BIRDS

Eastern North America

OF.

BY

CHARLES B. CORY





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TO DISTINGUISH THE

LAND BIRDS AND WATER BIRDS.

All birds having toes more or less webbed and no feathers

on the tarsus (all intergradations between figures A and B), except the Vultures,* and also all birds having the bill more than three inches long, whether the toes are webbed or not, are Water Birds. There are also a few Water Birds which do not agree with the above description, which may be described as follows:—





Shore Birds.



Gallinutes.

Rails.

Least Bitterns and Small Herons.

SHORE BIRDS. — The majority of the Shore Birds either have the toes with small web, or the bill over three inches long. Those which do not may be recognized by the following characters: hind toe, when present, elevated above level of front toes: bill, rather soft; nostril, a sht; lower portion of tibia (upper part of leg), not feathered: first primary, about equal to second.

GALLINULES. — Rail-like birds, inhabiting marshy places; forehead, covered by a horny plate or shield.

RAILS. — Wing, rather short and rounded; toes, long; hind toe, above level of front toes (true Rails); first primary, much shorter than second.

LEAST BITTERNS AND SMALL HERONS. - Toes, four; lores, bare; inner side of middle toe nail, with comb-like edge.

All other birds are called Land Birds.

* Several Land Birds have the toes partly webbed, such as the Goatsuckers, *Caprimulgida*, the Vultures, *Cathartula*, and a few others; but all have the tarsus more or less feathered, except the Vultures, the only Land Birds which have webbed toes, and no feathers on the tarsus.

THE BIRDS

 \mathbf{OF}

EASTERN NORTH AMERICA

KNOWN TO OCCUR EAST OF THE NINETIETH MERIDIAN

KEY TO THE FAMILIES AND SPECIES

ΒY

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"A Naturalist in the Magdalen Islands," "Hunting and Fishing in Florida," "Key to the Water Birds of Florida," "How to know the Shore Birds of North America," "How to know the Ducks, Geese, and Swans," etc., etc.

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Martin A. Byerson

VICE-PRESIDENT OF THE FIELD COLUMBIAN MUSEUM AND PRESIDENT OF THE BOARD OF TRUSTEES OF THE UNIVERSITY OF CHICAGO IN RECOGNITION OF HIS MANY SERVICES TO SCIENCE THIS BOOK IS DEDICATED

PREFACE

ORNITHOLOGY is the science of birds (Gr., $\delta\rho\nu\partial\sigma$ s, ornithos, of a bird; $\lambda\delta\gamma\sigma$ s, logos, a discourse), and to become an expert ornithologist requires years of hard work, combined with a love for the study itself; but there are many students of nature who would like to know the birds about them, but do not have the time nor desire to go deeply into the subject. To meet such a want, the present "keys" have been prepared, in which the species are grouped according to size, and it is believed they will enable the novice to accurately identify any of our birds.

Careful comparison of large series of birds has shown that while adult birds of the same species differ considerably in length, the wing measure is very constant, the variation in a large number of specimens being so small that, allowing for possible extremes, we may safely arrange our birds in groups according to length of wing. A Song Sparrow may vary slightly in size, but the largest Song Sparrow is never as large as the smallest adult Robin, and *vice versa*. By grouping the various birds from the Humming Bird to the Eagle and Albatross, according to the length of wing (allowing, of course, for unusual extremes), the identification of any species then becomes a comparatively simple matter, as usually the birds contained in each group are so few in number that characteristic differences in each species are easily indicated.

Let us, for example, assume we have a bird before us which we wish to identify; we first should find out to which family it belongs. Turning to the Key to Families, page 10, we find this an easy matter (as the families are few and the illustrated diffeences in the bills and feet very characteristic), we discover our bird to be a duck. Having ascertained the family to which our bird belongs, we turn to the Key to Species. We have, of course, measured the wing and found it to be 5.90 inches long, measured from the carpus (bend of wing) to tip. (See illustration, "How to Measure a Bird," on page 8.)

We now turn to the Ducks, and discover they are divided into subfamilies, the Bay and Sea Ducks having a flap or lobe on the hind toe, and the fresh-water ducks, or River and Pond Ducks, have no large flap on the hind toe. Our bird has a flap on its hind toe, and is evidently a salt-water duck, belonging to the subfamily *Fuligulinæ*. This subfamily, we find, contains two sections. Section 1 having the tail feathers

not stiff and pointed, and Section 2, tail feathers stiff and pointed. Our duck has stiff, pointed tail feathers, and therefore belongs in Section 2. Section 2 contains two species; one having whole front of head and checks *black*, the other, with sides of head more or less *white*. As our duck has a patch of white on the side of the head, it must, therefore, be the Ruddy Duck, *Erismatura jamaicensis*.

All measurements of birds are given in inches and fractions of an inch. The diagrams on page 8 will illustrate how a bird should be measured, and the chart (pages viii and ix) will be useful to the young student of ornithology who may not be familiar with the technical terms used in describing birds. Such terms as primaries and axillars should be learned at once. It is customary to indicate the sexes by the signs of Mars and Venus; the male, of course, being given that of Mars, \mathfrak{F} , and the female, Venus, \mathfrak{P} .

In preparing the Key, a very large number of birds were examined and measured. In addition to the large collection of North American birds contained in the Field Columbian Museum, by courtesy of my friends, Dr. J. A. Allen and Prof. Robert Ridgway, the collections of the Smithsonian Institution and the American Museum of Natural History were always open to me, as well as the splendid private collection of Mr. William Brewster, at Cambridge, Mass.

A few species which occur in Greenland, but which have not been observed elsewhere in North America, and rare exotic stragglers have been excluded from the Key, but are given in their proper place in the body of the work.

The larger portion of the illustrations are original and are the work of Mr. Edward Knobel, of Boston. Numerous cuts are also included by arrangement with Messrs. Little, Brown & Co., of Boston, which are taken from Baird, Brewer & Ridgway's NORTH AMERICAN BIRDS. A few others were obtained from Messrs. Estes & Lauriat, used in Dr. Elliott Cones' Key to NORTH AMERICAN BIRDS.

C. B. CORY.

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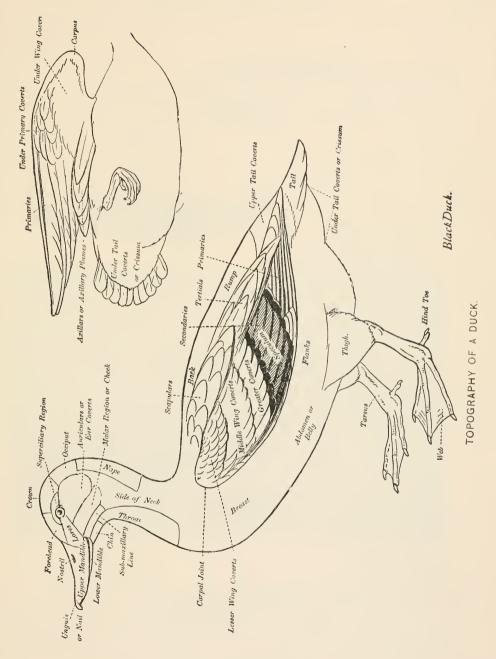
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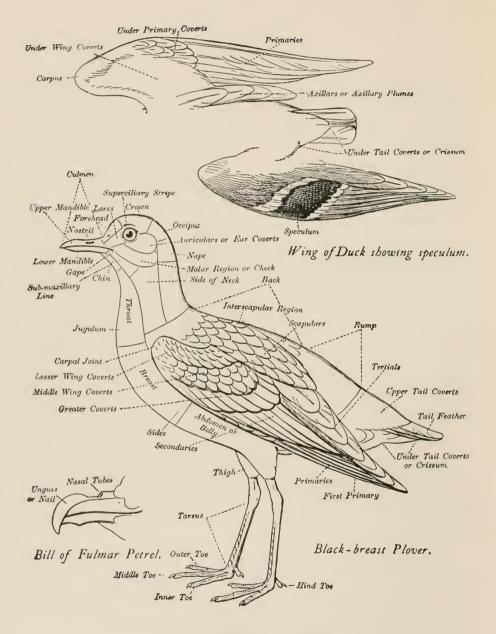
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GLOSSARY.

Nearly all the terms used in describing a bird may be more easily and clearly understood by examining the illustrations of "bird topography," on pages viii and ix, than from a written description; a few, however, may require a word of explanation.

- Cere. A hard skin-like covering on the base of the upper mandible (Parrots, Hawks, etc.).
- Mandibles. Some authors use the word maxilla for the upper half of the bill, and mandible for the lower. I prefer, however, to describe the two halves of the bill as upper and lower mandible.
- Culmen. The ridge of the upper mandible.
- Gonys. Lower outline (middle) of under mandible.
- Unguis. The nail on the end of the upper mandible; very pronounced in several families of water birds (Ducks, Pelicans, and Petrels).
- Axillars or Axillary Plumes. Several elongated feathers at the junction of the wing and body. (Lat. axilla, the arm-pit.)
- **Carpus or Carpal Joint.**—Bend of the wing. The third segment of the wing corresponding to the wrist (see illustration).
- **Speculum.** A wing band or patch (usually of a different color from the rest of the wing), formed by the terminal portion of the secondaries; very noticeable in the Ducks.
- **Tarsus.** Extends from the root of the toes to the end of the tibia (what *appears* to be the bend of the leg or knee; but which is, in reality, the heel joint). See illustration.
- Toes Syndactyle. Outer and middle toes more or less joined together (King-fisher, etc.).
- Toes Zygodactyle. Arranged in pairs, two in front, two behind (Cuckoos, etc.).
- Tarsus Reticulate. -- Covered with numerous small, uneven scales (Plovers, etc.).
- Tarsus Scutellate. Comparatively large, somewhat square-cut seales, one above the other, covering the front of the tarsus.
- Booted Tarsus. Scales fused together on greater portion of tarsus so as to be indistinct or invisible except on lower part (Robins, etc.).
- Superciliary Stripe. Stripe over the eye.





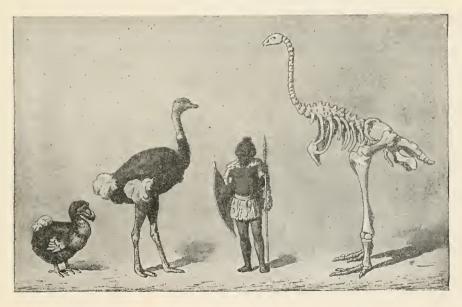
TOPOGRAPHY OF A PLOVER

INTRODUCTION.

A BIRD

Is a feathered vertebrate animal; or, to describe it more fully, it is an air-breathing, warm-blooded, feathered, oviparous (egg-laying), vertebrate animal, having a fourchambered heart, and a complete double circulation. Birds occupy a place in nature intermediate between the mammals and the reptiles, and many naturalists consider a bird to be merely a modified reptile. Be that as it may; we are morally certain that thousands of years ago there existed on the earth huge, lizard-like birds, of many of which we know nothing. The oldest known form of which we have any actual knowledge is the celebrated *Archwopteryx*, a fossil found by Andreas Wagner, in the Oölitic slate of Solenhofen, Bavaria, in 1861. This reptile bird had a lizard-like tail bordered with feathers, and jaws armed with teeth.

Of late years, many important osteological discoveries have been made, and from



Dodo.

Ostrich.

Moa.

the reconstructed skeletons we are able to form some idea of the size and shape of a few of the many huge and strange birds which lived and died in the forgotten past. The *Harpagornis*, an immense raptorial bird, or some similar monster, may have originated the stories of the Roc of nursery lore. Still later, we have the Dodo of Mauritius, and the Moa of New Zealand, the latter a giant bird, much larger than the largest Ostrich, which, it is claimed, was still in existence at the beginning of the present century, and a few of the older natives claim to have heard their fathers talk of seeing it alive. We know of several species which have become extinct during the past fifty years, notably the Great Auk and the Labrador Duck, *Camptolemus labra-dorius*.

In the West Indies we have numerous instances of the recent disappearance of insular forms. The Jamaica Petrel, *Aestrelata caribora*, is now supposed to have been exterminated by the Mongoose (*Herpestes*), which animal was introduced into the island some years ago for the purpose of killing the rats. Wallace, in his "Distribution of Animals," states that no less than six species of Parrots were said to have been formerly found in Guadaloupe and Martinique, but at the present time no Parrots are known to exist on either of those islands.

Ledru, in his "Voyage aux îles Teneriffe," published in Paris, in 1810, mentions several birds which are now unknown, among them a green pigeon from St. Thomas.

While many species have become extinct, others have extended their range, and, accommodating themselves to changed conditions and environment, have in the course of time developed new forms. Birds showing decided and constant differences are recognized as *species*, whereas if the differences in color or size are not very great and intermediate forms occur showing an intergradation from one to the other, they are ealled *races* or *subspecies*. Races are really species in process of development and are caused by difference in climate, food, etc. Insular forms which are sufficiently removed from the parent stock to warrant the belief that their isolation is complete, are generally recognized as species even though the differences would hardly be worthy of specific recognition if the two forms occurred in close proximity on the main land. It should be borne in mind, however, that the line of demarkation between a species and a subspecies is a purely arbitrary one and is largely a matter of individual opinion. Subspecies are distinguished by a third name; for example, *Dendroica palmarum hypochrysea* is a race or subspecies of *Dendroica palmarum*.

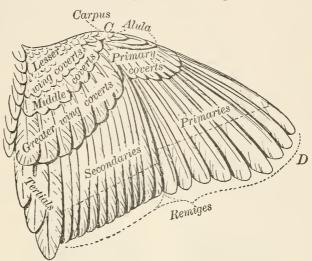
Having learned something as to what a bird is, let us take up in order the more important external parts, such as the wing, tail, bill, and feet.

THE WING.

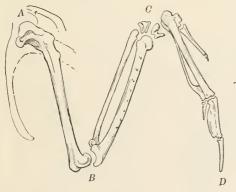
As an aid to identification, the wing characters are most important. The terms **primaries**, **secondaries**, **axillars**, **wing coverts**, etc., are constantly used in describing birds, and the student should learn to recognize them at a glance.

The Remiges are the flight feathers of the wing, and the *Tectrices* are the small feathers eovering the upper part of the wing or shoulder (see illustration), and are usually ealled coverts. The Remiges are divided into primaries, secondaries, and tertials, according to the location in the wing.

The Primaries are the feathers growing from the outer section of the



wing; that is to say, from the outer bend of the wing (carpus) to tip, C to D, the number ranging from 9 to 10 (and rarely 11) in various families. At first, it is



not always easy to distinguish the last primary from the first secondary; but experience is the best teacher, and the point can always be settled by examining the roots of the feathers.

The Secondaries are the remiges attached to the *ulna* or forearm, B to C (see illustration); they number from 6 to 40 in the various families; the Humming-bird having the smallest number, and the Albatross more than 40.

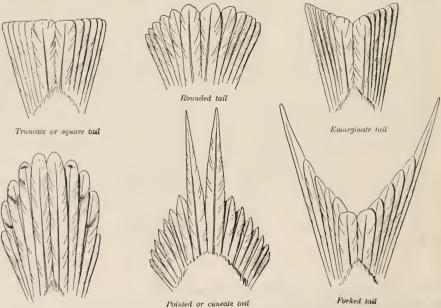
The Tertials are the few remaining remiges which grow from the *humerus*, A to B. The Tectrices, or Wing Coverts, are small feathers covering the larger wing feathers; the feathers lining the edge of the under surface of the wing are called under wing coverts. The outer wing coverts are divided and described as greater wing coverts, middle wing coverts, and lesser wing coverts, respectively. (See illustration.) The Speculum. A term used to indicate a patch or band on the wing (usually of different color from the rest of the feathers), formed by the terminal portion of the secondaries, very noticeable in the Ducks. (See illustration, Topography of a Duck, page 8.)



The Axillary Plumes, or Axillars, are an important aid in the identification of many species; these are several rather elongated feathers growing from the armpit (*axilla*), at the junction of the wing and body.

THE TAIL.

The Rectrices, or Tail Feathers, proper, number from 8 to 24, and in some very few cases even more. By far the greater number of birds, however, have 12 rectrices.



Graduated tail

The small feathers overlapping the **rectrices** are called **upper tail coverts**, while those below are the **under tail coverts or crissum**. (For illustration of tail coverts and crissum, see Topography of a Bird.)

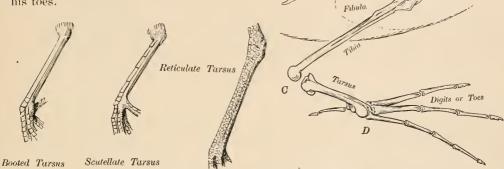
THE LEG AND FOOT.

A bird's leg may be briefly described as having only the knee downward exposed; the true thigh is concealed, but may be felt under the skin on the side of the body. The true knee is close to the body just under the skin. The first exposed joint which is

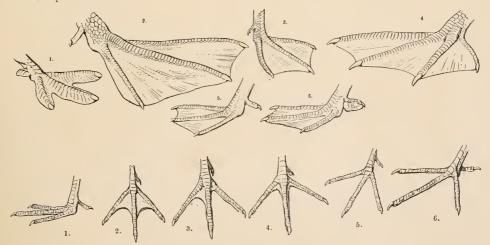
Femur

B

apparently the knee, but which *bends backward*, is really the heel. (See illustration.) The bird does not walk on the foot (from the heel downward), but merely walks on his toes.

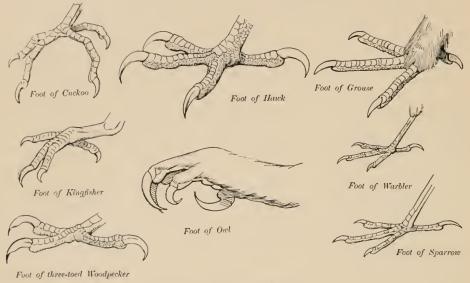


The Tarsus, which is measured from the bend of the leg (end of tibia) to the roots of the toes (C to D in illustration), is an important factor in the identification of many species. The feet are very variable in shape and arrangement of the toes. These variations are of the greatest importance, representing generic and, often, family differences.



Types of Feet. -- Water Birds.

The Toes are sometimes three or four (the Ostrich has but two), sometimes two in front and two behind; two in front and one behind; or, in one family (not North America), all four turned forward. Some families have the toes joined or fused together for part of their length, as in the Kingfisher. Some species have webbed feet, others have the toes armed with curved talons, and so on; but the various differences with which we wish to become familiar can better be illustrated than described.



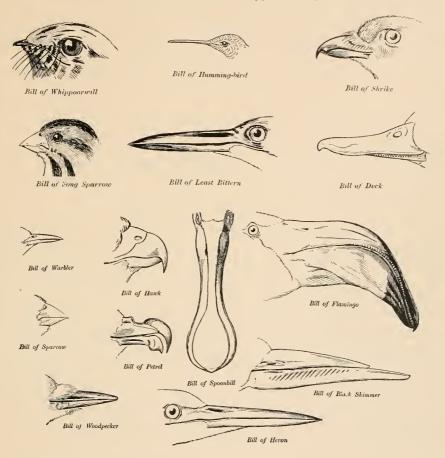
Types of Feet. - Land Birds.

THE BILL.

The Bill consists of **an upper and a lower mandible**, both of which are movable. The shape is of great assistance in determining the family to which the species belong. Four principal types are recognized : —

- 1. Epignathous. Upper mandible longer than lower; the tip bent or hooked over the end of lower mandible. (Examples : Hawks, Gulls, Petrels, Parrots.)
- 2. Hypognathous. Lower mandible, longer than upper mandible. (Examples: Black Skimmers, *Rhynchops.*)
- 3. Paragnathous. Both mandibles of about equal length.
- 4. Metagnathous. Mandibles crossed. (Example : Crossbill. Loxia.)

The shape and size of the bill vary greatly, as will be seen by the following illustrations representing fifteen of the principal types among our birds : —



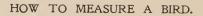
Cere. A membrane (usually hard), which covers the base of the upper mandible. (Hawks, Parrots, Jægers.)

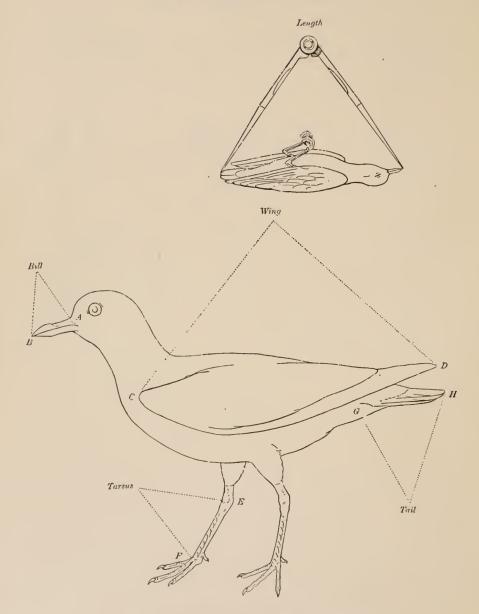
Nasal Fossa, or Nasal Groove. Groove in which the nostrils open.

Gonys. Lower outline (middle) of the under mandible, A to B.

Culmen. The ridge of the upper mandible.

- **Unguis.** The naik on the end of the upper mandible. Very pronounced in some families of Water Birds, Ducks, Pelicans, and Petrels.
- **Mandibles.** Some authors use the word *maxilla* for the upper half of the bill, and *mandible*, for the lower. I prefer, however, to describe the two halves of the bill as upper and lower mandible.





For description see page 9.

HOW TO MEASURE A BIRD.

See Illustration, page 8.

- Wing. Distance from carpal joint C (bend of wing) to the tip of the longest primary D. See cut on page 8.
- Length. Distance in a straight line from the end of the bill to the tip of the longest tail feather. (Occasionally the middle feathers are much elong-ated, as in the Old Squaw and Pintail Duck, and in other families of birds, such as Phæthon and Stercorarius. In such cases it is well to give the length from bill to longest tail feather, and also to end of outer tail feather.)
- **Tail.** Distance from the tip of the longest tail feather to its base (the point where it enters the body).
- Bill. The distance in a straight line from where the bill (upper mandible) joins the skin of the forehead (A) to the tip (B). (There are a few exceptions to this rule, in other families, such as birds with frontal plate, etc. Some curved bills are measured along the curve of the culmen, and at times it is advisable to measure from the nostril to the tip of the bill, but in such cases it should always be so stated.)
- **Tarsus.** Distance in *front* of the leg from what *appears* to be the knee joint (end of tibia) to the root of the middle toe. All measurements are given in inches and fractions of an inch.

INDEX TO KEY TO FAMILIES.

WATER BIRDS.

Group 1. Toes, four, with lobate web or web on sides of toes. See page 11.



Group 2. Toes, four; front toes, palmate (full webbed); hind toe, not connected with front ones by web. See page 12.







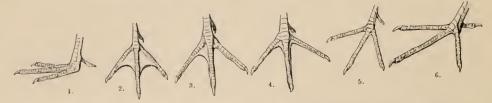


Group 3. Toes, four; toto-palmate (all toes full webbed); hind toe, connected with front ones by web. See page 15.





Group 4. Toes, four, not full webbed; small web between toes at base, or toes entirely without web; hind toe, sometimes very small. See page 17.



Section 1 Hind toe, raised above level of front toes. See page 17. Section 2. Hind toe, on same level with front toes. See page 19.

- Group 5. Toes, three, full webbed; no hind toe. See page 21.
- Group 6. Toes, three, not full webbed; a small web between toes at base, or toes entirely without web. See page 23.

KEY TO FAMILIES.

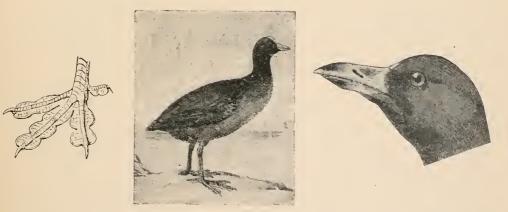
WATER BIRDS. GROUP 1.

Toes, four, with lobate webs, or webs on sides of toes.





Bill, pointed; feet, placed far back, near tail; underparts, silvery white; tail, very short. Family PODICIPIDÆ. Grebes. See page 26.



Forehead, with bare shield; bill, rather short; general color, slaty gray; toes, with bobate webs. Family RALLIDÆ. Subfamily FULICINÆ. Coots. See page 100. Hind toe, elevated above the level of the others; bill, slender; nostrils, opening through slits; sides of toes, webbed. Family PHALAROPODIDÆ. Phalaropes.

See page 104.



GROUP 2.

Toes, four; front toes, palmate (full webbed); hind toe, not connected with front ones by web.



Bill, straight and pointed: tarsns, flattened; hind toe, with flap or lobe; feet, placed far back near the tail; tail, very short.

> Family GAVIIDÆ. Loons. See page 28.

Very large wing, over 19 inches long; upper mandible, curved near tip, forming a hook, the end (unguis) enlarged; nostrils, separate and tubular; hind toe, rudimentary, often apparently wanting.

> Family DIOMEDEIDÆ. Albatrosses. See page 46.



Nostrils, tubular, united in one double-barrelled tube; front toes, palmate (full webbed); hind toe, very small, and in some cases entirely absent: upper mandible, curved near tip; wing, less than 19 inches long.

> Family PROCELLARIIDÆ. Shearwaters, Petrels, and Fulmars. See page 46.

Nostrils, separate not tubular; **bill, with cere** (a horny or skin-like covering on base of upper mandible); hind toe, sometimes very small; end of upper mandible (unguis), swollen and somewhat rounded; back and wings, always dark, sometimes sooty, sometimes barred with brown; tail, never white or gray, usually very dark; **middle tail feathers. longest**,



but only very long in adult birds, sometimes only slightly longer than rest of tail feathers in immature birds; in brown plumages, the axillars (feathers extending from armpit) are heavily barred, brown and white; in other plumages, the axillars and under wing coverts are sooty brown or dark slaty brown. Family STERCORARIDÆ. Skuas and Jaegers.

See page 34.



Nostrils, separate not tubular; **bill**, **without cere**; hind toe, sometimes very small; upper mandible, curved; unguis (end of bill), not swollen; middle tail feathers, about equal in length to the others; tail, rarely dark, although sometimes tipped with black or brown; axillars and under wing coverts, white or gray, sometimes with *narrow* gray lines or faint wavy bars.

Family LARIDÆ. Subfamily LARINÆ. Gulls. See page 36.





0 48

Nostrils, separate not tubular; hind toe, sometimes very small; upper mandible, nearly straight, not hooked or decidedly rounded near tip; outer tail feathers, usually longer than middle feathers. Family LARIDÆ. Subfamily STERNINÆ. Terns.

See page 41.



Bill, like blade of a knife, the under mandible the longer: plumage, black above, white below. Family RHYNCHOPIDÆ. Skimmers.

See page 45.



Bill, very much bent, with tooth-like servations on edge. Large, tall birds with long necks and legs, usually red or pink. Family PHENICOPTERIDÆ. Flamingoes. See page 85.



Bill, long and narrow, having tooth-like serrations on edges: toes, four, the front ones, full webbed; hind toe, with flap.

Family ANATIDÆ. Subfamily MERGINÆ. Mergansers. See page 61.







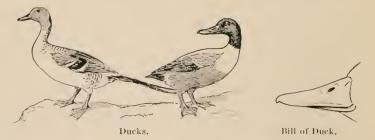
Top of bill of Merganser.

Side of bill.



Bill, not narrow; tarsus, sentellate in front (transverse scales); toes, four, the front ones, full webbed; *hind toes, without decided flap or lobe*.

Family ANATIDÆ. Subfamily ANATINÆ. River and Pond Ducks. See page 63.





Bill, not narrow: tarsus, scutellate in front (transverse scales); toes, four, the front ones, full webbed; *hind toe, with flap or lobe*.

Family ANATIDÆ. Subfamily FULIGULINÆ. Sea Ducks. See page 71. Lores, feathered; tarsus, reticulate (scales rounded); wing, more than thirteen inches long; toes, four, the front ones full webbed.

Family ANATIDÆ. Subfamily ANSERINÆ. Geese and Brant.

See page 81.



Geese and Swan.

Lores, partly bare; tarsus, reticulate (scales rounded); size, large; neck, long; wing, over eighteen inches long; plumage, white or gray. Subfamily CYGNINÆ. Swans.

See page 84.

GROUP 3.

Toes, four, toto=palmate; (front toes, full webbed;) hind toe, connected with front ones by web.







Bill, sharp pointed; chin, feathered; toes, four, all connected by webs. Family PHAETHONTIDÆ. Tropic Birds. See page 50.



Bill, stout, but not hooked; chin, bare; neck, thick; toes, four, all connected by webs. Family SULIDÆ. Gannets. See page 51.

THE BIRDS OF EASTERN NORTH AMERICA.



Bill/sharp-pointed and slender; chin, bare; neck, long and slender; toes, four, all connected by webs; middle tail feathers, corrugated or fluted.

> Family ANHINGIDÆ. Darters, Snake Birds. See page 53.

Bill, hooked at tip, over twelve inches long and having : large pouch: lores, bare: toes, four, all connected by webs.

> Family PELECANIDÆ. Pelicans See page 56.





Bill, hooked at tip, and less than twelve inches long; bare skin at base of bill and chin; lores, bare; toes, four, all connected by webs.

Family PHALACROCORACIDÆ. Cormorants. See page 54.



Bill, hooked at tip; lores, feathered; upper plumage, entirely black; toes, four, all connected by webs; tail, forked; wings, very long.

Family FREGATIDÆ. Man=of=war Birds, Frigate Birds. See page 58.

GROUP 4.

Toes, four; toes, not full webbed; small webs between toes at base, or toes entirely without webs; hind toe, sometimes small.

Section 1. Hind toe, raised above level of front toes.



Tarsus, over 3.50 inches long; bill, curved upward or straight.

Family RECURVIROSTRIDÆ. Avocets.

See page 106.



Hind toe, higher than front toes; tarsus, less than 3.50 inches long; middle toe and elaw together shorter than bill, except a few of the small species, which have middle toe and elaw equal to or longer than bill; but all such have the belly and under tail coverts pure white in most plumages. Family SCOLOPACIDÆ. Snipe, Curlews, Sandpipers, etc. See page 107.





Hind toe, higher than front ones; lower back and rump, white, with black band. Family APHRIZIDÆ, Turnstones. See page 129. Hind toe, higher than front ones; hind toe, very small, hardly noticeable; bill, black, rather short and stout; all other species belonging to this family have but three toes.

Family CHARADRIIDÆ (Charadrius squaterola). Black=bellied Plover.

See page 124.









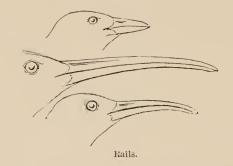
four, no comb-like edge on inner side of middle toe nail; middle toe and claw together not shorter than bill, usually decidedly longer; under tail eoverts, not white. Family RALLIDÆ. Rails, etc. See page 97.

Hind toe, above level of front toes; bill, less than 3 inches long; toes,

Sora Rail.



King Rail.





Virginia Rail.

Hind toe, above level of front toes: bill, over 3 inches long; wing, over 16 inches; tarsus, over 7 inches; toes, four, no comb-like edge on inner side of middle toe nail; lores, with hair-like bristles. Family GRUIDÆ. Cranes. See page 95.





Hind toe, above level of front toes; bill, over 3 inches long; tarsus, under 7; wing, under 16; toes, four, no comb-like edge on inner side of middle toe nail; under mandible, often slightly twisted near tip; plumage, dark brown with white streaks. Family ARAMIDÆ. Courlans.

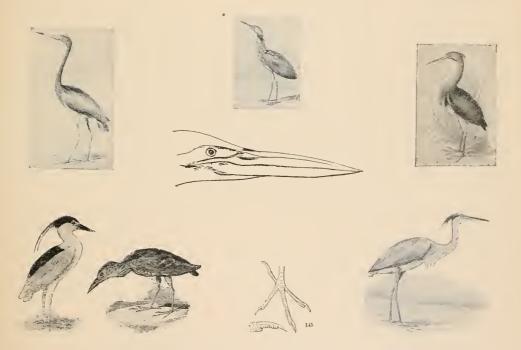
See page 96.

Section 2. Hind toe, on level with front toes.



Toes, long and slender; bill, short and pointed; a bare shield or plate on forehead; wing, about 7 inches long, carpus (bend of wing) to tip: under tail coverts, white.

Family RALLIDÆ, Subfamily GALLINULINÆ, Purple Gallinule, or Florida Gallinule. See page 100.



Bill, nearly straight and sharply pointed; inner side of middle toe nail, with distinct comblike edge; toes, four, all on same level. Bitterns, tail with ten feathers. Herons, tail with twelve feathers. Family ARDEIDÆ. Herons, Egrets, and Bitterns. See page 89.

THE BIRDS OF EASTERN NORTH AMERICA.

Greater part of plumage, white; bill, rounded and somewhat curved, very thick and strong; tarsus, always over five inclus long; toes, four, all on same level; no comb-like edge on inner side of middle toe nail.

Family CICONIIDÆ. Storks and Wood Ibises. See page 88.





Bill, long, rather slender, and decidedly enryed downward; *tarsus*, *always less than jire inches long*; toes, four, all on the same level; no comb-like edge on side of middle toe nail. **Family IBIDIDÆ: Ibises**. See page 87.







