <i>fem.</i>

Inhabits the American Continent, from the 58th parallel to Guiana and the West Indies.

PETROCYANEA CYANOPTERA.

Petro.—*Rafflesii*, similis sed majora rostrum apice flavum ungue et relegaes aterimis.

PETRO. similar to *Rafflesii*, but larger; the apex of the bill yellow; nail and the rest of the bill black.

	IN.		IN.
<i>Length</i>	23½	<i>Tarsi</i>	1½
<i>Bill</i>	2	<i>Middle toe</i>	2½

Deep reddish chestnut; head and neck nearly black; wings slightly brunnaceous; coverts bright blue; the breast rather lighter in colour than the rest of the body; bill black, with the end yellow; nail black; legs orange.

Hab. Western Africa; brought over by Mons. Chaillu.

Petrocyanea cyanoptera

Nov. *Anas cyanoptera* Vieill.

Querquedula *Hartleubii*, Chaillu.

Hab. Equatorial Africa.

PETROCYANEA RAFFLESII.

Petro.—Castaneo-ferrugineus, speculo viridi.

RAFFLES'S TEAL.

Deep reddish chestnut teal, with the speculum green.

	IN.		IN.
<i>Length</i>	18	<i>Tarsi</i>	1 $\frac{1}{4}$
<i>Bill</i>	2	<i>Middle toe</i>	2

Deep reddish chestnut teal, with the crown and vent inclining to dark brown; each of the feathers on the back with black lunules; tertiaries black and blue, with the shaft buff; wing coverts light blue; speculum metallic green; quills and tail black.

Petrocyanea cærulata Bp.

Anas Rafflesii, King Zool. Journ. 4. 97.

— *cyanoptera* Vieill. Cassin, *Birds of N. America*, p. 82, pl. 15.

First brought home by Captain King from Chili; since which time we have received specimens from the same locality. Said by navigators to be exceedingly common on the west of South America.

SPATULA RHYNCHOTIS.

Spat. Mas.—Ferrugineus; capite colloque superiore cæruleis; tectricibus caudæ nigris; speculo viridi.

Spat. Fem.—Brunneâ, marginibus pennarum suturationibus; rostro pallido.

NEW HOLLAND SHOVELLER.

Male shoveller, with the head and upper part of the neck blue ; under and upper tail coverts black ; wing-spot green.

Fem. shoveller, brown, each feather edged with lighter; bill horn-colour.

	IN.		IN.
<i>Length</i>	20	<i>Tarsi</i>	1 $\frac{1}{4}$
<i>Bill</i>	1 2-5ths	<i>Middle toe</i>	1 $\frac{1}{8}$

Male: head and neck, lesser coverts, and tertiaries light blue, some of the latter with a stripe on the inner side of the shaft white; bar behind the base of the bill, on each side, white; centre of the back, quills, and tail white, with a lunule near the tip and two spots on the shaft of each feather brown; wing-spot bright brassy green, anterior to which is a white stripe; flanks, belly, and breast deep ferruginous, the former barred and dotted, and the latter undulated with brown; above the thighs, on each side, a white spot; under and upper tail coverts black; under wing coverts white; top of the head and back of the neck darkest; bill black; legs orange.

Fem.: brown, with the tip of each feather lighter; below lightest; lesser coverts slightly inclining to blue; bill and legs horn-colour in the dried specimen.

Young: male nearly intermediate between the two; bill black; legs orange.

Anas Rhynchotis Lath. Ind. Orn. App. 1.

Spatula Rhynchotis Steph. in Sh. Zool. 12. 123.

New Holland Shoveller..... Lath. Gen. Syn. Sup. 359.

Inhabits New Holland, and appears to be identical with specimens received from South America.

The bird described by Latham under the name of *Anas Rhynchotis* is the young. It is possible also that the white markings mentioned as present in our specimens of the old male, behind the base of the bill and down the fore neck, are not constant, but merely appear during the moult.

SPATULA MACULATUS.

Spat.—Precedenti similis, sed corpore flavescente-ferrugineo, nigris maculis rotundatis ornatis; capite simili, nigro sparso.

SPOTTED SHOVELLER.

Shoveller like the preceding, but with the body yellowish ferruginous, adorned with rounded black spots; head the same, sprinkled with black.

	IN.		IN.
<i>Length</i>	20	<i>Tarsi</i>	1 $\frac{1}{4}$
<i>Bill</i>	2 3-10ths	<i>Middle toe</i>	2 1-10th

We have considerable doubts as to the validity of this species. The marks of distinction between it and *R. Rhynchotis* are the following: the nail on the bill is broader, the flattened space between the nostrils and behind them is also broader; the whole body is of a lighter colour, and spotted in the centre of each feather with round dots; the white spot behind the thighs is similar, but the admeasurements slightly differ. We suspect that this bird will eventually turn out to be the female of *Rhynchotis*; and that the birds we have described as female and young of that bird will turn out to be both young males.

Spatula maculatus Gould in *Jard. and Selb.*
Illus. Orn. p. 147.

Mr. Gould received his bird from South America; ours was received from New Holland.

SPATULA CLYPEATA.

Spat. Mas.—Capite colloque viridibus; ptilis cæruleis.

Spat. Fem.—Brunneâ, marginibus pennarum saturationibus.

COMMON SHOVELLER.

Male shoveller, with the head and neck green; the wing coverts blue.

Fem. shoveller, brown, with the margins of the feathers lighter.

	IN.		IN.
<i>Length</i>	20	<i>Tarsi</i>	1 $\frac{3}{8}$
<i>Bill</i>	2 $\frac{2}{3}$	<i>Middle toe</i>	2

Male: head and neck glossy metallic green; throat black; breast, smaller scapulars, and greater wing coverts white; larger scapulars and lesser wing coverts blue, the former with a light stripe down the centre of each feather; speculum green; quills and tail brown; the outer tail feathers elongated, pointed; below chestnut; bill fuscous red.

Fem. : brown, having the edges of all the feathers lighter ; wing as in the male.

<i>Spatula clypeata</i>	<i>Steph. Sh. Zool.</i> 12. 115.
<i>Anas clypeata</i>	<i>Linn. Syst.</i> 1. 200. 19.
	<i>Gmel. Syst.</i> 1. 518.
	<i>Lath. Ind. Orn.</i> 2. 856.
<i>Spatula clypeata</i>	<i>Flem. Brit. An.</i> 123.
<i>Anas platyrhynchos</i>	<i>Raii, Syn.</i> 144. 13.
<i>Shoveller</i>	<i>Penn. Arct. Zool.</i> 2 N. 489.
	<i>Penn. Brit. Zool.</i> 2. 596.
<i>Red-breasted Shoveller</i>	<i>Penn. Brit. Zool.</i> 2. 597.
<i>Souchet ou le rouge</i>	<i>Buff. Ois.</i> 9. 191.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 4, <i>tab.</i> 13,
	<i>fig.</i> 4, 5.

Was found in the Deccan by Colonel Sykes: one specimen has been brought home by Dr. Smith from South Africa. Generally inhabits Asia, Europe, America, and North Africa ; breeds in Holland, and has occasionally bred in Norfolk, laying twelve eggs ; little, however, is known of its nidification.

SPATULA CAPENSIS.

Spat.—Brunneus ; subtus singulis pennis lunulâ centrali, apiceque leviter ferrugineis.

CAPE SHOVELLER.

Brown shoveller ; below with a lunule, and the tip of each feather light ferruginous.

	IN.		IN.
<i>Length</i>	22½	<i>Tarsi</i>	1½
<i>Bill</i>	2¾	<i>Middle toe</i> ..	2½

Head and neck light brown, minutely spotted with dark brown ; crown and slightly elongated feathers on the occiput darker ; below dark sepia brown, each feather having its tip and a transverse lunule in the centre light brownish buff ; the back brown, slightly glossed with greenish ; greater quills and tail deep brown, the latter edged with lighter ; secondaries with the outer webs metallic green ; tertiaries with the outer webs blue ; lesser wing coverts azure, the

greater ones white, forming a band of that colour across the wing; bill black; legs reddish orange.

Spatula Cupensis Smith, Cat. S. African Mus.

We are indebted to Dr. Smith for allowing us to take the above description from the specimens exhibited in the South African Museum, of which he has published drawings.

MALACORHYNCHUS MEMBRINACEUS.

Mal. Mas.—Cinereus, maculâ caryophyllacê post oculari.

Mal. Fem.—Mare similis, sed macula post ocularis caret.

MEMBRINACEOUS DUCK.

Male ashy, with the side of the bill towards the tip membrinaceous; a pink spot behind the eye.

Fem. similar, but without the pink spot behind the eye.

	IN.		IN.		IN.
<i>Length</i>	16½	<i>Bill</i>	2¾	<i>Tarsi</i>	1¼

Male: grey, transversely striped with brownish black,—stripes broadest on the flanks; neck brown; a stripe round the eye and down the back of the neck dark brown; a little behind the eye a bright pink spot; back brown, transversely irrorated with lighter; rump black; tail coverts white; tail brown; under tail coverts fawn-colour; quills dark brown; coverts light brown, except the tip of the primary coverts, which are white, forming a white wing-spot; bill and legs brown, the former largely lobated.

Fem. as above.

Melacorhynchus membrinacea.. Swain.

Anas malacorhynchus Gmel. Syst. 1. 526.

Lath. Ind. Orn. 2. 862.

Anas membrinacea..... Lath. Ind. Orn. App. 11.

— *fasciata* Shaw, N. Mis. 17 pl. 697.

Soft-billed Duck Lath. Gen. Syn. 6. 522.

New Holland Duck Lath. Gen. Syn. Sup. 11. 359.

Rhynchaspis malacorhynchus.. Steph. Sh. Zool. 12. 123.

— *membrinacea*..... Steph. Sh. Zool. 12. 124.

Inhabits New South Wales.

CHAULELASMUS STREPERA.

Kti. Mas.—Cinereus et albus; speculo atro; tectricibus castaneis.

Kti. Fem.—Brunneâ, marginibus pennarum saturatioribus.

GADWALL.

Male, grey and white; speculum velvet black; primary coverts chestnut.

Fem. brown, with the margins of the feathers lighter.

	IN.		IN.		IN.
<i>Length</i>	21	<i>Bill</i>	$1\frac{3}{4}$	<i>Tarsi</i>	$1\frac{1}{2}$

Male: head and neck brownish, marked with dots of grey-brown; upper part of the breast and lower part of the neck grey-brown, each feather marked with a lunule of white; back the same, thickly barred with white; tertiaries grey, the edges light; speculum black, anterior to which there is a reddish chestnut patch formed by the greater primary coverts, posteriorly one of white; lower part and under tail coverts black; quills and tail grey; bill black; legs fuscous.

Fem.: with the speculum as in the male; remainder of the plumage as in the female of the common wild duck.

<i>Chaulelasmus</i>	<i>G. R. Gray.</i>
<i>Chauliodus strepera</i>	<i>Gould, European Birds.</i>
<i>Anas strepera</i>	<i>Linn. Syst. 1. 200.</i>
	<i>Gmel. Syst. 1. 520.</i>
	<i>Lath. Ind. Orn. 2. 859.</i>
<i>Ktinorhynchus strepera</i>	<i>Nobis. (See preface, Mon. Anat.)</i>
<i>Gadwall</i>	<i>Penn. Arct. Zool. 2. 575.</i>
<i>Chipeau</i>	<i>Buff. Ois. 9. 187, pl. 12.</i>
<i>Trachea</i>	<i>Linn. Trans. vol. 4, tab. 13, fig. 8.</i>

A very widely-distributed species. We have received specimens from India, Africa, and America. It is also enumerated in the British lists, and is not uncommon in Holland, where it breeds in marshes among rushes, laying eight or nine ashy green eggs.

Tube of the trachea enlarged about one-third of its whole length from the lower extremity, and again contracted above the inferior larynx. Inferior larynx with a projection on the left side and before; anteriorly very slightly acuminate.

ANAS CHLOROTIS.

Anas.—Dorso brunneâ, pectoreque castaneo.

ANAS. with the back brown, the breast castaneous.

	IN.		IN.
<i>Length</i>		<i>Metatarsus</i>	
<i>Bill</i>		<i>Middle toe</i>	

Brown duck, the breast and under parts inclining to castaneous, the basal portion of the feathers darker; wings and back dark brown, with the edges of the feathers lighter; head castaneous, brown speckled, with darker brown bill, and feet greenish.

Anas chlorotis G. R. Gray, *Voy. Erebus and Terror. Birds* pl. 20.
Icon..... G. R. Gray, *Genera of Birds*.

Hab.

ANAS SPECULARIS.

An.—Brunneâ, maculâ magnâ et ovali utrinque ante oculos; rostro colloque superiore singulis albis.

BRONZE-WINGED DUCK.

Brown duck, with a large oval spot before the eyes; bill and the upper part of the neck surrounded by a collar of white.

	IN.		IN.
<i>Length</i>	25½	<i>Inner toe</i>	7/8
<i>Bill</i>	17/8	<i>Middle toe</i>	2½
<i>Tarsi</i>	17/8	<i>Outer toe</i>	2½

Head and neck umber brown, with a large oval spot of white between the eye and bill, placed transversely; a broad collar of white on the upper part of the neck, not meeting at the back, from which proceeds a streak to the chin also white; under surface brown-grey, undulated with darker; back and coverts brown, slightly glossed with brassy green; coverts tipped with white; rump and tail ashy brown, the latter darkest; bill black; legs and toes orange; webs black.

Anas chalcoptera *Kitlitz*.
 — *specularis*, *King* *Zool. Journ., Nat. vol. 4. 98.*
 — *specularoides*, *King*..... *Ditto ditto.*

Inhabits Chili.

ANAS LUZONICA.

An.—Supra cinereo fusca, striga super oculari pallide castaneis.

AN.—Above fuscous cinereous, with a supra ocular streak pale castaneous.

	IN.		IN.		IN.
<i>Length</i>	21	<i>Bill</i>	2 $\frac{1}{4}$	<i>Tarsi</i>	1 $\frac{1}{2}$

Above brownish castaneous, with top of the head nearly black, and a super ocular stripe; the cheeks and throat pale chestnut; the speculum purplish green, margined before and behind with black; the body below cinereous fuscous.

Anas Luzonica *Frazer, Zool. proc.* 1839. 113.

Hab. Isle of Luzon and Philippines.

ANAS SUPERCILIOSA.

An.—Brunneâ, fasciâ albidâ supra et sub oculos; speculo violaceo.

SUPERCILIOUS DUCK.

Brown duck, with a whitish stripe above and below the eye; speculum violet.

	IN.		IN.
<i>Length</i>	23	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Bill</i>	2 $\frac{1}{8}$	<i>Middle toe</i>	2 $\frac{3}{8}$

Brown, with the head darkest; a whitish stripe arises at the culmen of the bill, and proceeds over the eye nearly to the occiput, another arises below the base of the bill, and passes below the eye, also nearly to the occiput, where the two meet; the whole of the plumage dark brown, with the edges of the feathers lighter, and the throat and fore neck yellowish white; speculum metallic violet, surrounded with black; under wing coverts white; bill black; legs brown.

Sexes similar.

<i>Anas superciliosa</i>	Gmel. Syst. 1. 537.
	Lath. Ind. Orn. 2. 852.
<i>Supercilious Duck</i>	Lath. Gen. Syn. 6. 497.
<i>Anas superciliosa</i>	Steph. Sh. Zool. 12. 108.

Inhabits New Holland.

ANAS OBSCURA.

An.—Brunneâ, speculo violaceo atro marginato.

DUSKY DUCK.

Brown duck, with the speculum violet, margined with black.

	IN.		IN.
<i>Length</i>	24	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Bill</i>	2 $\frac{1}{8}$	<i>Middle toe</i>	2 $\frac{1}{2}$

Male: crown, lower part of the neck, body, tail, and wings entirely of a deep dusky brown, each feather edged with lighter; throat, cheeks, and upper part of the neck light brown, each feather having on its shaft a dark-brown streak; speculum deep glossy violet, margined with black; bill greenish, and formed similar to that of the mallard; legs and feet dusky yellow.

Female similar.

<i>Anas obscura</i>	Gmel. Syst. Nat. 1. 541.
	Lath. Ind. Orn. 2. 871.
<i>Dusky Duck</i>	Lath. Gen. Syn. 6. 545.
	Wils. Am. Orn. 8. p. 141.
	pl. 1—11.
	Penn. Arct. Zool. N. 496.

Inhabits America; occurs chiefly on the coasts of Florida, New England, and New Jersey, where it breeds in sequestered places on the marshes, laying eight or ten eggs similar to those of *A. Boschas*.

ANAS BOSCHAS.

An. Mas.—Capite colloque superiore viridibus; singulo collari albo.

An. Fem.—Brunneâ, marginibus pennarum suturationibus; speculo viridi.

WILD DUCK.

Male duck, with the head and upper part of the neck green; collar white.

Fem. brown duck, with the margins lighter; speculum green.

	IN.		IN.		IN.
<i>Length</i>	24	<i>Bill</i>	2 $\frac{1}{4}$	<i>Tarsi</i>	2

Male: head and upper part of the neck metallic green, below which is a white collar; breast vinaceous; back brown; scapulars and flanks white, undulated with black; speculum metallic green, margined anteriorly and posteriorly with white; quills, rump, and tail coverts brown, in some light greenish, middle tail feathers curling upwards; tail grey-white; bill yellow; legs orange.

Fem.: brown, with the edge of the feathers lighter; speculum similar to that of the male.

Var. A. *Anas adunca* (Linn.)—Hook-billed Duck.

This variety has the bill turned downwards.

Var. B. Penguin Duck.

The peculiar upright position of this variety, when at rest and standing, distinguishes it.

<i>Anas Boschas</i>	<i>Linn. Syst.</i> 1. 205.
	<i>Gmel. Syst.</i> 1. 538.
	<i>Lath. Ind. Orn.</i> 2. 850.
<i>Wild Duck</i>	<i>Penn. Arct. Zool.</i> 2. 494.
<i>Le canard sauvage</i>	<i>Buff. Ois.</i> 9. 115.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 4, <i>tab.</i> 12.
	<i>fig.</i> 10.

Inhabits universally the temperate regions of the northern hemisphere, and does not appear to be subject to any considerable migration; breeds commonly in all marshy districts, laying from ten to fifteen eggs of a greenish colour.

ANAS FLAVIROSTRIS.

An.—Cinereo-brunneo, rostro flavo, naribus maculâ atrâ cin-
gentibus.

YELLOW-BILLED DUCK.

Cinereous-brown duck, with a yellow bill, and the nostrils sur-
rounded by a black patch.

	IN.		IN.
<i>Length</i>	22 $\frac{1}{2}$	<i>Tarsi</i>	2
<i>Bill</i>	2 $\frac{1}{4}$	<i>Middle toe</i>	2 $\frac{1}{4}$

Inhabits Southern Africa, and was brought to England by Dr. A. Smith, to whom we are indebted for permission to take the above description.

CARINA MOSCHATA.

Car.—Niger; ptilis albis.

MUSK DUCK.

Black, with the coverts white.

	IN.		IN.		IN.
<i>Length</i>	32½	<i>Bill</i>	2½	<i>Tarsi</i>	2½

Glossy black, with the wing coverts white; the bill in the male carunculated, less so in the female; legs black; caruncle red. In a domesticated state a greater or less quantity of white feathers make their appearance.

<i>Anas moschata</i>	<i>Linn. Syst.</i> 1. 199.
	<i>Gmel. Syst. Nat.</i> 1. 515.
<i>Anas Sylvestris Braziliensis</i> ...	<i>Raii, Syn.</i> 148, 150.
<i>Carina Sylvestris</i>	<i>Steph. Sh. Zool.</i> 12. 78.
<i>Trachea</i>	<i>Linn. Trans.</i> vol. 4, tab. 14, fig. 1, 2, and tab. 16, fig. 56; vol. 15, tab. 15, fig. a.

Supposed to have been originally natives of South America, but have now been domesticated in many parts of the world. In the tame varieties many of the feathers are white.

MICROPTERUS PATACHONICUS.

Mic.—Cinereus; subtus et maculâ post oculari albis.

PATAGONIAN MICROPTERUS.

Cinereus micropterus; below and with a patch behind the eye white.

	IN.		IN.
<i>Length</i>	24	<i>Inner toe</i>	2½
<i>Bill</i>	2	<i>Outer toe</i>	3½
<i>Tarsi</i>	2¾	<i>Hind toe</i>	1

Dark grey, with the edges of the feathers on the flanks, head, back, wing coverts, and breast light chocolate; lower part of the

breast, belly, abdomen, under tail coverts, and secondaries white; secondary coverts longer than the primary quills; tail long, with the feathers rather stiff; bill dusky green; legs and toes orange; thighs and a small triangular mark behind the eye white.

Micropterus Patachonicus, King... *Proc. Zool. Soc.* 1830,
p. 15.

In the Museum of the Zoological Society, brought by Capt. James from Pricket's Harbour.

MICROPTERUS BRACHYPTERUS.

Mic.—Cinereus, subtus albus; maculâ ferrugineâ gutture.

SHORT-WINGED MICROPTERUS.

Grey micropterus, with the belly white; a ferruginous patch on the throat.

	IN.		IN.		IN.
Length ...	27	Bill	2	Tarsi	2½

Grey, with the head and neck lighter; a ferruginous tinge on the throat; belly and wing-spot white; legs and bill orange; nail black.

Anas brachyptera *Iath. Syn.* 6. 439.
Voyage autour du monde Frey,
p. 39.

Oiseaux grises, ou ois. de plein.. Pernet Voy. II. ch. xix. p. 21.

The specimen from which the above description was taken was in the Museum of the Zoological Society, and was obtained from the Straits of Magellan; they also inhabit the Falkland and Staaten Islands. We have considerable doubts as to the propriety of making this and the preceding distinct species. Both are destitute of the powers of flight, merely using their wings to flapper over the surface of the sea. They are also bad divers, obtaining their living almost entirely by breaking shell-fish along the water-mark: hence, the head is so strong that Mr. Darwin informs us he had great difficulty in breaking one with his zoological hammer.

MELANITTA AMERICANA.

Mel. Mas.—Sequenti similis, sed tuberculâ ad basin rostri aurantiacâ.

AMERICAN SCOTER.

Male duck, similar to the following, but with the tubercle at the base of the bill entirely orange.

	IN.		IN.
<i>Length</i>	19	<i>Middle toe</i>	3
<i>Bill</i>	1 $\frac{3}{4}$	<i>Outer toe</i>	2 $\frac{3}{8}$
<i>Tarsi</i>	2 $\frac{3}{4}$	<i>Inner toe</i>	2 $\frac{3}{4}$

Male distinguished from the following, which it in every other respect resembles, by the protuberance at the base of the bill and a small space anteriorly and laterally being entirely orange, and by the sides of the nail at the apex of the upper mandible being suddenly narrowed.

Fem.: a similar distinction holds between the females of this and the following as regards the nail.

Oidemia Americana..... *Faun. Bo. Am.* 2. 450.
Nutt. Orn. 2. 442.

Brought home by Dr. Richardson from the neighbourhood of Hudson's Bay. Specimens are in our collection.

MELANITTA NIGRA.

Mel. Mas.—Ater; tuberculâ bifida atra ad basin rostri.

Mel. Fem.—Brunneâ; subtus cinereâ, maculâ albicante gutture.

BLACK SCOTER.

Male scoter, with a bifid black tubercle at the base of the bill.

Fem. brown; beneath cinereous, with a white patch on the throat.

	IN.		IN.
<i>Length</i>	21	<i>Tarsi</i>	1 9-12ths
<i>Bill</i>	1 $\frac{1}{4}$	<i>Middle toe</i>	2 $\frac{5}{8}$

Male entirely black, glossy on the head and neck; no speculum; a bifid protuberance at the base of the bill, orange in the centre, black on the sides; a small patch anterior to the tubercle also orange; remainder black; legs dark lead-coloured.

Fem.: sooty black or brown; a large light-coloured grey patch on the throat, extending backwards to the hind neck, and below about half-way down the fore neck; bill (devoid or nearly so of a tubercle) entirely black; legs as in the male.

Young similar to the female.

<i>Melanitta nigra</i>	<i>Brehm. Hand. der Nat. aller,</i> <i>Vo. Deut.</i> 903.
<i>Anas nigra</i>	<i>Linn. Syst.</i> 1. 196. <i>Gmel. Syst.</i> 1. 588. <i>Lath. Ind. Orn.</i> 2. 848.
<i>Anas nigra minor</i>	<i>Raii Syn.</i> 141 <i>A.</i>
<i>Oidemia nigra</i>	<i>Flem. Brit. An.</i> 119.
<i>Scoter or Black Diver</i>	<i>Penn. Arct. Zool.</i> 2. 484.
<i>Le Macreuse</i>	<i>Buff. Ois.</i> 9. 234. <i>pl.</i> 16.

A native of the northern regions, but migrating southwards during winter down the European Continent; breeds, like its congeners, on the coast in northern latitudes, making its nest near the water-mark of grass, sea-weed, and other rubbish, and near the time of hatching lines its nest with down from the body; lays from six to ten white eggs.

MELANITTA PERSPICILLATA.

Mel. Mas.—Rostro aurantiaco, maculâ quadrangulari utrinque baso atro; speculo nullo.