Bill, wide and flat at the end; toes, four, all on same level; wing (carpus to tip), over twelve inches long.

> Family PLATALEIDÆ. Spoonbills. See page 86.

GROUP 5.

Toes, three, full webbed; no hind toe.

Nostrils, separate, not opening into one double-barrelled tube; upper mandible, curved near tip; bill, yellowish, or greenish yellow; an indication of a hind toe, in the form of a



small knob without nail; tail, entirely white, or white with black band near tip. This is the only North American gull lacking a hind toe.

Family LARIDÆ (Larus tridactyla). Kittiwake Gull. See page 36.





Bill, reddish (in life showing also yellow and blne), peculiar in form, suggesting that of parrot. Family ALCIDÆ. Subfamily FRATERCULINÆ, Puffins.

See page 30.





Bill, black, with narrow white band. Family ALCIDÆ. Subfamily ALCINÆ. Auks. See page 30.





Bill, black or brownish; wing, over 7.25 inches long, carpus (bend of wing) to tip.

Family ALCIDÆ. Subfamily ALCINÆ. Murres. See page 30.









Bill, black, or blackish; wing, less than 7.25, but more than 5.50, measured, carpus to tip. Family ALCIDÆ. Subfamily PHALARINÆ. Guillemots. See page 30. Bill, black, or blackish; wing, less than 5 inches long (carpus to tip).

Family ALCIDÆ. Subfamily ALLINÆ.



Very large wing, over 19 inches long; upper mandible, curved near tip, forming a hook, the end (unguis) enlarged; nostrils, separate and tubular; hind toe, rudimentary, often apparently wanting.

Dovekies. Little Auks.

See page 30.

Family DIOMEDEIDÆ. Albatrosses. See page 46.



Shearwater.

Petrel.

Fulmar.

Nostrils, tubular, united in one double-barrelled tube; front toes, palmate (full webbed); hind toe, very small, and in some cases entirely absent; upper mandible, curved near tip: wing, less than 19 inches long.

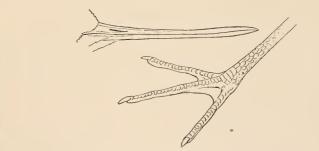
Family PROCELLARIIDÆ. Shearwaters, Petrels, and Fulmars. See page 46.

GROUP 6.

Toes, three; a small web between toes, or, entirely without web.



Bill, slender; wing, about 5 inches; bill, about one inch; this is the only representative of this family with three toes, all others have four; tarsus, less than 1.50 inches long. Family SCOLOPACIDÆ. (Calidris arrenaria.) Sanderling. Sandpiper. See page 107.



Toes, three, partly webbed; tarsus, over 3 inches long; general plumage, black and white; legs, pink red in life. Family RECURVIROSTRIDÆ. Stilts.

See page 106.



Plovers.





Bill, short; some species have hill less than three quarters inch long; none have bill over two inches long. Family CHARADRIIDÆ. Plovers.

See page 124.



Bill, over 2.50 inches long; head and neck, black or blackish; bill, red. Family HÆTATOPODIDÆ. Oyster-catchers. See page 130.

WATER BIRDS.

KEY TO THE SPECIES.

FAMILY PODICIPIDÆ.

Grebes.



Toes, four; three in front, one behind, with lobate webs.

* Group 1. Wing, less than 6.50 inches long.

Depth of bill at base of culmen, over .40. In summer: Bill, with black band; throat, black.

In winter: Bill, without black band; throat, white.

Podilymbus podiceps. Picd-billed Grebe. Hell Diver. See No. 4.

Depth of bill at base of culmen, less than .40. In summer: Two small tufts of brownish gray or buff-colored feathers behind the eye; erown, nape, and throat, black.

In winter: Plain colored, without black or buff on head; upper plumage, grayish black; underparts, silvery white, often tinged with ash gray on throat and sides.

Colymbus auritus Horned Grebe. See No. 2.

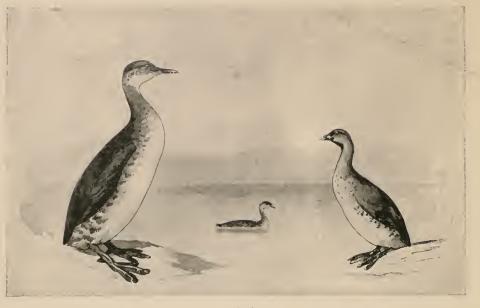
* Group 2. Wing, over 6.50 inches long.

In summer: Crown, black; upper throat, gray; lower throat and breast, chestnut rufous; rest of underparts, silvery grayish white.

In winter: No rufous brown on throat or breast. Colymbus holballi. Holboell's Grebe.

See No. 1.

KEY TO THE BIRDS OF EASTERN NORTH AMERICA.



Grebes.







Horned Grebe.

Pied-billed Grebe.

FAMILY GAVIIDÆ.

Loons.



Toes, four; front toes, palmate (full webbed); bill, pointed; tarsus, flattened; hind toe, with flap or small lobe.

* Group 1. Wing, 9.50 to 11 inches long.

 Back, with white spots ; throat, white or whitish (immature or winter).
 (favia lumme. Red-throated Loon. See No. 7.

 Back, without distinct white spots ; the feathers, edged with ashy ; throat, white or dusky (immature or winter).
 Gavia arcticus.

 Black-throated Loon. See No. 6.
 Black-throated Loon. See No. 6.

 Head, ashy gray ; throat, black (adult).
 Gavia arcticus.

 Black-throated Loon. See No. 6.
 See No. 7.

* Group 2. Wing, 11 to 15 inches long.

Section 1. Depth of bill at base, more than .85.

Head, black (adult).

Gavia imber. Loon. See No. 5.

Top of head, grayish; throat, white (immature or winter plumage).

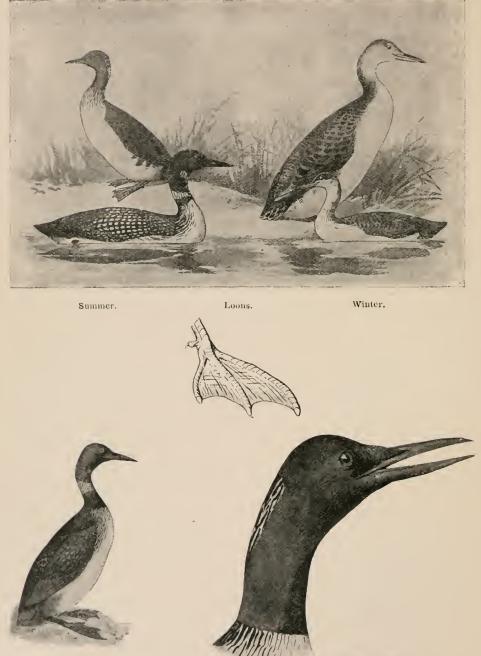
Gavia imber. Loon. See No. 5.

Section 2. Depth of bill at base, less than .85.

Head, ash gray; throat, black (adult). Gavia arcticus. Black-throated Loon. See No. 6,

Throat, gray; front of neck, chestnut brown (adult).

Gavia lumme. Red=throated Loon. See No. 7.



Black-throated Loon.

Back, with white spots ; throat, white or whitish (immature or winter).

Gavia lumme. Red=throated Loon. See No. 7.

Back, without distinct white spots; the feathers, edged with ashy; throat, white or dusky (immature or winter). Gavia arcticus. Black-throated Loon. See No. 6.

* Group 3. Wing, over 15 inches long.

Feet, webbed; head, black, in adult; head, gray; throat, whitish, in immature. Urinator imber. Loon. See No. 5.

FAMILY ALCIDÆ.



Auks, Puffins, and Murres.

Toes, three; no hind toe (hallux); toes, palmate (full webbed); nostrils, separate, and not tubular.

* Group 1. Wing, less than 5 inches long.

Winter plumage: Upper parts, black; underparts, white. *In summer*: The breast, throat, and sides of the head and neck, sooty brown.

St

Alle alle. Dovekie. Little Auk. See No. 17.

* Group 2. Wing, 5.50 to 6.50 inches long.



Bill, parrot like; underparts, white; back, black; usually a black collar. Fratercula arctica. Puffin. Sea Parrot. See No. 9.

Adult in summer: General plumage, black, a white patch on the shoulder; basal half of the greater wing coverts (feathers forming the white patch on the wing), black. Winter birds have the underparts white, and the upper parts, black and white. *Cepphus grylle.* Black Guillemot. Sea Pigeon.



epphus grylle. Black Guillemot. Sea Pigeon. See No. 11.

Similar to Black Guillemot, but has the wing coverts (feathers forming the white wing patch) entirely white and not with basal half black.

Immature and winter birds (except wing coverts), resembling the Black Guillemot.

Cepphus mandtii. Mandt's Guillemot. See No. 12.

KEY TO THE BIRDS OF EASTERN NORTH AMERICA.



Murres.



Putlin.

Guillemots.

30

* Group 3. Wing, 6.50 to 7.50 inches long.



Bill, parrot like; underparts, white; back, black, usually a black collar. Fraterenta arctica, and races. Puffin. Sea Parrot. See No. 9.

Adult in summer: General plumage, black; a white patch on the shoulder; basal half of the greater wing coverts (feathers forming the white patch on the shoulder), black. Winter birds have the underparts white, and the upper plumage, mixed black, gray, and white. Cepplus grylle. Black Guillemot. See No. 11.



Similar to the Black Guillemot, but has the wing coverts entirely white and not with basal half black. Cepphus mandtii. Mandt's Guillemot.

See No. 12.

Summer plumage: Head, back, wings, and tail, sooty brown; underparts and tips of secondaries, white. Winter plumage: Underparts, white, more or less marked with sooty brown, or blackish about the throat, belly, and flanks. Uria lomvia. Brunnich's Murre.

See No. 14.



Summer plumage: Head and neck, back, wings, and tail, black; tips of secondaries and rest of underparts, white. Winter plumage: Similar, but has the throat white. Alca torda. Razor-billed Auk.

See No. 15.

* Group 4. Wing, 7.50 to 8.50 inches long.

 Summer planage: Head and neck, back, wings, and tail, black. Tips of secondaries and rest of underparts, white.
 Alca torda.
 Razor-billed Auk.

See No. 15.

Summer plumage: Head, back, wings, and tail, dark sooty brown; underparts and tips of secondaries, white. *Winter plumage:* Underparts, white, more or less marked with sooty brown or blackish about the throat, belly, and flanks; bill, usually over 1.60.

Uria troile. Murre. See No. 13.

Similar to Uria troile, but has the head darker than the throat; bill, usually under 1.60. Uria lonvia. Brunnich's Murre. See No. 14.

* Group 5. Wing, over 8.50 inches long.

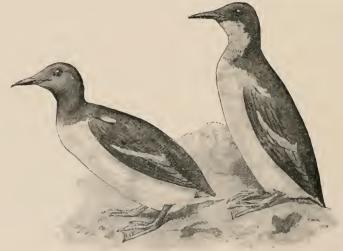


Head and neck, **black**, easily distinguished by the shape of the bill; a white line on bill. Alea torda. **Razor-billed Auk**. See No. 15.



Murre.





Head and neck, sooty **brown**; bill pointed, no white line on bill. Uru troile. Murre. See No. 13.

FAMILY STERCORARIIDÆ.

Skuas and Jægers.

Nostrils, separate, and not tubular; bill, with cere; front toes, palmate (full webbed); hind toe, small, but always present; end of upper mandible



(unguis), swollen, and somewhat rounded; back and wings, always dark, sometimes sooty, sometimes barred with brown; tail, never white or gray, usually very dark; middle tail feathers, longest. The cere (hard skin-like covering on base of upper

mandible) will distinguish these birds from Gulls.

* Group 1. Wing, 11 to 15 inches long.

Underparts, not entirely pure white; bill, over 1.35; tarsus, over 1.80; middle tail feathers, not pointed; plumage, sometimes dark brown; sometimes mixed gray, brown, and white.

Stercorarius pomarinus.
Pomarine Jæger.

See No. 19.

Bill, under 1.35; tarsus, under 1.80; middle tail feathers, pointed; base of unguis to frontal feathers less than length of unguis; shafts of primaries, yellow white.

> Stercorarius longicaudus. Long-tailed Jæger. See No. 21.

Bill, under 1.35; tarsus, under 1.80; middle tail feathers, pointed; base of unguis to frontal feathers, greater than length of unguis; shafts of primaries, yellowish white.

Stercorarius parasiticus. Parasitic Jæger. See No. 20.

* Group 2. Wing, over 15 inches long.

Bill, with cere; general color, dark brown, more or less streaked with light brown: a patch of white at base of primaries. Megalestris skna. Skua.

See No. 18.



FAMILY LARIDÆ.

GULLS AND TERNS.

SUBFAMILY LARINÆ. GULLS.

TAIL, USUALLY NEARLY SQUARE.

GROUP 1. Wing, 9.50 to 11 inches long. See page 36.

GROUP 2. Wing, 11 to 13 inches long. See page 36.

GROUP 3. Wing, 13 to 15 inches long. See page 38.

GROUP 4. Wing, 15 to 17 inches long. See page 38.

Section 1. Length, over 21; bill, over 2; underparts, white. See page 38.

Section 2. Length, over 21; bill, over 2; underparts, not white. See page 39.

Section 3. Length, over 21; bill, under 2; underparts, white. See page 39.

Section 4. Length, over 21; bill, under 2; underparts, not white. See page 40.

Section 5. Length, under 21. See page 40.

GROUP 5. Wing, over 17 inches long. See page 40.

SUBFAMILY STERNINÆ. TERNS.

TAIL, USUALLY FORKED.



GROUP 1. Wing, 5.50 to 7.50 inches long. See page 41.
GROUP 2. Wing, 7.50 to 8.50 inches long. See page 41.
GROUP 3. Wing, 8.50 to 9.50 inches long. See page 41.
GROUP 4. Wing, 9.50 to 11 inches long. See page 41.

GROUP 5. Wing, 11 to 13 inches long. See page 43.

GROUP 6. Wing, 13 to 17 inches long. See page 43.

GROUP 7. Wing, over 17 inches long. See page 43.



FAMILY LARIDÆ.

Gulls and Terns.

SUB-FAMILY LARINÆ.

Gulls.

Upper mandible, curved; unguis (end of bill), not swollen; middle tail



feathers, about equal in length to the others; tail, rarely dark, although sometimes tipped with black or brown; hind toe, small, but always present except in one genus; bill, without cere.

* Group 1. Wing, 9.50 to 11 inches long.

Underparts, white; inner web of first primary, white, with black spot near the end; the tip, white; shaft of feather, white; adult birds have the bill dark red; in immature birds it is brownish.
Larus franklinit. Franklin's Gull.

See No. 34.

Underparts, white; inner web of first primary, white; the tip, black; bill, black; shaft of feather, white. Larus philadelphia. Bonaparte's Gull. See No. 35.

Underparts, white; inner web of first primary, about half white; shaft of feather, dark brown on upper surface. In the adult the bill is black, tipped with yellow.

Xema sabinii. Sabine's Gull. See No. 38.

* Group 2. Wing, 11 to 13 inches long.

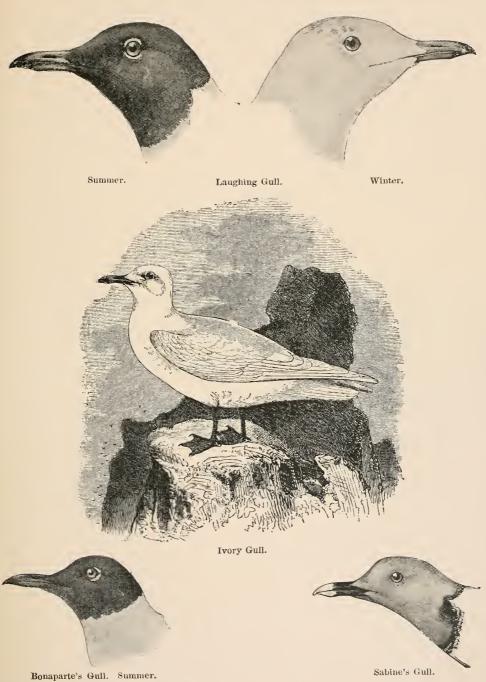
Shafts of primaries, black or dark brown; underparts, not pure white (immature).

Larus atvicilla. Laughing Gull. See No. 33.

Underparts, pure white; inner web of first primary. white, with black spot near the end, the tip, white; shaft of feathers, white. Adult birds have bill dark red; in immature birds it is brownish. Larus franklinii. Franklin's Gull.

See No. 34.

FAMILY LARIDÆ. - GULLS AND TERNS.



Bonaparte's Gull loses the black head in winter.

Underparts, white; first primary, entirely black or dark brown (adult).

Larus utricilla. Laughing Gull. See No. 33.

General plumage, white; back, white; first primary entirely white, or with a blackish spot at tip; hind toe, with nail; bill, yellow. Pagophila alba. lvory Gull. See No. 22.

Back, pearl gray; inner web of primary, white, broadly **tipped** with black; a small rudimentary hind toe **without nail**. *Rissa triductyle*. **Kittiwake Gull**. See No. 23.

* Group 3. Wing, 13 to 15 inches long.

Underparts, white; first primary entirely black, or dark brown.

Larus atvicilla. Laughing Gull. See No. 33.

General plumage, white; first primary, entirely white, or with a dusky spot near tip; hind toe, with nail; bill, less than 1.50; wing, less than 14; bill, yellow.

Pagophila alba. Ivory Gull. See No. 22.

Underparts, white; inner web of primary, white, broadly tipped with black; a small rudimentary hind toe, without nail. Larus tridactyla. Kittiwake Gull. See No. 23.

Underparts, white; terminal portion of first primary, **black**, with white spot near tip. Larus delawarensis. **Ring-billed Gull**. See No. 31.

Primaries, pale pearl gray, becoming white at tip; bill, over 1.50; wing, over 14. Larus leucopterus. Iceland Gull. See No. 25.

* Group 4. Wing, 15 to 17 inches long.

Section 1. Length, over 21; bill, over 2; underparts, white.

No black on primaries (adult).

Larus glaucus. Glaucous Gull. See No. 24.

Back, slaty black; primaries, black with more or less white (adult).

Larus marinus. Great Black-backed Gull. See No. 27.

Back, pale bluish, gray, or pearl gray; primaries, dull black or brownish black, more or less marked with white.

Larns argentatus smithsonianus. American Herring Gull.

See No. 30.

Section 2. Length, over 21; bill, over 2; underparts, not white.

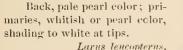
Outer webs of primaries, ash color (immature). Larus glaucus. Glaucous Gull. See No. 24.

Onter webs of primaries, dark brown; wing, over 17.50; depth of bill at angle, over .90 (immature). Larus marinus. Great Black-backed Gull. See No. 27.

Outer webs of primaries, dark brown; depth of bill at angle, under .90; wing, under 17.50 (immature). Larus argentatus smithsonianus. American Herring Gull. See No. 30.

Section 3. Length, over 21; bill, under 2; underparts, white.

Back, grayish blue, more or less black on primaries. Larus argentatus smithsonianus. American Herring Gull. See No. 30.



Larus leucopterus. Iceland Gull. See No. 25.

Great Black backed Gull.

Ring-billed Gull.

Back, pale pearl color; primaries marked with slaty gray. *Larus kumlieni*. Kumlien's Gull. See No. 26.

Herring Gull.

Section 4. Length, over 21; bill, under 2; underparts, not white.

Outer webs of primaries, dark brown; bill, over 1.90 (immature). Larus argentatus smithsonianus. American Herring Gull.

See No. 30.

Onter webs of primaries, brownish; bill, under 1.90 (immature).

Larus kumlieni. Kumlien's Gull. See No. 26.

Outer webs of primaries, ash color (immature).

Larus leneopterns. Iceland Gull. See No. 25.

Section 5. Length, under 21.

A band of black on the bill (adult). Bill, dull yellow, tipped with black (immature). Larus delawarensis. Ring-billed Gull. See No. 31.



Terns.

Gulls.

* Group 5. Wing, over 17 inches long.

Primaries, marked with more or less black, Larus marinus, Great Black-backed Gull,

See No. 27.

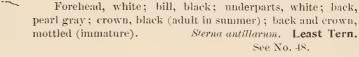
No black on primaries.

Larus glaucus. Glaucous Gull. See No. 24.

SUB=FAMILY STERNINÆ. Terns.

Upper mandible, nearly straight, not hooked or decidedly rounded near tip; outer tail feathers, usually longer than middle feathers; toes, four; front toes, webbed; hind toe, small, but well developed.

* Group 1. Wing, 5.50 to 7.50 inches long.



* Group 2. Wing, 7.50 to 8.50 inches long.

Head and underparts, black (adult). A patch of black behind the eye; back of head, dusky; rest of head, white (inmature). *Hydrochelidon nigra surinamensis*. Black Tern. See No. 51.

* Group 3. Wing, 8.50 to 9.50 inches long.

Outer tail feathers, pure white.

Inner web of outer tail feather, gray.

Sterna dougalli. Roseate Tern. See No. 47.

Sterna forsteri. Forster's Tern. See No. 44.

* Group 4. Wing, 9.50 to 11 inches long.

Outer web of outer **tail feather**, **darker** than **inner web**; back, pearl gray; breast, washed with pearl gray; bill in adults, **red**, tipped with black; tarsus, usually over .70.

Sterna hirundo. Common Tern. Wilson's Tern.

See No. 45.

Inner web of outer tail feather, darker than outer web; back, pearl gray; breast, white; bill in adults, black, slightly yellowish at tip. Sterna forsteri. Forster's Tern. See No. 44.

Outer tail feather, entirely pure white; back, pearl gray; breast, white, often tinged with faint rose color; bill, in adults, black with basal portion, red.

Sterna dougalli. Roseate Tern. See No. 47.

veloped.





Forster's Tern. Winter.



Roseate Tern.



Common Tern.





Least Tern. Gull-billed Tern. Adult Terns except the Noddy) have the top of the head entirely black, part of the year, varying with age and season. **Outer web of outer tail feather, darker than inner web;** back, pearl gray; breast and underparts, pearl gray; bill, in adults, entirely red; tarsus, usually less than .70.

Sterna paradisœa. Arctic Tern. See No. 46.

Back, black; a white stripe from forehead, extending over the eye; breast, white; bill, in adults, black. Sterna fuliginosa. Sooty Tern. See No. 49.

Back, sooty or grayish brown; a white stripe from forehead, **not reaching above the** eye; bill, black. Sterna anathetus. Bridled Tern. See No. 50.

Back, sooty brown; underparts, sooty brown.

Anous stolidus. Noddy Tern. See No. 53.

* Group 5. Wing, 11 to 13 inches long.

Bill, black, not tipped with yellow; feet, blackish; back, pearl gray; bill, comparatively short and stout. Gelochelidon nilotica. Gull-billed Tern.

See No. 39.

Bill, black, not tipped with yellow; feet, black; back, black or sooty. Sterna fuliginosa. Sooty Tern.

See No. 49.

Bill, red, tipped with black; feet, orange red; back, pearl gray or gray and buff. Sterna hirundo. Common Tern. Wilson's Tern. See No. 45.

Bill, black, tipped with pale yellow; feet, dark; bill, comparatively long and slender. Sterna sandvicensis acuflavida. Cabot's Tern. See No. 39.

* Group 6. Wing, 13 to 17 inches long.

Bill, orange or yellowish; tarsus, less than 1.50; inner web of outer primary, usually with more or less white. Sterna maxima. Royal Tern. See No. 41.

Bill, red or reddish; tarsus, over 1.50; inner web of outer primary, usually without white. Sterna caspia. Caspian Tern.

See No. 40.

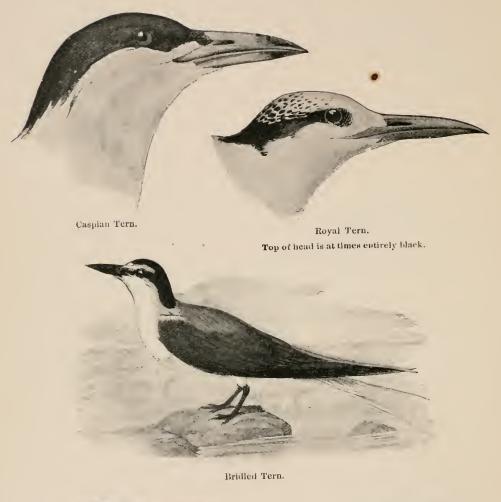
Bill, black, tipped with yellow.

Sterna sandvicensis acutlavida. Cabot's Tern. See No. 39.

* Group 7. Wing, over 17 inches long.

Bill, red or reddish.

Sterna caspia. Caspian Tern. See No 40.







FAMILY RHYNCHOPIDÆ.

Skimmers.

Bill, like blade of a knife, the under mandible the longer; plumage, black above, white below.

* Group 1. Wing, 13 to 15 inches long.



Bill, thin, knife-like; lower mardible, the longer; basal half of bill, vermilion red, blackish at tip; upper plumage, black; underparts, white. Rhynchops nigra. Black Skimmer. See No. 54.

FAMILY DIOMEDEIDÆ. Albatrosses.

Very large wing, over 19 inches long; upper mandible, curved near tip, torming a hook, the end (unguis) enlarged; nostrils, separate and tubular; hind toe, rudimentary, often apparently wanting.

* Group 1. Wing, 17 to 21 inches long



Bill, dark; the top (culmen), yellow. A very large sea bird.

Thalassogeron culminatus, Yellow-nosed Albatross. See No. 56.

FAMILY PROCELLARIIDÆ.

Shearwaters, Petrels, and Fulmars.

Nostrils, tubular, united in one double-barrelled tube; front toes, palmate (full webbed); hind toe, very small, and in some cases entirely absent; upper mandible, curved near tip; wing, less than 19 inches long.

* Group 1. Wing, less than 5.50 inches long.

General plumage, sooty black, the underparts with faint brownish tinge; upper fail coverts, white, some of them tipped with black. *Procellaria pelagica*. **Stormy Petrel**. See No. 67.



* Group 2. Wing, 5.50 to 6.50 inches long.

 Tail, nearly square; upper tail coverts, white, not tipped with black; underparts, dull black; tarsus, over 1.05.
 Oceanites oceanicus.
 Wilson's Petrel.

 See No. 69.

Tail, decidedly forked; upper tail coverts, white, not tipped with black; underparts, brownish black or sooty brown; tarsus, less than 1.05.

Occanodroma leucorhoa. Leach's Petrel. See No. 68.

Pelagodroma marina. White-faced Petrel. See No. 71.

Underparts, white.



Leach's Petrel.



Stormy Petrel.



Wilson's Petrel.



White-faced Petrel,

* Group 3, Wing, 6.50 to 9.50 inches long.



Upper parts, dark sooty brown or grayish black; underparts, white; sides of breast, tinged with gray; middle toe and claw, less than 2 inches long.

> Puffinus auduboni. Audubon's Shearwater. See No. 62.

The Manx Shearwater, Puffinus puffinus, a European species, somewhat resembles Audubon's Shearwater, but it is larger, the back darker, the wing rarely, if ever, measur-

ing less than 8.40 inches, and the middle toe and claw 2 inches or more. It is of accidental occurrence on our coast.

* Group 4. Wing, 11 to 13 inches long.

Upper and under tail coverts, gray or brownish gray; breast, white.

Pufliuus major. Greater Shearwater. See No. 60.

Under tail coverts, gray; upper tail coverts, sooty; breast, gray.

Puffinus fuliginosus. Sooty Shearwater. See No. 63.

Upper and under tail coverts, white,

Estrelata hasitata, Black-capped Petrel. See No. 64.

Upper tail coverts, pearl gray; under tail coverts, white, or entire plumage, dark slate Fulmarus glacialis, and races. Fulmar Petrel. color (dark phase). See Nos. 57 and 58.

* Group 5. Wing, 13 to 15 inches long.

Upper surface of tail feathers, dark slaty brown; under tail coverts, ash gray or brownish gray. Puffinus major. Greater Shearwater.

See No. 60.

Upper surface of tail feathers, dark slaty brown; under tail coverts, white, sometimes slightly mottled with grayish. Puflinus borealis. Cory's Shearwater. See No. 59.

Upper surface of tail feathers, pale pearl gray; upper tail coverts, pearl gray; under tail coverts, white; or entire plumage, dark slate color (dark phase).

Fulmarus glacialis, and races. Fulmar Petrel. See Nos. 57 and 58.

* Group 6. Wing, 15 to 17 inches long.

Upper surface of tail feathers, dark slaty brown; under tail coverts, ash gray, or Puffinus major. Greater Shearwater. brownish gray.

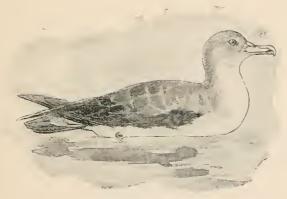
See No. 60.

Upper surface of tail feathers, dark slaty brown; under tail coverts, white; sometimes Puffinus borealis. Cory's Shearwater. slightly mottled with grayish.

See No. 59.



Fulmar.



Cory's Shearwater.



Puffinns major.







Audubon's Shearwater.

ORDER STEGANOPODES.

Gannets, Pelicans, Cormorants, etc.

Toes, four, all connected by webs.

FAMILY PHAETHONTIDÆ.

Tropic Birds.



Bill, sharp pointed; chin, feathered; toes, four, all connected by webs.

* Group 1. Wing, 9.50 to 13 inches long.



Bill, yellowish; general plumage, white; outer webs of primaries and lesser wing coverts, black; middle tail feathers, very long; bill, yellow or pale orange; shafts of tail feathers, black. Phaethon americana, Yellow-billed Tropic Bird, See No. 72.

Bill, red; back, finely barred with black. Rare straggler, recorded from Newfoundland banks. Red-billed Tropic Bird.

See No. 73.

^{*} For directions for measurement, see page 9.

FAMILY SULID.E. - GANNETS.

FAMILY SULIDÆ. Gannets.

Bill, stout, but not hooked; chin, bare; neck, thick; toes, four, all connected by webs.

* Group 1. Wing, 13 to 15 inches long.

Head, sooty brown; belly, white; feet, yellowish or greenish, but never red (adult). Sula sula. Booby Gannet.

Head, sooty brown; belly, brownish; feet, not red (immature).

Sula sula. Booby Gannet. See No. 75.

Head, white, tinged with buff; belly, white; feet, red (adult).

Sula piscator. Red=footed Booby. See No. 76.

* Group 2. Wing, 15 to 17 inches long.

Section 1. Side of chin, feathered; a narrow strip of bare skin down the middle of the throat.

Adult, white head, tinged with buff; primaries, dark; immature birds are mottled, grayish brown and white. Sula bassana. Gannet. See No. 77.

Section 2. Whole of chin and upper part of throat, bare skin without feathers.

General plumage, sooty brown (rarely whitish); underparts, white; feet, greenish yellow, or pale yellow. Sula sula. Booby Gannet. See No. 75.

General plumage, white; feet, red; gular sack, blackish; bare skin in front of eye and angle of jaw, pink red; tail, white; immature birds are grayish brown.

> Sula piscator. Red=footed Booby. See No. 76.

General plumage, white; **feet, leaden blue**; gular sack, blackish; bare skin in front of eye, bluish; tail, sooty brown; the middle feathers tinged with hoary; young birds are sooty gray. Sula cyanops. Blue-faced Booby.

See No. 74.

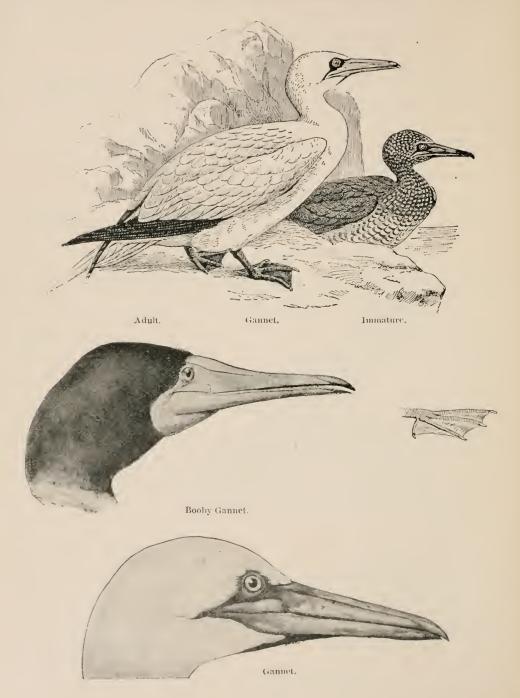
* Group 3. Wing, 17 to 21 inches long.

Sides of chin, feathered; a narrow strip of bare skin down wildle of throat; adults, white; head tinged with buff; immature birds, mottled grayish brown a d hite. Sula bassana. Gannet. See No. 77.

Whole chin and upper throat, bare; feet, leaden blue; wing, always less than 18. Accidental straggler, on Florida coast, not recorded elsewhere in Eastern North America.

Sula cyanops. Blue-faced Booby Gannet, See No. 74.

^{*} For directions for measurement, see page 9.

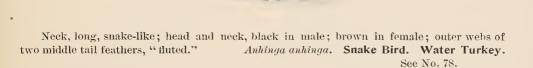


FAMILY ANHINGIDÆ.

Darters. Snake Birds.

Bill, sharp-pointed and slender; chin, bare; neck, long and slender; toes, four, all connected by webs.

* Group 1. Wing, 12.50 to 15.50 inches long.



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FAMILY PHALACROCORACIDÆ.

Cormorants.



Bill, hooked at tip, and less than twelve inches long; bare skin at base of bill and chin; lores, bare; toes, four, all connected by webs.



* Group 1. Wing, 11 to 15 inches long.

Tail composed of fourteen feathers.

Phalacrocorax carbo, Common Cormorant. Shag. See No. 79.

Tail composed of twelve feathers. *Phalacrocorax dilophus, and races.* Double-crested Cormorant and Florida Cormorant. See Nos, 80 and 81

The Mexican Cormorant, a smaller species, occasionally occurs in the Mississippi Valley.

* For directions for measurement, see page 9.



Common Cormorant.



Double-crested Cormorant.

FAMILY PELECANIDÆ.

Pelicans.

Bill, hooked at tip, over twelve inches long and having a large pouch; lores, bare; toes, four, all connected by webs.



White Pelican.

* Group 1. Wing, over 17 inches long.

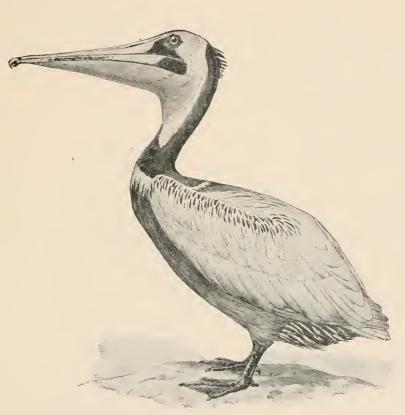
General plumage, white.

Pelecanus crythrorhynchos. White Pelican. See No. 83.

General plumage, not white (coloration very variable according to age and season, but never white). Pelecanus fuscus. Brown Pelican.

See No. 84.

* For directions for measurement, see page 9.



Brown Pelican.

General plumage, variable, according to age and season, but never white. Pelicanus fuscus. Brown Pelican. See No. 84.

FAMILY FREGATIDÆ.

Man-of-war Birds. Frigate Birds.

Bill, hooked at tip; lores, feathered; upper plumage, entirely black; toes, four, all connected by webs; tail, forked; wings, very long.

* Group 1. Wing, over 21 inches long.



Entire plumage, black (*adult, male*); general plumage, black; belly, white (*female*); head and neck, whitish; belly, white; rest of plumage, black (*immature*).

Fregata aquila. Man-of-war Bird. See No. 85.

FAMILY ANATIDÆ.

DUCKS, GEESE, AND SWANS.

SUBFAMILY MERGINÆ. MERGANSERS.

FISH-EATING DUCKS HAVING NARROW BILLS WITH TOOTH-LIKE SERRATIONS ON EDGES; TARSUS, SCUTELLATE IN FRONT (TRANSVERSE SCALES).

GROUP 1. Wing, 6.50 to 8.50 inches long. See page 61. GROUP 2. Wing, 8.50 to 12 inches long. See page 63.

SUBFAMILY ANATINE. RIVER AND POND DUCKS.

DUCKS HAVING HIND TOE WITHOUT WELL DEVELOPED, MEMBRANEOUS LOBE OR FLAP; TARSUS, SCUTELLATE (TRANSVERSE SCALES) IN FRONT.

GROUP 1. Wing, 5 to 7.50 inches long. See page 63.

GROUP 2. Wing, 8 to 10 inches long. See page 64.

Section 1. Belly, white. See page 64.

Section 2. Belly, not white. See page 64.

GROUP 3. Wing, 10 to 14 inches long. See page 65.Section 1. Belly, white, or tinged with dusky or gray on lower part. See page 65.Section 2. Belly, not white. See page 66.

SUBFAMILY FULIGULINÆ. BAY AND SEA DUCKS.

DUCKS HAVING A FLAP OR MEMBRANEOUS LOBE ON HIND TOE; TARSUS, SCUTELLATE (TRANSVERSE SCALES) IN FRONT.

GROUP 1. Wing, 5 to 6.50 inches long. See page 71.

Section 1. Tail feathers, not stiff and pointed. See page 71.

Section 2. Tail feathers, stiff and pointed. See page 71.

GROUP 2. Wing, 6.50 to 7.50 inches long. See page 71.

Section 1. Belly, white. See page 71.

Section 2. Belly, not white. See page 72.

GROUP 3. Wing, 7.50 to 8.50 inches long. See page 72.

Section 1. Head, with more or less white or brownish white; belly, white, sometimes tinged with dusky or gray on lower part. See page 72.

Section 2. No white or grayish white on head; belly, white; sometimes tinged with grayish white on head. See page 73.

Section 3. Belly, not white. See page 73.

GROUP 4. Wing, 8.50 to 10 inches long. See page 74.

Section 1. Hind toe, with flap or lobe; belly, white, sometimes tinged on lower part with dusky or gray; *head*, *marked with more or less white*, or brownish white. See page 74.

- Section 2. Belly, white, sometimes tinged on lower part with gray or dusky; no white or grayish white on head. See page 74.
- Section 3. Belly, not white: head, marked with more or less white, or grayish white. See page 76.
- Section 4. Belly, not white; no white on head. See page 77.
- GROUP 5. Wing, 10 to 14 inches long. See page 77.
 - Section 1. Head, with more or less white, or grayish white; belly, black. See page 77.
 - Section 2. No white on head; belly, black. See page 79.
 - Section 3. Head, with more or less white, or grayish white; belly, mottled brown, or grayish brown, or slaty. See page 79.
 - Section 4. No white on head; belly, mottled brown, or grayish brown. See page 80.

SUBFAMILY ANSERIN.E. GEESE.

Lores, feathered; tarsus, reficulate.

- GROUP 1. Wing, 12 to 14 inches long. See page 81.
- GROUP 2. Wing, 14 to 20 inches long. See page 81.
 - Section 1. Head and neck, black or blackish, marked with more or less white; bill and feet, black See page 81.
 - Section 2. Head, white, sometimes tinged with brownish orange; bill and feet, pink or flesh color in life; yellowish or pale brownish in dried skin. See page 83.
 - Section 3. Head, brownish or grayish, sometimes marked with white; bill, pinkish; feet, yellow or pink. See page 83.

SUBFAMILY CYGNIN.E. SWANS.

BARE SKIN BETWEEN THE BILL AND EYE; TARSES, RETICULATE; NECK, VERY LONG; WING, OVER 19 INCHES LONG. See page 84.

ORDER ANSERES.

Lamellirostral Swimmers.

FAMILY ANATIDÆ.

Ducks, Geese, and Swans.

SUBFAMILY MERGINÆ.

Mergansers.

Fish-eating Ducks having narrow bills with tooth-like serrations on edges, and the tarsus, scutellate in front.

* Group 1. Wing, from 6.50 to 8.50 inches long.

Section 1. Bill, narrow, with tooth-like serrations.



Lophodytes cucullatus (male).

Lophodytes cucullatus.

Head, brownish or grayish; tarsus, less than 1.50; crest, small (female and immature). Lophodytes cucultatus. Hooded Merganser. See No. 88.

Head, with black and white crest; tarsns, less than 1.50 (male). Lophodytes cucultatus. Hooded Merganser. See No. 88.



Red-breasted Merganser.



Male.

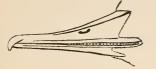
American Merganser.

Female.



* Group 2. Wing, from 8.50 to 12 inches long.

Section 1. Bill, narrow, with tooth-like serrations.



Distance from nostril to tip of bill, less than 1.50; head and neck, greenish black; underparts, creamy white, tinged with salmon color; feet, red (male).

Merganser americana. American Merganser. Sheldrake. See No. 86.

Distance from nostril to tip of bill, less than 1.50; head, rufous brown; upper throat, white; feet, orange red (female). Merganser americana. American Merganser. Sheldrake.

Top of bill, Merganser americana,

Distance from nostril to tip of bill, more than 1.50; head, black, tinged with green; breast, rufous, streaked with black (male). Merganser servator. Red-breasted Merganser. See No. 87.

See No. 86.

Merganser serrator.

Distance from nostril to tip of bill, more than 1.50; head, brownish, palest on the throat; speculum, white (female). Merganser servator. Red-breasted Merganser. See No. 87.

SUBFAMILY ANATINÆ.

River and Pond Ducks.

Ducks having hind toe without membraneous lobe or flap; tarsus, scutellate in front.

* Group 1. Wing, 5 to 7.50 inches long.

Section 1. Hind toe, without flap or lobe.



Anas discors.

Large patch pale blue on wing (coverts); white crescent on face (male); no white crescent, face speckled; chin whitish (female). Common in Eastern United States.

Inas discors. Blue-winged Teal. See No. 97.

Large patch of pale blue on wing (coverts); head and breast, rufous brown; crown,

* For directions for measurement, see page 9.

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blackish (male); sides of head, speckled (dull white, dotted with black); chin and throat, dusky, tinted with rufous (female). Western species rare east of the Mississippi River.

Anas cyanopteva. Cinnamon Teal. See No. 98.

No blue patch on wing; head, rufous brown with large patch of green through eye to nape; speculum, black and green (male); head, speckled. No blue patch on wing (female). Anas carolinensis. Green-winged Teal. See No. 96.

* Group 2. Wing, from 8 to 10 inches long.

Section 1. Belly, white; no flap or lobe on hind toe.

Head, green, purple, black, and white; chin and upper throat, white; feet, yellow in life (male).

Aix sponsa. Wood Duck. Summer Duck. See No. 101.

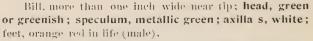
Aix sponsa.

Head, grayish brown with white stripe through the eye; chin and upper threat, white; toes, dull yellow in life (female).

> Aix sponsa. Wood Duck. Summer Duck. See No. 101.

Head, brown; chin, not white; a white stripe on sides of the neck: tail, pointed (male). Dapila acuta. Pintail Duck. See No. 100.

Section 2. Belly, not white; hind toe, without mem= braneous lobe or flap.

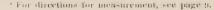


Spatula clypcata, Shoveller Duck, Broad-bill, See No. 99.

Bill, more than one inclusive near tip; head, narrowly streaked and speckled with brown and dull white; speculum, metallic green; feet, *orange red* in life; axillars, white (female).

Spatula elypeata. Shoveller Duck. Broad-bill. See No. 99.

Spatula clypeata.





Bill, less than one inch wide near tip; head, lined and speckled with brown and brownish white; speculum, not metallic green; axillars, white, barred with brown; rump

Axillar. Dafila acuta.

and tail coverts, brown, narrowly edged and banded with white; feet, dusky (female).

Dafila acuta. Pintail Duck. See No. 100.

Belly, white, with more or less brown spots; axillars, white; bill, less than .90 wide at widest part (female). Anas strepera. Gadwall. See No. 92.

Belly, more or less spotted; throat, white; rump, olive brown; secondaries, metallic green, tipped with white; axillars and under wing coverts, heavily barred; toes, yellowish in life (female). Aix sponsa. Wood Duck. Summer Duck.

See No. 101.

* Group 3. Wing, from 10 to 14 inches long.

Section 1. Hind toe, without membraneous lobe or flap; belly, white, sometimes faintly tinged with dusky or gray on lower part.

Axillars, white; the shafts, white: exposed speculum, black and white; head, tawny brown; cheeks and throat, tawny, speckled with brown (male).

> Anas strepera. Gadwall. Creek Duck. See No. 92.





Axillars, white; the shafts, white; head, speckled; exposed speculum, black and white (female).

Anas strepera. Gadwall. Creek Duck. See No. 92.

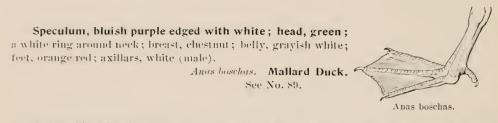
Axillars, white with dark shafts; speculum, green and black; white patch on shoulder; top of head, white (male). Anas americana. American Widgeon. Baldpate. See No. 94.

* For directions for measurement, see page 9.

Axillars, white with dark shafts; no white shoulder patch; head, speckled (female). Anas americana. American Widgeon. Baldpate. See No. 94.

Axillars, grayish white; head, brown, not speckled; stripe of white on sides of neek; tail, pointed; middle feathers, long (male). Dafila acuta. Pintail Duck. See No. 100.

Section 2. Hind toe, without membraneous lobe or flap; belly, not white.



Belly, white, showing more or less brown spots; axillars, white; bill, less than .90 wide at widest part; speculum, black and white (female). Anas strepera. Gadwall. See No. 92.

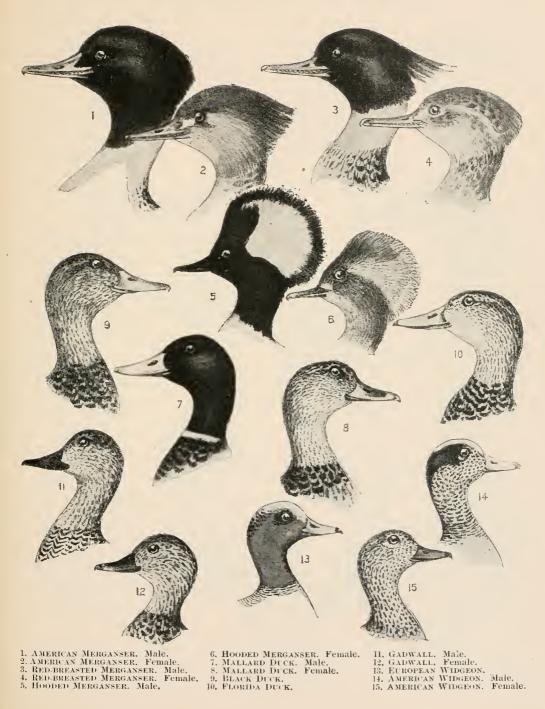


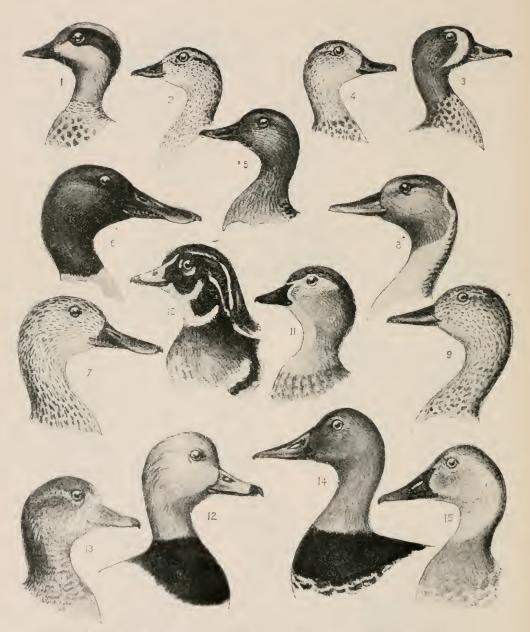
Anas boschas.

Speculum, bluish purple, edged with white and black; greater wing coverts, with broad band of white; head, tawny brown, streaked with dark brown; belly, pale buff, mottled with brown; feet, orange red; axillars, white (female).

> Anas boschas. Mallard Duck. See No. 89.

Speculum, purplish blue; no white band on greater wing coverts; head, pale brown; upper throat, buff, not streaked; bill, yellowish olive; nail of bill and spot at base, black; feet, pale orange red; axillars, white. Florida species occasionally observed on Gulf coast to Louisiana. Anos falrigada. Florida Black Duck. Florida Dusky Duck.

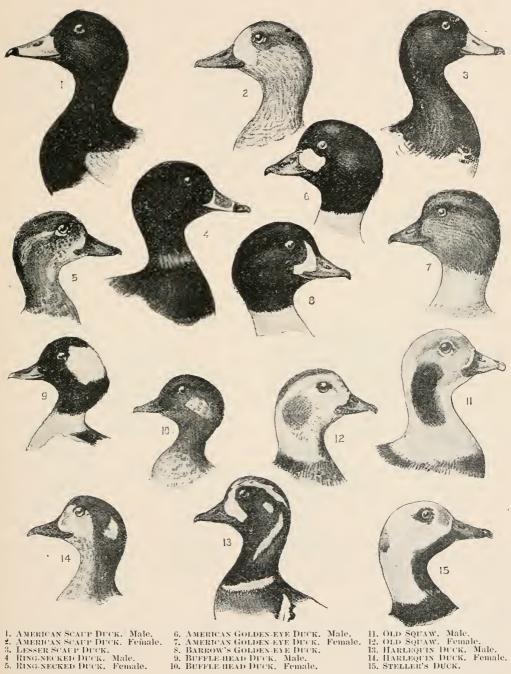




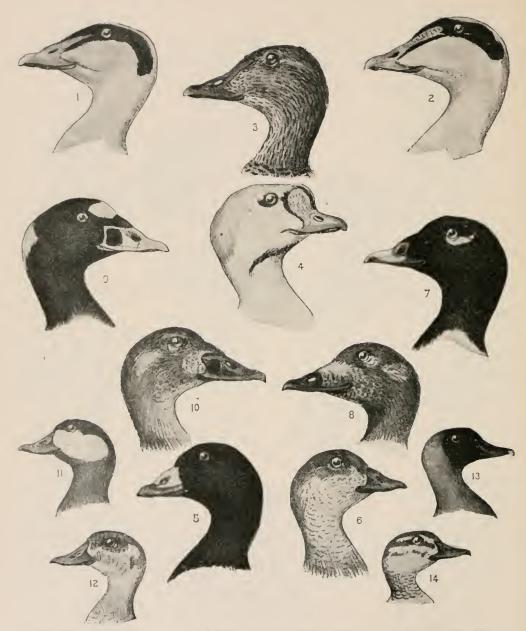
- GREEN WINGED TEAL, Male,
 GREEN-WINGED TEAL, Female,
 BLEE WINGED TEAL, Male,
 BLEE WINGED TEAL, Female,
 UINNAMON TEAL,
- SHOVELLER DUCK, Male,
 SHOVELLER DUCK, Female,
 PINTAIL DUCK, Male,
 PINTAIL DUCK, Female,
 WOOD DUCK, Male,

- WOOD DUCK, Female,
 REDIFAD DUCK, Male,
 REDIFAD DUCK, Female,
 REDIFAD DUCK, Female,
 CANVAS BACK DUCK, Female,

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- NORTHERS EIDER DUCK.
 AMERICAS EIDER DUCK. Male.
 AMERICAS EIDER DUCK. Female.

- 4. KING EIDER DUCK. 5. AMERICAN SCOTER DUCK, Male.
- AMERICAN SCOTER DUCK, Female,
 WHITE WINGED SCOTER DUCK, Male,
 WHITE WINGED SCOTER DUCK, Female,
 SPERF SCOTER DUCK, Male,
 SURF SCOTER DUCK, Female,
- RUDDY DUCK, Male,
 RUDDY DUCK, Female,
 MASKED DUCK, Male,
 MASKED DUCK, Female,

SUBFAMILY FULIGULINÆ.

Bay and Sea Ducks.

Ducks having flap or membraneous lobe on hind toe; tarsus, scutellate (transverse scales) in front.

* Group 1. Wing, from 5 to 6.50 inches long. Section 1. Tail feathers, not stiff and pointed.

Head, greenish purple, with white patch (male); head, gravish brown with white patch (female or immature); no dark stripes on cheek; bill, less than three fourths inch wide.

Charitonetta albeola. Buffle=head Duck. Dipper Duck. See No. 110.



Charitonetta albeola.

Section 2. Tail feathers, stiff and pointed.

Throat, whitish; cheeks, white or whitish; bill, broad, three quarters inch or more wide. Erismatura jamaicensis. Ruddy Duck. See No.

Front of head, including cheeks, black (adult); head with black stripes on side (female or immature). Tropical species accidental in the United States.

> Nomonys dominicus. Masked Duck. See No. 123.

* Group 2. Wing, from 6.50 to 7.50 inches long.

Section 1. Belly, white.

Head, greenish purple, no white on head; back, barred black and white; **speculum**, white (male).

> Aythya affinis. Lesser Scaup Duck. Blue=bill. See No. 106.



Aythya affinis.

Head, brownish, a patch of dull white at base of bill; no white on ear coverts; **speculum**, white (female). Authya affinis. Lesser Scaup Duck. Blue=bill. See No. 106.



Head, greenish purple, no white on head; back, dull black; **speculum, gray** (male). Aythya collaris. **Ring-neck Duck**. See No. 107.

Head, dull brown, brownish white at base of bill and below eye: speculum, gray (temale). Aythya collaris. Ring-neck Duck.

See No. 107.

Head, greenish purple, a large patch of white on back of head (male). Charitonetta albeola. Buffle-headed Duck.

See No. 110.

Head, dark brown or dnsky, a patch of white behind the eye (on ear coverts); no white or brownish white at base of bill; speculum, white (female).

Charitonetta albeola. Buffle-headed Duck. See No. 110.

Section 2. Belly, not white.

it (male)).	
oniens.	Harlequin	Duck.
S	ee No. 112.	
de).		
onicus.	Harlequin	Duck.
Se	e No. 112.	
stelleri.	Stellers'	Duck.
S	ee No. 114.	
stelleri.	Stellers'	Duck.
	oniens. So ie). onieus. So stelleri. So	t (male). onicus. Harlequin See No. 112. le). onicus. Harlequin See No. 112. stelleri. Stellers' See No. 114. stelleri. Stellers'

See No. 114.

* Group 3. Wing, from 7.50 to 8.50 inches long.

Section 1. Head, marked with more or less white or brownish white; belly, white, sometimes tinged with dusky or gray on lower part.

Head, brownish; a patch of dull white on face at base of bill; speculum, white (female).

Aythya marila. Greater Scaup Duck. Blue-bill. See No. 105.

Aythya marila nearctica.

Speculum, white, similar to preceding but somewhat smaller (female). More common in the South than the Greater Scaup Duck. Aythya affinis. Lesser Scaup Duck, See No. 106.

* For directions for measurement, see page 9.

Speculum, gray; head and neck, brownish; chin and anterior portion of lores, brownish white or whitish (female); resembles female Red-head, but is smaller.

Aythya collaris. Ring=necked Duck. See No. 107.

A patch of white or grayish white on the head, including the eye; no speculum; under tail coverts, white; adult males have the tail feathers long and pointed.

Clangula hyemalis. Old Squaw. Long-tailed Duck. See No. 111.

Section 2. Belly, white, sometimes tinged on lower part with dusky or gray; no white or grayish white on head.



Glaucionetta clangula americana.

Head, black, glossed with green; speculum, white; back, grayish white, finely lined with black (male).

Aythya marila, Greater Scaup Duck, Blue-bill or Black-head. See No. 105.

Head, brown; a distinct wing band of white (female).

Glaucionetta clangula americana. Golden Eye.

See No. 108.

Head, black, glossed with purple, finely lined with black; speculum, white; back, grayish white, smaller than the preceding species, but resembles it closely (male).

Aythya affinis. Lesser Scaup Duck. Blue-bill or Black-head. See No. 106.

Head, black, with violet or bluish gloss, a spot of white on the chin; speculum, gray; back, dull black (male). Aythya collaris. Ring-necked Duck. See No. 107.

Section 3. Belly, not white.

Plumage, variously marked with white, slate-color, and chestnut; speenlum, bluish; top of head and wing coverts, not white (male). *Histrionicus histrionicus*. **Harlequin Duck**. See No. 112.

Top of head and wing coverts, not white; plumage, dull brown, mottled on the underparts (female). *Histrionicus histrionicus.* Harlequin Duck. See No. 112.

Top of head, white; wing coverts, white; rump, bluish black.

Eniconetta stelleri. Stellers' Duck. See No. 114. * Group 4. Wing, 8.50 to 10 inches long.

Section 1. Hind toes, with well defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; head, marked with more or less white, or brownish white.

Head, brownish; a patch of dull white on face at base of bill; speculum, white (female). Aythya mavila. Greater Scaup Duck. Blue-bill, Black=head. See No. 105. Aythya marila.

Head and neck, dark glossy green; a nearly round patch of white on check at base of hill; back, black; speculum, white (male).

Glancionetta clangula americana. American Golden Eye. Whistler. See No. 108.

Head, bluish black, or purplish blue; an irregular white patch on check at base of bill (male). bill (male). See No. 109.

Top of head, brown; sides of head, brownish white; speculum, gray; bill, more than one and a quarter inches long (female). Aythya americana. Red-headed Duck. See No. 103.

Bill, not over 1.25 long; a patch of white, or grayish white, on the head, including the eye; no speculum; under tail covert, white: adult males have the tail feathers long and pointed. Clangula hyemalis. Old Squaw. Long-tailed Duck. See No. 111.

Section 2. Hind toe, with well defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; no white, or grayish white, on head.

Aythya marila nearctica.

Head, black, glossed with green; back, grayish white, finely lined with black; speculum, white (male).

Aythya marila. Greater Scaup Duck. Blue-bill. Black-head. See No. 105.

* For directions for measurement, see page 9.



Head, cinnamon brown; upper breast and back, ashy gray, not barred; speculum, white (female; very similar to female Barrow's Golden Eye, but slightly smaller, much more common than the next species, on the Atlantic coast.

Glowiouetta clangula americana. American Golden Eye. Whistler. See No. 108.

Head, cinnamon brown; upper breast and back, ashy gray, not barred; speculum, white female; very similar to preceding species, but slightly larger.

Glauvionetta islandica. Barrow's Golden Eye.

See No. 109,

Head, rufous brown; erown, blackish; breast, black; lower back, ashy white, tinely lined with black (male); bill, very different from that of Red-head, (See cut.) *Aythya vallisueria*, Canvas=back Duck,

See No. 104.

Aythya vallisneria.

Head, neck, and upper breast, dull cinnamon brown, palest on throat: lower back, dull brown, barred with tine, wavy, white lines (female); easily distinguished by shape of bill. (See cut.) Aythya vallisneria. Canvas-back Duck.

See No. 104.



Aythya americana.

Head, reddish brown; erown, not blackish; breast, black; lower back, grayish, finely lined with black (male); bill, very different from that of Canvas-back. (See cut.)

> Aythya umevicana. Red-headed Duck. See No. 103.

Section 3. Hind toe, with well defined membraneous lobe or flap; belly, not white; more or less white, or gray= ish white, on head.

General plumage, black ; a patch of white on front of crown and nape : bill, large, marked with orange, red, black, and white ; no white on wings (male).

ad Coot.

Oidemia perspicillata, Surf Scoter, Skunk-head Coot, See No. 121.

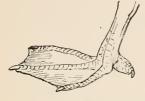
General plumage, brown; top of head and wings, dark; a spot of dull white at base of bill and behind eye; no white on wings (female).

Oidemia perspicillata, Surf Scoter, Skunk-head Coot, See No. 121.

Top and sides of head, white; a patch of greenish in front of eye; throat, black; all wing coverts, white (male). Eniconetta stelleri. Stellers' Duck. Stellers' Eider. See No. 114.

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Section 4. Hind toe, with well defined membraneous lobe or flap; belly, not white; no white on head.



Axillars, brown; secondaries, white, forming a white wing patch; upper parts, dark brown; underparts, sometimes brown, sometimes gravish (female).

Oidemia deglandi. White-winged Scoter. White-winged Coot. See No. 120.

* Group 5. Wing, 10 to 14 inches long.

Section 1. Hind toe, with well defined membraneous lobe or flap; head, with more or less white, or grayish white; belly, black.

General plumage, black; speculum, white; spot under eye, white; axillars, black; bill, orange at base (male). Oidemia deglandi. White=winged Scoter. White=winged Coot. See No. 120.

General plumage, black; head, black, with patch of white on crown and nape; no white on wing; axillars, black; bill, orange, black, and white (male).

Oidemia perspicillata. Surf Scoter. Skunk=head Coot. See No. 121.

See No. 121.

Oidemia deglandi.





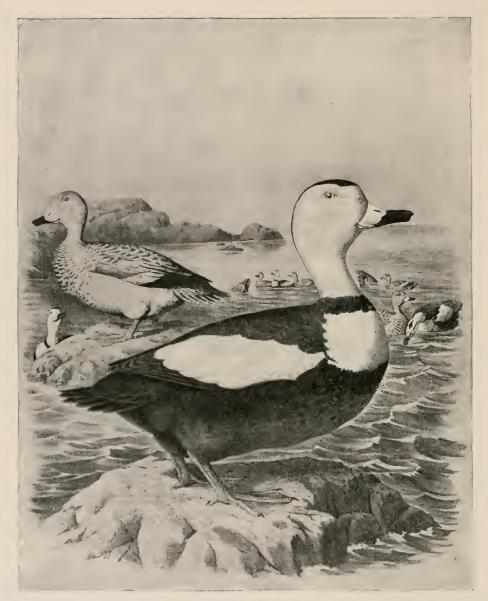
Dresser's Eider Duck. Somateria dresseri.

Northern Eider Duck. Somateria borealis.

Top of head, black, divided on crown; more or less green on head; throat, white; axillars, white; bill, enhuen, divided and rounded at base (male). (See cut of bill.)

Somateria dresseri. American Eider Duck.

See No. 116.



Labrador or Pied Ducks, Camptolamus labradorius, Formerly not uncommon on the Atlantic coast. Probably now extinct, See No. 113, Top of head, black, divided on crown; more or less green on head; throat, white; axillars, white; culmen, divided and pointed at base (male). (See cut of bill.)

Somateria borea¹is. Greenland Eider Duck. See No. 115.

Top of head, slate color; cheeks, greenish; throat, white, with large, black, V-shaped mark (male). Somateria spectabilis. King Eider Duck. See No. 117.

Section 2. Hind toe, with well defined membraneous lobe or flap; no white on head; belly, black.

General plumage, black; axillars, black; no white on wing; bill, orange at base; feathers on bill, more than one half inch from nostril (male).

Oidemia americana. American Scoter. Black Coot. Butter-bill Coot. See No. 118.

Section 3. Hind toe, with well defined membraneous lobe or flap; head, marked with more or less white, or grayish white; belly, mottled brown, or grayish brown, or slaty.

General plumage, brownish; no white on wing; feathers on bill, more than one half inch from nostril (female and immature).

> Oidemia americana. American Scoter. Butter=bill Coot. See No. 118.



Oidemia americana,

General plumage, grayish brown ; speculum, white ; feathers on bill, less than one half inch from nostril (female and immature).

Oidemia deglandi. White-winged Scoter. White-winged Coot. See No. 120.

General plumage, grayish brown; feathers extending on upper part of bill more than on the sides; no white on wing; feathers on bill, less than one half inch from nostril (female). Oidemia perspicillata. Surf Scoter. Skunk-head Coot.

See No. 121.



Section 4. Hind toe, with well defined membraneous lobe or flap; no white on head; belly, mottled brown, or grayish brown.

General plumage, brownish; no white on wings; axillars, black; feathers on the bill, more than one half inch from nostril (female).

> Oidemia americana. American Scoter. Butter-bill Coot. Gray Coot.

Head, dark brown or black: feathers on bill, less than one half inch from nostril; axillars, black; no white on wings (immature male).

See No. 118.

Oidemia perspicillata. Surf Scoter. Skunk-head Coot. See No. 121.

A patch of white on the wings; back and upper parts, dark brown; feathers on the base of bill, extending to within one half inch of nostril (female).

> Oidemia deglandi. White-winged Scoter. See No. 120.

Head, tawny, streaked with brown; axillars, white, or grayish white; throat, streaked; feathers on bill, within one fourth inch from nostril; decided difference in bill from next species (female). (See cut.) Eastern North America.

Soluateria dresseri. American Eider Duck. See No. 116.

Head, tawny, streaked with brown; axillars, white, or grayish white; throat, streaked; feathers on bill, within one fourth inch from nostril; decided difference in bill from preceding species (female). (See cut.) Eastern North America.

Somateria borealis. Northern Eider Duck. See No. 115.

Head, tawny, streaked with brown: axillars, white, or grayish white; throat, not streaked; feathers on bill, more than one fourth inch from nostril (female).

Somateria spectabilis. King Eider Duck. See No. 117.

SUBFAMILY ANSERINÆ.

Geese.

Lores, feathered; tarsus, reticulate.

* Group 1. Wing, 12 to 14 inches long.

Bill and feet black; head and neck, black; sides of neck (not front), mottled with white; no speculum; lower breast, gravish; no white on head.

Branta bernicla. Brant. See No. 132.

Head and neck, black; front and sides of neck, mottled with white; no speculum; lower breast, dark, not pale gray; no white on head.

Branta nigricans. Black Brant. See No. 133.

A patch of white on side of head, extending to throat; rest of head and neck, black. Western United States, rarely to Wisconsin. Bernicla canadensis minima. Cackling Goose. See No. 131.

* Group 2. Wing, from 14 to 20 inches long.

Section 1. Head and neck, black or blackish, marked with more or less white; bill and feet, black.