Mel. Fem.—Brunneâ, maculâ cinereâ utrinque ad basin rostri.

SURF DUCK.

Male scoter, with the bill orange, a quadrangular patch on each side of the bill at the base; no speculum.

Fem.: brown duck, with a cinereous patch on each side at the base of the bill.

	IN.		IN.
<i>Length</i>	19	<i>Inner toe</i>	2
<i>Bill</i>	1½	<i>Middle toe</i>	2¾
<i>Tarsi</i>	17⁄8	<i>Outer toe</i>	2½

Male: bill orange, with a four-cornered diamond-shaped patch of black on each side at the base of the upper mandible; bill (raised at the base) short and thick; plumage in general dead black, slightly glossed on the sides of the neck, with a patch of white on the occiput, and another elongated one down the back of the neck; legs and toes orange, the webs dusky.

Fem.: dusky brown, lighter on the neck and belly; the raised portion of the bill not so prominent as in the male; an obscure patch behind the base of the bill on each side, and another elongated one between it and the occiput.

<i>Anas perspicillata</i>	Linn. Syst. 1. 261.
	Gmel. Syst. 1. 524.
<i>Oidemia perspicillata</i>	Steph. Sh. Zool. 12. 219.
	Eyton, Hist. R. Brit. Birds, 81.
<i>Black or Surf Duck</i>	Wils. Am. Orn. viii. p. 49, pl. 67.
<i>Black Duck</i>	Edw. Glea, p. 155.
<i>Macreuse à large bec Marchand</i>	Buff. Ois. 9. 244.
<i>Canard Marchand</i>	Temm. Man. 2. 853.

Common in America, along the coast from the River St. Lawrence to Florida, and has also been occasionally met with in the Orkney and Shetland Isles; it almost exclusively inhabits the sea. The female of this species may be distinguished from that of *O. nigra*, which it somewhat resembles, by the superior length of the bill, and by the grey marking on the cheeks behind the eye—that colour in the above-mentioned bird being confined entirely to the throat.

MELANITTA FUSCA.

Mel.—Ater, speculo et maculâ lunatâ suboculari albis.

VELVET DUCK.

Black duck, with the speculum and a lunate mark under the eye white.

	IN.		IN.
<i>Length</i>	20	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Bill</i>	1 $\frac{7}{8}$	<i>Middle toe</i> ..	1 $\frac{3}{8}$

Male: entirely deep velvet black, with a lunate spot and a mark under the eye white; bill and legs orange, the former with a tubercle at the base; a space before it and the margins black; webs black.

Fem.: has the plumage above sooty black, below dirty grey; the tubercle at the base of the bill smaller than in the male.

Young similar to the female.

<i>Melanitta fusca</i>	Boie in Brehm. Hand. der Natt. aller, Vo Duet. 905.
<i>Anas fusca</i>	Linn. Syst. 1. 196.
	Gmel. Syst. 1. 507.
	Lath. Ind. Orn. 2. 848.
<i>Oidemia fusca</i>	Flem. Brit. An. 119.
	Steph. Sh. Zool. 12. 216.
<i>Velvet Duck</i>	Penn. Arct. Zool. 2. 272. pl. 196.
<i>Grand ou double macreuse</i>	Buff. Ois. 9. 242.
<i>Trachea</i>	Linn. Trans. vol. 4, tab. 15,
	fig. 3, 4, 5, 6, 7; and vol. 16, tab. 21, fig. 2, 3.

Inhabits the arctic regions, migrating southwards in the winter, like several of the other known species of the genus, on both the American and European Continents; breeds in the neighbourhood of Hudson's Bay, on the borders of fresh water lakes, laying eight or ten white eggs. On the commencement of incubation the males, like those of the eider, form themselves in large flocks and desert the females.

SOMATERIA FISCHERI.

Som.—Maculâ albâ magnâ oculos cingente, capite viridi flavo.

FISCHER'S EIDER DUCK.

Som.—Whitish; a large white spot surrounding the eyes; rest of the head yellowish green.

	IN.		IN.
<i>Length</i>	17 $\frac{1}{2}$	<i>Metatarsus</i>	1
<i>Bill to gape</i>	2	<i>Middle toe</i>	2 $\frac{1}{2}$

Male: back, and a few feathers behind the legs, white; under parts and tail black; head yellowish green, a large white spot surrounding each eye, with two lunate ones placed before and behind it, black:

Fem.: dark brown, transversely barred with black; head black, with markings round the eye similar to the male, but indistinct.

Hab. N. America.

SOMATERIA SPECTABILIS.

Som. Mas.—Capite supra et occipite cinereis; genis viridibus; rostrum tuberculâ magnâ basali.

Som. Fem.—Sequenti similis, sed tuberculâ minore basali.

KING DUCK.

Male eider, with the head above and occiput cinereous; the cheeks green; the bill with a large tubercle at the base.

Fem. eider, like the following species, but with a smaller tubercle at the base of the bill.

	IN.		IN.
<i>Length</i>	24 $\frac{1}{2}$	<i>Inner toe</i>	1 $\frac{7}{8}$
<i>Bill</i>	1 1-6th	<i>Middle toe</i>	2 $\frac{5}{8}$
<i>Tarsi</i>	1 5-6ths	<i>Outer toe</i>	2 $\frac{5}{8}$

Male: with the crown and occiput light cinereous grey; cheeks light green; round the base of the bill a band, and on the chin a V-shaped mark, black; remainder of the neck, breast, and upper part of the back white, slightly tinged with purplish; lower part of the back, tail quills, tertiaries, scapulars, and under parts black; tail and greater wing coverts white; bill and legs red, the former with a large knob at the base, the top of which is covered with feathers.

Fem.: in colour resembling the female of the common eider; but can be distinguished by the knob at the base of the bill being larger.

<i>Somateria spectabilis</i>	<i>Steph. Sh. Zool.</i> 12. 229.
<i>Anas spectabilis</i>	<i>Linn. Syst.</i> 1. 195.
	<i>Gmel. Syst.</i> 1. 907.
	<i>Lath. Ind. Orn.</i> 2. 845.
<i>Grey-headed Duck</i>	<i>Edw. Glea, pl.</i> 154.
<i>Anas freti Hudsonis</i>	<i>Briss. Orn.</i> 365.
<i>King Duck</i>	<i>Penn. Arct. Zool.</i> 2. N. 481.
<i>Le Canard a tete grise</i>	<i>Buff. Ois.</i> 9. 258.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 15, <i>tab.</i> 15,
	c—d.

Inhabits the same countries as the preceding; builds its nest, which is formed of sea weeds, on rocks and islands on the sea coast, laying five or six eggs scarcely to be distinguished from the preceding. By the Greenlanders this bird is considered a delicacy, particularly the knob at the base of the bill.

SOMATERIA V NIGRUM.

Som.—Sequenti similis, sed V subrostro.

Som.—Similar to the common eider, but with a V-shaped mark under the chin.

	IN.		IN.
<i>Length</i>	22	<i>Metatarsus</i>	1 $\frac{3}{4}$
<i>Bill to gape</i>	3	<i>Middle toe</i>	3

Somateria V nigrum *G. R. Gray, Proc. Zool. Soc.*
1855.

Rather smaller than the common eider.

Hab. Russian-America.

SOMATERIA ST. CUTHBERTI.

Som. Mas.—Capite supra occipiteque viridibus.

Som. Fem.—Brunneâ, transversim lineata atro.

COMMON EIDER DUCK.

Male eider, with the head above and occiput green.

Fem. brown eider, transversely lineated with black.

	IN.		IN.
<i>Length</i>	24	<i>Inner toe</i>	2 $\frac{1}{8}$
<i>Bill</i>	2 1-6th	<i>Outer toe</i>	2 $\frac{7}{8}$
<i>Tarsi</i>	2	<i>Middle toe</i>	2 $\frac{7}{8}$

Male: crown and occiput green; back, wing coverts, and remainder of the head and neck white, with a yellowish tinge; quills and tail grey below, with the secondaries and rump black; bill and legs black.

Fem.: light brown on the breast; a lunule of black on each feather near the tip dark brown, with the edges of the feathers lighter; belly obscure; lesser coverts, the back, tail, secondaries, and greater wing coverts grey brown; primaries dark brown, with the edges light-grey brown; bill and legs black.

<i>Somateria mollissima</i>	<i>Steph. Sh. Zool.</i> 12. 224.
<i>Anas mollissima</i>	<i>Lynn. Syst.</i> 1. 178.
	<i>Gmel. Syst.</i> 1. 514.
<i>Anas St. Cuthberti</i>	<i>Raii Syn.</i> 14. 1.
<i>Eider</i> — <i>St. Cuthbert's Eider</i> ...	<i>Penn. Arct. Zool.</i> 2 N. 480.
<i>Oie a duvet ou Eider</i>	<i>Buff.</i> 9. 103, t. 6.
<i>L'Eider</i>	<i>Vieill. En. Method. Orn.</i>
	30. 119.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 12, <i>tab.</i> 30,
	<i>fig.</i> 1.

Like its congener, an arctic species, seldom seen south of the 55th degree N. L., but in the parts within that on all three continents and the adjacent islands, where it breeds, building its nest of sea weeds, and laying four eggs of a greenish colour.

ENICONETTA STELLERI.

Poly. Mas.—Albus, fronte occipiteque viridibus; collum cingulo atro.

Poly. Fem.—Ferruginea, atro et obscuro maculato, duabus maculis albis tectricibus.

WESTERN DUCK.

Male : white duck, with the forehead and occiput green ; neck with a black collar.

Fem. : ferruginous duck, marked with black and dusky, with two white spots on the wing coverts.

Length..... 17 inches.

Male : chin, throat, fore part of the neck, and collar black ; a black stripe extends from the collar down the neck to the back, which is also black ; head sides and the upper part of the neck to the collar white ; forehead and nape greenish ; a black irregular patch behind the eyes, with a narrow band proceeding from it, and surrounding the orbits ; breast and sides light ferruginous ; vent and tail black, with the edges of the feathers lighter ; a humeral spot black ; quills dark brown ; tertiaries (very long) black, edged with light brown.

Fem. : ferruginous, marbled with dark and black, with two white spots upon the wing coverts, the feathers of which are straight and blackish. (*Nuttall.*)

<i>Eniconetta</i>	<i>G. R. Gray.</i>
<i>Anas dispar</i>	<i>Gmel. Syst. 1. 535.</i>
<i>Anas Stelleri</i>	<i>Gmel. Syst. 1. 518.</i>
	<i>Pall. Spic. Zool. v. p. 35,</i> <i>tab. 5.</i>
<i>Polysticta Stelleri</i>	<i>Eyton, Hist. R. Brit. Birds,</i> <i>79.</i>
<i>Macropus Stelleri</i>	<i>Nuttall, Orn. 2. 451.</i>
<i>Fuligula Stelleri</i>	<i>Bonap. Syn. 344.</i>

First discovered by Steller, in Kamschatka, and do not appear to stray far from their native place. A pair were shot in Oster Gothland, in Sweden, and are figured by Sparman. Another was killed in the British Isles. Nothing is known of the anatomy of this beautiful species.

KAMPTORHYNCHUS LABRADORUS.

Kamp. Mas.—Dorso, primariis, collo, fasciâ occipitali, subtusque, atris.

Kamp. Fem.—Capite, mento, colloque cinereo ; dorso alisque obscuris.

PIED DUCK.

Male duck, with the back, primaries, neck, occipital fascia, and below black.

Fem. duck, with the head, chin, and neck cinereous; the back and wing dark.

	IN.		IN.
<i>Length</i>	21½	<i>Outer toe</i>	2⅜
<i>Bill</i>	1⅝	<i>Middle toe</i>	2½
<i>Tarsi</i>	1½	<i>Inner toe</i>	2

Male: head, neck, breast, scapulars, wing coverts, and secondaries white; crown, a collar round the neck, belly, back, quills, and a streak on the occiput, black.

Fem.: about one inch shorter than the male; head, chin, and neck ashy grey; back and wings brownish slate-colour; below ashy; legs in both sexes deep brown, with the webs black; bill black, with the base and edges of the mandibles orange.

<i>Fuligula Labradora</i>	<i>Bonap. Syn.</i> 337.
<i>Anas Labradora</i>	<i>Wils. Am. Orn. pl.</i> 69, <i>fig.</i> 6.
<i>Rhynchaspis Labradora</i>	<i>Steph. Sh. Zool.</i> 12. 121.
<i>Pied Duck</i>	<i>Penn. Arct. Zool.</i> 2. 282.
	<i>Lath. Gen. Syn.</i> iii. p. 497.
<i>Camtolaimus</i>	<i>G. R. Gray.</i>

Found most plentifully on the western side of the American Continent, and occasionally on the eastern. Nothing is known of its nidification.