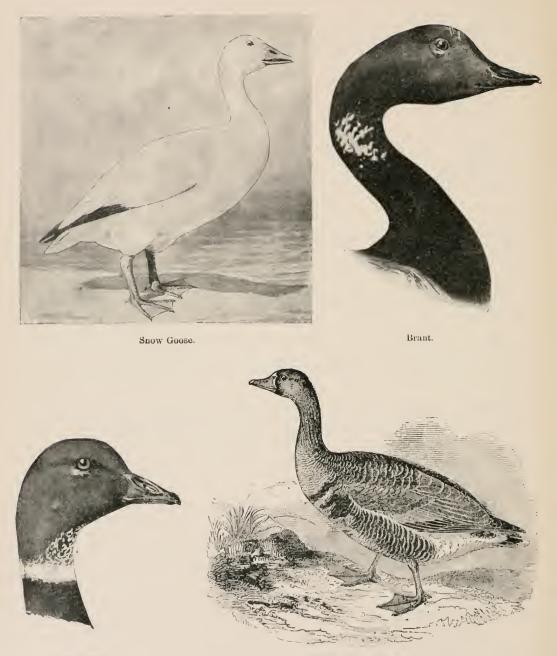
Head and neck, black; a patch of white on each cheek, extending to upper throat; no white on neck. Branta canadensis and races. Canada Goose. See Nos. 129, 130.

Head and neck, black; side (not front) of neck, speckled with white; upper belly, whitish. Common on Atlantic coast. Branta bernicla. Brant. See No. 132.

Head and neck, black; side and front of neck, speckled with white; upper belly, grayish brown. Rare on Atlantic coast. Branta nigricans. Black Brant. See No. 133.

Face and upper breast, white; lores, black; back of head, black. European species occasionally found on our coast. Branta leucopsis. Barnacle Goose. See No. 134.

^{*} For directions for measurement, see page 9.



Black Brant.

White-fronted Goose.

Section 2. Bill and feet, pink or flesh color in life; head, white, sometimes tinged with brownish orange.

Entire plumage, white; primaries, black; smaller than C. h. nivalis; bill, over 1.90; tarsus, over 2.80; middle toe, over 2.10 (adult). Chiefly Pacific coast to Mississippi Valley, rare on Atlantic coast. Chen hyperborea. Lesser Snow Goose. See No. 124.

Entire plumage, white; primaries, black; resembles preceding species but is larger (adult). Eastern North America, south in winter on Atlantic coast to Florida and Cuba.

Chen hyperborea nivalis. Greater Snow Goose. See No. 125.

Baek, slaty brown; belly and **rump**, gray; the feathers, not barred; terminal half of tail, not white (adult). *Chen carulescens.* Blue Goose. See No. 126.

Section 3. Bill, pinkish; feet, yellow or pink; head, brownish or grayish, sometimes marked with white.

Forehead and feathers at base of bill, white; nail of bill (unguis), whitish; bill, yellowish in dried skin; breast, grayish, more or less marked or spotted with black (adult).

Anser albifrons gambeli. American White Fronted Goose. See No. 128.

No white on forehead or base of bill; bill, yellowish in dried skin; nail of bill (unguis), dusky; rump, slaty brown; wing coverts, edged with white (immature).

Anser albifrons gambeli. American White Fronted Goose. See No. 128.

General plumage, grayish; rump, white; smaller than C. h. nivalis; bill, over 1.90; tarsus, over 2.80; middle toe, over 2.10 (immature). Chiefly Pacific coast to Mississippi Valley; rare on Atlantic coast. Chen hyperborea. Lesser Snow Goose. See No. 124.

General plumage, grayish; rump, white; larger than *nivalis*, (immature). Eastern North America, south in winter to Florida and Cuba.

Chen hyperborea nivalis Greater Snow Goose. See No. 125.

Head, brownish gray; chin, white; rump, gray; unguis (nail of bill), yellow; wing coverts, grayish, showing very little white on the edge of the feathers (immature).

Chen cœrulescens. Blue Goose. See No. 126.

SUBFAMILY CYGNINÆ.

Swans.

Bare skin, between the bill and eye; tarsus, reticulate; neck, very long; wing, over 19 inches long.

General plumage, white; bill, black with yellow spot (adult); distance from tip of bill to nostril, less than distance from nostril to eye (immature birds are gray or brownish gray). Common on some parts of the coast. Olor columbianus. Whistling Swan.

See No. 136.

General plumage, white; bill, black, showing no yellow; distance from tip of bill to nostril, more than distance from nostril to eye. Chiefly found in the interior of North America; not common on the coast. Olor buccinator. Trumpeter Swan.

See No. 137.



Olor columbianus.

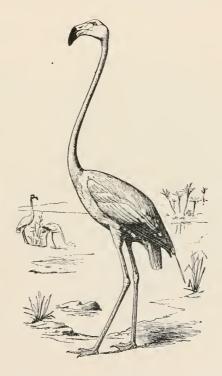
General plumage, gray, or brownish gray; birds of this description may be the young of either of the above species, the difference in the distance from the bill to the eye being characteristic as in the old birds.

FAMILY PHENICOPTERIDÆ.

Flamingoes.

Large, tall birds, usually red or pink; bill, very much bent, with toothlike serrations on edge.

Wing, over 17 inches long (carpus to tip).



General plumage, red or pink ; neck and legs, long ; bill, much bent with tooth-like serrations on edge. Phænicopterus ruber. Flamingo.

See No. 138.

A few Flamingoes are still found in extreme southern Florida. The species is common in the Bahama Islands.

FAMILY PLATALEIDÆ.

Spoonbills.

Bill, wide and flat at the end; toes, four, all on same level.

Wing, 13 to 17 inches long.



Bill, flat, widened and rounded at tip; general plumage, pink and white. Ajaja ajaja. Roseate Spoonbill.

See No. 139.

The Spoonbill may be readily recognized by its peculiar bill. Although by no means common, it still occurs in some numbers in the swamps of southern Florida.

FAMILY IBIDIDÆ.

Ibises.

Bill, long, rather slender, and decidedly curved downward; tarsus, always less than five inches long; toes, four, all on the same level, no comblike edge on side of middle toe nail; wing, from 8.50 to 13 inches long.

Wing, less than 10.50 inches long.

General plumage, purplish chestnut, showing purplish reflections on head, and greenish on wings; axillars and under wing coverts, purplish bronze: feathers, bordering base of bill, whitish. Plegadis guaranna. White-faced Glossy lbis.

General plumage, dark chestnut; feathers, at base of bill, not white.

Plegadis autumnalis, Glossy Ibis. See No. 142.



General plumage. white; primaries, blackish (adult).

Guara alba. White Ibis. See No. 140.

General plumage, brownish or grayish, often more or less mixed brown, gray and white; rump, white (immature). Guara alba. White Ibis. See No. 140.

General plumage, searlet. The young Searlet Ibis somewhat resembles the young White Ibis, but differs in having the rump not white. Guara rubra. Scarlet Ibis.

See No. 141.

FAMILY CICONIIDÆ.

Storks and Wood Ibises.

Greater part of plumage, white; bill, rounded and somewhat curved, very thick and strong; tarsus, always over 5 inches long; toes, four, all on same level; no comb-like edge on inner side of middle toe nail.



Wing, 17 to 19 inches long.

General plumage, white; the wings and tail, more or less black; adult birds have the head bare. *Tantalus leucolator.* Wood lbis. See No. 144.

FAMILY ARDEIDÆ.

Herons, Egrets, and Bitterns.

Bill, nearly straight and sharply pointed; inner side of middle toe nail, with distinct comb-like edge; toes, four, all on same level. Bitterns, tail with ten feathers. Herons, tail with twelve feathers.

* Group 1. Wing, less than 6 inches long.



Least Bittern.

Underparts and sides of the head and throat, buff white; a black patch on sides of the breast. Ardetta exilis. Least Bittern.

See No. 146.

Underparts and sides of the head and throat, rufous chestnut; under tail coverts, dull black. Ardetta neosena. Cory's Least Bittern.

See No. 147.

* Group 2. Wing, 6 to 7.50 inches long.



Crown, greenish or greenish black; legs, orange yellow in life. Ardea rirescens. Green Heron, See No. 158.

* Group 3. Wing, 8.50 to 11 inches long.



Greater part of plumage, slaty blue; belly, slaty blue; head, tinged with purplish brown (adult). Ardea carnica. Little Blue Heron.

See No. 157.

^{*} For directions for measurement, see page 9.

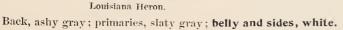
General plumage, white; tips of primaries, tinged with slaty blue; legs, yellowish olive (immature). Ardea carulea. Little Blue Heron.

See No. 157.



General plumage, white; ends of primaries, not tinged with slaty blue; legs, black; feet, yellow.

> Ardea candidissima. Snowy Heron. Snowy Egret. See No. 154.



Ardea tricolor ruticollis. Louisiana Heron. See No. 156.



General plumage, tawny brown, mottled and streaked with dark brown; upper surface of primaries, blackish. Botaurus lentiginosus. American Bittern. See No. 145.



Bill, large; top of head, black; back, green (adult).

Nyeticorax nyeticorax navrius. Night Heron. See No. 159.

Bill, large; top of head, white or whitish; back, not green (adult). Nycticorax violacers. Yellow-crowned Night Heron.

See No. 160.

Bill, large; general plumage, mottled, and streaked brown and while; outer edge of primaries, reddish brown (immature).

Nycticoras nycticoras navius.

Night Heron. See No. 159.

Bill, large; general plumage, mottled and streaked brown and white: primaries, slaty brown (immature).

> Nyeticorax violaceus. Yellow-crowned Night Heron.

See No. 160.

92

Night Heron.

* Group 4. Wing, 11 to 15 inches long.

Bill, stout; top of the head, black; back, dark green (adult). Nycticorax nycticorax neevias. Night Heron.

See No. 159.

Bill, stout; top of head, white or whitish; back, not green (adult). Nycticorax violacens. Yellow=crowned Night Heron. See No. 160.

Bill, stout; general plumage, mottled and streaked brown and white: outer edge of primaries, reddish brown (immature). Nycticorax nycticorax mexins. Night Heron. See No. 159.

Biil, stout; general plumage, mottled and streaked grayish brown and white; primaries, slaty brown (immature). Nycticorax violaceus. Yellow=crowned Night Heron. See No. 160.



General plumage, white; bill, yellow; legs, black. Ardea cyretta. American Egret. See No. 153.

General plumage, white; legs, dark olive; terminal half of bill, black; basal half, flesh color (white phase). Ardea rafescens. Reddish Egret. See No. 155.

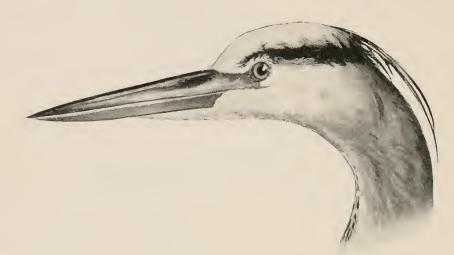
Head and neck, rufous chestnut; rest of plumage, slate color, or slaty gray. Ardea rufescens. Reddish Egret. See No. 155.

General plumage, yellow brown, mottled and streaked with dark brown; upper surface of primaries, blackish. Botaurus lentiginosus. American Bittern. See No. 145.

* Group 5. Wing, over 15 inches long.

Plumage, entirely white; wing, over 17 inches; bill, over 5.50; tarsus, over 7.25. Ardea occidentalis. Great White Heron, See No. 148.

Plumage, entirely white; wing, less than 17 inches long; bill, under 5.50; tarsus, under 7.25. Ardea caretta. American Egret. See No. 153.



Greater part of upper plumage, bluish gray or slaty gray; adults in breeding have middle of crown and throat, white; bill, less than 6.25; immature birds have the top of the head, black, Ardea herodias. Great Blue Heron. See No. 151.

Similar to Great Blue Heron, but larger; bill, over 6.25. Occurs only in Florida. Ardea wardi. Ward's Heron. See No. 150.

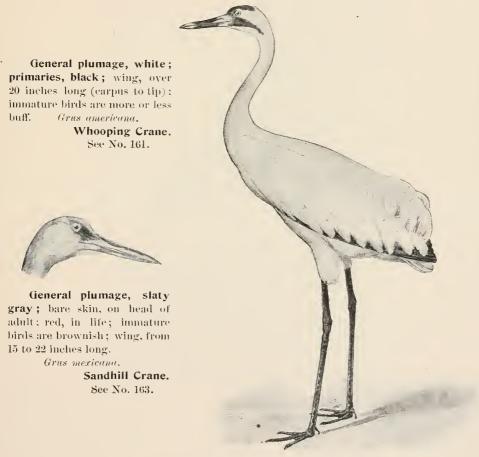
Top of head and sometimes greater portion of head, white; wings and back, bluish gray, or slaty gray; general appearance of Ward's Heron except color of head. Occurs only in Florida: probably a color phase of Ardea occidentalis.

> Ardea wuerdemanni. Wuerdeman's Heron. See No. 149.

ORDER PALUDECOLÆ. Cranes, Rails, Courlans. FAMILY GRUIDÆ.

Cranes.

Bill, over 3 inches long; wing, over 16 inches; tarsus, over 7 inches; toes, four, no comb-like edge on inner side of middle toe nail; hind toe, elevated above level of front toes.



Whooping Crane.

FAMILY ARAMIDÆ.

Courlans. Limpkins.

Bill, over 3 inches long; tarsus, under 7; wing, under 16; toes, four, no comb-like edge on inner side of middle toe nail; hind toe, raised above level of front toes.



General plumage, dark olive brown, streaked and marked with pure white; tail, purplish brown showing metallic gloss when held in the light; feathers of the back, breast, and wing coverts, brown, with white stripe in mildle of each feather; tip of lower mandible often slightly twisted. Occurs in Atlantic States only in Florida. Arounds gigenteus. Limpkin. See No. 164.

FAMILY RALLIDÆ. Rails, Gallinules, and Coots.

SUBFAMILY RALLINÆ.

Rails.

Birds which frequent marshy places. Toes, long; wings, short and rounded; bill, shorter than middle toe and claw together.

* Group 1. Wing, less than 3.75 inches long.



Black Rail.

Throat, breast, and **sides of head**, **slaty gray**; primaries, with more or less white spots. Frequents marshes. *Porzana jamaicensis*. **Black Rail**.

See No. 173.



Yellow Rail.

Throat, breast, and sides of the head, tawny brown, no white spots on primaries. Porzana noreboracensis. Yellow Rail. See No. 172.

^{*} For directions for measurement, see page 9.

* Group 2. Wing, from 3.75 to 4.75 inches long.



Virginia Rail.

Back, black or fuscous, the feathers edged with brownish or grayish olive; underparts, cinnamon rufous, whitish on the throat; bill, slightly enrved.

Rallus virginianus. Virginia Rail. See No. 169.



Back, with more or less white streaks; breast, gray or tawny, according to age; lower belly, dull white. *Porzana carolina*. Carolina Rail or Sora. See No. 171.



* Group 3. Wing, 4.75 to 6.50 inches long.



Feathers on back, dark olive, edged with gray ; cheeks and ear coverts, pale cinna= mon rufous, sometimes blackish in young birds; bill, over 1.25 inches long. Usually found near fresh water. Rallus elegans. King Rail. See No. 165.

Feathers on the back, black, edged with grayish olive; cheeks and ear coverts, gray. Prefers salt-water marshes, Rallus longirostris crepitans and varieties. Clapper Rail. See No. 166.

* Group 4. Wing, over 6.50 inches long.



Breast, tinged with rufous checks; rufous throat, whitish: back, streaked; bill, long and slightly curved. Rallus clegans. King Rail. See No. 165.

SUBFAMILY FULICINÆ.

Coots.



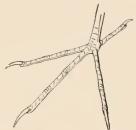
Bill, short and pointed; forehead, with more or less of a shield; toes, with large lobate webs; head, blackish; back, dark slaty gray; underparts, dark ash gray, whitish, on abdomen. Fulice americana. American Coot. Mud Hen. Blue Peter. See No. 178.

FAMILY RALLIDÆ. - RAILS.

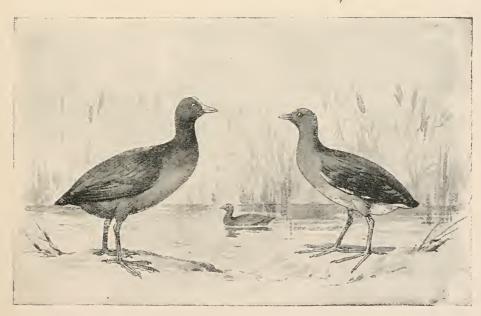
SUBFAMILY GALLINULINÆ. Gallinules.

Toes, not webbed; no white on sides of body; head and breast, purplish blue; back, greenish.

Ionornis martinica. Purple Gallinule. See No. 175.



Head, smoky black; breast, dark gray: toes, not webbed; more or less white on sides of body, *Gallinula galeata*. **Florida Gallinule**. See No. 179.



Gallinule.

ORDER LIMICOLÆ.

SHORE BIRDS.

HIND TOE, WHEN PRESENT, ALWAYS ELEVATED ABOVE LEVEL OF FRONT TOES.

FAMILY PHALAROPID.E. PHALAROPES.

SIDES OF TOES WITH ROUNDED LOBES OR NARROW WEBS. See page 104.

FAMILY RECURVIROSTRID.E. AVOCETS AND STILTS.

Toes, more or less webbed (not lobate); tarsus, over 3.50; bill curved peward or straight. See page 106.

FAMILY SCOLOPACIDE.

SNIPE, SANDPIPERS, CURLEWS, WOODCOCK, GODWITS, WILLETS, ETC.

TARSUS, LESS THAN 3.50 INCHES LONG; SIDES OF TOES, WITHOUT LOBATE WEBS; TOES, FOUR (ONE EXCEPTION, THE SANDERLING).

- GROUP 1. Birds having wings from 3.25 to 3.75 inches long. See page 107.
- GROUP 2. Birds having wings from 3.75 to 4.50 inches long. See page 108.
 - Section 1. Toes, four, with small web (not lobate at base). See page 108.
 - Section 2. Toes, four, without web. See page 109.
 - Section 3. Toes, three; bill, over .75. See page 109.
- GROUP 3. Birds having wings from 4.50 to 5.50 inches long. See page 109.
 - Section 1. Toes, four, a small web between tocs; bill, less than .75. See page 109.
 - Section 2. Toes, four, a small web between outer and middle toes; bill, over 1.75. See page 110.
 - Section 3. Toes, four, without web; bill, over 2 inches long. See page 110.
 - Section 4. Toes, four, without web; bill, over 1.10 and less than 1.90. See page 112.
 - Section 5. Toes, four, without web; bill, under 1.10. See page 114.
 - Section 6. Toes, three; bill, over .60 inch long. See page 115.
- GROUP 4. Birds having wings from 5.50 to 6.75 inches long. See page 116.
 - Section 1. Toes, four, a small web between outer and middle toes; bill, over 1.80. See page 116.
 - Section 2. Toes, four, a small web between outer and middle toe; bill, under 1.80. See page 116.
 - Section 3. Toes, four, without web; bill, over 2 inches long. See page 117.
 - Section 4. Toes, four, without web; bill, under 2. See page 118.
- GROUP 5. Birds having wings from 6.75 to 9 inches long. See page 119.
 - Section 1. Toes, four with more or less web; bill, enryed upwards or straight; bill, over 2.60 inches. See page 119.

- Section 2. Toes four, without web; bill, nearly straight; bill, over 2 inches long. See page 120.
- Section 3. Toes, four, with small web; bill, slightly curved upward or straight; bill, under 2.60 and over 1.50 inches long. See page 121.
- Section 4. Toes, four, with small web; bill, nearly straight; bill, less than 1.50 inches long. See page 121.
- Section 5. Toes, four, with small web; *bill, curved downward*; bill, over 2 inches long. See page 122.

GROUP 0. Birds having wings from 9 to 12 inches long. See page 123.

Section 1. Toes, four; bill eurved downward. See page 123.

Section 2. Toes, four; bill, curved upward or nearly straight. See page 123.

FAMILY CHARADRIIDÆ. PLOVERS.

TOES, THREE (ONE EXCEPTION, BLACK-BELLIED PLOVER); BILL, COMPARATIVELY SHORT AND THICK.

GROUP 1. Wing, 3.75 to 4.50 inches long; toes, three, no hind toe. See page 124.Section 1. Bill, under .60 inch long. See page 124.

Section 2. Bill, over .60 inch long. See page 125.

GROUP 2. Wing, 4.50 to 5.50 inches long; toes, three, no hind toe. See page 125. Section 1. Bill, over .60 inch long. See page 125.

Section 2. Bill, under .60 inch long. See page 125.

GROUP 3. Wing, 5.50 to 6.75 inches long; toes, three, no hind toe. See page 128.

GROUP 4. Wing, over 6.75 inches long. See page 128.

Section 1. Toes, three, no hind toe. See page 128.

Section 2. Toes, four. See page 128.

FAMILY APHRIZIDZE. TURNSTONES.

TOES, FOUR; LOWER BACK AND RUMP, WHITE WITH BLACK BAND. See page 129.

FAMILY HÆMATOPODIDÆ. OYSTER-CATCHERS.

Toes, THREE; BILL, OVER 2.50 INCHES LONG.

Section 1. Toes, three; bill, red. See page 130.

ORDER LIMICOLÆ.

Snipes, Plovers, Sandpipers, Curlews, Phalaropes, etc.

Hind toe, when present, always elevated above level of front toes.

FAMILY PHALAROPIDÆ.

Phalaropes.

Sides of toes, with lobes or narrow webs.



Wilson's Phalarope.

Red Phalarope. Winter plumage.





Crymophilus fulicarius.

Back, heavily streaked with black and tawny; belly, reddish brown, showing more or less white; toes, with small lobate web; wing, 5.20 to 5.50.

Crymophilus fulicarius. Red Phalarope.

See No. 179.



Phataropus lobatus.

Back, grayish, streaked with tawny: belly, white; toes, partly webbed; bill, under 1.05; tarsns, under 1; wing, 4 to 4.50. Phalaropus lobatus. Northern Phalarope.







Phalaropus tricolor.

Back, grayish, marked with **chestnut brown; belly, white; bill, over 1.05;** tarsus, over 1; toes, with narrow web on sides; wing, 5.10 to 5.40 (female).

Phalaropus tricolor. Wilson's Phalarope. See No. 181.

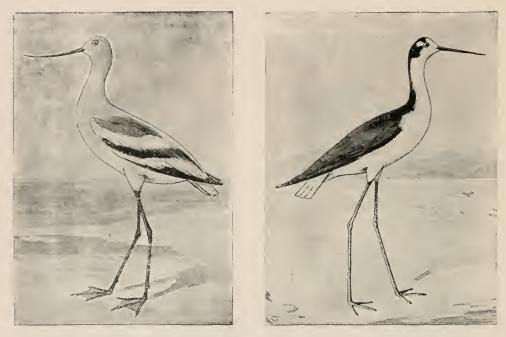
Back, grayish, mottled with dusky or whitish; bill, over 1.05; tarsns, over 1 inch; toes, with narrow web on sides; wing, 4.75 to 4.95 (male).

Phalaropus tricolor. Wilson's Phalarope. See No. 183.

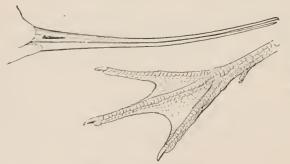
FAMILY RECURVIROSTRIDÆ.

Avocets and Stilts.

Tarsus over 3.50 inches; bill, curved upward or straight.



Avocet.



Recurvirostra americana.

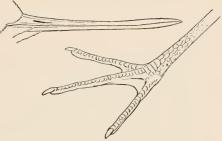
Stilt.

Head and neck, pale rufons (summer): white or grayish (winter): back and tail, white: axillars, white; belly, white; first primary, dark with dark shaft; bill, euryed upward; toes, four.

> Recurrirostra americana. American Avocet. See No. 182.

Top of head and nape, black; general upper plumage, glossy black; front of head and front of neck, rump, and underparts, white; axillars, white; first primary, dark, with dark shaft; legs, very long, rose pink in life; bill, nearly straight; toes, three.

Himantopus mexicanus. Black-necked Stilt. See No. 183.



Himantopus mexicanus.

FAMILY SCOLOPACIDÆ.

Snipe, Sandpipers, Curlews, etc.

Tarsus, less than 3.50 inches; toes, four (one exception, Sanderling Sandpiper).



* Group 1. Wing, from 3.25 to 3.75 inches long.



No web between toes; belly, white.



Tringa minutilla.

Tringa minutilla. Least Sandpiper. See No. 196.

* For directions for measurement, see page 9.

107

See No. 200.



Toes, with small web; bill, usually over .85.

Ereunetes occidentalis. Western Sandpiper. See No. 201.

* Group 2. Wing, 3.75 to 4.50 inches long.

Section 1. Toes, four, with small web (not lobate) at base.



Bill, under .85; back, not greenish olive; bill, entirely black, Erennetes pusillus. Semipalmated Sandpiper. See No. 200.

Elemetes pusillus.

Bill, over .85; back, not greenish olive; bill, black; no white patch on inner web of third primary. Erennetes occidentalis. Western Sandpiper. See No. 201.

Small web between onter and middle toe; bill, over .85; back, greenish olive, sometimes banded; under mandible, pale yellow (in life); third primary and inner primaries with patch of white on inner web. Actiles macularia. Spotted Sandpiper.

Sec No. 216.

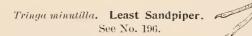
Toes, with small web; bill, usually under .85.

Ereunetes pusillus,

Semipalmated Sandpiper.

Section 2. Toes, four, without web.

Belly, white; bill, black.





Section 3. Toes, three; bill, over .75 inches long.



Belly, white; basal half of outer webs of inner primaries, white; back, mixed rufous, black and white, or grayish brown, or entirely black (breeding), according to season; bill, about one inch long. Calidris arenaria. Sanderling Sandpiper. See No. 202.

* Group 3. Wing, 4.50 to 5.50 inches long.

Section 1. Toes, four, a small web between toes; bill, under 1.75.

Bill, under 1.75; tarsus, over 1.30. All other species in this section have the tarsus less than 1.30. Micropalama himantopus. Stilt Sandpiper.

See No. 190.

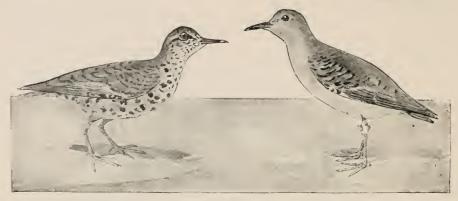
RO

A xillars. Totanus solitarius. **Tarsus, under 1.30;** back, dark olive spotted with white, or brownish gray spotted with dull white, according to season. **Axillars**, heavily barred; a small web between the outer and middle toe.

> Totanus solitarius. Solitary Sandpiper. See No. 209.

Back, greenish olive, sometimes barred with black: axillars, white, without bars. At some seasons underparts with round black spots; a small web between the outer and middle toe. Actilis macularia. Spotted Sandpiper.

See No. 216.



Summer.

Spotted Sandpipers.

Winter.

Section 2. Toes, four, a small web between outer and middle toes; bill, over 1.75.



Macrorhamphus griscus.



Macrorhamphus griscus.

Bill, over 1.75; axillars, white, barred with dark brown; rump and tail, white, spotted and banded with black. Macrorhamphus griseus. Dowitcher. Red-breasted Snipe. Macrorhamphus scolopaceus. Long-billed Dowitcher. See Nos, 188 and 189.

Section 3. Toes, four, without web; bill, over 2 inches long.

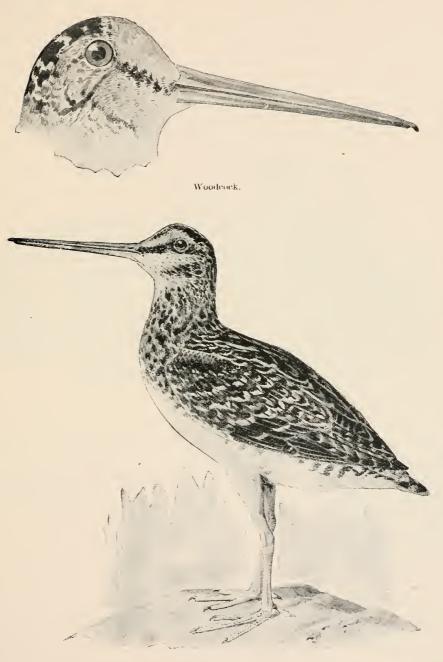
Axillars, rufous brown, without bars: belly, buff color. Philohela minor. Woodcock.

and a state of the state of the

Axillars, barred black and white; belly, white; upper tail coverts and tail, tawny, more or less marked with black. Gallinago delicata. Wilson's Snipe. Jack Snipe.

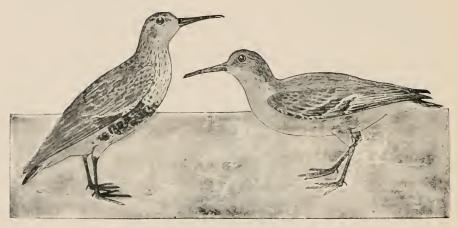
See No. 187.

Gallinago delicata.



Wilson's Snipe.

Section 4. Toes, four, without web; bill, over 1.10; and less than 1.90.



Summer.

Winter.



Bill, decurved near tip; one or more of inner secondaries, almost entirely white; apper tail coverts, not white, barred with black; legs and feet, black. Spring birds have black on the belly, and back, rutous brown and black. Fall birds have the belly white and back gray. Tringa alpina pacifica. Red-backed Sandpiper. American Dunlin.

See No. 198.

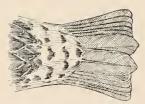
Tringa alpina pacifica.



Curlew Sandpiper.

Bill, decurved near the tip: upper tail coverts, white, banded with black or dark brown.

Tringa ferruginea. Curlew Sandpiper. See No. 199.



Tringa ferrugin**c**a. Tail and upper tail coverts.



Pectoral Sandpiper.



Tringa maculata. Tail and upper tail coverts

Bill, nearly straight; back, marked with tawny and black; breast with numerous narrow, brown streaks; none of inner secondaries almost entirely white; lower rump and upper tail coverts, black; the feather more or less tipped with bufl: two middle

Grass Bird.

tail feathers longer than the others. Tringa maculata. Pectoral Sandpiper.



Tringa maculata.

See No. 193.

Bill, nearly straight; back, dark; feathers, edged with ashy or buff; breast, gravish, without brown streaks; one or more of inner secondaries almost entirely white; legs and feet, yellow in life, pale brown in dried skin.

> Tringa maritima. Purple Sandpiper. See No. 192.



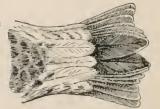
Purple Sandpiper.

Section 5. Toes, four, without web; bill, under 1.10.



Upper tail coverts, white; muer webs of primaries, not speckled. Tringa fascicollis.

White-rumped Sandpiper. See No. 194.



Tringa fuscicollis.

Tringa fus. icollis.

Middle upper tail coverts, smoky or dusky, often tipped with buff; inner webs of primaries not speekled; sides, white; middle toe and claw, less than .95; legs and bill, blackish. Tringa bairdii. Baird's Sandpiper. See No. 195.



Tringa bairdii. Tail and upper tail coverts.



Tringa maculata. Tail and upper tail eoverts.

/liddle upper tail coverts, black, often narrowly tipped with brownish buff; inner webs of primaries, not speekled; middle toe and claw, over .95; middle tail feathers decidedly longer than the rest; legs, yellowish olive; base of bill, dull olive; tip, black.

> Tringa maculata. Pectoral Sandpiper. Grass Bird. See No. 193.

Inner web of primaries speckled. Tryngites subruficollis. Buff-breasted Sandpiper. See No. 215.

Tryngites subruficollis. First primary.



Buff-breasted Sandpiper.

Section 6. Toes, three; bill, over .60 inch.





Bill, black; shoulder (lesser and middle wing coverts), brown; no web between toes; legs, black. Calidris arenaria. Sanderling Sandpiper. See No. 202.

Calidris arenaria.

* Group 4. Wing, 5.50 to 6.75 inches long.

Section 1. Toes, four, a small web between outer and middle toe; bill, over 1.80.



Upper tail coverts and axillars, white, spotted or barred with dusky; bill, nearly straight.

Macrorhamphus griseus, Red-breasted Snipe, or Dowitcher. See No. 188.

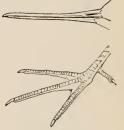
Macrorhamphus scolopaceus. Western Red-breasted Snipe, or Long-billed Dowitcher. See No. 189.

Macrorhamphus griseus.

Section 2. Toes, four, a small web between outer and middle toe; bill, under 1.80.

Tarsus and middle toe together, more than 2.60 inches long; outer primary, slate brown, without bars; rump and upper tail coverts, white, more or less barred with brown; **legs**, **yellow**.

> Totanus wipes. Summer Yellow-leg. See No. 208.



Totanus flavipes.



Tarsus and middle toe, together, less than 2.60; upper tail coverts, white, or white barred with black; outer primary, slate brown, without bars.

Micropalama himantopus. Stilt Sandpiper. See No. 190.



Upland Plover.

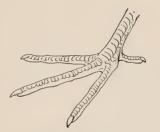
Outer primary, whitish, barred with dark brown. Bartramia longicauda. Bartramian Sandpiper. Upland Plover. See No. 214.

Section 3. Toes, four, without web; bill, over 2 inches long.



Lower belly, whitish or white; axillars, barred black and white. Gallinago delicata. Wilson's Snipe. Jack Snipe. See No. 187.

Gallinago delicata.



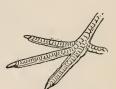
Belly, buff color: axillars, rufous brown. Philohela minor, Woodcock. See No. 185.