Wilson gives the following description of the trachea:—"The windpipe of the male measures ten inches in length, and has four enlargements, viz., one immediately below the mouth at the interval of an inch; it then bends largely down to the breast bone, to which it adheres by two strong muscles, and has at that place a third expansion; it then becomes flattened, and, before it separates into the lungs, has a fourth enlargement much greater than the former, which is bony and round, puffing out from the left side. The bill of this species differs much in form from any in the family, being broad and thin at the tip, and having the lamellæ more elongated."

CALLICHEN CARYOPHYLLACEUM.

Cal.—Fuscum, capite colloque caryophyllaceis.

PINK-HEADED POCHARD.

Fuscous pochard, with the head and neck pink.

	IN.		IN.
<i>Length</i>	21	<i>Bill</i>	2½

Head and neck bright pink, the latter with a black streak down the back; lower part of the neck, flanks, back, and abdomen umber brown; speculum ferruginous; bill orange; legs lead-coloured.

Anas caryophyllacea *Lath. Ind. Orn.* 2. 866.

Pink-headed Duck *Lath. Syn. Sup.* 1. 276.

Fuligula caryophyllacea *Steph. Sh. Zool.* 12. 207.

Inhabits several parts of India. Few specimens have been brought to this country. We only know of two at present existing—one is in our collection, the other in the British Museum; both were purchased at the sale of the late Colonel Cobbe's collection.

CALLICHEN RUFINUM.

Cal. Mas.—Capite cristato, colloque anteriore castaneis; subtus obscurus, lateribus albis.

Cal. Fem.—Brunneâ-cinerea, occipite obscuro.

RED-CRESTED POCHARD.

Male duck, with the head crested, and, together with the anterior part of the neck, chestnut; below obscure, with the flanks white.

Fem.: cinereous brown duck, with the occiput dark.

	IN.		IN.
<i>Length</i>	21	<i>Inner toe</i>	1¾
<i>Bill</i>	2½	<i>Outer toe</i>	2½
<i>Tarsi</i>	1¾	<i>Middle toe</i>	2½

Male: head and upper part of the neck chestnut, the former crested; lower part of the neck, breast, and belly dirty brownish black; sometimes with a few of the feathers slightly tipped with white; back light brown; shoulders, and a large spot on the flanks, white; tail feathers and quills cinereous; rump black; bill red, with the nail whitish horn-colour; legs and toes red; webs black.

Fem.: slightly smaller than the male; light cinereous brown, with the crown darker; the throat and sides of the neck dark cinereous; bill and legs reddish brown.

<i>Callichen rufinus</i>	<i>Brehm. Hand. der. Natt. aller,</i> <i>Vo. Deut. 924.</i>
<i>Anas rufina</i>	<i>Gmel. Syst. 1. 541.</i> <i>Lath. Ind. Orn. 2. 870.</i>
<i>Anas capite rufo major</i>	<i>Raii. Syn. 140.</i>
<i>Canard siffler, Huppe</i>	<i>Buff. Ois. 9. 282.</i> <i>Temm. Man. 2. 864.</i>
<i>Red-crested Pochard</i>	<i>Lath. Gen. Syn. 6. 554.</i>
<i>Mergoides rufina</i>	<i>Eyton, Hist. R. Brit. Birds,</i> <i>77.</i>
<i>Trachea</i>	<i>Linn. Trans. Vol. 15, tab. 15,</i> <i>fig. 2.</i>

Inhabits the eastern portions of the north of Europe, and migrates to the Caspian Sea, to Hungary, Austria, and Turkey, and the great Lakes of Switzerland; never found on the sea. Such is the account Temminck gives of the bird before us; and we are not aware that anything besides is known concerning it, either as regards its breeding places or nest. Colonel Sykes says it is rare in the Deccan.

FULIGULA VALISNERIA.

Fu. Mas.—Dorso albo atro undulato; collo castaneo; capistroque atro.

Fu. Fem.—Capite, collo, pectoreque obscuris; subtus alba.

CANVAS-BACKED POCHARD.

Male pochard, with the back white, barred with black; neck chestnut; collar black.

Fem. pochard, with the head, neck, and breast obscure; below white.

	IN.		IN.
<i>Length</i>	24	<i>Tarsi</i>	1 $\frac{5}{8}$
<i>Bill</i>	2 $\frac{3}{4}$	<i>Middle toe</i>	3 1-5th

Male: a band round the base of the bill; top of the head, lower part of the neck and throat, rump, and tail coverts black; head and neck reddish chestnut; back, scapulars, wing coverts, tip of the secondaries, and flanks white, barred with narrow bands of black and brown; primaries brown, darkest at their tips; belly white; bill and legs blackish brown.

Fem. somewhat smaller than the male; brown, with the sides of the head, neck, and breast ferruginous; scapulars and under plumage edged with the same; back and coverts brown, undulated with dirty white.

Anas valisneria Wils. 8. 103. pl. 70, f. 5.

Fuligula valisneria Bonap. Syn. N. 338.

Faun. Bo. Am. 2. p. 451.

Steph. Sh. Zool. p. 196.

According to Dr. Richardson, this bird breeds in the fur countries from the 50th parallel to their most arctic limits. They arrive in the United States about the middle of October, frequenting the Bay of Chesapeake, the Sounds and Bays of North Carolina, and the coast of Mexico. The canvas-backed duck may be distinguished from the following at once by its greater size and the superior length of the bill; it is said to be most delicious food. Of this, however, we have considerable doubts: none of the other species contained in this genus, or even among the *Fuligulinæ*, are so.

FULIGULA FERINA.

Fu. Mas.—Capite, colloque, castaneis; nullo speculo.

Fu. Fem.—Brunneâ; subtus alba.

RED-HEADED POCHARD.

Male pochard, with the head and neck chestnut; the speculum wanting.

Fem. brown; below white.

	IN.		IN.
<i>Length</i>	19	<i>Breadth of nail</i>	3-16ths
<i>Bill</i>	1 $\frac{7}{8}$	<i>Middle toe</i>	2 $\frac{3}{4}$

Male: head and neck chestnut; breast, upper part of the back, and rump black; remainder of the back, wing coverts, thighs, flanks, and scapulars white, undulated with black; quills and tail grey; bill and legs lead-coloured, the former with the tip black.

Fem.: rather smaller than the male; head and neck reddish brown; below white; back similar to the male, but more obscure.

Young similar to the female.

<i>Fuligula ferina</i>	Steph. Sh. Zool. 1. 193.
<i>Anas ferina</i>	Linn. Syst. 1. 203.
	Gmel. Syst. 1. 530.
	Lath. Ind. Orn. 2. 862.
<i>Anas rufa</i>	Gmel. Syst. 515.
	Lath. Ind. Orn. 2. 863.
<i>Aythya ferina</i>	Boie in Brehm. Hand. der
	Nat. aller, Vo. Deut. 920.
<i>Nyroca ferina</i>	Flem. Brit. An. 121.
Pochard, or Red-headed	
Pochard	Penn. Arct. Zool. 2. 491.
Millouin	Buff. Ois. 216.
Le canard a cou roux.....	Vieill, En. Meth. Orn. 1. 132.
Le millouin	Vieill, En. Meth. Orn. 1. 136.
Trachea	Linn. Trans. vol. 4, tab. 14,
	fig. 3, 4.

Common on the European and British coasts during winter. We have also received it from India. The sea appears to be its true habitation, but it is occasionally found frequenting fresh water, particularly in the breeding season, when it makes its nest on the borders of rivers, laying twelve eggs of a greenish-white colour, and generally within the arctic circle.

FULIGULA AMERICANA.

Fu.—*Similis precedenti, sed rostrum ungue latiore.*

AMERICAN POCHARD.

Pochard like the preceding, but the bill with the nail broader.

	IN.		IN.
Length	19 $\frac{1}{2}$	Breadth of nail.....	$\frac{1}{4}$
Bill	1 $\frac{3}{4}$	Tarsi	1 $\frac{1}{2}$

It is not without considerable diffidence that we have placed this bird as a distinct species from *F. ferina*. We have, however, examined a very large number of specimens, and find the following distinctions to hold good both in young and old birds. The bill in the present species is shorter than in *F. ferina*, the nail broader, and the whole bird rather larger. In form the nail is much more rounded at the sides, the bill more rounded immediately above the nostrils, and not so deeply channelled in the centre; also broader measuring across the culmen.

Fuligula Americana Bonap.

Fuligula ferina Faun. Bo. Am. vol. 2, p. 452.

Red-headed Pochard *American authors.*

Inhabits North America.

FULIGULA MARILLA.

Fu. Mas..—Capite colloque nigris; dorso scapularibusque albis nigro lineato.

Fu. Fem.—Brunnea, cingulo albo basim rostri cingente.

SCAUP DUCK.

Male duck, with the head and neck black; the back scapulars white, lineated with black.

Fem.: brown duck, with a white band surrounding the base of the bill.

	IN.		IN.
<i>Length</i>	20	<i>Breadth of nail</i>	3-10ths
<i>Bill</i>	1 $\frac{3}{4}$	<i>Inner toe</i>	1 9-10ths
<i>Tarsi</i>	1 $\frac{1}{2}$	<i>Middle toe.</i>	2 $\frac{1}{2}$

Male: head and neck black, with purplish inflections; back and scapulars greyish white, finely and transversely lineated with black; small wing coverts, primaries, and greater wing coverts deep brown, the former sprinkled with light brown; secondaries (forming the speculum), belly, and flanks pure white; lower part of the back and tail deep brown; bill, head, and legs lead-coloured; feet the same, with the webs darker; irides yellow.

Fem.: nearly equal in size to the male; brown, with a white band surrounding the base of the bill, and expanding on the cheeks; the back and scapulars sprinkled with specks of light brown.

Fuligula marilla Steph. Sh. Zool. 12. 198.

Anas marilla Linn. Syst. 1. 196.

Gmel. Syst. 1. 509.

Lath. Ind. Orn. 2. 853.

Fuligula Gesneri Raii, Syn. 142. A. 6.

Nyroca marilla *Flem. Brit. An.* 122.

Scaup Duck Penn. Brit. Zool. 2. 275.

Penn. Arct. Zool. 2. 493.

White-faced Duck *Son. Brit. Mis. t. 62.*

<i>Le Milouian</i>	<i>Buff. Ois.</i> 9. 221. <i>Vieill. En. Method. Orn.</i> 1. 152.
<i>Le canard a bec cercle</i>	<i>Vieill. En. Method. Orn.</i> 1. 144.
<i>Trachea</i>	<i>Linn. Trans.</i> vol. 4, tab. 14, fig. 5, 6.

Met with in the same localities as *Fuligula ferina*, breeding near the arctic circle, and laying from five to eight greenish eggs.

FULIGULA AFFINIS.

Fu.—Precedenti similis, sed rostro brevior et ungue angustior armato.

AMERICAN SCAUP.

Duck like the preceding, but with the bill shorter, and armed with a narrower tail.

	IN.		IN.
<i>Length</i>	19	<i>Breadth of nail</i> ...	1-5th
<i>Bill</i>	1 3-5ths	<i>Tarsi</i>	1 1-5th

The above bird may be distinguished from the preceding, in both sexes, by the following comparative marks:—total length less; bill shorter, and not so broad; nail much narrower, and not so much rounded at its sides; tarsi shorter.

Scaup Duck of American authors.

Fuligula affinis nobis.

Inhabits North America.

This is another bird of which we have entertained considerable doubts as to the propriety of making it into a species: the above distinctions, however, appear through all the specimens we have examined to be constant. It is a curious fact that most of the water ducks* (*Fuligulinæ*) of North America and Europe should be all distinct, while those land ducks (*Anatinæ*) and the mergansers (*Merginæ*) should, in a great measure, be identical. We can only attribute it to their being endowed with a greater power of wing, and to the former (*Fuligulinæ*) following the sea coast in their migrations, and probably

* We have never examined the eiders of North America.

performing it by shorter flights, consequently being less liable, if I may be allowed the expression, to lose their road.

It is, however, yet a question whether—if the theory we have advanced in the introductory chapter of this work prove true—they will not eventually take the rank of varieties.

FULIGULA RUFITORQUES.

Fu. Mas.—Ater; subtus albus, lateribus cinereo undulatis; capistro castaneo.

Fu. Fem.—Brunneâ, fronte subtusque albis.

RING-NECKED POCHARD.

Male: black duck; below white, the sides undulated with cinereous; collar chestnut.

Fem.: brown duck, with the forehead and below white.

	IN.		IN.
<i>Length</i>	20 $\frac{1}{4}$	<i>Inner toe</i>	1 $\frac{3}{4}$
<i>Bill</i>	1 $\frac{7}{8}$	<i>Middle toe</i>	2 3-10ths
<i>Tarsi</i>	1 $\frac{7}{8}$	<i>Outer toe</i>	2 2-5ths

Male: head purplish black; back, neck, and breast purplish brown, glossed with green inflections; belly white; flanks mottled with black; tail grey-brown; primary coverts light grey; bill and legs deep lead-colour, the former crossed with a band of greenish behind the nail; the base also surrounded with a narrow band of the same colour; head slightly crested.

Fem.: upper plumage dark brown, edged on the top of the head, scapulars, and breast with chestnut; flanks chestnut; bill, throat, and belly greyish white, speckled with brown; vent dark brown.

Young similar to the female.

Fuligula rufitorques..... Bonap. Syn. p. 393, N. 341.

This species was found by Dr. Richardson in the fur countries during winter; they frequent the rivers and estuaries of North America.

The above bird appears to hold an intermediate station between *F. cristata* and *F. marilla*—the crest is smaller than in the former,

and larger than in the latter. The female may be distinguished from the female of the latter by the greater extent of the triangular space at the upper part of the base of the bill, and from that of *Cristata* by its larger dimensions.

FULIGULA CRISTATA.

Fu. Mas.—Supra ater, capite cristato; subtus albus.

Fu. Fem.—Mare similis, sed minore cristâ.

TUFTED POCHARD.

Male pochard: above black, with the head crested; below white. Female similar to the male, but with the crest smaller.

	IN.		IN.
<i>Length</i>	13	<i>Tarsi</i>	1 $\frac{3}{8}$
<i>Bill</i>	2 $\frac{3}{8}$	<i>Middle toe</i> ..	2 $\frac{1}{4}$

Male: head and crest (which is long) black, glossed with violet; back, and upper part of the plumage, glossy brown-black; the scapulars undulated with narrow bars of whitish; below, together with the speculum, white; bill lead-coloured, with the nail black; feet and legs black.

Fem. similar to the male, but not so glossy, and with the crest smaller.

<i>Fuligula cristata</i>	<i>Steph. Sh. Zool.</i> 12. 190.
<i>Anas cristata</i>	<i>Raii, Syn.</i> 142 A.
<i>Anas fuligula</i>	<i>Linn. Syst.</i> 1. 207.
	<i>Gmel. Syst.</i> 1. 542.
	<i>Lath. Ind. Orn.</i> 2. 869.
<i>Aythya cristata</i>	<i>Brehm. Hand. der Nat. aller,</i>
	<i>Vo. Deut.</i> 916.
<i>Anas scandiaca</i>	<i>Gmel. Syst.</i> 1, 520.
	<i>Lath. Ind. Orn.</i> 2. 859.
<i>Tufted Duck</i>	<i>Penn. Arct. Zool.</i> 2. 573.
<i>Lapmark Duck</i>	<i>Penn. Arct. Zool.</i> 2. 576.
<i>Morillon</i>	<i>Buff. Ois.</i> 9. 227.
<i>Le canard brun</i>	<i>Buff. Ois.</i> 9. 252.
<i>Le canard acrete</i>	<i>Vieill, En. Method. Orn.</i> 1.
	143.

A winter visitant in the British Isles; is found also in Asia, migrating northwards to breed. In America this bird is not found, its place being supplied by the preceding species. Nothing is known of its nidification.

NYROCA MELANOCEPHALA.

Ny.—Brunneâ, capite colloque âtris.

BLACK-HEADED POCHARD.

Ny.—Brown, with the head and neck black.

	IN.		IN.
<i>Length</i>	13	<i>Metatarsi</i>	1
<i>Bill</i>	1½	<i>Middle toe</i>	2

Under parts light silvery-grey; bill black, with a yellow spot on each side at the base; head and neck black, the remainder brown.

Nyroca melanocephala *Eyton.* *not here*
Fuligula nigroiceps..... *Vieill.*
Atra capilla *Merrem.*

Hab. Chili.

NYROCA AUSTRALIS.

Ny.—Proximo similis, sed majore.

AUSTRALIAN POCHARD.

Duck like the next, but larger.

	IN.		IN.
<i>Length</i>	21	<i>Inner toe</i>	2
<i>Bill</i>	1¾	<i>Middle toe</i>	2½
<i>Tarsi</i>	1½	<i>Outer toe</i>	2½

So extremely like *Nyroca leucophthalmus*, that as far as colouring goes one description will serve. The greater size, much larger and robust bill, and the bill being deep lead-coloured, with a fascia of lighter across just behind the nail, as well as being destitute of the white spot on the chin, serve to distinguish it.

Nyroca Australis *Gould, MSS.*

Our specimen was obtained from Mr. Gould, who received it from Australia.

NYROCA LEUCOPHTHALMUS.

Ny. Mas.—Ferrugineus; iridibus, speculo, mentoque maculâ, albis.

Ny. Fem.—Mare similis, sed obscurior.

WHITE-EYED DUCK.

Male: ferruginous duck, with the eyes, speculum, and patch on the chin, white.

Fem. like the male, but darker.

	IN.		IN.
<i>Length</i>	17 $\frac{1}{2}$	<i>Tarsi</i>	1 $\frac{1}{4}$
<i>Exp. alæ</i>	26	<i>Middle toe</i>	2 $\frac{1}{4}$
<i>Bill</i>	1 $\frac{1}{2}$	<i>Inner toe</i> ..	1 $\frac{5}{8}$

Male: bright reddish chestnut, with a collar round the neck brown; speculum, a spot on the chin, and under parts pure white; the back and wings in some specimens inclining to brownish; bill and legs lead-coloured; irides white.

Fem.: similar, but with the colours more obscure.

<i>Nyroca leucophthalmus</i>	<i>Flem. Brit. An.</i> 121.
<i>Anas Africana</i> ..	<i>Gmel. Syst.</i> 1. 522.
	<i>Lath. Ind. Orn.</i> 2. 875.
<i>Anas nyroca</i>	<i>Gmel. Syst.</i> 1. 542.
	<i>Lath. Ind. Orn.</i> 2. 869.
<i>Anas ferruginea</i>	<i>Gmel. Syst.</i> 1. 528.
	<i>Lath. Ind. Orn.</i> 2. 866.
<i>Aythya nyroca</i>	<i>Boie in Brehm. Hand. der.</i>
	<i>Nat. aller, Vo. Deut.</i> 918.
<i>African Teal</i>	<i>Lath. Syn.</i> 6. 555.
<i>Ferruginous Duck</i>	<i>Penn. Brit. Zool.</i> 2. 601.

Rare as the occurrence of this bird is in the British Isles, it is not uncommon in some parts of France, Holland, and Germany, and is found also in India and North America. Mons. Temminck informs us in his Manual that it constructs its nest by the sides of rivers and morasses, laying eight or ten white eggs, slightly tinged with greenish.

NYROCA BRUNNEA.

Ny. Mas.—Obscurus, capite cristato; genis colloque inferiore castaneis; dorso brunneo.

Ny. Fem.—Mare similis, sed mento basoque rostri fasciâ cinctâ, genisque lineâ albis.

BROWN POCHARD.

Male: obscure duck, with the head slightly crested; the cheeks and lower parts of the neck chestnut; the back brown.

Fem. duck similar to the male, but with the chin and the base of the bill surrounded with a fascia; and the cheeks with a white line.

	IN.		IN.
<i>Length</i>	20	<i>Outer toe</i>	2 $\frac{1}{4}$
<i>Bill</i>	1 $\frac{5}{8}$	<i>Middle toe</i>	2 $\frac{3}{8}$
<i>Tarsi</i>	1 $\frac{3}{8}$	<i>Inner toe</i>	1 $\frac{3}{4}$

Male: sooty black, with the head slightly crested and glossy; flanks and back inclining to olive brown, and speckled with light brown and white; wing-spot white; cheeks deep chestnut, which colour extends for some distance down the neck; chin black; bill blueish lead-colour; legs the same.

Fem.: as in the male, but with a circle round the base of the bill; a line from the eye to the lower part of the throat, and the tips of all the feathers below, white.

Nyroca brunneâ nobis.

Specimens of this species are in our own collection, and were received from Southern Africa. Specimens are also in the South African Museum, brought home by Dr. Andrew Smith.

HARELDA GLACIALIS.

Ha. Mas.—Capite colloque albis; maculâ auriculari brunneâ ornata.

Ha. Fem.—Brunneâ; gutture maculâ albâ ornata.

LONG-TAILED DUCK.

Male duck, with the head and neck white, with a brown auricular patch.

Fem. brown duck; the throat with a white patch.

	IN.		IN.
<i>Length</i>	22	<i>Inner toe</i>	1 $\frac{5}{8}$
<i>Bill</i>	1 $\frac{1}{8}$	<i>Middle toe</i>	2 $\frac{1}{4}$
<i>Tarsi</i>	1 $\frac{1}{4}$	<i>Outer toe</i>	2 $\frac{1}{4}$

Male: head and neck white, with an auricular brown spot; scapulars and tertiaries, abdomen, and outer tail feathers, white;

breast, back, wing and middle tail feathers, brown; (during summer the plumage becomes more obscure, and similar to that of the female;) middle tail feathers and tertiaries much elongated; bill black, with a band of red; legs and toes yellow, with the membranes dusky.

Fem.: without the long tail and tertiary feathers; dark brown, darkest on the back, the edge of the feathers lightest; throat with a large patch, and the under parts light grey.

The young similar to the female.

<i>Harelda glacialis</i>	<i>Steph. Sh. Zool.</i> 12. 175.
<i>Anas glacialis</i>	<i>Linn. Syst.</i> 1. 203.
	<i>Gmel. Syst.</i> 1. 529.
	<i>Lath. Ind. Orn.</i> 2. 864.
<i>Anas hyemalis</i>	<i>Linn. Syst.</i> 202. 29.
	<i>Gmel. Syst.</i> 529. 29.
<i>Anas caudata harelda</i>	<i>Raii, Syn.</i> 145. 14.
<i>Querquedula ferroensis</i>	<i>Briss. Orn.</i> 6. 466.
<i>Anas longicauda islandica</i>	<i>Briss. Orn.</i> 7. 299.
<i>Long-tailed Duck</i>	<i>Penn. Brit. Zool.</i> 2. 599.
<i>Canard a longequue</i>	<i>Buff. Ois.</i> 9. 202.
<i>Canard de midon</i>	<i>Buff. pl. Enl.</i> 1008.
	<i>Vieill. En. Method. Orn.</i> 1.
	129.
<i>Sarcelle de ferroe</i>	<i>Buff. Ois.</i> 9. 278.
<i>L'Angletaske</i>	<i>Vieill. En. Method. Orn.</i> 1.
	134.
<i>Trachea</i>	<i>Mont. Orn. Diet. Sup. fig.</i> 12.
	<i>Linn. Trans. vol. 4, tab.</i>
	30, fig. 3, 4.

An inhabitant of the arctic regions, not migrating farther south than the northern part of Scotland; breeds on the sea coast, making its nest of grass and sea weed; lays generally about eight eggs of a blueish colour. We have given an account of the trachea under the genus *Harelda*.

CLANGULA HISTRIONICA.

Clang. Mas.—Capite atro; maculâ utrinque ante oculari auricularique albis.

Clang. Fem.—Brunneâ; capite maculis albis obscuris ornatis mare similibus.

HARLEQUIN DUCK.

Male duck, with the head black; a spot on each side before the eyes, and on the ears, white.

Fem. brown duck, with marks on the head similar to the male, but obscure.

	IN.		IN.
<i>Length</i>	16½	<i>Inner toe</i>	1¾
<i>Bill</i>	1	<i>Middle toe</i>	2⅜
<i>Tarsi</i>	1¼	<i>Outer toe</i>	2¼

Male: crown black; between the base of the bill and the eye is a triangular patch of white, with the small end towards the bill, from the upper corner of which a streak varying in intensity proceeds over the eye to the occiput; back of the neck black, with an elongated white streak on each side; throat and upper part of the neck shining violet-black; an auricular patch white; collar and a streak extending nearly from the point of one wing round the front of the breast to that of the other, wing coverts, and tertiaries, white; breast, belly, and vent brown; tail and wings dark umber-brown; wing-spot purple; bill and legs lead-coloured, tipped with red; irides hazel.

Fem.: brown, with the margins of the feathers paler; a spot between the base of the bill and the eye, and an auricular one, whitish; belly and vent white, blotched with brown; rather smaller than the male.