Philohela minor.

Section 4. Toes, four, without web; bill, under 2 inches . long.

Rump, gray; upper tail coverts, whitish, banded or marked with black: inner webs or primaries not speckled.

> Tringa canutus. Knot. See No. 191.



Tringa canutus.



Tringa maculata.

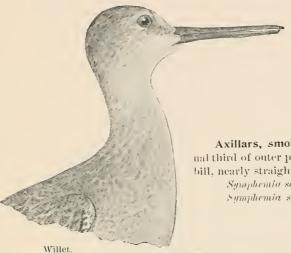
Rump, blackish; middle upper tail coverts, black (not anded); inner web of primaries not speckled. Tringa maculata. Pectoral Sandpiper. Grass Bird. See No. 193.

luner webs of primaries, speckled. Temajites subraticollis. Buff-breasted Sandpiper. See No. 215.

Tryngites subruficollis.

* Group 5. Wing, 6 75 to 9 inches long.

Section 1. Toes, four, with more or less web; bill, curved upwards or straight; bill, over 2.60.





Symphemia semipalmata.

Axillars, smoky black; belly, white; terminal third of outer primary, black; the rest, white; bill, nearly straight.

> - Symphemia semipalmata, - **Willet.** - Symphemia semipalmata inornata.

> > Western Willet. See Nos. 211 and 212.

Axillars, dark gray, or sooty gray; belly, grayish white; first primary, dark slaty brown with white shaft; bill, euryed upward; upper tail coverts mostly white.

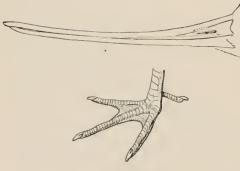
Limosa huvmastica. Hudsonian Godwit. See No. 204.



Hudsonian Godwit.



Marbled Godwit.



Limosa fedoa.

Axillars, rufous brown; upper tail coverts, not white; belly, buil, sometimes barred with dark brown; primaries, pale rufous brown with numerous dark dots; shaft of primaries, white; bill, eurved upward.

> Limosa fedoa. Marbled Godwit. See No. 203.

Section 2. Toes, four, without web; bill, nearly straight; bill, over 2.60.

Axillars, banded with white and grayish brown; belly, pale brown, banded with dark brown: primaries, grayish brown; outer web, banded with pale brown or rufous brown; shaft of primaries, dark; bill, nearly straight.

Scolopax rusticola. European Woodcock. See No. 184.

Section 3. Toes, four (with small web); bill, slightly curved upward or straight; bill, under 2.60 and over 1.50.

Axillars, smoky black; belly, white; outer primary terminal third, black, rest white; rump, gray; upper tail coverts, white. Symphemia semipalmata. Willet. See No. 211.

Axillars, white, with few light brown dots near the ends; belly, white; outer primary dark, with shaft, white; rump, white without bars; upper tail coverts, white, without bars; legs, olive green. Totanus nebularius. Greenshank.

See No. 206.

Axillars, white, banded with brown; belly, white; outer primary, black; shaft, white; rump, grayish brown; feathers, tipped with white; upper tail coverts, white, more or less barred with dark brown; legs, bright yellow.

Totanus melanoleucus. Winter Yellowlegs. Greater Yellowlegs. See No. 207.

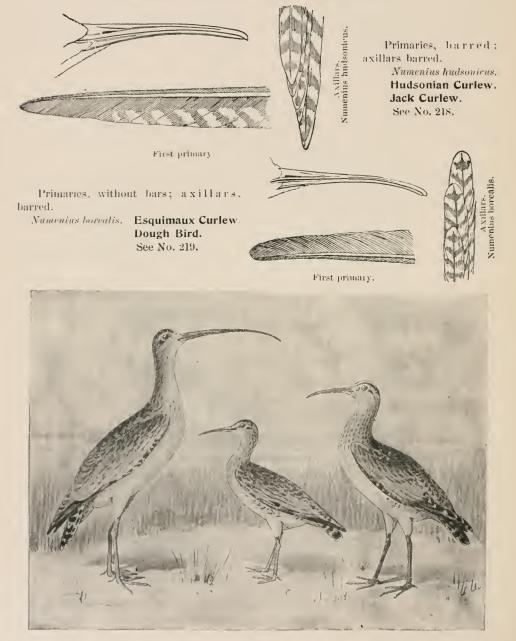
Section 4. Toes, four, with small web; bill, nearly straight; bill, under 1.50.



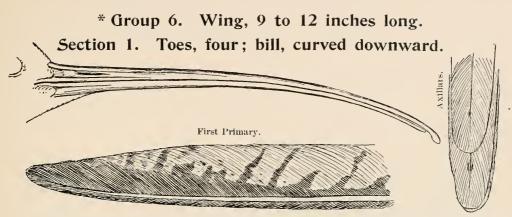
Upland Plover.

Axillars, white, banded with brown; first primary, brown, with white bars on innerweb; tip, dark.Bartramia longicanda.Bartramia Nandpiper.Upland Plover.See No. 214.

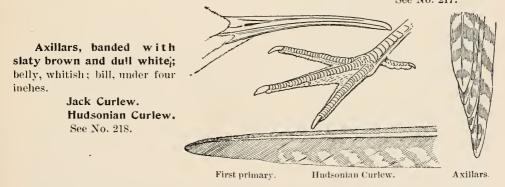
Section 5. Toes, four, with small web; bill, curved downward; bill, over 2 inches long.



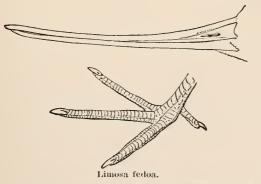
Curlews



 Axillars, reddish brown with narrow black marks; belly, buff; bill, usually over four inches.
 Numenius longirostris.
 Long-billed Curlew.
 Sickle-bill Curlew See No. 217.



Section 2. Toes, four; bill, curved upward, or nearly straight.



Axillars, rufous; primaries, rufous, dotted with black.

Limosa fedoa. Marbled Godwit. See No. 203.

^{*} For directions for measurement, see page 9.

FAMILY CHARADRIIDÆ.

Plovers.

Toes, three, no hind toe.

The Plovers are a cosmopolitan family, numbering something less than one hundred species, fifteen of which occur in North America, including exotic stragglers. As a rule they have but three toes, although two genera, Squatarola and Vanellus, have four. The tarsus is reticulate and the toes are partly webbed.



Black-bellied Plover (Winter)

Piping Plover

Semipalmated Plover.

* Group 1. Wing, 3.75 to 4.50 inches long.

Section 1. Bill, under .60.

' For directions for measurement, see page 9.

Bill, orange at base, the tip, black; legs, dull flesh color; a black stripe from bill passing under eye.

Aegialitis semipalmata. Semipalmated Plover. See No. 226.



Aegialitis semi palmata.

Bill, orange at base, the tip, black; legs, orange yellow; two middle tail feathers, tipped with white; no black stripe from bill to eye; black breast band not confluent. Species Aegialitis meloda. Piping Plover. not found west of the Rocky Mountains. See No. 228.

Bill, orange at base, the tip, black; legs, orange yellow; middle tail feathers, tipped with white; no black stripe from bill to eye; a continuous black band on breast. Species not found west of Rocky Mountains.

Aegialitis meloda circumcineta. Belted Piping Plover. See No. 229.

Bill, entirely black; legs, slate color: two outer tail feathers, entirely white; two middle feathers, **not** tipped with white; no black stripe from bill to eye. Ranges from Texas and Kansas west to the Pacific Ocean; easual in Western Florida and Cuba; not known to occur on the Atlantic Coast. Aegialitis nivosa. Snowy Plover. See No. 229a.

Section 2. Bill, over .60 inch long.

A very small web between outer and middle toes; bill, large and thick; a band of black (male) or brown (female) on breast.

> Aegialitis wilsonia. Wilson's Plover. See No. 230.

Aegialitis wilsonia.

* Group 2. Wing, 4.50 to 5.50 inches long; toes, three, no hind toe.

Section 1. Bill, over .60 inch long.

Bill, thick; shoulder (lesser and middle wing coverts), ashy grav; legs, dull flesh color; a small web between toes.

> Aegialitis wilsonia. Wilson's Plover. See No. 230.

Section 2. Bill, under .60 inch long.

Bill, orange at base, the tip, black; legs, dull flesh color; a black stripe from bill passing under eye.

> Aegialitis semipalmata. Semipalmated Plover. Ring Neck. See No. 226.

* For directions for measurement, see page 9.

Aegialitis semipalmata.

Aegialitis nivosa.



Aegialitis wilsonia.

Bill, orange at base, the tip, black; legs, orange yellow: no black stripe from bill to eye; black breast band, not confluent: two middle tail feathers, tipped with white. Eastern species not found west of Rocky Mountains. Aegialitis meloda. Piping Plover. See No. 228.

Bill, orange at base, the tip, black; legs, orange yellow: no black stripe from bill to eye; **breast band, continuous** and not broken in the middle; two middle tail feathers, **tipped with white.** Eastern species not found west of Rocky Monntains.

Aegialitis m·loda circumcincta. Belted Piping Plover. See No. 229.



Snowy Plover.



Aegialitis nivosa.

Bill, entirely black; legs, slate color; no black stripe from bill to eye; two middle tad teathers, **not tipped with white;** two outer tail feathers, white. Western species ranges from Texas and Kansas, west, to the Pacific Ocean. Accidental in Florida.

Aegialitis nivosa. Snowy Plover. See No. 229a.

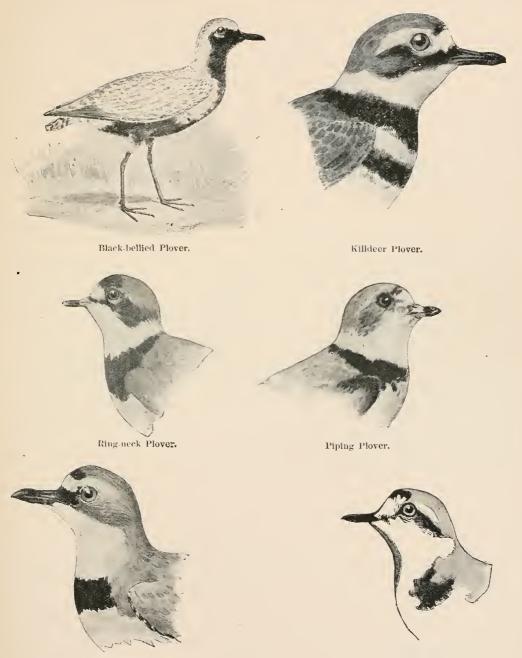
* Group 3. Wing, 5.50 to 6.75 inches long; toes, three, no hind toe.

Breast, with two black bands; underparts, white: rump and upper tail coverts, orange brown. *Egialitis vocifera*. Killdeer Plover. See No. 225.

No black band on breast: back, brownish gray; rump, not orange brown. Western species of casual occurrence in Florida. *Egialitis montana*. Mountain Plover. See No. 231.

* For directions for measurement, see page 9.

FAMILY CHARADRIIDÆ. — PLOVERS.

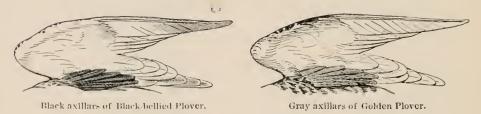


Wilson's Plover.

Snowy Plover.

* Group 4. Wing, over 6.75 inches long.

Section 1. Toes, three.



Axillars, gray; rump, not orange brown.

Charadrius dominicus. Golden Plover. See No. 221.

Charadrius dominicus.

Axillars, smoky black; rump and upper tail coverts, not orange brown.

Charadrius squatarola. Black-bellied Plover.

See No. 222.

This species has four toes (the hind toe being so small that it often escapes notice), and properly belongs in Group 5, Section 3, but owing to the fact that it is constantly looked for among the three-toed species it is included in both sections.

Rump, orange brown; underparts, white, with two black bands on the breast; axillars, pure white. *Egialitis vocifera*. Killdeer Plover.

See No. 225.

No black bands on breast; shaft of first primary, white; back, brownish gray; axillars, white. A Western species of casual occurrence in Florida; not recorded elsewhere on Atlantic coast. *Egialitis montana*. Mountain Plover.

See No. 231.

Section 2. Toes, four.

Axillars, smoky black; tarsus, over 1.70: hind toe, very small.

Charadrins squaturola.

Black-bellied Plover. See No. 222.

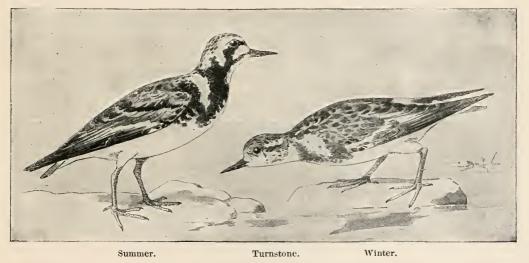
* For directions for measurement, see page 9.

FAMILY APHRIZIDÆ. Surf Birds and Turnstones.

SUBFAMILY ARENARIINÆ. Turnstones.

Toes, four; lower back and rump, white with black band.





Adult in summer: General upper parts, mottled and variegated with black, white, rufous, and tawny; throat and breast, black and white; rest of underparts, white; tail, with subterminal band of black, tipped with white.

Adult in winter: Above, light, streaked and dashed with dark brown; an imperfect band of dark brown on the jugulum; chin and upper part of the throat, white; sides of breast, like the back; rest of the underparts, white; a distinct white band on the wing; rump, white, but with a broad patch of black on the upper tail coverts; tail, dark brown, the tips and basal balf of the inner feathers, and nearly two thirds of the outer feathers, white; legs, reddish orange; bill, black.

Length, 8.65; wing, 5.70; tail, 2.60; tarsus, 1; bill, .95.

Arenaria interpres. Turnstone. See No. 232.

FAMILY HÆMATOPODIDÆ.

Oyster=catchers.

Toes, three; bill, over 2.50 inches long.

Section 1. Toes, three; bill, red.

Hæmatopus palliatus.

Head and neck, blackish, or very dark brown; back, brown; upper tail coverts, white; **bill, red**; bill, over 2.50 inches long; wing, about ten inches long; lower breast and belly, white.

Hæmatopus palliatus. American Oyster=catcher. See No. 234.



American Oyster-catcher.

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LAND BIRDS.

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KEY TO FAMILIES.

LAND BIRDS. GROUP 1.

Birds having wings less than 1.75 inches long.*

(1.) Smallest of our birds; bill, very slender; primaries, 10; rectices, 10; feet, very small and weak.

Family TROCHILIDÆ. Humming Birds.



See page 199.



(2.) Tail, rounded; the outer feathers, shorter than middle ones; first primary, less than two thirds as long as third; second primary, much shorter than third; tarsus, scutellate. 538

Family TROGLODYTIDÆ. Wrens, Thrashers, etc. Subfamily TROGLODYTINÆ. Wrens.

See page 312.

GROUP 2.

Birds having wings from 1.75 to 2.75 inches long.*

Section 1. First primary, less than half as long as third.

Part 1. Tip of upper mandible, with small but distinct hook or notch.

(1.) Toes, joined at base. Plain colored birds, usually greenish or grayish, but often show a faint wash of yellow on underparts; tail, always without white spots.

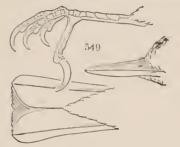






Family VIREONIDÆ. Vireos. See page 171.

* For directions for measurement, see page viii. (133) Part 2. Upper mandible without notch or hook at tip.



(1.) Bill, as illustrated; back, gray or bluish gray; bill, over .50; nostrils, conecaled by bristly tufts; tarsus, sentellate; tail feathers, not stiff or pointed.

> Family PARIDÆ. Subfamily SITTINÆ. Nuthatches. See page 317.



2. Bill, as illustrated; back, bluish gray; bill, less than .50; size, small; length, less than 5.50; first primary, very short. Family SYLVIIDÆ. Subfamily POLIOPTILINÆ. Gnatcatchers.

See pag e 320.



(3.) Bill, as illustrated; **throat**, **black**; nostrils, concealed by tufts of bristly feathers.

Family PARIDÆ. Chickadees, Titmice. 552 See page 318.

(4.) Bill, as illustrated; back, brown or brown streaked; tail feathers, not sharp pointed; onter tail feathers, shortest; tarsus, scutellate; first primary, short.







Wren.



bill of Wren.

Family TROGLODYTIDÆ. Wrens. See page 312.

(5.) Bill, as illustrated; back, streaked; tail feathers, stiffened and sharply pointed.



Creeper.

Family CERTHIDÆ. Creepers. See page 316.





(6.) Bill, as illustrated; back, olive green; bill, less than .50 inches long. Two species: both males and one of the females have brilliant red or yellow crown patch; the other female has crown, dull green, like back.



Family SYLVIIDÆ. Subfamily REGULINÆ. Kinglets, See page 320.

Section 2. First primary, more than half as long as third.

Part 1. Tip of upper mandible, with small but distinct hook or notch.

(1.) Bill, flattened, wide at base; tip, with small hook; numerous black bristles at base of bill; back of tarsus, rounded; wings, longer than tail; first primary, never very short.





side of bill.

Family TYRANNIDÆ. Flycatchers. See page 200.

(2.) Bill, very slightly hooked; not wide and flat at base, as in the Flycatchers; toes, joined together at base. Plain colored birds, usually greenish or gravish, but often show a faint wash of vellow on underparts; tail, always without white spots; first primary, variable, very short in some species, in others nearly as long as second.



Family VIREONIDÆ. Vireos. See page 271.

Part 2. Tip of upper mandible, not notched or hooked.



(1.) Bill curved; back, slaty black; rump, bright yellow. West Indian family: Numerous species, one common in Bahama Islands, accidental in Florida; not recorded elsewhere in United States.

> Family CEREBIDÆ. Honey Creepers. See page 274.

135

(2.) First primary, not short, never less than two thirds as long as second or third; **bill**, **stout and conical**; nostrils, high near the culmen; primaries, 9; tarsus, flattened behind.



Family FRINGILLIDÆ. Sparrows, Finches, Buntings, etc. See page 226.

First primary, not short, never less than two thirds as long as third, and often nearly the same length: **bill**, **slender and pointed**; back of **tarsus**, thin and sharp, not rounded as in front; hind toe and elaw, not longer than middle toe and elaw.









523

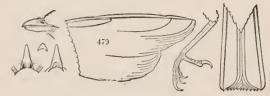
Family MNIOTILTIDÆ. Warblers. See page 275.

GROUP 3.

Birds having wings measuring from 2.75 to 3.25 inches long.*

Section 1. First primary less than half as long as third.

Part 1. A small but distinct hook or notch at tip of upper mandible.



Bill, very slightly hooked; primaries, 10, the first often very short; toes, joined together at base. Plain colored birds, usually greenish or grayish, but often show a faint wash of yellow on underparts; tail, always without white spots.

> Family VIREONIDÆ. Vireos. See page 271.

* For directions for measurement, see page vili.

Part 2. Tip of upper mandible, not notched or hooked.



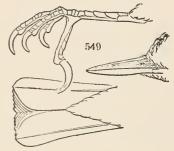
Bill, as illustrated; **back**, **brown**; rump, with concealed white spots; outer tail feathers, shortest; tarsus, scutellate.

Family TROGLODYTIDÆ. Wrens. See page 312.



Bill, as illustrated; **back**, **gray or bluish gray**; nostrils, concealed by tufts of bristly feathers.

> Family PARIDÆ. Subfamily SITTINÆ. Nuthatches. See page 317.





But, as illustrated; **throat, black**; crown, black and no rufous brown on sides (Chickadee), or forehead, black; sides, with rufous brown (Titmouse).



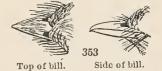
Family PARIDÆ. Chickadees and Titmice. See page 318.

Section 2. First primary, not short, always more than half as long as third.

Part 1. Tip of upper mandible, with small but distinct hook or notch.



Bill, flattened and wide at base; numerous black bristles at base of bill; back of tarsus, rounded; wing, longer than tail.



Family TYRANNIDÆ. Flycatchers. See page 200.



Bill, very slightly hooked or notched at tip; not flattened at base, as in the Flycatchers; toes, joined at base. Plain colored birds, usually greenish or grayish, at

times, with wash of yellow on underparts; no white on tail.

Family VIREONIDÆ. Vireos. See page 271.

Part 2. Tip of upper mandible not notched or hooked.



(1.) Toes, 4; nostrils, opening into a soft, deshy membrane; tarsus, usually shorter than toes.

Family COLUMBIDÆ. Pigeons and Doves.

255 See page 155.

(2. Bill, pointed; first primary, not short; base of bill, extending upon and dividing the feathers of the forehead; nostrils, exposed; outer tail feathers, shorter than middle feathers.

Family ICTERIDÆ. Orioles. See page 213.









(3.) First primary, not short, never less than two thirds as long as second or third; **bill, stout and conical**; nostrils, near the culmen; prim-

aries, 9; tarsus, flattened behind.

Family FRINGILLIDA: Finches, Sparrows, Crossbills, and Buntings. See page 226.





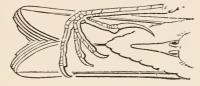
(4.) First primary, never less than two thirds as long as third, and often nearly the same length; bill, slender and pointed; back of tarsns, thin and sharp, not rounded, as in front: hind toe and claw, not longer than middle toe and claw.

Family MNIOTILTIDÆ. Warblers. See page 275.



Bill, slender; first primary, not short, the first, second and third, being about equal in length; hind toe and claw, longer than middle toe and claw; hind toe nail, long, in this somewhat resembling larks, but no tufts of hair-like feathers over nostrils.





Family MOTACILLIDÆ. Pipits, Titlarks, etc.

See page 311.

GROUP 4.

Birds having wings from 3.25 to 9.50 inches long.* Section 1. Bill, with strong hook; toes, armed with talons.



Eyes, not surrounded by radial disk of feathers, as in the Owls; toes, armed with talon : Family FALCONIDÆ. Hawks, Falcons, Kites, etc. head, not bare. See page 162.

Eyes, surrounded by radiated disk of feathers; plumage, soft; bill, hooked; toes, armed with talons.









Family BUBONIDÆ. Hoot Owls, Horned Owls. See page 186.

* For directions for measurement, see page viii.

Section 2. Upper mandible, with distinct notch and hook at tip, but feet, not armed with talons.



Toes, four, zygodactyle (two in front, two behind); bill, with cere (skin-like covering over base of bill).

> Family PSITTACIDÆ. Parrots and Paroquets. See page 187.





Bill, strong, notched near the end, and decidedly hooked; tarsus, seutellate; tail, rounded. But two species occur with us, both grayish birds with blackish wings and tail, and a dark stripe through the eye.

> Family LANIIDÆ. Shrikes. See page 270.

Bill, flattened, wide at base; tip, with small hook; numerous black bristles at base of bill; back of tarsus, rounded; wings, longer than tail; first primary, not very short, usually longer than the sixth.

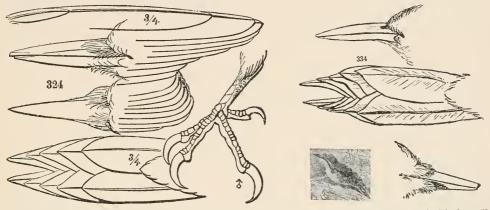




Family TYRANNIDÆ. Flycatchers. See page 200.

Section 3. Upper mandible, not notched and hooked at tip.

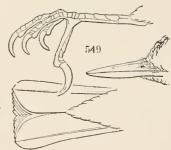
Part 1, First primary less than one half as long as third.



Toes, four, two in front and two behind; or toes, three, two in front and one behind: *tail feathers, stiff and pointed.* (If tail feathers are not stiff and pointed, see Nuthatehes, next family.) Order PICI. Woodpeckers. Family PICIDÆ. Woodpeckers. See page 190.

Bill, as illustrated; nostrils, concealed by bristly tufts; tarsus, scutellate; first primary, very short; tail feathers, not stiff and pointed. (If tail feathers are stiff and pointed, look for the bird under Family Picidæ.)

Family PARIDÆ. Subfamily SITTINÆ. Nuthatches. See page 317.





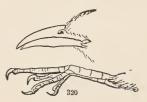
Bill, as illustrated; nostrils, eoncealed by bristly tufts of hair-like feathers; first primary, short; forehead, black; back, gray: head, with more or less crest; sides of body, washed with brown (Tufted Titmouse). Family PARIDÆ. Titmice.

See page 318.



First primary, about one half as long as third; **feet, zygodactyle** (toes, two in front, two behind); outer tail feathers, very much shorter than middle feathers.

Family CUCULIDÆ. Cuckoos. See page 188.

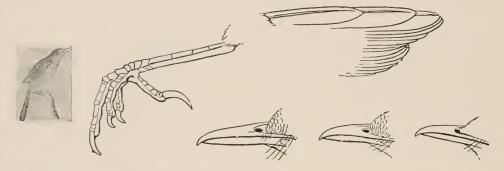




Bill, stont and strong; the nostrils concealed by coarse hairlike feathers; outer tail feathers, shorter than middle feathers; first primary, decidedly less than half as long as third; tail, over seven inches long (Magpies); first primary, about half as long as third; tail, less than seven inches long (Jays).

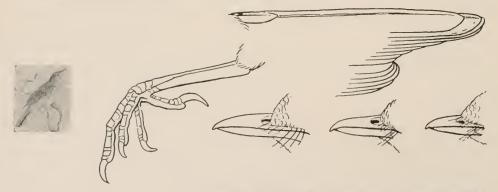
Family CORVIDÆ. Subfamily GARRULINÆ. Magpies and Jays. See page 209.

Tail, rounded; the outer feathers, shorter than middle ones; first primary, less than two thirds as long as third; second primary, much shorter than third; tarsus, scutellate.

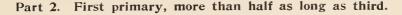


Family TROGLODYTIDÆ. Subfamily MIMINÆ. Thrashers, Cat-birds, Mocking-birds, etc. See page 315.

First primary, very short; tarsus, booted (no scales showing, except near the toes); bill, shorter than head; wing, over 3.50 inches long.



Family TURDIDÆ. Thrushes, Robins, Bluebirds. See page 321.





Toes, four, hind toe not elevated above the rest; nostril, opening into a soft fleshy membrane; tarsus, usually shorter than the toes.

> Family COLUMBIDÆ. Pigeons and Doves. See page 155.

Toes, four, the hind toe elevated above the rest; bill, rather short and stout; wing, short and somewhat rounded, the outer primaries curved.







Family TETRAONIDÆ. Grouse and Quail.

(a) Tarsus feathered; wing, over 5.50 inches long.

Subfamily TETRAONINÆ. Grouse.

(b) Tarsus, hare; wing, less than 5.50 inches long.

Subfamily PERDICINÆ. Partridges. Quail. See page 149.

Feet, small and weak; front toes, sometimes webbed at base; primaries, ten; month, large; bill, very small, in comparison with size of bird; middle toe nail, with comb-like edge.





Family CAPRIMULGIDÆ. Whippoorwills, Night-hawks, etc. See page 198.

Image: Swallow.
 Sw

Family HIRUNDINIDÆ. Swallows and Martine. See page 265.

Plumage, smoky black; shafts of fail feathers, extending beyond the web in sharp spines. Sometimes mistaken for Swallows by persons unfamiliar with birds.





Family MICROPODIDÆ. Swifts. See page 199.



First primary, about half as long as third; feet, zygodactyle (toes, two in front, two behind); onter tail feathers, very much shorter than middle feathers.

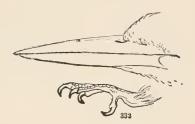
Family CUCULIDÆ. Cuckoos.

320 See page 188.

Bill, small, flattened, and somewhat triangular in shape, the gape very wide; wings, very

Feet, syndactyle; toes, four, the middle and outer ones joined, being fastened together for more than half their length.





Family ALCEDINIDÆ. Kingfishers. See page 189.

First primary, much shorter than second, always less than three fourths as long as third; fourth, or fifth primary, longest; bill, stout and strong; the nostrils, concealed by coarse, hair-like feathers; onter tail feathers, shorter than middle feathers.

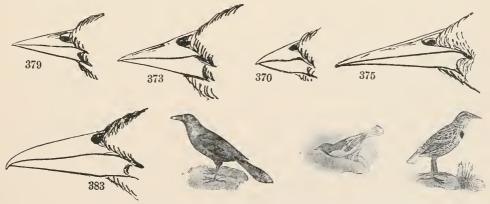






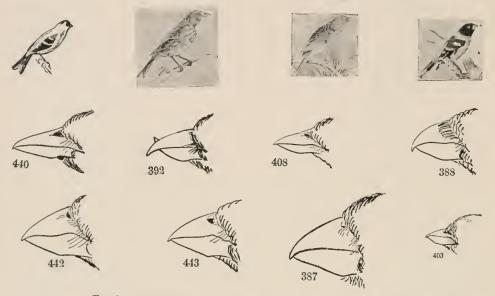
Family CORVIDÆ. Subfamily GARRULINÆ. Jays. See page 209,

First primary, never less than three fourths as long as third; base of bill, extending backward, forming a point, dividing the feathers of the forehead; nostrils, exposed; outer tail feathers, shorter than middle feathers.



Family ICTERIDÆ. Blackbirds, Orioles, Meadow Larks. See page 213.

First primary, not short, never less than two thirds as long as second or third; bill, stout and conical; nostrils, high, near the culmen; primaries, nine; tarsus, flattened behind.



Family FRINGILLIDÆ. Sparrows, Crossbills, Finches, Buntings, etc. See page 226.

Bill, somewhat fringilline, but having a small "tooth," near the middle of the edge of upper mandible; primaries, nine; tarsus, scatellate. But two species (a third accidental): Males, bright red, one with black wings; one female is olive green above, and yellowish green below; the other is olive green above, and the underparts, dull orange yellow or built yellow. (If bird does not agree Family TANAGRIDÆ. Tanagers. with above description, see Fringillidæ.)

See page 263.

Bill, without notch: head, with crest; primaries, ten; tarsus, shorter than middle toe and claw; a black stripe from forehead through the eye; inner primaries and tail feathers, often tipped with little hard red bits, like minute drops of sealing wax; general plumage, venaceus gray brown; tail, tipped with yellow.



Family AMPELIDÆ. Waxwings, Cedar Birds. See page 139.



Bill, pointed, and somewhat rounded; back of tarsus, rounded; hind toe nail, elongated, equal or longer than the toe: nostrils, nearly or quite concealed by tufts of hairlike feathers; wing, over 4 inches long.

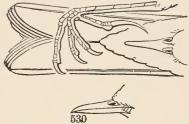
> Family ALAUDIDÆ. Larks. See page 208.

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Bill, slender; first primary, not short, the first, second, and third, being about equal in length; hind toe nail, long, in this somewhat resembling the larks, but no tufts of hair= like feathers over nostrils; wing, less than 4 inches long.

Grouse.





Family MOTACILLIDÆ. Wagtails, Pipits, Titlarks, etc. See page 311.

Small birds, wing, less than 3.75 inches long; first primary, not short, never less than two thirds as long as third, and often nearly the same length; bill, slender and pointed; back

of tarsus, thin and sharp, not rounded as in front; hind toe and

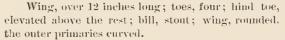


Family MNIOTILTIDÆ. Warblers. See page 275.

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GROUP 5.

Birds having wings over 9.50 inches long.*



Family TETRAONIDÆ. Grouse.

See page 149.

Toes, four, the hind toe elevated above the rest; bill, rather short and stont; wing, short and somewhat rounded, the outer primaries eurved.

> Family PHASIANIDÆ. Subfamily MELEAGRINÆ. Turkeys. See page 154.





* For directions for measurement, see page viii.

THE BIRDS OF EASTERN NORTH AMERICA.



Eyes not surrounded by radiated disk of feathers; plumage, black or dark brown; hind toe, short; claws, not sharp; head, bare in adult.



Family CATHARTIDÆ. Vultures. See page 158.

Eyes not surrounded by radiated disk of feathers, as in the Owls; toes, armed with talons; head, not bare.



See page 186.

Toos, four, two in front and two behind (zygodactyle); tail feathers, stiff and pointed. Family PICIDÆ. Woodpeckers. See page 191.





Plumage, **glossy black**; first primary, much shorter than second, not exceeding half as long as third; fourth, or fifth primary, longest; bill, stont and strong; the nostrils, concealed by coarse, hair-like feathers; onter tail feathers, shorter than middle feathers.

> Family CORVIDÆ. Crows and Ravens. See page 201.

LAND BIRDS.

KEY TO THE SPECIES.

FAMILY TETRAONIDÆ.

Grouse, Partridges, Quails, etc.

Toes, four, the hind toe elevated above the rest; bill, rather short and stout; wing, short and somewhat rounded, the outer primaries curved; wing, less than 12 inches long.



Group 1. Wing, less than 5 inches long.



Underparts, white, black, and rufous; throat, white (male); throat, buff brown (female).

Quail. Bob White. Colinus virginianus, and races. See No. 235.

The Southern race (C. v. *floridanns*) has much more black on the breast and the underparts more heavily banded than the Northern bird.

Group 2. Wing, more than 5 inches long.

Section 1. The following species do not have the greater portion of the primaries white.



 Λ tuft of black feathers on sides of the neck; tarsus not entirely feathered; axillary plumes, white barred with brown.

Ruffed Grouse "Partridge." Bonasa unrbellus, and vaces. See No. 238.

Tarsus, entirely feathered; axillary plumes, entirely white; no elongated tutts of feathers on sides of neck; tail, pointed.

Prairie Sharp-tailed Grouse. Pediocates phalianellus campestris. See No. 247.

Tarsus, entirely feathered; axillary plumes, white; sometimes with faint bars near tip; a tuft of ten or more clongated feathers on each side of the neck; tail, not pointed; the ends of the neck plumes are not pointed, and the axillary plumes are very rarely barred on the whole feather, as in the Martha's Vineyard species.

Prairie Hen. Pinnated Grouse.

Tympanuchus americanus. See No. 245.



Tarsus, entirely feathered; axillary plumes, usually strongly barred with slate brown; a tuft of less than ten elongated feathers on each side of the neck; scapulars, tipped with buff; tail, not pointed. Confined to the island of Martha's Vineyard, Mass.

> Heath Hen. Tympanuchus cupido. See No. 246



Tarsus, entirely feathered; axillary plumes, smoky gray with white shafts, and tipped with white; the male has the breast black; the female has the breast tawny brown, black, and white.

> Canada Grouse. Spruce Partridge. Dendragapus canadensis. See No. 237.

Section 2. The following species have the greater portion of the primaries white.



Depth of bill at base, .40 or more; no black on lores; shafts of secondaries, not black.

Willow Ptarmigan. Lagopus lagopus. See No. 240. Depth of bill at base, .40 or more; no black on lores; shafts of secondaries, black. Newfoundland.

Allen's Ptarmigan. Lagopus lagopus alleni. See No. 241.

Depth of bill at base, less than .40. In summer: back, gray, mixed with black, or tawny buff, or gray and white. In winter: plumage, white; lores, usually (not always) black.

Rock Ptarmigan.

Lagopus rupestris, and ruces. See No. 242.

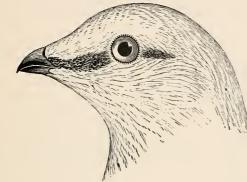
Similar to Lagopus rupestris, but in summer, back, more heavily barred. Confined to Northern Labrador and Greenland.

> Reinhardt's Ptarmigan. Lagopus rupestris reinhardti. See No. 243.

Depth of bill at base, less than .40; shafts of secondaries, not black. Confined to island of Newfoundland.

Welch's Ptarmigan.

Lagopus welchi. See No. 244.



FAMILY PHASIANIDÆ.

Pheasants, Turkeys, etc.

SUBFAMILY MELEAGRINÆ.

Turkeys.

Toes, four, the hind toe elevated above the rest; bill, rather short and stout; wing, short and somewhat rounded, the outer primaries curved; wing, over 12 inches long.



Resembles domestic Turkey, but legs usually pink red; primaries, broadly barred with white.

Wild Turkey. Meleagris gallopavo. See No. 248.

Similar; but primaries with irregular white marking. Does not occur north of Florida.

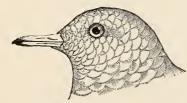
Florida Wild Turkey. Meleagris gallopavo osceola. See No. 249.

FAMILY COLUMBIDÆ.

Pigeons and Doves.

Toes, four, hind toe not elevated above the rest; nostril, opening into a soft fleshy membrane; tarsus, usually shorter than the toes; wings, rather long and flat.

Group 1. Wing, less than 5.50 inches long.

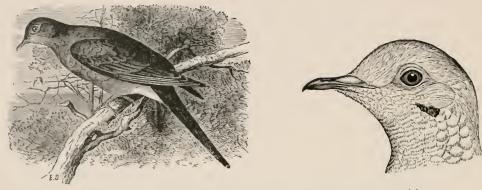




Primaries, heavily marked with rufous brown; underparts, pinkish brown or vinaceous, sometimes grayish, with more or less black dots on breast; wing coverts, with metallic steel-blue spots.

> Ground Dove. Columbigallina passerina terrestris. See No. 255.

Group 2. Wing, from 5.50 to 7.50 inches long. Section 1. Primaries, dark slaty brown or blackish.



Upper parts, grayish olive; crown, tinged with slate color; sides of neck, with purplish metallic reflections; a bluish black spot on lower edge of ear coverts; wing coverts, not broadly tipped with white; tail, pointed; middle tail feathers, much longer than outer feathers.

Mourning Dove. Zenaidura macroura. See No. 252.



Wing coverts, broadly tipped with white; crown, and back of the neck, drab color; tail, square not pointed; outer feathers, but slightly shorter than middle ones; terminal fourth of tail feathers, ashy, or ash gray.

White-winged Dove. Melopelia leucoptera. See No. 254. Wing, over 6.50 inches long; no white on wings; general plumage, slaty blue, varying in shade; tail, square; adult birds have top of head, white.

White Crowned Pigeon.

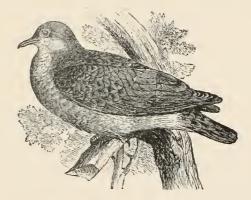
Columba leucocephala. See No. 254.

Crown, bluish bordered by black; a white stripe from back of head, under eye to chin; throat and upper breast, black; the feathers, more or less marked with blue. Cuban species accidental on Florida Keys?

Blue-headed Dove.

Starnænas cyanocephala. See No. 258.

Section 2. Greater portion of primaries, rufous brown.



Belly and line below eye, whitish. West Indian species accidental on Florida Keys.

Key West Quail Dove.

Geotrygon chrysea. See No. 256.

Belly, eiunamon or vinaceous buff; spot of blue black beneath eye. West Indian species accidental in Southern Florida.

Zenaida Dove. Zenaida zenaida. See No. 253.

Belly and line below eye, tawny buff. West Indian species accidental on Florida Keys.

Ruddy Quail Dove. Mountain Dove. Geotrygon montana. See No. 257.

Group 3. Wing, over 7.50 inches long.



Tail, pointed and rather long; under tail coverts, white.

Tail, square; under tail coverts, gray or bluish gray.

Passenger Pigcon. Ectopistes migratorius. See No. 251.

White-crowned Pigeon. Columba leucocephala. See No. 250.

FAMILY CATHARTIDÆ.

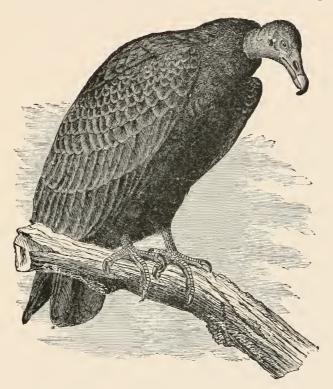
American Vultures.

Plumage, black or dark brown; hind toe, short; claws, not sharp; head, bare in adult.

Group 1. Wing from 14 to 21 inches long. Section 1. Wing, less than 17 inches long.

Head and foreneck, bare; skin of head, blackish; general plumage, black; primaries, hoary white beneath.

Black Vulture. Carrion Crow. Catharista urubu. See No. 260.



Section 2. Wing, over 17 inches long.

General plumage, brownish black or dark brown; bill, whitish; the adult has the head without feathers, the skin being red; immature birds have the head feathered.

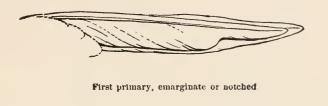
Turkey Buzzard. Turkey Vulture. Cathartes aura. See No. 259.

FAMILY FALCONIDÆ.

HAWKS, FALCONS, EAGLES, ETC.

- GROUP 1. Wing, less than 8.50 inches long. See page 162.
- GROUP 2. Wing, 8.50 to 9.50 inches long. See page 163.
- GROUP 3. Wing, 9.50 to 13 inches long. See page 164.
 - Section 1. Species having second primary longest. See page 165.
 - Section 2. Species having third primary longest. See page 166.
 - Section 3. Species having fourth primary longest. See page 166.
- GROUP 4. Wing, 13 to 15 inches long. See page 167.
 - Section 1. Second primary, longest; first and second primaries, emarginate or notched. See page 167.
 - Section 2. Third primary, longest; face, bare. See page 167.
 - Section 3. Fourth primary, longest; upper tail coverts, white. See page 16S.
 - Section 4. Fourth primary, longest; upper tail coverts, not white. See page 168.
- GROUP 5. Wing, 15 to 17 inches long. See page 170.
 - Section 1. Second primary, longest; only first primary, notched. See page 171.
 - Section 2. Second primary, longest; first and second primary, notched. See page 171.
 - Section 3. Third primary, longest. See page 171.
 - Section 4. Fourth primary, longest; four or five outer primaries, notched; upper tail eoverts, white. See page 173.
 - Section 5. Fourth primary, longest; four or five outer primaries, notched; upper tail eoverts, not white; no feathers on the tarsus. See page 173.
 - Section 6. Fourth primary, longest; four or five outer primaries, notehed; upper tail coverts, not white; tarsus, partly feathered. See page 173.
 - Section 7. Fourth primary, longest; four or five outer primaries, notched; tarsus. entirely feathered. See page 174.
 - Section 8. Fourth primary, longest; three outer primaries, notched. See page 174.
- GROUP 6. Wing, 17 to 21 inches long. See page 174.
 - Section 1. Third primary, longest; tarsus, wholly feathered. See page 174.
 - Section 2. Third primary, longest; tarsus, not wholly feathered. See page 177.
 - Section 3. Fourth primary, longest; tarsus, without feathers. See page 178.
 - Section 4. Fourth primary, longest; tarsus, partly feathered. See page 178.
 - Section 5. Fourth primary, longest; tarsus, entirely feathered. See page 178.

GROUP 7. Wing, over 21 inches long. See page 179.





First two primaries, emarginate. Swallow-tailed Kite



First three primaries, emarginate Swainson's Hawk



First four primaries, emarginate Rough-legged Hawk



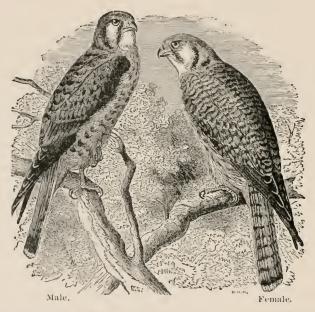
First five primaries, emarginate. Bald Eagle.

FAMILY FALCONIDÆ.

Hawks, Falcons, Eagles, etc.

Toes, four, three in front, one behind; toes, with strong, curved talons or claws; bill, with cere (skin-like covering at the base); bill, strongly hooked.

Group 1. Wing, less than 8.50 inches long.

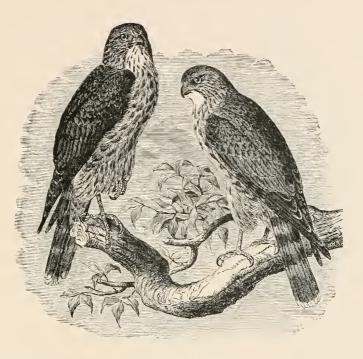


Rump and upper tail coverts, rufous brown; tail, more or less marked with rufous brown; tarsus, less than 1.50; second primary, longest.

Sparrow Hawk. Falco sparverius. See No. 295.

Rimp and upper tail coverts, slaty brown; tarsus, over 1.50; fourth primary, longest.

Sharp-shinned Hawk. Accipiter velox. See No. 266.



Rump and upper tail eoverts, dark brown; breast, streaked with dark brown; no rufous brown on tail; second primary, longest.

Pigeon Hawk. Falco columbarius, See No. 292.

Group 2. Wing, 8.50 to 9.50 inches long.

Second primary, longest.

Pigeon Hawk. Falco columbarius.

See No. 292.

Fourth primary, longest; outer tail feather, three quarters inch or more shorter than middle feather; tail, usually more than 7.25 long.

Cooper's Hawk. Accipiter cooperi. See No. 267.



Fourth primary, longest; outer tail feather, less than three quarter inch shorter than middle feather; tail, usually less than 7.25 long.

> Sharp-shinned Hawk. Accipiter velox. See No. 266.

Group 3. Wing, 9.50 to 13 inches long.

Section 1. The following species have the second primary longest.



Upper surface of inner web of first primary, without bars; breast and belly, white.

> White-tailed Kite. Elanus leucurus. See No. 262.

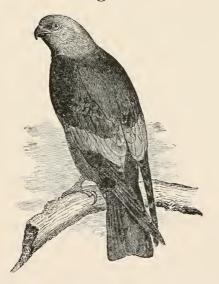
Upper surface of inner web of first primary, **barred with white**; breast and belly, streaked.

Prairie Falcon. Falco mexicanus. See No. 290.

Upper surface of inner web of first primary, **barred with pale rufous brown**; breast and belly, streaked.

Duck Hawk. Peregrine Falcon. Falco peregrinus anatum. See No. 201.

Section 2. The following species have the third primary longest.



Belly, slaty gray (adult), or buffy streaked more or less with pale brown (immature); upper tail coverts, not white.

1

Mississippi Kite. Ictinia mississippiensis, See No. 263.

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Section 3. The following species have the fourth primary longest.

Upper tail coverts, white: tarsus, less than 2.25. Rare north of Florida, where it is a permanent resident.

Everglade Kite. Rostrhamus sociabilis, See No. 264.



Marsh Hawk.

Upper tail coverts, white; tarsus, over 2.25.

Marsh Hawk. Circus hudsonius. See No. 265.

Fourth outer primary, not decidedly notched; under surface of primaries, not barred with dark brown and white; tail, less than 9.50; upper tail coverts, not white.

Broad-winged Hawk.

Buteo latissimus. See No. 278.

Fourth outer primaries, decidedly notched; under surface of outer primaries, not heavily barred with dark brown and white; tail, 9.50, or over; wing, over 11.50.

American Goshawk. Accipiter atricapillus.

Accipiter atricapillus. See No. 268. Fourth outer primary, decidedly notched; under surface of outer primaries, not heavily barred with dark brown and white; tail, less than 9.50; upper surface of tail, with distinct white bars. Red=shouldered Hawk. Bateo lineatus, and races. See No. 275.

Under surface of primaries, heavily barred with dark brown and white; wing, under 11.50. Coop

Cooper's Hawk. Accipiter cooperi. See No. 267.

Short=tailed Hawk. Buteo brachynrus. See No. 279.

Belly, black; general plumage, black (black phase).

Belly, white, without streaks or bars.

Short=tailed Hawk. Buteo brachnurus.

See No. 279.

Group 4. Wing, 13 to 15 inches long.

Section 1. Second primary, longest; first and second primaries, emarginate, or notched.

Length, always under 19; primaries, hoary gray, without bands

White=tailed Kite.

Elanus leucurus. See No. 262.

First primary, pale brown, with numerous bands on inner web; length. usually under 19 (some females are longer). Prairie

Prairie Falcon. Falco mexicanus. See No.290.

Length, always over 19; under tail coverts, spotted, or washed with dusky.

Gray Gyrfalcon. Falco rusticolus, and races. See No. 287.

Length, always over 19; under tail coverts, white, without spots.

White Gyrfalcon. Falco islandus. See No. 286.

Section 2. Third primary, longest; face, bare.

Basal portion of tail, white, barred with black, or brown; end of tail, black.

Audubon's Caracara. Polyborus cheriway. See No. 297.

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Face, not bare; upper surface of tail, grayish brown, with numerous bars; three outer primaries emarginate or notched. Swainse

Swainson's Hawk. Buteo swainsoni. See No. 277.

Section 3. Fourth primary, longest; upper tail coverts, white.

Under surface of tail, whitish at base; **one** broad subterminal band of dark brown, tipped with grayish white; upper mandible elongated (see cut). Not recorded north of Florida.

Everglade Kite. Elanoides forficatus. See No. 261.

Upper mandible, more hawk-like (see cut); under surface of tail, white or pale rufous, with several bands of dark brown.

> Flarsh Hawk. Circus hudsonius. See No. 265.

Section 4. Fourth primary, longest; upper tail coverts, not white.

Upper surface of tail, bright rufous brown, with or without bands (adult).

Red-tailed Hawk.

Buteo borealis, and races. See No. 271.

Upper surface of inner webs of outer tail feathers, barred with brown and white; tail feathers, more or less tinged with pale rufous; primaries, not tinged with rufous (immature). Red-tailed Hawk.

Buteo borealis.

See No. 271.

Upper surface of inner web of outer tail feathers, barred with brown and white; tail feathers, more or less tinged with pale rufous; **primaries, more or less tinged with rufous** (immature).

Red-shouldered Hawk.

Buteo lineatus. See No. 275.

Upper surface of tail, dark brown, barred with white (adult).

Red-shouldered Hawk. Buteo lineatus, and races. See No. 275.

Face, bare; basal portion of tail, white, barred with black or dark brown; end of tail black; thighs, black or dark brown. Audubon's

Audubon's Caracara. Polyborus cheriway. See No. 297.



Adult. Swainson's Hawks. Immature.

Throat, white; breast, dull brown; thighs, barred rufous brown and white; three outer primaries emarginate or notched (adult) Swainson's Hawk.

Swainson's Hawk Buteo swainsoni. See No. 277.

Throat, buff or buff white; breast, heavily marked with dark brown; thighs, pale rufous or buff with or without bars; three outer primaries emarginate or notched (immature). Swainson's Hawk.

Buteo swainsoni. See No. 277.

Throat and underparts finely barred with gray and dull white, the feathers with dark shafts; thighs, barred and mottled with gray and white; tail. 9.50 or over; wing, over 11.50 (adult). Goshawk.

Accipiter atricapillus. See No. 268.

Throat and underparts and thighs, white, or tawny white, streaked with dark brown; tail, strongly barred (immature). Goshawk.

Accipiter atricapillus. See No. 268.

Group 5. Wing, 15 to 17 inches long.

Section 1. Second primary, longest; only first primary, emarginate, or notched.



Duck Hawk.

Length, under 19 · primaries, dark brown, banded on inner web with pale rufous. Duck Hawk.

Falco peregrinus anatum. See No. 291.

> Gray Gyrfalcon. Falco rusticolus. See No. 287.

White Gyrfalcon. Falco islandus, and races. See No. 286.

Length, over 19; under tail coverts, white, without spots.

Length, over 19; under tail coverts, marked with dusky or spotted.

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Section 2. Second primary, longest; first and second primaries, emarginate or notched.

Back, entirely brown; **belly**, white, without streaks; under tail coverts, pure white; tarsus, nearly bare.

Fish Hawk. Pandion haliaetus carolinensis. See No. 298.

Back, brown; belly, brown; under tail coverts, not white.

Black Gyrfalcon. Falco rusticolus obsoletus. See No. 289.

Back, slaty brown and white; under tail coverts, spotted or marked with dusky.

Gray Gyrfalcon. Falco rusticolus, and races. See No. 287.

Back. white, or white streaked with slaty brown; under tail coverts, white.

White Gyrfalcon. Falco islandus. See No. 286.

Section 3. Third primary, longest.

Four outer primaries, notched; basal portion of inner webs of primaries, largely white, without bars; thighs, tawny or buff, more or less barred; tarsus, thickly feathered.

American Rough-legged Hawk.

Archibuteo lagopus sancti-johannis. See No. 281.

Four outer primaries, notched; basal portion of inner webs of primaries, largely white, without bars; thighs, tinged with deep rnfous, heavily barred; tarsus thickly feathered.

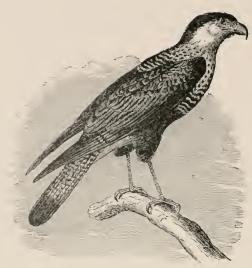
Ferruginous Rough-legged Hawk.

Archibuteo ferrugineus. See No. 282.

General plumage, entirely sooty brown, or black; four outer primaries, notched; primaries and tail, with more or less white, or gray; tarsus, thickly feathered.

American Rough-legged Hawk (black plumage). Archibuteo lagopus sancti-johannis.

See No. 281.



Caracara.

Four outer primaries, emarginate, but not decidedly notched; a part of inner web of outer primaries, white, showing numerous imperfect bars; thighs, black, or dark brown; face, bare.

Audubon's Caracara.

Polyborus cheriway. See No. 297

Three outer primaries, notched; belly and thighs, not white.

Swainson's Hawk.

Buteo swainsoni. See No. 277.

Three outer primaries, notched; a part of inner web of outer primaries, white, showing numerous imperfect bars; belly and thighs, pure white; back, dark brown.

Fish Hawk. Pandion haliaetus. See No. 298.

Two outer primaries, notched; primaries, dark slaty blue, showing greenish tinge when held in the light; tail, long and forked; underparts and thighs, white.

Swallow-tailed Kite.

Elanoides forficatus. See No. 261.

Section 4. Fourth primary, longest; four or five outer primaries, emarginate or notched; upper tail coverts, white.

Under surface of tail, whitish at base; one broad subterminal band of dark brown, tipped with grayish white; upper mandible, long and curved (see cut). Not recorded north of Fiorida.

Everglade Kite. Rostrhamus sociabilis. See No. 264.

Upper mandible, hawk-like (see cut); under surface of tail, white or pale rufous with several bands of dark brown.

Marsh Hawk. Circus hudsonius. See No. 265.

Section 5. Fourth primary, longest, four or five outer primaries emarginate or notched; upper tail coverts, not white; no feathers on tarsus.

Face, bare; back, brown; thighs, black or dark brown.

Audubon's Caracara. Polyborus cheriway. See No. 297.

Section 6. Fourth primary, longest, four or five outer primaries, emarginate or notched; upper tail coverts, not white; tarsus, partly (but not entirely) feathered.

Tail, bright rufous brown (adult); tail, whitish or grayish, with numerous brown bars (immature).

Red-tailed Hawk. Buteo borealis, and races. See No. 271.

General plumage, dark sooty brown, sometimes with underparts pale, more or less streaked and spotted.

Harlan's Hawk. Buteo borealis harlani. See No. 274.

Section 7. Fourth primary, longest; four or five outer primaries, emarginate or notched; tarsus, entirely feathered; upper tail coverts, not white.

Thighs, tawny, more or less streaked of barred

American Rough-legged Hawk. Archibuteo lagopus sancti-johannis. See No. 281.

General plumage, sooty brown or black (black plumage).

American Rough-legged Hawk. Archibuteo lugopus sancti-johannis. See No. 281.

Thighs, tinged with deep rufous with numerous bars.

Ferruginous Rough-legged Hawk. Archibuteo ferrugineus, See No. 282.

Section 8. Fourth primary, longest; three outer primaries, emarginate or notched.

Tarsus, partly feathered; throat, white (adult); throat, tawny or buff (immature).

Swainson's Hawk. Buteo swainsoni. See No. 277.

Group 6. Wing, 17 to 21 inches long.

Section 1. Third primary, longest; tarsus, wholly feathered.

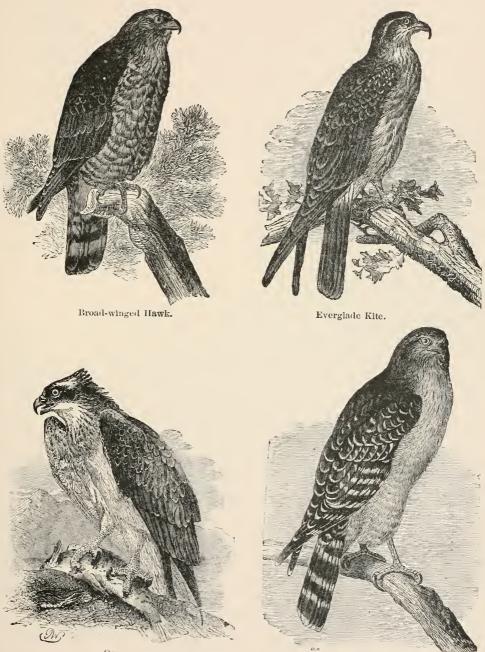
Basal portion of inner web of primaries, largely white, without bars; thighs, tawny or buff, more or less barred; tarsus, thickly feathered.

American Rough-legged Hawk. Archibuteo lagopus sancti-johannis, See No. 281.

Basal portion of inner web of primaries, largely white, without bars; thighs, tinged with deep rufous heavily barred.

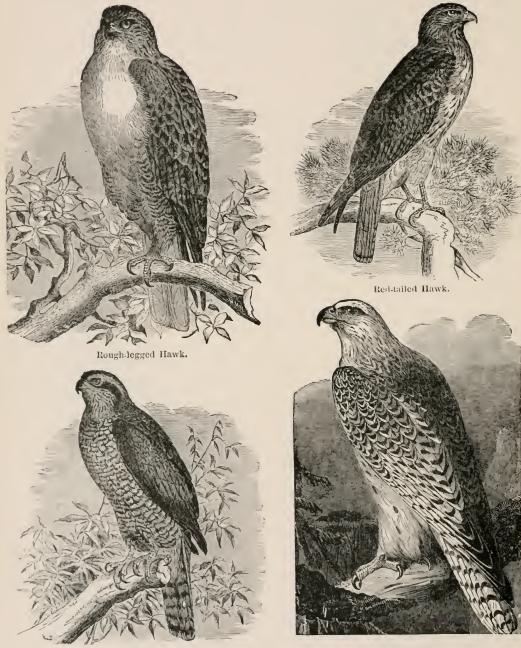
Ferruginous Rough-legged Hawk. Archibuteo ferrugineus, See No. 282.

174



Ospray.

Red-shouldered Hawk,



Goshawk.

Gyrfalcon.

General plumage, entirely sooty brown or black; primaries and tail, with more or less white or gray.

American Rough-legged Hawk (black plumage). Archibuteo lugopus sancti-johannis.

See No. 281.

Section 2. Third primary, longest; tarsus, not wholly feathered.

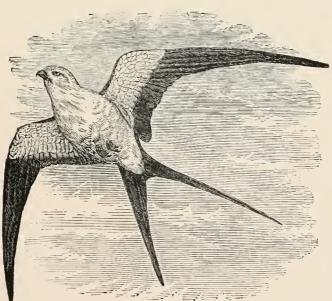
Wing, less than 19; a part of inner web of outer primaries, white, showing numerous imperfect bars; thighs, black or dark brown; face, bare.

Audubon's Caracara.

Polyborus cheriway. See No. 297.

Wing, from 16.90 to 21; a part of inner web of outer primaries, white, showing numerous imperfect bars; three outer primaries, notched; belly and thighs, pure white; back, dark brown. Fish Hawk.

> Pandion haliaetus carolinensis. See No. 285.



Wing, less than 19; primaries, dark slaty blue, showing greenish tinge when held in the light; **two outer primaries, notched;** tail, long and forked; underparts and thighs, pure white. Swallow-tailed

Swallow-tailed Kite. Elanoides forficatus. See No. 261. Wing, always over 18.50; belly and thighs, never white; only adult birds have the hood and tail, white.

Bald Eagle. Haliactus leucocephalus. See No. 285.

Section 3. Fourth primary, longest; tarsus, without feathers.

Back, brown; face, bare.

Audubon's Caracara.

Polyborus cheriway. See No. 297.

Section 4. Fourth primary, longest; tarsus, partly (not entirely) feathered.

Tail, rufous brown (adult); tail, whitish or grayish, with numerous brown bars (immature).

Red-tailed Hawk. Buteo borealis, and races. See No. 271.

General plumage, dark sooty brown, sometimes with pale underparts, more or less streaked and spotted.

Harlan's Hawk. Buteo borealis harlani. See No. 274.

Wing, always over 18.50; only adults have head and tail white.

Bald Eagle. Haliaetus leucocephalus. See No. 285.

Section 5. Fourth primary, longest; tarsus, entirely feathered.

Thighs, tawny, more or less streaked or barred.

American Rough-legged Hawk. Archibuteo lagopus sancti-johannis. See No. 281.

General plumage, sooty brown or black (black plumage).

American Rough-legged Hawk. Archibuteo lagopus sancti-johannis. See No. 281.

Thighs, tinged with deep rufous with numerous hars.

Ferruginous Rough-legged Hawk. Archibuteo ferrugineus, See No. 282.

Group 7. Wing, over 21 inches long.



Golden Eagle.

4 N

Tarsus, entirely feathered; head and tail, never white.

Golden Eagle. Aquila chrysaetos. See No. 283.



Tarsus, not entirely feathered; head and tail, more or less white in old birds; younger birds, have no white on head.

Bald Eagle. Haliaetus leucocephalus See No. 285.

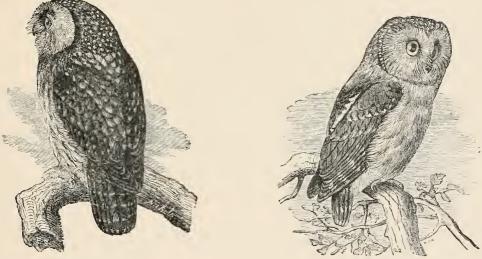
FAMILY STRIGIDÆ.

Owls.

Radiated disk of feathers surrounding the eye; plumage, soft; toes, armed with strong curved talons.

Group 1. Wing, less than 8.50 inches long.

Section 1. Toes, thickly feathered.



Richardson's Owl.

Saw-whet Owl.

Wing, less than 6.10; upper plumage, dark cinnamon brown, more or less marked with white; underparts, whitish, streaked with brown; immature birds have much white about the face.

Saw-whet Owl. Acadian Owl. Nyctala acadica. See No. 306.

Wing, over 6.10; upper plumage, dark cinnamon brown, more or less marked with white; underparts, brown and white.

Richardson's Owl. Nyctala tengmalmi richardsoni. See No. 305.

Section 2. Toes, nearly bare, or but thinly feathered.



Screech Owl. About one quarter natural size.

Tarsus, thickly feathered; head with two horn-like tufts of feathers; general plumage, sometimes gray, sometimes rufous brown, more or less streaked and spotted. Screech Owl.

Megascops asio, and races. See No. 307.

Tarsus, scantily feathered, usually nearly bare, especially on the lower part: head, without horn-like tufts of feathers. Occurs only in Florida.

Florida Burrowing Owl.

Spectyto cunicularia floridana. See No. 315.

Group 2. Wing, 8.50 to 11 inches long.

Primaries, dark brown, more or less marked with tawny brown.

Long-eared Owl. Asio wilsonianus. See No. 300.

Primaries, dark brown, more or less marked with pure white; no horn-like tufts of feathers on head. Hawk Owl.

Surnia ulula caparoch. See No. 313.

Group 3. Wing, 11 to 13 inches long.

General plumage, brown, mottled, and streaked; underparts, streaked and barred with brown; toes, feathered.

Barred Owl. Syrnium nebulosum. See No. 302.

Underparts, streaked and barred with brown; toes, nearly bare.

Florida Barred Owl. Syrnium nebulosum alleni. See No. 303.



Barn Owl. About one seventh natural size.

Underparts, white, or tawny white, with more or less small **spots** of brown; middle toe nail, with comb-like edge.

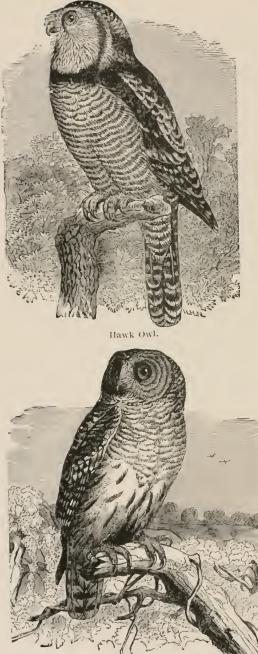
Barn Owl. Strix pratincola. See No. 299.

Group 4. Wing, 13 to 15 inches long.

Section 1. Second primary, decidedly shorter than fourth.

Underparts, white, barred and streaked with brown; toes, more or less feathered.

Barred Owl. Syrnium nebulosum. See No. 302.



Barred Owl.



Burrowing Owl.



Snowy Owl.

Underparts, white, barred and streaked with brown; toes, nearly bare. Occurs in Florida and Gulf States only.

Florida Barred Owl. Syrnium nebulosum alleni, See No. 303.

Section 2. Second primary, about equal in length to fourth.

Two large, ear-like tufts of feathers above the eyes.

Great Horned Owl. Bubo virginianus, and races. See No. 309.

Section 3. Second primary, decidedly longer than fourth.



Underparts, streaked; feet, thickly feathered.

Short-eared Owl. Asio accipitrinus. See No. 301.

Underparts, white or buff white, more or less spotted; feet, nearly bare.

Barn Owl. Strix pratincola. See No. 299,



Group 5. Wing, over 15 inches long.

Bill, black; general plumage, tawny black and white; horn-like tufts of feathers over the eyes.

Great Horned Owl.

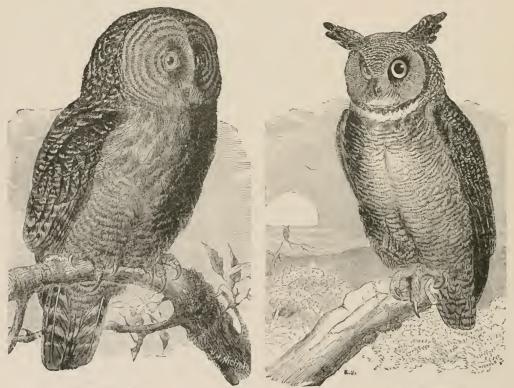
Bubo virginianus, and races. See No. 309.

Bill, black: general plumage, white, usually more or less marked with slate brown, or dark brown; no horn-like tufts of feathers over the eyes.

Snowy Owl. Nyctea nyctea. See No. 312.

Bill, yellowish; no horn-like tufts of feathers over eyes; general plumage, gray mixed with white and dark brown.