<i>Clangula histrionica</i>	<i>Steph. Sh. Zool.</i> 1. 180. <i>Eyton, Hist. R. Brit. Birds,</i> 84.
<i>Anas histrionica</i>	<i>Lynn. Syst.</i> 1. 204. <i>Gmel. Syst.</i> 1. 534.
<i>Anas minuta</i>	<i>Linn. Syst.</i> 1. 204. <i>Gmel. Syst.</i> 1. 534.
<i>Anas torquata</i>	<i>Gmel. Syst.</i> 1. 514.
<i>Harlequin Duck</i>	<i>Penn. Arct. Zool.</i> 2. 490.
<i>Dusky and Spotted Duck</i>	<i>Edw. Glea, pl.</i> 99.
<i>Le canard a collier de terre</i> <i>neuve</i>	<i>Buff. Ois.</i> 9. 250.
<i>Canard a collier ou histrion</i>	<i>Temm. Man.</i> 2. 878.
<i>La sarcelle brun et blanche</i>	<i>Buff. Ois.</i> 9. 287.
<i>Le canard de terre neuve</i>	<i>Vieill, En. Method. Orn.</i>
<i>Le canard histrion</i>	<i>Vieill, En. Method. Orn.</i> 1. 146.

Inhabits the northern regions of both the American and European Continents. A few specimens have been occasionally killed in Orkney and the northern islands; migrates northwards to breed; the female lays ten white eggs.

CLANGULA ALBEOLA.

Clang. Mas.—Capite colloque atris; maculâ albâ suboculari occipite extendente.

Clang. Fem.—Atra-fusca; albâ maculâ genis.

SPIRIT DUCK.

Male duck, with the head and neck black; a white patch extending below the eye to the occiput.

Fem.: sooty black duck, with a white patch on each side of the head.

	IN.		IN.
<i>Length</i>	16	<i>Tarsi</i>	1 $\frac{3}{8}$
<i>Bill</i>	1 $\frac{1}{4}$	<i>Middle toe</i> ..	

Male: head and upper part of the neck rich purple-green, with a large white patch extending from below the eye to the occiput; back and scapulars black; tail and quills hoary black; greater wing coverts white; secondaries black, above which is another white patch formed by the tertiary coverts; legs and toes orange; webs black; bill lead-coloured.

Fem.: smaller than the male; head and plumage dark blackish brown; the fore part of the neck, side of the breast, flanks, and vent feathers blackish grey; breast and belly white, tinged with brownish orange; the white band on the ears and occiput much narrower than in the male, and obscure; lesser coverts and scapulars blackish brown; bill and feet brownish.

<i>Anas albeola</i>	<i>Linn. Syst.</i> 1. 199.
	<i>Gmel. Syst.</i> 1. 517.
	<i>Lath. Ind. Orn.</i> 2. 866.
<i>Anas Bucephala</i>	<i>Linn. Syst.</i> 1. 200.
	<i>Gmel. Syst.</i> 1. 521.
<i>Anas hyberna</i>	<i>Briss. Orn.</i> 6. 349.
<i>Querquedula Ludoviciana</i>	<i>Briss. Orn.</i> 6. 349.
<i>Anas rustica</i>	<i>Linn. Syst.</i> 1. 201.
	<i>Gmel. Syst.</i> 1. 524.
<i>Sarcelle de la Caroline</i>	<i>Buff. Ois.</i> 9. 286.
<i>Sarcelle blanche et noir ou la</i> <i>religieuse</i>	<i>Buff. Ois.</i> 9. 284.
<i>Petit canard a grosse tete</i>	<i>Buff. Ois.</i> 9. 249.
<i>Buffle-headed Duck</i>	<i>Catesb. Carol.</i> 1. pl. 95.
	<i>Penn. Arct. Zool.</i> 2. 489.
	<i>Lath. Gen. Syn.</i> 6. 532.

- Little brown Duck* *Catesb. Carol.* 1. pl. 98.
Lath. Gen. Syn. 6. 534.
Le canard Lhoora *Vieill. En. Method. Orn.* 1.
 134.

An abundant species on the fresh water lakes of arctic America, where nidification is perfected; their nests are made in hollow trees contiguous to water. During autumn and winter they are found over a considerable portion of North America.

CLANGULA BARROVII.

Clang. Mas.—Capite colloque superiore atro; genis lunatâ fasciâ ornâtis.

Clang. Fem.—Vulgari similis, sed singulo albo collo.

BARROW'S DUCK.

Male clangula, with the head and upper part of the neck black; the cheeks ornamented with a lunate fascia.

Fem. similar to the female of *Clangula vulgaris*, but with a white collar.

	IN.		IN.
<i>Length</i>	22½	<i>Middle toe</i>	2½
<i>Bill</i>	1 7-12ths	<i>Outer toe</i>	1 5-12ths
<i>Tarsi</i>	1 7-12ths		

Male: head and upper part of the neck black, with purple and metallic green inflections; a crescent-shaped patch from the gape to the crown; below, lesser wing coverts, tips of the scapulars, and greater coverts, together with the outer secondaries, white; lateral tail coverts brown; bill lead-coloured; legs and feet orange, the webs black.

Fem.: very similar to the female of *Clan. vulgaris*, but rather larger; with a white ring round the middle of the neck, and the back of a darker colour.

- Clangula Barrovii*..... *Faun. Bo. Am.* 2. 415.
Gould, Birds of Europe.

The true habitat of this species is North America, in the neighbourhood of the Rocky Mountains, where it was discovered by Dr. Richardson. A single individual has since been obtained from Iceland by T. C. Atkinson, Esq., and a female is in our own collection.

Brisson, in his "Ornithologie," pl. 37, fig. 2, vol. 6, has figured this bird in mistake for *Clangula vulgaris*, quoting for it the synonyms of Willoughby (whose plate is that of *C. vulgaris*) and of Linnæus. The specimen from which his description and plate is taken was in the collection of M. de Reaumur; he does not, however, say from whence obtained.

CLANGULA VULGARIS.

Clang. Mas.—Albâ maculâ rotundatâ suboculari et speculo albo.

Clang. Fem.—Capite colloque superiore brunneis.

COMMON GOLDEN EYE.

Male duck, with a white spot under the eye, and wing-spot white.

Fem. duck, with the head and upper part of the neck brown.

	IN.		IN.
<i>Length</i>	19	<i>Tarsi</i>	1½
<i>Bill</i>	1¼	<i>Middle toe</i>	2 7-10ths

Male: head and upper part of the neck green, with purple inflections; remainder of the neck, belly, breast, greater wing coverts, and a spot below the eye, white; back, rump, lesser wing and tail coverts black; quills and tail black; legs, toes, and bill lead-coloured; irides golden yellow.

Fem.: with the head and upper part of the neck brown; back, wings, and tail dusky slate-colour; wing-spot white; bill lead-coloured, with a yellowish band round the nail.

<i>Anas clangula</i>	<i>Linn. Syst.</i> 1. 201.
	<i>Gmel. Syst.</i> 1. 523.
	<i>Raii, Syn.</i> 142 A.
	<i>Lath. Ind. Orn.</i> 2. 867.
<i>Anas glaucion</i>	<i>Linn. Syst.</i> 1. 401.
	<i>Gmel. Syst.</i> 1. 525.
	<i>Lath. Ind. Orn.</i> 2. 868.
<i>Le garrot</i>	<i>Buff. Ois.</i> 9. 222.
<i>Clangula vulgaris</i>	<i>Flem. Brit. An.</i> 120.
<i>Clangula chrysophthalmus</i>	<i>Steph. Sh. Zool.</i> 12. 182.
<i>Canard garrot</i>	<i>Temm. Man.</i> 2. 870.
<i>Golden Eye</i>	<i>Penn. Arct. Zool.</i> 2. 276.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 4, <i>tab.</i> 15, <i>fig.</i> 1—5.

Breeds in the arctic regions, but regularly migrates southwards during winter; is found commonly in Europe, frequenting both fresh

and sea water, but more commonly the latter; during the breeding season, however, they are stated by travellers to frequent exclusively fresh water, making their nest on the shores of lakes and rivers in the fur countries, and laying from seven to ten white eggs.

CLANGULA AMERICANA.

Clang. Mas.—*Clangula vulgari similis*, sed majore.

AMERICAN GOLDEN EYE.

Male clangula, similar to the common golden eye, but larger.

	IN.		IN.
<i>Length</i>	21	<i>Tarsi</i>	$\frac{1}{2}$
<i>Bill</i>	$1\frac{1}{2}$	<i>Middle toe</i>	$2\frac{3}{4}$

Very like the common golden eye of Europe, but larger, with the spot at the base of the bill more ovate, and the bill longer, broader, and stouter.

Clangula Americana..... Bonap, MSS.

Common Golden Eye..... Nutt. Orn. 2. 441.

It is even now doubtful whether or not many of the birds of North America are distinct from our own. There is, however, between many of them found enough of distinction for the practised eye of an ornithologist to say with certainty, this bird is North American—this European.

THALASSORNIS LEUCONOTUS.

Thal.—Corpore colloque ferrugineis; illo atro transversim fasciato, dorsoque imo albo.

FASCIATED DUCK.

Duck, with the body and neck ferruginous; the former transversely fasciated with black, and the lower part of the back white.

	IN.		IN.
<i>Length</i>	18	<i>Inner toe</i>	2
<i>Bill</i>	$1\frac{5}{8}$	<i>Middle toe</i>	$2\frac{3}{4}$
<i>Tarsi</i>	$1\frac{3}{8}$	<i>Outer toe</i>	$2\frac{5}{8}$

Head, upper part of the back, and flanks black; the tip and a bar across each feather dull brown; wing coverts black, barred with

ferruginous; neck light-yellowish brown; belly rather darker; back and rump dirty white; tail coverts and tail black, the former tipped with light brown; feet and bill black; tail short; very old birds have a whitish spot on each side behind the base of the bill, and another smaller one on the chin.

Clangula leuconotus Smith, Cat. S. Afric. Mus.
Thalassornis Eyton, Mon. Anat.

Was in the Museum of the Zoological Society, said to have been received from the Cape of Good Hope; also in my collection.

The bill in this species approaches in form to that of *Biziura*. Since we described the above, under another name, we have seen the specimens brought home by Dr. Smith from the Cape, and now exhibiting. As our specific appellation was not published, we have therefore adopted his.

BIZIURA LOBATA.

Biz. Mas.—Ater, albo transversim et minuté fasciatus; alis brunneis; mandibulâ inferiore carunculâ compressâ.

Biz. Fem.—Mare similis, sed carunculâ caret.

LOBATED DUCK.

Male, black duck, minutely and transversely lineated with white; wings brown; inferior mandibles with a compressed caruncle.

Fem duck similar to the male, but without the caruncle.

	IN.		IN.
<i>Length</i>	33	<i>Inner toe</i>	3
<i>Bill</i>	1 $\frac{3}{4}$	<i>Middle toe</i>	3 $\frac{5}{8}$
<i>Tarsi</i>	2	<i>Outer toe</i>	3 $\frac{1}{2}$

Male: crown and upper part of the back of the neck black, occasionally speckled with whitish; back, lower part of the neck, flanks, rump, and under tail coverts deep glossy black, each feather transversely streaked with one or two narrow lines of white or light brown; wings and tail sooty black; remainder grey or silvery white; bill and legs lead-coloured, the former with a large compressed caruncle on the lower mandible.

Fem.: smaller than the male, but in colour similar; without the caruncle.

<i>Biziura Nova Hollandiae</i>	Steph. Sh. Zool. 12. 222.
<i>Hydrobates lobatus</i>	Temm. Pl. En. N. 68.
<i>Anas lobata</i>	Shaw, Nat. Mis. 8. pl. 255.
<i>Lobated Duck</i>	Lath. Gen. Syn. Sup. 2. p. 349.
<i>Le canard caroncule</i>	Vieill, En. Method. Orn. 356.

All that is known of the habits of this curious bird is contained in a short notice by Lieutenant Breton, R.N., inserted in the Zoological Proceedings for 1834, p. 19, from which we extract the following:—"He (Lieutenant Breton) stated that these birds are so extremely rare that he saw only three of them during his various excursions, which extended over twelve hundred miles of country. He has never heard of any instance in which more than two were seen together. They are only met with on the rivers and in pools left in the otherwise dry beds of streams. They are extremely difficult to shoot on account of the readiness with which they dive. The instant the trigger is drawn the bird is under water."

ERISMATURA MACCOA.

Eris.—Brunneâ, gutture lineâque infra oculos albis.

MACCOA DUCK.

Brown duck, with the throat and a streak below the eye dirty white.

	IN.		IN.
<i>Length</i>	14	<i>Tarsi</i>	1 $\frac{3}{8}$
<i>Bill</i>	1 $\frac{1}{2}$	<i>Outer toe</i>	2 $\frac{1}{4}$

Back black, barred with ferruginous; flanks brown, barred with the same; tail brown; head dark brown, undulated with ferruginous; chin and streak from the bill below the eye to the occiput whitish grey; below silvery grey, undulated with brown; bill lead-coloured; legs with a tinge of greenish; speculum none.

<i>Oxyura Maccoa</i>	Smith, Cat. S. Afric. Mus.
<i>Eris matura</i>	Eyton, Mon. Anat.

A specimen is in our collection, brought home from the Indian Isles. Except from the difference in locality, we should have supposed this bird to have been the young of *Oxyura rubida*. Since writing the above we have seen a specimen brought home by Dr. Smith, and have adopted his name.

ERISMATURA UNIFASCIATA.

Eris.—Atra brunneâ strigatis.

Eris.—Black, irrorated with brown.

	IN.		IN.
<i>Length</i>	13½	<i>Metatarsi</i>	1
<i>Bill</i>	1½	<i>Middle toe</i>	2½

Crown of the head and cheeks dark brown; throat, and a distinct mark just below the eye to the occiput and throat, white, slightly dappled with brown; back of the neck, back, and upper tail coverts black, minutely irrorated with brown; lower tail coverts white; tail and quills black above, grey on the under surfaces.

Erismatura unifasciata nobis. *non Bonaparte, 18*

Hab. Purchased from a dealer, and ticketed Persia, October 8, 1840.

ERISMATURA FERRUGINEA.

Eris.—Ferruginea, capite atro.

FERRUGINOUS DUCK.

Male, ferruginous duck, with the head black.

	IN.		IN.
<i>Length</i>	17½	<i>Tarsi</i>	1¼
<i>Bill</i>	1¾	<i>Centre toe</i>	2¾

Male: deep ferruginous, with the head and upper part of the neck black; quills and tail brown; vent and belly silvery ash, tinged with ferruginous.

Erismatura ferruginea. *Eaton, Mon. Anat., 1858, 11*

Closely allied to *Erismatura Australis*. The only specimen we have seen is in the British Museum, obtained from Chili.

Erismatura ferruginea nobis.

ERISMATURA LEUCOCEPHALA.

Eris. Mas.—Vertice atro; subtus castaneus; reliquo albo.

Eris. Fem.—Mare similis, sed coloribus obscuris.

WHITE-HEADED DUCK.

Male duck, with the crown black; remainder of the head white; below chestnut.

Fem. similar, but with the markings obscure.

	IN.		IN.
<i>Length</i>	17	<i>Inner toe</i>	$2\frac{1}{8}$
<i>Bill</i>	$1\frac{3}{4}$	<i>Centre toe</i>	$2\frac{7}{8}$
<i>Tarsi</i>	$1\frac{3}{8}$	<i>Outer toe</i>	$2\frac{3}{4}$

Male: crown black; remainder of the head pure white; body silvery brown, tinged with ferruginous on the breast, flanks, and back,—on the latter irrorated with black; tail and wings brown; no wing-spot; legs and bill lead-coloured,—the latter more taper at the base than is usual in the genus.

Fem.: similar to the male, but with the colours not so distinct.

<i>Anas leucocephala</i>	<i>Gmel. Syst.</i> 1. 516.
	<i>Lath. Ind. Orn.</i> 2. 858.
<i>Undina leucocephala</i>	<i>Gould, Birds of Europe.</i>
<i>Anas mersa</i>	<i>Gmel. Syst.</i> 1. 520.
<i>White-headed Duck</i>	<i>Lath. Gen. Syn.</i> 6. 478.
<i>Ural Duck</i>	<i>Lath. Gen. Syn.</i> 6. 478.
<i>La Macreuse de Russie</i>	<i>Vieill, En. Method. Orn.</i> 1. 140.
<i>Le canard Ural</i>	<i>Vieill, En. Method. Orn.</i> 1. 127.

Inhabits the eastern portions of Europe; occasionally found during migration in Austria and Hungary.

ERISMATURA RUBIDA.

Eris. Mas.—Brunneâ, capite supra, fronte, et occipite atris; genis mentoque albis.

Eris. Fem.—Mare similis, sed coloribus obscuris.

RUDDY DUCK.

Male, brown duck, with the upper part of the head, the forehead, and occiput black; cheeks and chin white.

Fem. like the male, but with the colours less distinct.

	IN.		IN.
<i>Length</i>	15	<i>Inner toe</i>	2
<i>Bill</i>	$1\frac{5}{8}$	<i>Middle toe</i>	$2\frac{1}{2}$
<i>Tarsi</i>	$1\frac{1}{4}$	<i>Outer toe</i>	$2\frac{1}{2}$

Male: crown, head, and back of the neck black; back and tail brown, dotted with whitish; wings brown; throat and cheeks white; flanks, breast, and lower surface also white, tinged more or less with ferruginous; bill lead-coloured; legs and feet brown; irides hazel.

Fem.: similar to the male, but with the back part of the head and neck inclining to brown; the throat and cheeks light slate-colour.

Young similar to the female.

<i>Erismatura rubida</i>	Bonap. Cat. Am. and Europ. Birds.
<i>Anas rubida</i>	Wils. Am. Orn. 8 p. 128, pl. 71, fig. 56.
<i>Fuligula (oxyura) rubida</i>	Bonap. Syn. p. 390. N. 336.
——— <i>rubida</i>	Faun. Bo. Am. 2. 455.
<i>Gymnura rubida</i>	Nutt. Man. Orn. 2. 426.

Inhabits North America, retiring northwards to breed; frequents fresh water in preference to the sea, according to Nuttall. When swimming they have a habit of carrying the tail so erect that it appears of the same height with the head and neck.

ERISMATURA AUSTRALIS.

Eris. Mas.—Capite colloque atris; corpore castaneo.

Eris. Fem.—Ferruginea, fasciata et punctata atro et brunneo.

AUSTRALIAN DUCK.

Male duck, with the head and neck black; the body chestnut.

Fem. ferruginous duck, fasciated and punctated with black and brown.

	IN.		IN.		IN.
Length ...	15	Bill	1 $\frac{7}{8}$	Tarsi	1 $\frac{1}{8}$

Male: with the head, throat, and neck black; below with the back dark chestnut; tail, wings, and rump black, the latter irrorated with ferruginous; under tail coverts silvery grey; bill, feet, and legs lead-coloured.

Fem.: brown, ferruginous, fasciated transversely with black and dark brown; throat light brown; under surface silvery grey, slightly tinged with brown; tail and wings brown.

Oxyura Australis, Gould.. ... Zool. Proc. 1836, p. 85.

Inhabits Australia. First sent to England by Lieutenant Breton from Swan River. The specimens were in the collection of the Zoological Society.

ERISMATURA DOMINICA.

Eris. Mas.—Ferrugineus, capite anteriore atro; speculo albo.

Eris. Fem.—Brunneâ, lineis albis infra et per oculos, occipite tendentibus; speculo mare simili.

DOMINICAN DUCK.

Male, ferruginous duck, with the head anteriorly black; the wing-spot white.

Fem. brown duck, with a white streak through the eye, and another below it extending to the occiput; wing-spot as in the male.

	IN.		IN.
<i>Length</i>	13½	<i>Inner toe</i>	1½
<i>Bill</i>	1¼	<i>Middle toe</i>	2¼
<i>Tarsi</i>	1	<i>Outer toe</i>	1¾

Male: fore part of the head sooty black; the hind part of the neck, back, scapulars, flanks, and rump ferruginous; wing coverts brown; quills ashy black, with the wing-spot white; tail black; throat, streak through the eye, and another below it, light ferruginous; bill and legs lead-coloured.

Fem.: with the back deep brown; flanks light brown, barred with darker; head deep brown, slightly undulated with ferruginous; under parts silvery grey, undulated with brown; a dusky white streak passes through the eye, and another below it; wing-spot white; bill lead-coloured; legs brown.

<i>Anas Dominica</i>	<i>Linn. Syst.</i> 1. 201.
	<i>Gmel. Syst.</i> 1. 521.
	<i>Lath. Ind. Orn.</i> 2. 874.
<i>Fuligula Dominica</i>	<i>Steph. Sh. Zool.</i> 12. 203.
<i>Querquedula Dominicensis</i>	<i>Briss. Orn.</i> 6. 472.
<i>Anas spinosa</i>	<i>Gmel. Syst.</i> 1. 522.
	<i>Lath. Ind. Orn.</i> 2. 874.
<i>Anas Dominica</i>	<i>P. Max. Bat. Nat. Braz.</i> 4.
	938.

- Sarcelle de la Guadeloupe*..... Buff. Pl. Enl. 938.
Sarcelle à queue épineuse de
Cayenne Buff. Pl. Enl. 968.
Spinous-tailed Duck Lath. Gen. Syn. 6. 554.
Erismatura ortygoides G. Hill, in Gosse, p. 406.

A female specimen is in the British Museum. Both male and female are in our own collection, obtained from Jamaica. It also, according to Prince Maximilian, inhabits Brazil.

NESONETTA AUCLANDICA.

Nes.—Brunneâ, dorso alisque æneo tinctis.

Nes.—Brown, the back and wings tinged with æneous.

- Nesonetta Auclandica* Gray. Gen. An.
Mergus Australis Homb. and Jacq. in An. Sc.
 Nat. 15. 320.

We have not seen this bird, but it certainly does not belong to the *Erismaturinæ*.

MERGUS MERGANSER.

Mer. Mas.—Capite colloque superiore viridibus; scapularibus primoribusque atris; corpore subtus albo.

Mer. Fem.—Capite rufo; corpore subtus cinerascenti-albo.

COMMON MERGANSER.

Male mer. with the head and upper part of the neck green; the scapulars and primaries black; below white.

Female, with the head rufous; below ashy white.

	IN.		IN.
<i>Length</i>	29	<i>Tarsi</i>	1 $\frac{3}{4}$
<i>Bill</i>	2	<i>Middle toe</i>	2 $\frac{3}{4}$

Male: head and neck deep glossy green, the former crested; upper part of the back and scapulars black; lower part of the back, tail, and secondary coverts hoary grey; quills and secondaries brown; tertiaries white, beautifully edged with black; bill red, with the margins and culmen black; legs, feet, and webs orange; irides hazel.

Fem.: head and upper part of the neck rufous brown, the former crested on the occiput; throat white; lower part of the neck, breast,

flanks, and thighs, whitish ash; belly and abdomen yellowish white; above dark ash; feet, bill, and legs as in the male, but not so bright.

Young similar to the female.

<i>Mergus merganser</i>	Linn. Syst. 1. 208.
	Raii, Syn. 1. 34. A. 1.
	Gmel. Syst. 1. 544.
	Briss. Orn. 6. 231. t. 32.
	Lath. Ind. Orn. 2. 828.
	Wils. Am. Orn. pl. 68.
<i>Merganser Raii</i>	Steph. Shaw, Zool. 12. 161.
<i>Mergus castor</i>	Linn. Syst. 1. 209.
.....	Gmel. Syst. 1. 545.
.....	Lath. Ind. Orn. 2. 829.
<i>Mergus ruficapillus</i>	Gmel. Syst. 1. 545.
——— <i>serratus longirostris</i> ...	Raii, Syn. 1. 34. A. 2.
<i>Gooseander</i>	Penn. Arct. Zool. 2. N. 465.
.....	Lath. Syn. 6. 418.
<i>Dundiver</i>	Penn. Arct. Zool. 2. 465.
<i>Le Harle</i>	Buff. Ois. 8. 267.
——— <i>femelle</i>	Buff. Ois. 8. 236.
<i>Le Bievre</i>	Vieill, En. Method. Orn. 1.
	103.
<i>Le Harle</i>	Vieill, En. Method. Orn. 1.
	101.
<i>Trachea</i>	Linn. Trans. vol. 15, tab. 15,
	fig. h.

Inhabits the neighbourhood of the arctic circle, breeding in Iceland, Siberia, Kamschatka, and the fur countries, making its nest of grass near the water, and laying from ten to fourteen eggs of a yellowish colour. During winter, in hard weather, these birds migrate southwards, and are found over considerable portions of the Continents of Europe, Asia, and America. We have also received them from Peru.

MERGUS SERRATOR.

Mer. Mas.—Capite cristato, hâc colloque superiore viridibus; collo inferiore capistro albo.

Mer. Fem.—Capite cristato, hâc colloque superiore rufis, collo inferiore cinereo; ventre albo; speculoque fasciâ atrâ diviso.

RED-BREASTED MERGANSER.

Male mer. with the head crested, and the upper part of the neck green; the inferior part with a white collar.

Fem. mer. with the head crested, together with the upper part of

the neck, rufous; the inferior part cinereous; below white; speculum divided by a black bar.

	IN.		IN.
<i>Length</i>	20	<i>Inner toe</i>	2
<i>Bill</i>	2 $\frac{5}{8}$	<i>Middle toe</i>	2 $\frac{5}{8}$
<i>Tarsi</i>	2 $\frac{1}{8}$	<i>Outer toe</i>	2 $\frac{1}{2}$

Male: head and upper part of the neck glossy greenish black, the former crested; middle of the neck with a white collar; lower part of the neck and breast ferruginous, spotted with black; upper part of the back, scapulars, and sides of the breast black; wing coverts white, with a black bar across the larger ones; tail grey; flanks and lower part of the back white, undulated with narrow black lines; below white; irides reddish; bill orange, with the culmen black.