Great Gray Owl. Scotiaptex cinerca. See No. 304.



Great Gray Owl.

Great Horned Owl.

FAMILY PSITTACIDÆ.

Parrots.

Toes, four, two in front and two behind; bill, with cere (a skin-like covering over base of the bill).



General plumage, green, more or less yellow about the head.

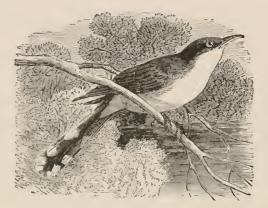
Carolina Paroquet. Conurus carolinensis See No. 316.

Once common in Sonthern States; apparently now restricted to Florida and Indian Territory.

FAMILY CUCULIDÆ.

Cuckoos.

Feet, zygodactyle (two toes in front, two behind).



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Under mandible, yellow; greater portion of primaries, rufous brown, tipped with grayish olive: underparts, dull white; outer tail feathers, black, tipped with white.

Yellow-billed Cuckoo.

Coccyzus americanus. See No. 320.

Under mandible, yellow, tip, black; primaries, grayish olive, not rufous brown; belly, tinged with pale rufous.

Mangrove Cuckoo.

Coccyzus minor, and races. See No. 318.

Bill, black; no rufous brown on primaries; underparts, dull white; outer tail, like back in color.

Black-billed Cuckoo.

Coccyzus crythrophthalmus. See No. 321.

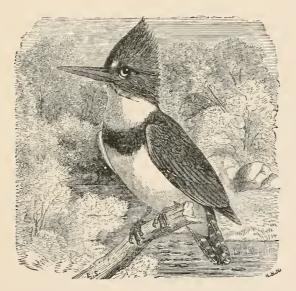
General plumage, black; bill, black. West Indian species, recorded from Florida; accidental in the United States. Bifl very different from that of true Cuckoo, being thin and "Parrot like." Anl.

Ani. Crotophaga ani. See No. 317.

FAMILY ALCEDINIDÆ.

Kingfishers.

Feet, syndactyle; toes, four, the middle and outer ones joined, being fastened together for more than half their length.



Back, bluish gray; throat and belly, white; a band of bluish gray on the breast (male); underparts, without chestnut brown; sides of the body and a band on the belly, chestnut (female).

Belted Kingfisher. Ceryle alcyon.

See No. 322.

FAMILY PICIDÆ.

WOODPECKERS.

- GROUP 1. Wing, less than 4.25 inches long. See page 191.
- GROUP 2. Wing, 4.25 to 5.50 inches long. See page 191.
 - Section 1. Toes, three; no trace of red on crown or nape. See page 191.Section 2. Toes, four; no trace of red on crown or nape. See page 192.Section 3. Toes, four; more or less red on crown or nape. See page 193.
- GROUP 3. Wing, 5.50 to 8.00 inches long. See page 195.
- GROUP 4. Wing, over 8.00 inches long. See page 196.

FAMILY PICIDÆ.

Woodpeckers.

Tail feathers, stiff and pointed; bill, strong and sharp. Woodpeckers are commonly seen climbing about on trunks of trees.

Group 1. Wing, less than 4.25 inches long.



Back, black, streaked with white; crown, with red nuchal patch (male); without red nuchal patch (female); tail feath= ers, stiff and pointed; toes, four, two in front, two behind.

> Downy Woodpecker. Dryobates pubescens. See No. 326.

Group 2. Wing, 4.25 to 5.50 inches long.

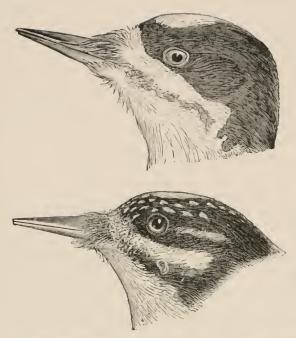
Section 1. The following species have three toes; no trace of red on the crown or nape.



Toes, three; crown, yellow; back, black, without white (male).

Arctic three-toed Woodpecker. Picoides arcticus. See No. 328.

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Toes, three; crown, black; back, black, without white.

> Arctic Three-toed Woodpecker. Picoides arcticus (female). See No. 328.

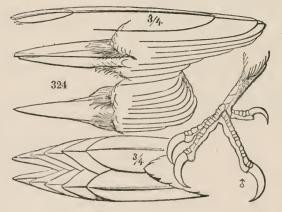
Toes, three; crown, yellow; back, black and white.

American Three-toed W odpecker. Banded-backed Woodpecker. Picoides americanus (male). See No. 329.

Toes, three; erown, black, marked with white; back, black and white.

American Three-toed Woodpecker. Banded-backed Woodpecker. Picoides americanus (female). See No. 329.

Section 2. The following species have four toes; no trace of red on crown or nape.



Ear coverts, black; no white on inner web of two middle tail feathers; middle of back, more or less white, but not heavily banded as in borealis; lower rump and upper tail coverts, black.

> Hairy Woodpecker. Dryobates villosus (female). See No. 324.

Ear coverts, white; no white on inner web of two middle tail feathers; back, heavily banded with white and black; upper tail coverts, black.

Red=cockaded Woodpecker.

Dryobates borealis (male). See No. 327.

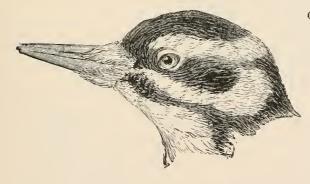
Rump and upper tail coverts, pure white; greater portion of tertials and secondaries, white; the shafts, black; inner webs of two middle tail feathers, not marked with white.

> Red-headed Woodpecker. Melanerpes erythrocephalus (immature). See No. 332.

Inner webs of two middle tail feathers, heavily marked with white; belly, usually tinged with pale yellow.

Yellow-bellied Woodpecker. Sphyrapicus varius (immature). See No. 330.

Section 3. The following species have four toes, and more or less red on crown or nape.



Crown, black; a patch of red on the occiput (back of the head); ear coverts, black; no white on inner webs of two middle tail feathers; back, black, with white patch in middle, but not heavily banded with black and white; wings, with round white spots; upper tail coverts, black.

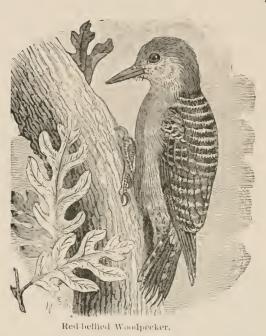
Hairy Woodpecker.

Dryobates villosus (male). See No. 324.

Crown, black; a narrow patch of red on either side of the occiput (back of the head); ear coverts, white; no white on inner webs of two middle tail feathers; back, banded black and white; upper tail coverts, black.

Red-cockaded Woodpecker. Dryobates borealis (male). See No. 327. Crown, red; throat, red (male); erown, red; throat, white (female); belly, tinged with yellow; two middle tail feathers, heavily marked with white on the inner webs; a patch of black on the breast, varying in size, according to age and season.

Yellow-bellied Woodpecker. Sphyrapicus varius (adult). See No. 330.



trown, red (male); crown, ashy gray, nape, red (female); throat and underparts, pale ash gray, the belly tinged with red or buff, according to season.

Red-bellied Woodpecker.

Melanerpes carolinus. See No. 333.

Rump and upper tail coverts, pure white; greater part of secondaries and tertials, white, with black shafts (sometimes with one brown band near tip); entire head and throat, red (adults); immature birds have the head brownish gray, speekled and marked with dull black, but usually showing more or less red in places.

Red-headed Woodpecker. Melanerpes erythrocephalus. See No. 332.

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Group 3. Wing, 5.50 to 8.00.



Golden-winged Woodpecker.

Under surface of wings and tail, yellow; a band of red on the nape, and a **black molar stripe** (male): similar but without the black molar stripe (female).

Golden-winged Woodpecker. Flicker. Colaptes auratus. See No. 334.



Rump and upper tail coverts, pure white; greater portion of tertials, white, the shafts, black; middle tail feathers, not marked with white; belly, white.

Red-headed Woodpecker.

Melanerpes erythrocephalus. See No. 333.



Throat, red or white, not gray; belly, tinged with yellow. Yellow-bellied Woodpecker. Spyrapicus varius.

See No. 330.

Yellow bellied Woodpecker.

Middle tail feathers, marked with white; underparts, ashy, tinged with red or buff on the belly. Red-bellied Woodpecker.

Melanerpes carolinus. See No. 332.

Group 4. Wing, over 8.00.



Ivory-billed Woodpecker.

Bill, yellowish white; greater portion of plumage, black; greater portion of secondaries, and tips of inner primaries, white; a white stripe extends down sides of the neck to the back; crest, bright red (male); crest, black (female). Occurs in Florida, and in a few localities along the Gulf coast. Rare.

Ivory-billed Woodpecker. Campephilus principalis. See No. 323.

FAMILY CAPRIMULGIDÆ. Night-hawks, Whip-poor-wills, etc.

Feet, small and weak; mouth, very large; bill, small; middle toe nail, with fine comb-like edge; front toes, connected at base.



A band of white on the wing; tail feathers, not tipped with white.

Night-hawk. Chordeiles virginianus, and races. See No. 337.

No white on the wing; primaries, banded with rufous brown and black; wing, over 7.50. Chuck-will's-widow. Antrostomus cavolinensis.

Cuck-will's-widow

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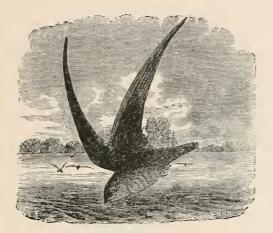
See No. 335.

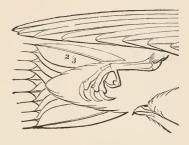
No white on wing; outer tail feathers, broadly tipped with white; wing, under 7,50.

> Whip-poor-will. Antrostomus voeiferus. See No. 336

FAMILY MICROPODIDÆ.

Swifts.





General plumage, sooty brown, showing a faint greenish tinge on the upper parts; throat, ashy white; tail feathers, with sharp spines, or points formed by the shafts of the feathers, extending beyond the webs. The Swifts are widely separated generically from the Swallows; but persons unfamiliar with birds might look for them under the same family.

> Chimney Swift. Chætura pelagica. See No. 340.

FAMILY TROCHILIDÆ.

Humming=birds.

Smallest of Birds. Wing less than 1.75 inches long (carpus to tip).



Throat, ruby red; back, golden green (male); no red on throat (female and young male).

> Ruby=throated Humming=bird. Trochilus Colubris. See No. 341.

FAMILY TYRANNIDÆ.

Flycatchers.

Group 1. Wing, from 2.13 to 2.37 inches long.

Bill, broad and flattened, with numerous small black bristles at base; tip, with small but distinct hook.



Top of bill.

Side of bill.

Bill, with small hook at tip, flat and wide at base; back, olive green; belly, not yellow, or only faintly tinged with yellow.

Least Flycatcher. Empidonas minimus. See No. 355.

Back, olive green; belly, clear yellow.

Yellow-bellied Flycatcher. Empidonax flaviventris. See No. 352.

Group 2. Wing, 2.37 to 2.75 inches long.

Under mandible, yellowish white; throat, whitish; breast and belly, dull white. tinged with pale yellow; back, olive green.

Arcadian Flycatcher. Green-crested Flycatcher. Empidona.c. virescens. See No. 353.



Under mandible, yellowish white; throat and underparts, greenish yellow; back, olive green.

Yellow-bellied Flycatcher. Empidonax flaviventris. See No. 352.



Flycatcher.

Under mandible, pale yellowish white, or brownish white; back, tinged with olive brown; wing, over 2.60.

Traill's Flycatcher. Empidonax traillii alnorum. See No. 354.



Under mandible, usually pale brown or brownish white; wing, under 2.60.

Least Flycatcher Empidonax minimus. See No. 355.

Group 3. Wing, 2.75 to 3.25 inches long.





Bill, flat and wide, with small hook at tip, and black bristles at base.

Wing, under 3.05; under mandible, yellowish white; throat and underparts, pale greenish yellow; back, olive green.

Yellow-bellied Flycatcher.

Empidonax flaviventris. See No. 352.

Wing, usually under 3.05; under mandible, yellowish white; throat, white; breast and belly, whitish, faintly tinged with yellow; back, dull olive green.

Arcadean Flycatcher. Empidonax rirescens.

See No. 353.

Wing, under 3.05; upper parts, tinged with olive brown; throat, white; under mandible, yellowish white; eye-ring and wing bars, pale tawny.

Traill's Flycatcher. Empidonax trailli alnorum. See No. 354.

Group 4. Wing, 3.25 to 3.75 inches long.



Under mandible, pale, usually yellowish, or yellowish brown; back, dull olive.

Wood Pewee. Cantopus virens. See No. 351.

Group 5. Wing, 3.75 to 4.25 inches long

Bill, with small hook at tip, and black bristles at base; back of tarsus, rounded.



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Throat, grayish; belly, yellow; back, dull olive; more or less rufous brown on the tail feathers.

Crested Flycatcher. Myiarchus crinitus. See No. 347.

Throat, grayish olive; belly, pale rufous brown; upper parts, olive gray.

Say's Phœbe.

Sayornis saya. See No. 349.

Throat, and middle of belly, white, sometimes tinged with yellow; under mandible, pale at base; upper parts, brownish olive; greater portion of breast, and sides of the body, brownish olive; upper mandible, black; a tuft of whitish feathers on the flanks.

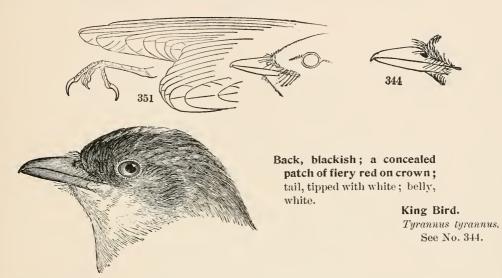
Olive-sided Flycatcher. Contopus borealis.

See No. 350.

Throat and underparts, white; a very long forked tail; erown, black, with yellow patch in centre; back, gray.

Fork-tailed Flycatcher. Milvulus tyrannus. See No. 342.

Group 6. Wing, 4.25 to 4.75 inches long.



Back, dull ash gray; a concealed patch of orange red on erown; tail, not tipped with white; belly, white.



Gray King Bird. Tyrannus dominicensis. See No. 345.

Crown and back, dull olive; throat, gray; belly and under tail coverts, yellow; tail feathers, heavily marked with rufous.

> Crested Flycatcher. Myiarchus crinitus. See No. 347.

Crown, dull olive gray; throat, olive gray; belly, rufous brown; tail, black.

> Say's Phœbe Flycatcher. Sayornis saya. See No. 349.

Upper plumage, brownish olive, or dull, grayish olive; throat and middle of belly, white, sometimes tinged with pale yellow: breast (except middle) and sides of body, dull grayish olive; under mandible, pale.

Olive-sided Flycatcher. Cantopus borealis. See No. 350.



Crown and back, ashy; throat and breast, ashy white; sides of breast and body, orange red; tail, very long, rarely less than four and one half inches.

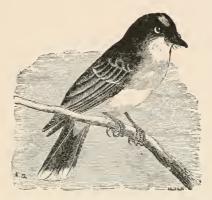
Scissor-tailed Flycatcher. Mileulus forficatus. See No. 343.

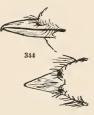
Crown, black, with concealed patch of yellow; back, gray; underparts, white; tail, very long, usually more than four and one half inches.

Fork-tailed Flycatcher. Mileulus tyrannus. See No. 342.

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Group 7. Wing, 4.75 to 5.50 inches long.





Top of bill.

Back, blackish; a concealed patch of fiery red on the crown; tail, tipped with white; belly, white. King Bird.

Tyrannus tyrannus. See No. 344.

Back, dull ash gray; a concealed patch of orange red on the crown; tail, not tipped with white; belly, white. Gray King-bird.

> Tyrannus dominicensis. See No. 345.

Back, olive gray; a concealed orange patch on the erown; throat, gray; belly, yellow; outer web of outer tail feather, white; a western species which has occasionally been taken east of the Mississippi. Arkansas F

Arkansas Flycatcher.

Tyrannus verticalis. See No. 346.

Crown and back, ashy; throat and breast, ashy white; sides of breast and body, orange red; tail, very long, rarely less than four and one half inches. A southwestern species, several examples of which have been taken in Eastern North America, from Ontario to Florida. Scissor-tailed F

Scissor=tailed Flycatcher.

Milvulus forficatus. See No. 343.

Crown, black, with concealed **patch of yellow; back, gray;** underparts, white; tail, very long and forked, usually over four and one half inches. South American species, stragglers, have been taken in Eastern North America.

Forked-tail Flycatcher.

Milvulus tyrannus. See No. 342.

FAMILY ALAUDIDÆ.

Larks.

Bill, pointed, and somewhat rounded; back of tarsus, rounded; hind toe nail, elongated, equal or longer than the toe; nostrils, more or less concealed by tufts of hair-like feathers; wing, 3.75 to 4.50.



Horned Lark.



Upper throat and line over the eye, yellow, or yellowish white; a stripe from bill below the eye, and a patch on breast, black, or blackish; belly, white; upper parts, brownish, more or less streaked; hind toe nail, long, and nearly straight; greater portion of outer web of outer tail feather, white. In immature and winter birds, the horn-like taft of feathers is lacking, or indistinct.

> Horned Lark. Shore Lark. Otocoris alpestris, and races. See No. 357.

FAMILY CORVIDÆ.

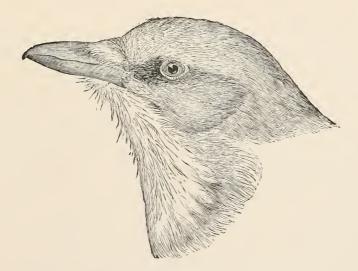
Jays, Crows, etc.

SUBFAMILY GARRULINÆ.

Jays and Magpies.

First primary, much shorter than second, always less than three fourths as long as third; fourth or fifth primary, longest; bill, stout and strong; the nostrils, concealed by coarse hair-like feathers; outer tail feathers, shorter than middle feathers.

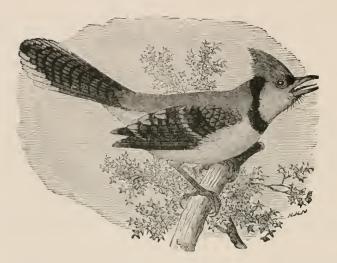
Group 1. Wing, 3.75 to 4.75 inches long.



Top and sides of head, wings and tail, dull blue; back and belly, ash gray. Occurs only in Florida.

Florida Jay. Aphelocoma floridana. See No. 362.

Group 2. Wing, 4.75 to 5.50 inches long.





Upper parts, pale blue or purplish blue; tail, bright blue, barred with black and (except middle feathers), tipped with white; wings, blue, marked with white; underparts, ashy white; breast with black band.

Blue Jay. Cyanocitta cristata, and races. See No. 360.



No blue on plumage anywhere; greater part of crown, dusky; breast and belly, gray; throat, lighter.

> Canada Jay. Perisoreus canadensis, and vaces. See Nos. 463 and 464.

Group 3. Wing, 5.50 to 6.50 inches long.

Upper parts, pale blue, or purplish blue; tail, bright blue, barred with black, and (except middle feathers) tipped with white; wings, blue, marked with white; underparts, ashy white; breast, with black band. Blue.

Blue Jay. Cyanocitta cristata See No. 360.

Forehead, throat, and sides of head, dull white; back of crown and nape, blackish; back, gray; underparts, ashy, palest on the throat.

> Canada Jay. Perisoreus canadensis, and races. See No. 363.

Group 4. Wing, 6.50 to 8.50 inches long.

Head and breast, black; tail, long, showing more or less green and purple reflections.

American Magpie. Pica pica hudsonica. See No. 359.

SUBFAMILY CORVINÆ.

Crows and Ravens.

Group 5. Wing, 9.50 to 15 inches long.



Plumage, black; wing, over 11.50; tarsus, over 2.10; bill, over 1.80.

> Crow. Corvus americanus, and races. See No. 366.

Plumage, black; wing, under 11.50; tarsus, under 2.10; bill, under 1.80.

Fish Crow. Coreus ossifragus. See No. 368.



Group 6. Wing, over 15 inches long.

Raven.

General plumage, black.

Raven. Corous cora.c principalis. See No. 365.

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FAMILY ICTERIDÆ.

BLACKBIRDS, ORIOLES, MEADOW LARKS, ETC.

GROUP 1. Wing, less than 3.75 inches long. See page 214.

Section 1. Underparts, more or less marked with yellow, orange, or chestnut brown. See page 214.

Section 2. Underparts, black or heavily streaked with black or dark brown. See page 85.

GROUP 2. Wing, 3.75 to 4.25 inches long. See page 216.

Section 1. Underparts, more or less yellow. See page 217.Section 2. No yellow on underparts. See page 218.

GROUP 3. Wing, 4.25 to 4.75 inches long. See page 219.

GROUP 4. Wing, 4.75 to 5.50 inches long. See page 222.

GROUP 5. Wing, 5.50 to 6.50 inches long. See page 224.

GROUP 6. Wing, over 6.50 inches long. See page 225.

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FAMILY ICTERIDÆ.

Blackbirds, Orioles, Meadow Larks, etc.

First primary, not short; base of bill slightly dividing the feathers of the forehead; nostrils, exposed; outer tail feathers, shorter than middle feathers.

Group 1. Wing, less than 3.75 inches long.

Section 1. The following species have the underparts more or less marked with either yellow, orange, or chestnut brown.

Head and throat, black; underparts, orange yellow; back, black.

Baltimore Oriole. Icterus galbula (male). See No. 379.

Head, more or less marked with black; back, blackish; underparts, orange, paler than the male. Baltimore Oriole.

Icterus galbula (female). See No. 379.

Crown and back, dull olive, faintly tinged with yellow on rump; underparts, pale yellow, usually with faint orange tinge; wing, over 3.45. Baltimore Oriole.

Icterus galbula (immature). See No. 379.



Head and back, black; rest of underparts, chestnut brown.

> Orchard Oriole. Icterus spuvius (male). See No. 378.

Crown and back, greenish, without stripes; underparts, yellow (not orange); wing, under 3.45.

Orchard Oriole. Icterus spurius (female). See No. 378.

Crown, with yellow buff in centre, bordered by black; back, streaked with black; underparts, pale yellow, tinged with buff; tail feathers, pointed.

Bobolink. Rice Bird. Dolichony. ovyzivorus (female). See No. 370.

Orchard Oriole.

Section 2. The following species have the underparts black, or heavily streaked with black, or dark brown.



Underparts, black, often showing more or less whitish on tips of feathers; head, black; back of neck, tawny, or tawny white; back, black, shading into gray and white on rump and upper tail coverts.

Bobolink. Rice Bird. Dolichonyx orgzivorus (male). See No. 370.



Underparts, whitish or buffy, streaked with black.

Red-winged Blackbird. Agelaius phaniceus, and races (female). See No. 373.

Group 2. Wing, 3.75 to 4.25 inches long.

First primary, never less than three fourths as long as third.



Blackbird.

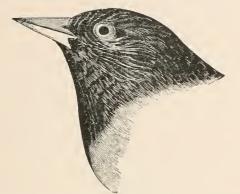
Grackle, or Crow Blackbird. Orlole. Meadow Lark.

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Section 1. The following species have underparts with more or less yellow.





Head and back, black; throat, black; rest of underparts, orange.

Baltimore Oriole. Icterus galbula (male). See No. 379.

Head and back, brownish black; throat, black; rest of underparts, paler than the male.

Baltimore Oriole. Icterus galbula (female). See No. 379.

Upper plumage, dull brownish olive; rump, yellowish olive; entire underparts, yellowish white or pale buffy yellow, faintly tinged with orange.

> Baltimore Oriole. Icterus galbula (immature). See No. 379.



Underparts, pale buff yellow or tawny yellow; whitish on chin; sides, streaked with black; crown, blackish, with tawny stripe in centre; back, streaked; tail feathers, very pointed.

Bobolink. Dolichonyx oryzivorus (female). See No. 370. Throat and underparts, yellow; breast, with more or less black; crown brownish black, with buff white stripe in centre.

Meadow Lark. Sturnella magna. See No. 370.

Section 2. The following species have no yellow on the underparts.

Underparts, heavily streaked with black; throat, tinged with tawny.

Red-winged Blackbird. Agelaius phæniceus (female). See No. 373.

Underparts, black, generally with more or less feathers tipped with dull white; erown, black; back of the neck, tawny; tail feathers, very pointed.

> Bobolink. Dolichonyx oryzivorus. See No. 270.



Head and throat, brown; rest of plumage, glossy greenish black.

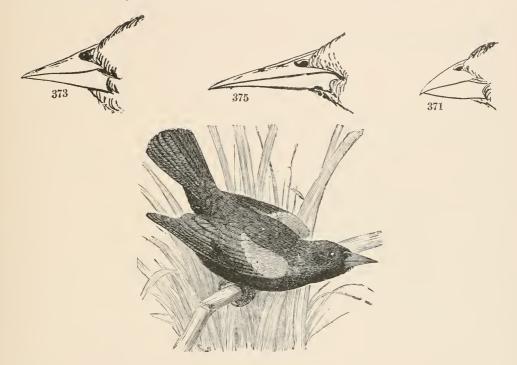
Cow Bird. Molothrus ater (male). See No. 371.

Underparts, brownish gray; upper parts, pale grayish brown.

Cow Bird. Molothrus ater (female). See No. 371.

Group 3. Wing, 4.25 to 4.75 inches long.

First primary, never less than three fourths as long as third.



General plumage, black; a patch of scarlet on the shoulder.

Red-winged Blackbird.

Agelaius phwniceus (male), and races. See No. 373.



General plumage, black; no red shoulder patch; head, not tinged with purple.

> Rusty Blackbird. Scolecophagus carolinus. See No. 381.

General plumage, black, glossed on the head with purplish or violet black, and back and underparts, tinged with metallic green; no red on shoulder.

Brewer's Blackbird. Scolecophagus cyanocephalus (male). See No. 382.

General plumage, black, tinged with brown on the crown and back; the feathers on the underparts, tipped with rusty brown; underparts, not streaked; no red on shoulder.

> Rusty Blackbird. Scolecophagus carolinus (immature), See No. 381.

General plumage, black, more or less streaked and marked with brown, buff, and dull white; lesser wing coverts (shoulder), dull red.

Red-winged Blackbird. Agelaius phœniceus (young male). See No. 373.



Underparts, streaked with black; no red patch on shoulder.

Red=winged Blackbird. Ayelains phoenicens (female), and vaces See No. 373.



Head and breast, chocolate brown; rest of plumage, glossy black.

Cow Bird. Molothrus ater (male See No. 371.

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General plumage, gray; palest on the throat.

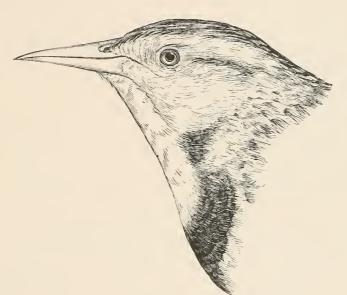
Cow Bird.

Molothrus ater (female). See No. 371.

Throat, yellow; belly, black; adult males have the entire head yellow; females and immature birds have the crown often blackish.

Yellow-headed Blackbird.

Xanthocephalus xanthocephalus (female). See No. 372.



Throat and belly, yellow; breast, with more or less black.

Meadow Lark. Sturnella magna. See No. 375.

General plumage, dark slate or brownish slate color; underparts, inclining to plumbeous.

Rusty Blackbird. Scolecophagus carolinns (female) (adult in summer) See No. 381.

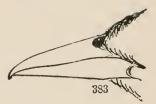
Group 4. Wing, 4.75 to 5.50 inches long.

First primary, not short; base of bill, dividing the feathers of the forehead; nostrils, exposed; outer tail feathers, shorser than middle feathers.



General plumage, metallic blue, green, purple, and bronze.

Crow Blackbird. Purple Grackle. Quiscalus quiscula, and vaces. See No. 383.



Upper plumage, dark brown, or blackish; crown, brown; underparts, brown= ish gray, shading to brownish white or buffy white on the throat.

> Boat-tailed Grackle. Quiscalus major (female). See No. 386.



General plumage, black; a patch of scarlet red on the shoulder.

Red-winged Blackbird. Agelaius phoniceus (adult male). See No. 3⁻³. General plumage, black, more or less streaked and marked with buff, brown, and dull white; traces of more or less red on the shoulder (lesser wing coverts).

Red-winged Blackbird.

Agelaius phaniceus, and races (immature). See No. 373.



Adult birds entirely dull black; no red shoulder patch. Immature birds have the upper parts more or less brown, and the feathers on the underparts, tipped with rusty brown.

Rusty Blackbird.

Scolecophagus carolinus (male, and immature). See No. 381.

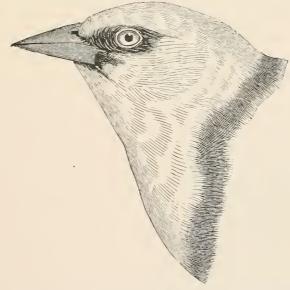
General plumage, dark slate or brownish slate color; underparts, plumbeous slate color. Rusty Blackbird.

> Scolecophagus carolinus (female, in summer). See No. 381.

General plumage, black, glossed on the head with purplish or violet black; the back and underparts, tinged with metallic green; no red on shoulder. Western species rare in Eastern United States.

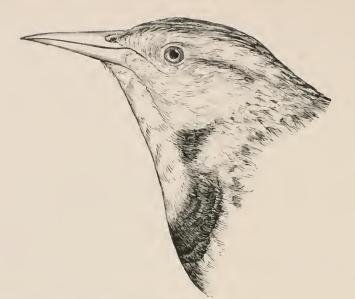
Brewer's Blackbird. Scolecophagus cyanocephalus (male).

See No. 382.



Throat, yellow; belly, black; amount of yellow on head varies according to age and season.

Yellow=headed Blackbird. Xanthocephalus xanthocephalus (female). See No. 372.



Throat and belly, yellow; breast, with more or less black.

Meadow Lark. Marsh Quail. Sturnella magna, and vaces. See No. 375.

Group 5. Wing, 5.50 to 6.50 inches long.



General plumage, black, showing metallic, reflections of blue green, purple, and brouze, when held in the light.

> Purple Grackle. Quiscalus quiscula, and races. See No. 383.

Upper plumage, dark brown or blackish; crown, brown; underparts, brownish grav, shading to brownish white, or buffy white on the throat (female).

Boat-tailed Grackle. Quiscalus major. See No. 386.

Throat, yellow; belly, black.

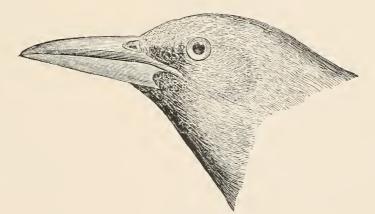
Yellow=headed Blackbird. Xanthocephalus xanthocephalus. See No. 372.

Throat, yellow; belly, yellow.

Meadow Lark.

Sturnella magna, and races. See No. 375.

Group 6. Wing, over 6.50 inches long.



Boat-tailed Grackle.

General plumage, black.

Boat-tailed Grackle.

Quiscalus major. See No. 386.

FAMILY FRINGILLIDÆ.

SPARROWS, FINCHES, CROSSBILLS, BUNTINGS, ETC.

GROUP 1. Wing, 1.75 to 2.13 inches long. See page 228.

GROUP 2. Wing, 2.13 to 2.37 inches long. See page 230.

- Part 1. Breast, more or less streaked; earpal joint, edged with yellow. See page 230.
- Part 2. Breast, more or less streaked; carpal joint, not yellow. See page 231.
- Part 3. Breast, not streaked; earpal joint, edged with yellow. See page 231.
- Part 4. Breast, not streaked; carpal joint, not edged with yellow. See page 232.

GROUP 3. Wing, 2.37 to 2.75 inches long. See page 233.

- Part 1. Throat or underparts, more or less blue, red, dull green, or bright yellow. See page 233.
- Part 2. Throat or underparts, not marked with red, blue, yellow, or green; breast, distinctly streaked; carpal joint, edged with yellow. See page 234.
- Part 3. Underparts, not marked with red, blue, yellow, or green; breast, distinctly streaked; carpal joint, not edged with yellow. See page 236.
- Part 4. Underparts, not marked with red, blue, yellow, or green; breast, not streaked; bend of wing (earpal joint), edged with yellow. See page 237.
- Part 5. Underparts, not marked with red, blue, yellow, or green; the breast, not distinctly streaked, and no yellow on bend of wing. See page 238.
- GROUP 4. Wing, 2.75 to 3.25 inches long. See page 239.

Part 1. Throat or underparts, more or less red, blue, green, or yellow. See page 239.

- Part 2. No blue, red, green, or yellow on the underparts; more or less of throat, black (sometimes only the chin); breast and sides, not distinctly streaked. See page 243.
- Part 3. No blue, red, green, or yellow on the underparts; throat or chin, not black; breast or sides, not distinctly streaked; tail feathers, marked with more or less white. See page 211.