Fem.: head and crest brown; remainder of the neck greyish brown; secondaries, abdomen, and lower part of the breast white.

Young similar to the female.

<i>Mergus serrator</i>	<i>Linn. Syst.</i> 1. 208.
	<i>Gmel. Syst.</i> 1. 545.
	<i>Lath. Ind. Orn.</i> 2. 829.
<i>Mergus serrator leucomelas</i>	<i>Gmel. Syst.</i> 1. 546.
—— <i>serratus</i>	<i>Gmel. Syst.</i> 1. 546. <i>A.</i>
—— <i>niger</i>	<i>Gmel. Syst.</i> 1. 546. <i>B.</i>
—— <i>cristatus</i>	<i>Briss. Orn.</i> 6, 237. 2. <i>t.</i> 23.
<i>Red-breasted Merganser</i>	<i>Penn. Aret. Zool.</i> 2. 466.
	<i>Lath. Gen. Syn.</i> 6. 423.
<i>Le Harle, Huppe</i>	<i>Buff. Ois.</i> 8. 273.
<i>Harle a manteau noir</i>	<i>Buff. Ois.</i> 8. 277.
——, <i>Huppe</i>	<i>Temm. Man. Orn.</i> 2. <i>p.</i> 884.
<i>Trachea</i>	<i>Linn. Trans. vol.</i> 4, <i>tab.</i>
	16, <i>fig.</i> 1, 2.

Inhabits nearly the same countries as the preceding, but does not extend so far southwards; breeds in the neighbourhood of the arctic circle and in the Highlands of Scotland, on the borders of fresh water lakes, making its nest of dried herbage, lined with down stripped from its own body; lays from eight to twelve eggs of a brownish yellow colour.

MERGUS BRAZILIANUS.

Mer.—Niger, capite colloque viride-æneis.

BRAZILIAN MERGANSER.

Black merganser, with the head and neck brassy green.

	IN.		IN.		IN.
<i>Length of bill</i>	2	<i>Tarsi.....</i>	$1\frac{3}{4}$	<i>Middle toe</i>	$2\frac{1}{4}$

Merganser, with the head and neck glossy green; the occiput with a long pendent crest the same; the whole of the back, tail, and wings sooty black; wing-spot white, divided by a black streak; under surface and the lower part of the neck brown, the latter, with the flanks, minutely spotted and barred with white, the abdomen broadly so; bill black; legs and feet orange, with the webs dusky.

Mergus Brazilianus..... Vieill, *Gal. des Oiseaux*, 2.
209.

Le Harle a huit brins *Dict. d'Hist. Nat.* 2nd edit.
14. 222.

In the collection of the Zoological Society; evidently a young bird.

MERGUS SQUAMATUS.

Mer.—Capite cristato et capite cervoque brunneis.

Mer.—Head crested; crest, head, and neck brown.

	IN.		IN.
<i>Length</i>	23	<i>Tail</i>	$4\frac{1}{4}$
<i>Bill</i>	$2\frac{3}{4}$	<i>Tarsi</i>	2
<i>Wing</i>	10		

Crown of the head, lengthened crest, and neck rusty brown; upper surface brownish grey; tuft of feathers at the insertion of the wing grey, passing into white near the tip, and broadly marginal, with black about the middle of the feathers, beyond which they are creamy white; primaries very dark or blackish brown; lower part of the throat, and all the under surface, pale buff; sides of the breast, and the whole of the flanks down to the tail, deep rich buff, with two narrow, irregular, crescentic bands on each feather, one behind the other, the outer one near the edge, the inner one near the middle; a similar style of marking pervades the space behind the legs, the lower part of the back, and upper tail coverts, but the

markings in those parts are wider and of a greyer tint, and intermingled with each other; tail greyish brown, the central feathers freckled on their margins with greyish white.

Mergus squamatus Gould, *Proc. Zool. Soc.*
1864. p. 184.

Hab. China. Non vidi.

MERGUS CUCULLATUS.

Mer. Mas.—Capite atro cristato; cristâ albâ, et macula triangulari notatâ.

Mer. Fem.—Brunneâ, capite cristato; gutture albo.

HOODED MERGANSER.

Male mer., with the head crested, black; crest with a large triangular patch of white.

Fem. brown merganser, with the head crested; the throat white.

	IN.		IN.
<i>Length</i>	19	<i>Inner toe</i>	1½
<i>Bill</i>	1½	<i>Middle toe</i>	2
<i>Tarsi</i>	1½		

Male: head and neck glossy black, with purple and green inflections, the former largely crested with long silky feathers; crest marked with a fan-shaped patch of white, the small end placed towards the eye, a little behind it, and extending backwards nearly to the edge of the hood; breast and under surface white, the former with two bands of velvet black, tapering to a point in front of the wings; quills and tertiaries deep brown, the latter with white shafts and dark edges; tail dark brown; back black; flanks dark chestnut, with narrow transverse undulated bars of black or brown; irides yellow; bill red.

Fem.: with the crest smaller than in the male, and the feathers not so numerous; neck, back, head, crest, and wings umber-brown, varying in intensity; throat white; lower part of the neck light umber-brown; belly white; feet and legs in both sexes red.

Young similar to the female in colouring, but the males may be distinguished by the crest being larger.

<i>Mergus cucullatus</i>	Linn. Syst. 1. 207.
	Gmel. Syst. 1. 544.
	Lath. Ind. Orn. 2. 830.
	Eyton, Hist. R. Brit. Birds,
	75.
	Aud. Am. Orn. 3. 246.
<i>Mergus fuscus</i>	Lath. Ind. Orn. 2. 802.
<i>Hooded merganser</i>	Penn. Arct. Zool. 2. 467.
	Lath. Gen. Syn. 6. 426.
	pl. ci.
<i>Round-crested Duck</i>	Catesb. Carol. 1. pl. 94.
<i>Brown merganser</i>	Penn. Arct. Zool. 2nd Sup.
	74.
<i>Le Harle couronne</i>	Buff. Ois. 8. 280.
	Vieill, En. Method. Orn. 1.
	103.
<i>Le Harle a queue fourchue</i>	Vieill, En. Method. Orn. 1.
	105.

Rare in Europe ; one or two specimens have, however, been killed in the British Isles. North America is its true habitat, over the whole of which it appears to be found during winter. As spring approaches the greater portion of them retire to the north, though some remain and breed in Pennsylvania, Kentucky, and the intermediate district. It builds in holes of trees and rocks where it can find them ; but in districts devoid of such localities, builds on the ground on the borders of lakes, laying from six to ten white eggs.

MERGUS PUSILLUS.

Mer.—Mas. et fem. colore merganser, similis sed valdi minore.

Mer. similar to *Mergus merganser*, but much smaller.

LITTLE MERGANSER.

	IN.		IN.
<i>Length</i>	23	<i>Metatarsus</i>	2
<i>Bill</i>	2 $\frac{1}{4}$	<i>Middle toe</i> ..	2 $\frac{3}{4}$

Both male and female similar to *M. merganser*, but very much smaller. Both my specimens are in adult plumage, therefore the great difference in size is not accounted for by their being young birds.

Hab. Amoy.

MERGUS ALBELLUS.

Mer. Mas.—Supra albus, genis et occipite atris; capite cristato.

Mer. Fem.—Subtus albâ, genis et occipite rufis; capite vix cristato.

WHITE SMEW.

Male mer. above white, with the cheeks and occiput black; head crested.

Fem. mer. below white, with the cheeks and occiput red; the head slightly crested.

	IN.		IN.
<i>Length</i>	17	<i>Inner toe</i>	$1\frac{3}{4}$
<i>Bill</i>	$1\frac{3}{4}$	<i>Middle toe</i>	$2\frac{1}{8}$
<i>Tarsi</i>	$1\frac{1}{2}$	<i>Outer toe</i>	2

Male: above and below white, with a large patch on each side of the head, and another one down the back of the neck, black; crest white; on the upper part of the breast, on each side, a bar of black, not meeting in front; coverts, primaries, and secondaries black; scapulars white, edged on their outer webs with black; tail, rump, and upper tail coverts grey; bill and legs lead-coloured.

Fem.: throat, neck, belly, and abdomen white; the breast, back, tail, and upper tail coverts ash-coloured; wings grey, with the outer webs of the scapulars white.

Young similar to the female.

<i>Mergus albellus</i>	<i>Linn. Syst.</i> 1. 209.
	<i>Gmel. Syst.</i> 1. 547.
	<i>Lath. Ind. Orn.</i> 2. 831.
	<i>Steph. Sh. Zool.</i> 12. 157.
	<i>Wils. Am. Orn.</i> 8. 136.
	<i>pl.</i> 71, <i>fig.</i> 7.
<i>Mergus minutus</i>	<i>Linn. Syst.</i> 1. 209.
	<i>Lath. Ind. Orn.</i> 2. 832.
<i>Mergus Asiaticus</i>	<i>Gmel. Syst.</i> 1. 548.
— <i>stellatus</i>	<i>Briss. Orn.</i> 6. 252. <i>pl.</i> 6.
<i>Smeu</i>	<i>Penn. Arct. Zool.</i> 2. 559.
	<i>Lath. Gen. Syn.</i> 6. 428.
<i>Blue merganser</i>	<i>Penn. Arct. Zool.</i> 2. <i>Sup.</i> 74.
<i>Le petit Harle ou la piette</i>	<i>Buff. Ois.</i> 8. 275.

<i>Le piette</i> ..	<i>Vieill, En. Method. Orn.</i> 1. 104.
<i>Le Harle étoile</i>	<i>Buff. Ois.</i> 8. 278. <i>Vieill, En. Method. Orn.</i> 1. 105.
<i>Trachea</i>	<i>Linn. Trans.</i> vol. 4, tab. 10, fig. 3, 4.

Found in Europe, America, and Asia, but does not migrate far southwards; breeds in Siberia, Kamschatka, Greenland, and Iceland, generally on the banks of fresh water rivers or lakes, laying from ten to twelve yellowish eggs. The female and young of this species may be distinguished from those of the hooded merganser by the shortness and stoutness of the bill, and by the serratures not being pointed backwards, and more resembling the lamellæ of the true ducks. The tube of the trachea has one enlargement towards the middle, and continues of large diameter to the inferior larynx, which differs in form from that of the other mergansers, the greatest diameter being transverse instead of vertical; in other respects it is similar.

MERGANETTA ARMATA.

Mer. Mas.—Subtus ferrugineus; dorso atro, marginibus pennarum cinereis.

Mer. Fem.—Subtus albus; dorso atro, marginibus pennarum cinereis.

ARMED MERGANETTA.

Mer. mas.: below ferruginous; the back black, with edges of the feathers cinereous.

Mer. fem.: below white; back black, with the edges of the feathers cinereous.

	IN.		IN.
<i>Length</i>	16	<i>Metatarsus</i>	1 $\frac{1}{8}$
<i>Bill</i>	1 $\frac{1}{8}$	<i>Middle toe</i>	2

Mer. mas.: under parts and front of neck ferruginous; the head and back black, each feather edged with light grey; wings dark grey, the lower coverts edged with white; speculum æneous; bill and legs red; upper tail coverts black, barred narrowly with light grey.

Mer. fem.: below white; back and upper tail coverts similar to the male; flanks dark grey, barred with black; a stripe down the back of the neck cinereous; sides of the neck cinereous, irrorated with white.

Merganetta armata..... Gould.

Hab. Chili. It is very difficult to distinguish between the species of this genus, but I believe they are resolvable into two,—*Merganetta Columbiana* and *Chilensis* being the same.

MERGANETTA CHILENSIS.

Mer. Mas.—Subtus brunneâ; atro strigato; dorso atro pennis; albo marginata.

Mer. Fem.—Similis *Merganetta armata*.

CHILIAN MERGANETTA.

	IN.		IN.
Length	18 $\frac{1}{2}$	Metatarsus.....	1 $\frac{3}{4}$
Bill	1	Middle toe	2 $\frac{1}{4}$

Mer. mas.: below brown, the centre of each feather with a dark stripe; fore part of the neck and breast black; back black, the edges of each feather edged with white; head with the vertex black; a stripe proceeds from a white lunule at the upper part of the bill to the occiput; cheek white; throat black; under and upper tail coverts black, irrorated with grey; tail feathers brownish grey.

Mer. fem. similar to the preceding.

Hab. Chili.

Merganetta chilensis Gray.

————— *Columbiana* O. Desm.

————— *Leucogenys* Tschudi.

Hab. Chili.

SMITHSONIAN INSTITUTION LIBRARIES

3 9088 00074 4003