- Part 4. No blue, red, green, or yellow on the underparts; throat or chin, not black; breast or sides, not distinctly streaked; no white on tail feathers. See page 245.
- Part 5. No red, blue, green, or yellow on the underparts; throat, more or less (sometimes only the chin) black; breast or sides, distinctly streaked. See page 247.
- Part 6. No red, blue, green, or yellow on the underparts; throat or chin, not black; breast, distinctly streaked or spotted. See page 248.
- GROUP 5. Wing, 3.25 to 3.75 inches long. See page 251.
 - Part 1. More or less of either red, blue, yellow, or green on the underparts. See page 251.
 - Part 2. No red, blue, yellow, or green on the underparts. See page 254.
- GROUP 6. Wing, 3.75 to 4.25 inches long. See page 257.
 - Part 1. More or less red on the underparts. See page 257.
 - Part 2. More or less yellow, orange, or green on the underparts. See page 258.
 - Part 3. No red, yellow, orange, or green on the underparts. See page 259.
- GROUP 7. Wing, 4.25 to 4.75 inches long. See page 261.

FAMILY FRINGILLIDÆ.

Sparrows, Finches, Crossbills, etc.

First primary, not short, never less than two thirds as long as second or third; bill, stout and conical; nostrils, high, near the culmen; primaries, 9; tarsus, flattened behind.

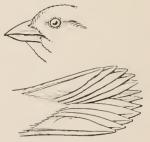
Group 1. Wing, 1.75 to 2.13 inches long.

Top of head, blackish, with tawny stripe in middle, and tawny stripe over each eye.

> Leconte's Sparrow. Ammodramus leconteii. See No. 413.

Ammod amus leconteil.

Ammodramus candacutus.



(Coturniculus) henslowi.



Top of head and nape, pale olive green, mixed with black; no tawny stripe over eye.

> Henslow's Sparrow. Ammodramus henslowii. See No. 412.



Top of head, **brownish and slate color**; a tawny stripe over each eye; **no tawny stripe on middle of crown.**

Sharp-tailed Sparrow. Sharp-tailed Finch. Anmodramus canducatus and races. See No. 414.



Back and rump, olive green; throat or sides of neck, black (male), or gray (female). West Indian species, accidental on Florida Keys.

Black-faced Finch or Grassquit. Euclide bicolor. See No. 449.

Phompara bicolor.

Back and rump, olive green; sides of neek, yellow (male), or throat, chestnut brown (female). West Indian species accidental on Florida Keys.

Cuban Finch, or Melodious Grassquit.

Euetheia canora.

See No. 450.

Group 2. Wing, 2.13 to 2.37 inches long.

Part 1. The following species have the breast more or less streaked; carpal joint (bend of wing), edged with yellow: —



Ammodramus maritimus.

Bill, dark; a small spot of yellow in front of the eye; no tawny superciliary stripe.

Sea-side Sparrow. Ammodramus maritimus, and varieties. See No. 417. Bill, dark; back, black; underparts, white, streaked sharply with black. Occurs in Eastern Florida only.

Dusky Sea-side Sparrow. Ammodramus nigrescens. See No. 419.



Bill, pale horn color ; sides of head and nape, tinged with olive green.

Henslow's Sparrow. Ammodramus henslowii. See No. 412.

Part 2. The following species have the breast more or less streaked; carpal joint (bend of wing), not yellow:—

Breast, very faintly streaked; middle tail feathers, rufous brown, with black stripe in middle, including the shaft; wing coverts and secondaries, edged with rufous brown.

> Swamp Sparrow. Melospiza georgiana. See No. 438.

Melospiza georgiana.



Breast, **sharply** streaked with black; shafts of tail feathers, not black.

Lincoln's Sparrow. Melospiza lincolnii. See No. 437.

Melospiza lincolnii.

Part 3. The following species have the breast not streaked (in the adult*); carpal joint (bend of wing), edged with yellow:----

Top of head, black with tawny stripe in centre; an orange brown spot over, and somewhat in front of, the eye.

Yellow-winged Sparrow. Grasshopper Sparrow. Ammodramus savannarum passerinus. See No. 411.

* In several species, very young birds in first plumage have the breast streaked.



Top of head and back, chestnut and black; sides, sometimes with black spots. Occurs only as far as known in Florida and Southern Georgia.

Pine-woods Sparrow. Peucaæ æstivalis. See No. 434.

Top of head and back, rufous brown with more or less gray on feathers; sides, without spots.

Bachman's Sparrow. Peucuæ æstivalis bachmanii. See No. 435.

Part 4. The following species have the breast not streaked (in the adult); carpal joint (bend of wing), not edged with yellow : —



Wing coverts and secondaries, edged with rufous brown; flanks, brownish olive.

Swamp Sparrow. Melospiza georgiana. See No. 438.



Wing coverts and secondaries, edged with pale tawny buff; tail feathers, brown, narrowly edged with brownish white; flanks, pale buffy white.

Field Sparrow.

Spizella pallida. See No. 426.

Spizella pallida.

Group 3. Wing, 2.37 to 2.75 inches long.



Part 1. The following species have the throat or underparts more or less marked with either blue, red, dull green, or bright yellow:—



Underparts, **entirely yellow** (male), or throat, yellow; underparts, dull olive gray (female); wings and tail, black, marked with white; yellow on underparts varies much, according to age and season.

Yellowbird. American Goldfinch. Spinus tristis. See No. 400.

Underparts, bright red, or tinged with red; back, green; crown, blue.

Nonpareil Painted Bunting. Passerina ciris (male). See No. 448.

Underparts, greenish; back, green.

Painted Bunting. Passerina ciris (female). See No. 448.



Underparts, blue; general plumage, blue; wings and tail, black, edged with blue.

> Indigo Bird. Indigo Bunting. Passerina cyanca (male). See No. 446.

Underparts, more or less blotched with blue.

Indigo Bird. Passerina cyanea (immature). See No. 446.

Part 2. The following species have the underparts not marked with red, blue, yellow, or green; breast, distinctly streaked; carpal joint (bend of wing), edged with yellow:---



Breast and flanks, tawny; a tawny stripe over the eye; outer tail feathers, decidedly shorter than middle ones.

Sharp-tailed Sparrow. Ammodramus caudactus, and varieties. See No. 414.

Breast, white, heavily streaked with black; back, black, the feathers edged with olive and gray; outer tail feathers, shortest. Occurs only in Florida.

> Dusky Seaside Sparrow. Ammodramus nigrescens. See No. 419.

Breast and flanks, grayish (sometimes faintly tinged with buff); a small yellow spot in front of the eye; no tawny stripe over the eye; rump, grayish olive; undertail coverts, not white; outer tail feathers, shortest.

> Seaside Sparrow. Annmodramus maritimus, and varieties. See No. 417.



Seaside Sparrow.

Breast and flanks, white streaked with brown; a yellow spot in front of eye (absent in some plumages); rump, pale brown, marked with dark brown; outer tail feathers, not shorter than middle ones: **under tail coverts**, white.

Savanna Sparrow. Ammodramus sandwichensis savanna. See No. 410. Part 3. The following species have the underparts not marked with red, blue, yellow, or green; breast, distinctly streaked; carpal joint (bend of wing), not edged with yellow:—



Crown, black, streaked with pale brown; a yellow spot in front of eye (wanting in some plumages); breast, white, streaked with dark brown; back, streaked: outer tail feathers, not shorter than middle ones.

> Savanna Sparrow. Ammodramus sandwichensis savanna. See No. 410.



Wings and tail, dark brown, more or less margined with yellow; the bases of the feathers, pale yellow; underparts, heavily streaked with brownish black; crown and back, brownish olive, heavily streaked with black.

> Pine Finch. Spinus spinus. See No. 402.

Crown and back, brown without streaks; underparts, pale buff brown, faintly streaked on breast and sides.

Indigo Bunting. Passerina cyanea (female). See No. 446.

Part 4. The following species have the underparts not marked with red, blue, yellow, or green, and the breast not distinctly streaked, but have the carpal joint (bend of wing), edged with yellow : —

Crown, black, with pale tawny buff stripe on middle; ear coverts, tawny buff; middle back, blackish; feathers, edged with buff; **tail feathers, very pointed;** tail, less than 2.25 long.

Grasshopper Sparrow. Yellow-winged Sparrow. Ammodramus savannarum passerinus. See No. 411.



Crown, grayish, without tawny stripe in middle; ear coverts, gray; back, olive and gray; a distinct superciliary stripe of buff or vellowish.

> Sharp-tailed Sparrow. Ammodramus caudacutus, and races. See No. 414.



Crown and back, rufous brown, the feathers, more or less marked with black, and edged with gray; not tawny stripe on middle of crown; tail feathers, not pointed; tail, over 2.25 long.

> Pine-woods Sparrow. Peucæa æstivalis, and races See No. 434.

Part 5. The following species have the underparts not marked with red, blue, yellow, or green; the breast, not distinctly streaked, and no yellow on the carpus (bend of the wing): —

Crown and back, the same color, brown without streaks.

Indigo Bunting. Passerina cyanea (female). See No. 446.

Crown and back, bright olive green, without streaks.

Painted Bunting. Passerina ciris (female). See No. 448.

Back, streaked with black; rump, olive brown, streaked with black; wing coverts and secondaries, broadly edged with rufous brown; sides of body, clear olive brown; middle of belly, whitish.

> Swamp Sparrow. Melospiza georgiana.

Bill, black or dark brown; back, streaked with black; rump, slate gray; adult birds have the crown rufous.

> Chipping Sparrow. Spizella socialis. See No. 425.

Bill, reddish brown; crown and back, rufous brown; back, streaked with black; rump, pale grayish brown.

> Field Sparrow. Spizella pusilla. See No. 428.



Bill, pale brown (not reddish brown); underparts, dull white (not grayish on sides as in *socialis*); crown and back, pale grayish brown, streaked with black; rump, grayish brown (not slate gray as in *socialis*).

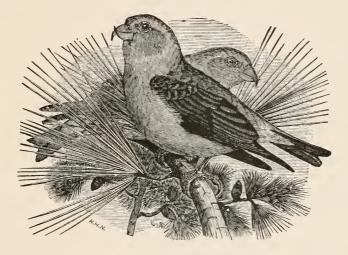
> Clay-colored Sparrow. Spizella pallida. See No. 426.



Group 4. Wing, 2.75 to 3.25 inches long.



Part 1. The following species have the throat, or underparts, more or less red, blue, green or yellow: —



flandibles, crossed ; general plumage, dull red; wings, brownish : no white on wings (male).

American Crossbill. Loxia curvirostra minor. See No. 392. Mandibles, crossed; no white on wings; underparts, greenish.

American Crossbill.

Loxia curvirostra minor (female). See No. 392.

Mandibles, crossed; more or less red on underparts, head, and back; wing bars, white.

White-winged Crossbill. Loxia leucoptera (male). See No. 393.

Mandibles, crossed; wing bars, white; underparts, greenish.

White-winged Crossbill.

Loxia leucoptera (female). See No. 393.

Mandibles, not crossed; breast and crown, rose red; back, brown, tinged with red; chin, not black.

> Purple Finch. Carpodacus purpureus (male). See No. 389.



Mandibles, not crossed; chin, blackish; breast, rose red; front crown, metallic red; rump, streaked.

Red-poll. Acanthis linaria, and races. See No. 396.

Mandibles, not crossed; chin, blackish; underpart, whitish, with faint tinge of pink on breast; rump, white, without streaks, sometimes tinged with rose color.

> Greenland Red-poll. Acanthis hornemannii, and races. See No. 394.



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Mandibles, not crossed; underparts, yellow; back, yellow; wings and tail, black, marked with white.

American Goldfinch. Yellowbird. Spinus tristis (male). See No. 400.

Mandibles, not crossed; throat, yellow; rest of underparts, grayish olive; tail and wings, black, marked with white.

American Goldfinch. Yellowbird. Spinus tristis (female).

See No. 400.



Mandibles, not crossed; chin, white; throat, black; breast, yellow; belly, white; back, streaked with black; shoulder, chestnut.

Dickcissel. Black-throated Bunting. Spiza americana. See No. 451. Mandibles, not crossed; underparts, red; crown and sides of head, blue; back, green.

Nonpareil. Painted Bunting. Passerina ciris (male). See No. 448.

Mandibles, not crossed; underparts, tinged with red; upper parts, bright olive green; no white on wings or tail.

Painted Bunting. Passerina ciris (young male). See No. 448.

Mandibles, not crossed; underparts, greenish yellow; upper plumage, bright olive green; no white on wings or tail.

Painted Bunting. Passerina ciris (female). See No. 448.



Mandibles, not crossed; general plumage, blue, with black wings and tail, edged with blue.

Indigo Bunting. Indigo Bird. Passerina cyanea (adult malr). See No. 446.

Mandibles, not crossed; general plumage, brownish, blotched with blue.

Indigo Bunting. Indigo Bird. Passerina cynanca (young male). See No. 446.

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Part 2. The following species have no red, blue, green, or yellow on the underparts; more or less of the throat, black (sometimes only the chin); breast and sides, not distinctly streaked:—



Throat, black; crown, gray; malar region, white; occiput, chestnut brown; rump, olive gray; bill, black.

English Sparrow. Passer domesticus (male). See No. 390.

Chin, black; throat, white, slightly tinged with tawny; rest of underparts, white; crown, fiery red; rump, white, not streaked.

> Greenland Red-poll. Acanthis hornemannii. See No. 394.



Throat, smoky gray; belly, white; back and rump, grayish brown; bill, pale; outer tail feather, entirely white.

> Snow Bird. Junco. Junco hyemalis. See No. 430.

Part 3. The following species have no red, blue, green, or yellow, on the underparts; throat or chin, not black; and the breast or sides, not distinctly streaked; tail feathers, marked with more or less white: —



Throat, grayish brown; sides of body, deep rufous brown; back, not streaked; belly, white; bill, black.

Towhee. Towhee Bunting. Pipilo erythrophthalmus. See No. 440.



Throat, gray; belly, white; back and rump, grayish brown; back, not streaked.

Snow Bird. Junco. Junco hyemalis, and races. See No. 430. Throat, white; crown, brown, with whitish stripe through middle; back, streaked; tail feathers, broadly tipped with white.

Lark Finch. Chondestes grammacus. See No. 420.



Throat, ashy white; belly. white, tinged with pale buff on sides: crown, bright rufous; tail feathers, very narrowly edged with white; upper mandible, blackish; lower mandible, pale yellowish white, with dark tip: back, streaked.

> Tree Sparrow. Spizella monticola. See No. 424.

Throat and underparts, pale buffy white or ashy white; erown and back, dull brown; back, streaked with blackish; tail, very narrowly edged with buffy white; bill, reddish brown; rump, brownish.

Field Sparrow. Spizella pusilla. See No. 428.

Throat, white; crown, rufous; a white stripe over the eye; onter tail feather, very narrowly edged with whitish on inner web; bill, black; back, streaked; rump, slaty gray.

Chipping Sparrow. Spizella socialis. See No. 425.

Part 4. The following species have no red, blue, green, or yellow on the underparts; throat or chin, not black, and the breast or sides, not distinctly streaked; no white on the tail feathers:

Crown, green, like back; throat and underparts, pale buil; back, green, without streaks.

Nonpareil. Painted Bunting. Passerina ciris (immature). See No. 448. Crown, brown, like back; throat and underparts, pale brown; whitish on belly; breast, usually with indistinct streaks; back, brown, without streaks.

Indigo Bird. Indigo Bunting. Passerina cyanea (female). See No. 446.

Crown, black, with white stripe in centre; stripe over eye, white; usually more or less yellow in front of eye; throat, white; breast, grayish; carpal joint (bend of wing), pale yellow; back, streaked.

White-throated Sparrow-

Zonotrichia albicollis. See No. 423.



Crown, black, with white stripe in centre; no distinct white patch on throat; carpal joint (bend of wing), not yellow; back, streaked.

White-crowned Sparrow

Zonotrichia leucophrys. See No. 422.

Crown, brown, with grayish brown centre: nape, gray; bill, reddish brown; back, streaked; wing coverts, tipped with white.

White-crowned Sparrow.

Zonotrichia leucophrys (immature' See No. 422.

Crown, light chestnut brown (streaked with black in young birds); rump, slaty gray; bill, black; back, streaked. Young birds in fall have the bill brownish.

Chipping Sparrow. Spizella socialis. See No. 425.

Crown, rufous brown; rump, pale olive brown; upper mandible, black; under mandible, pale, with dark tip; back, streaked.

Tree Sparrow. Spizella monticola. See No. 424.



Crown, pale chestnut brown; rump, olive brown; bill, reddish brown; baek, streaked.

> Field Sparrow. Spizella pusilla, and races. See No. 428.

Part 5. The following species have no red, blue, green, or yellow on the underparts; throat, more or less (sometimes only chin) black, and the breast or sides distinctly streaked:—



A black spot on the chin; crown, with more or less metallic red; rump, streaked; bill, yellowish, with dark tip. Common on Atlantic coast.

Red=poll. Acanthis linaria, and races. See No. 396.

A black spot on the chin; erown, with more or less metallic red; rump, white, usually without streaks; bill, yellowish, with dark tip; plumage, much whiter than linaria. Rarely occurs south of Labrador.

Greenland Red-poll. Acanthis hornemannii, and races. See No. 394. Part 6. The following species have no red, blue, green, or yellow on the underparts; throat or chin, not black, and the breast, distinctly streaked or spotted:—



Crown feathers, blackish, narrowly edged with light brown; an imperfect buff white line through centre of erown; tail, usually under 2.20; wing, usually under 2.90 (more or less yellow over and in front of eye in some plumages); outer tail feathers, not shorter than middle ones; a black streak on sides of upper throat; back, streaked; breast, streaked with dark brown; outer web of outer tail feather, edged with dull white.

> Savanna Sparrow. Ammodranus saudwichensis savanna. See No. 410.

Rump and upper surface of tail feathers, rufous brown.

Fox Sparrow. Passerella iliaca. See No. 439.

Wing, usually over 2.90; tail, usually over 2.20; breast, streaked with pale brown; crown feathers, with small black centres edged with buff and gray; outer tail feathers, not shorter than middle ones; no black streak on sides of upper throat; back, pale brown, tinged with gray and more or less streaked; very little or no white on outer tail feathers.

> Ipswich Sparrow. Ammodramus princeps. See No. 409.



Bill, large; depth of bill at base, about equal to length of culmen; crown and back, brownish olive, streaked with blackish; throat, streaked dark olive brown, not black; outer tail feathers, not shorter than middle ones.

> Purple Finch. Carpodacus purpureus (female). See No. 389.





Outer tail feathers, decidedly shorter than middle ones; erown, dull rufous brown, streaked with black and showing a grayish stripe in the centre; underparts, white; the breast, heavily streaked with black; carpal joint, not edged with yellow; outer tail feathers, not half white (the breast and sides, often faintly tinged with tawny and black striping on breast, often mixed with more or less rufous brown); back, streaked.

> Song Sparrow. Melospiza fasciata. See No. 436.



Shoulder (lesser wing coverts), rufous brown; at least half of outer tail feathers, white; back, streaked.

Vesper Sparrow. Poocætes gramineus. See No. 408.



Back, tinged with rufous brown, and streaked with black; carpal joint (bend of wing), edged with pale yellow; tail, over 2.50; usually an indication of yellow in front of the eye; no white on tail feathers.

White-throated Sparrow.

Zonotrichia albicollis. See No. 423.

Bill, sharp; tail, under 2 inches; entire upper plumage, olive buff, streaked with black; under plumage, bufly white, or ashy white, heavily streaked with black; more or less yellow on edge and base of wing feathers, and base of tail feathers.

Pine Siskin. Pine Finch. Spinus pinus.

See No. 402.

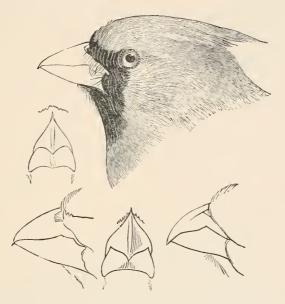
Crown and back, dull brown, without streaks; underparts, brownish, whitish on belly; breast streaks, not very pronounced, often indistinct (female).

> Indigo Bird. Indigo Bunting. Passerina cyanea. See No. 446.

Pine Finch.

Group 5. Wing, 3.25 to 3.75 inches long.

Part 1. The following species have more or less of either red, blue, yellow, or green on the underparts*:—



General plumage, red; crown and underparts, bright red; crown, with crest; throat, black; wings, not black (male).

Cardinal Grosbeak. Cardinalis cardinalis. See No. 442.



General plumage, red; back, streaked; belly, whitish (male).

Purple Finch. Carpodacus purpureus. See No. 389.

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* If bird is red or olive green, with wing measuring between 3.35 and 4 inches long (carpus to tip), and cannot be found in this section, see Family Tanagridae. The bill of a Tanager somewhat resembles that of a Finch.

Crown, rump, and underparts, rose red; more or less white on wing; mandibles, crossed.

White-winged Crossbill. Loxia leucoptera (male).

See No. 393.



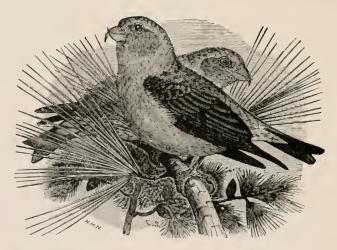
Crown, rump, and greater part of under plumage, dull red; no white on the wing; mandibles, crossed.

> American Crossbill. Loxia curvirostra minor (male). See No. 392.

Wings, with more or less white; general plumage, grayish olive, or olive green, more or less strongly tinged with yellowish green on rump: mandibles, crossed.

White-winged Crossbill.

Loxia leucoptera (female). See No. 392.



Underparts, tinged with green, or olive green; yellowish green on runp; no white on wings: mandibles, crossed.

American Crossbill. Loxia curvirostra minor (female). See No. 392.

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Crown, olive gray; chin, white; throat, black; breast, yellow; belly, white; shoulder (wing coverts), chestnut brown; back, streaked with black; more or less yellow over the eye.

Black-throated Bunting. Dickcissel.

Spiza americana. See No. 451.

Underparts, dull buffy yellow; more or less black streaks on sides; crown, blackish, with tawny buff stripe through centre; back, heavily streaked with black; tail feathers, very pointed. (This bird belongs in Section 8, as it is not a Tanager or a Finch, but the bill might appear Fringilline to beginners.)

> Bobolink. Dolichonyx oryzivorus (female). See No. 370.



General plumage, more or less blue.

Blue Grosbeak.

Guiraca cærulea. See No. 445.

Underparts, brownish white, **tinged with blue on the breast**; head, rump, and lesser wing coverts, usually tinged with blue.

Blue Grosbeak. Guiraca cærulea (female). See No. 445. Part 2. The following species have no red, blue, yellow, or green on the underparts: —

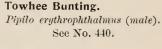
Underparts, brownish white; crown and back, brownish gray, usually tinged with more or less blue on the head, rump, and lesser wing coverts; middle wing coverts, edged with rufous brown.

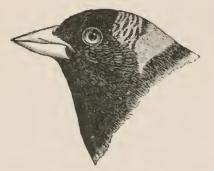
Blue Grosbeak. Guiraca cœrulea (immature). See No. 445.



Towhee Bunting.

Crown and back, black; throat, black; sides of body, rufous brown; belly, white.





Head and entire underparts, black; a tawny white patch on the back of the neck; back, black; rump, whitish. (This species belongs in the family leteridæ (see Section 8), but to the uninitiated the bill has a slight resemblance to birds in this class.)

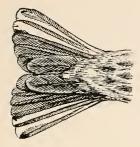
Bobolink.

Dolichonyx oryzivorus. See No. 370.

Crown, black, mixed with buffy white; a nuchal collar (back of neek), chestnut; back, streaked; breast, more or less marked with black; belly, white; hind toe nail, long.

Lapland Longspur. Calcarius lapponicus. See No. 404.

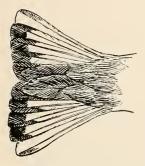
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Top and sides of the head, black; ear coverts and supereiliary stripe, white; back, streaked; **un= derparts**, **buff**; hind toe nail, long.

Smith's Longspur.

Calcarius pictus. See No. 405.



Top of head, black; wing coverts, heavily marked with chestnut; **throat and belly, white;** a large patch of black on the breast; most of the tail feathers, white, tipped with dark brown.

> McCown's Longspur. Rhynchophanes mccownii. See No. 407.



Crown, chestnut, with stripe of white in centre (male), or dull olive, streaked with blackish (female); back, streaked; underparts, white (pale brownish olive on sides of body); a short streak of dark brown or black on each side of white throat; tail feathers, tipped with white.

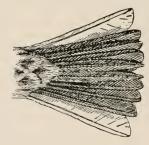
Lark Sparrow. Lark Finch. Chondestes grammacus. See No. 420.



Crown, black, with white stripe in middle; underparts, ashy, shading to pale buff on the flanks; no white on tail feathers.

> White-crowned Sparrow. Zonotrichia leucophrys. See No. 422.





Crown and back, grayish or buffy, streaked with black; shoulder (lesser wing coverts), rufous brown; breast, streaked; greater part of outer tail feather, including outer web, white.

Vesper Sparrow. Bay-winged Bunting. Grass Finch. Poocates gramineus. See No. 408.



Crown and back, slaty brown, or dull rufous brown; rump, and upper surface of tail feathers, light rufous brown; underparts, white, heavily streaked and spotted on breast and sides with rufous brown.

Fox Sparrow. Passerella iliaca. See No. 439. Crown and back, dark brown, with indistinct streaks; no white on tail; underparts, white, with numerous brown spots or streaks (female). Purple Finch.

Carpodacus purpureus.

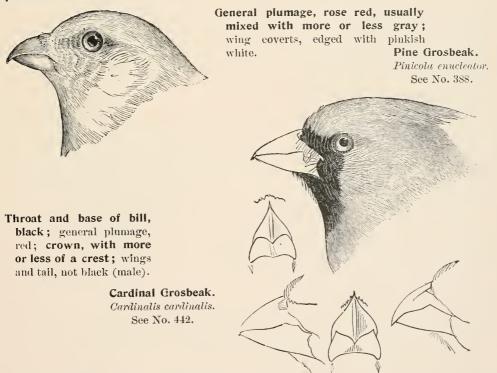
Crown, with crest of red feathers; back, olive; underparts, tawny, shading to olive on the sides; under surface of wing, red (female). Cardinal Grosbeak. Cardinalis cardinalis. See No. 442.

Crown, with fiery red patch; a black spot on the chin; belly, white; rump, white. Greenland Redpoll.

Acanthis hornemannii. See No. 394.

Group 6. Wing, 3.75 to 4.25 inches long.

Part 1. The following species have more or less red on the underparts*: ---



* If bird is red or olive green, with wing between 3.35 and 4 inches long (bend of wing to tip), see Family Tanagridæ. The bill of a Tanager somewhat resembles that of a Finch.



Head and back, black; breast and under wing coverts, rose red; belly, white (male).

> Rose-breasted Grosbeak. Habia ludoviciana, See No. 443.

Part 2. The following species have more or less yellow, orange, or green on the underparts:—



Forehead, yellow; crown, black; rump, greenish yellow; tertials, heavily marked with white; underparts, dark olive yellow on belly (male).

> Evening Grosbeak. Coccothraustes respertinus. See No. 387.

Underparts, gray, faintly tinged with greenish yellow; back, gray, more or less tinged with green; wings and tail, black, marked with white.

Crown and sides of head and chin, black; underparts, orange brown, or pale orange chestnnt; middle of belly and under wing coverts, bright yellow; wings and tail, black, marked with white (male).

Black-headed Grosbeak. Ilabia melanocephala,

See No. 444.

Underparts, pale tawny yellow, more or less streaked with black on sides of body; crown, black, with brownish bufl stripe in centre; tail feathers, sharp pointed. [This species belongs in Family Icteridae, but might be looked for nuder this section (female).]

Bobolink. Dolochony.c oryzivorus. See No. 370. Part 3. The following species have no red, yellow, orange, or green on the underparts:—

Underparts, gray; upper parts, gray, tinged with green; wings and tail, black, heavily marked with white; bill, yellowish. Evening Grosbeak. Coccothraustes vespertinus (female). See No. 387. General plumage, gray; crown and rump, tinged with yellowish green: bill, dark; no white on tail feathers; wing coverts and tertials, edged with white. Pine Grosbeak. Pinecola enucleator (female). See No. 388. Crown, brownish black, with whitish streak in centre; under wing coverts, orange yellow; breast, streaked with dark brown. Rose-breasted Grosbeak. Habia ludoviciana (female). See No. 443.

Uead and entire underparts, black; back of neck, tawny buff; back, black, mixed with buff; rump, gray; tail feathers, very pointed. (This species belongs in Family Icteridæ (Section 9), but might be looked for under this section.)

Bobolink. Dolichonyx oryzivorus (male). See No. 370. Head and throat, dull chocolate brown; rest of plumage, greenish black; no white on wings or tail. (See Section 9, Family Icteridae, where it belongs.)

Cow Bird.

Molothrus ater (male). See No. 371.

General plumage, brownish gray; no white on wing coverts or tail feathers. (This species belongs in Family leteridae, but the bill is somewhat Finch-like in appearance, and the bird might be looked for under this section.)

Cow Bird.

Molothrus ater (female). See No. 371.

Head, with crest; breast, grayish bufl or light tawny; back, olive gray, without streaks; rump and upper surface of tail, not rufous brown.

Cardinal.

Cardinales cardinalis (female). See No. 442.

Crown, brown, with white stripe in middle; a black stripe on each side of throat; underparts, soiled white; tail feathers, broadly tipped with white: rump and upper surface of tail, not rufous brown.

Lark Sparrow. Lark Finch. Choudestes grammicus. See No. 420.

Rump and upper surface of tail feathers, rufous brown; underparts, white, more or less spotted or streaked with brown.

Fox Sparrow. Passerella iliaca. See No. 439.

Entire head and back, brown or black; belly, white; sides of body. bright, rufous brown.

Towhee Bunting. Pipilo erythrophthalmus. See No. 440.

Underparts, white, often tinged with light brown on the breast; greater part of outer tail feathers, white.

> Snow Bunting. Snow Flake, Pleetrophenax nivalis, See No. 403.



Snow Bunting.

Group 7. Wing, 4.25 to 4.75 inches long.

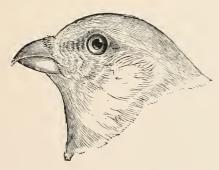
First primary, not short, never less than two thirds as long as second or third; bill, stout and conical; nostrils, high, near the culmen; primaries, nine; tarsus, flattened behind.



Throat, brownish olive, shading to yellowish green on the belly; wing, black, with patch of white; bill, yellowish; forehead, yellow; crown, black (male); forehead and erown, grayish (female).

Evening Grosbeak. Coccothranstes vespertinus. See No. 387.

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General plumage of body, rose red, more or less mixed with gray; tail, dark brown; wings, brown, the coverts and tertials, edged with white.

> Pine Grosbeak. Pinicola enucleator (male) See No. 388.

General plumage, gray; the crown and rump, tinged with yellowish olive; wings, dark brown; the coverts and secondaries, edged with white.

Pine Grosbeak. Pinicola enucleator (female). See No. 388.



Underparts, white; breast, usually more or less tinged with pale brown in winter.

Snow Bunting. Snowflake. Plectrophenax ntralis. See No. 403.



Head, chocolate brown; rest of plumage, greenish black (male); general plumage, gray, palest on the throat; no white on wing coverts; crown and rump, like back (female). This species belongs in Section 10, under Family Icteridæ, but might be looked for under this family by mistake.

Cow Bird. Molothrus ater. See No. 371.



Cow Bird. See Family Icteridae.

FAMILY TANAGRIDÆ.

Tanagers.



Bill, somewhat fringilline, but having a small "tooth" near the middle of the edge of upper mandible; primaries, 9; tarsus, scutellate; males, bright colored.

Group 1. Wing, 3.25 to 4.25 inches long.

Part 1. The following species have more or less of either red, blue, yellow, or green on the underparts: —



Louisiana Tanager.

Head and throat, orange red; bright red on crown; rest of underparts, bright yellow; back, wings, and tail, black; rump, yellow (male).

Louisiana Tanager. Piranga ludoviciana. See No. 453.



General plumage, scarlet red; wings and tail, black; throat, not black (male).

> Scarlet Tanager. Piranga crythromelas See No. 454.

General plumage, red; no black on throat; wings and tail, not black; back, not streaked; belly, not whitish (male).

Summer Tanager. Piranga rubra, See No. 455.

Underparts, yellowish green, or greenish yellow: back, grayish; greater wing coverts and tertials, edged with dull white, or yellowish white; mandibles, not crossed (female).

Louisiana Tanager. Piranga Iudoriciana, See No. 453.

Underparts, yellowish green, or greenish yellow; back, light olive green; no white on wing coverts: wings and tail, fuscous brown (female); wings and tail, black (young male); inner webs of inner primaries and secondaries, edged with white; mandibles, not crossed (female).

Scarlet Tanager. Piranga erythromelas. See No. 454.

No white on wing coverts; **underparts**, **pale orange yellow**; upper parts, olive green, with faint tinge of orange; mandibles, not crossed (female).

Summer Tanager.

Piranga rubra. See No. 455.

Underparts, bright yellow; throat, reddish orange; erown and sides of head, orange red; back, wings, and tail, black; rump, yellow (male).

Louisiana Tanager.

Piranga Indoviciana. See No. 453.

FAMILY HIRUNDINIDÆ.

Swallows.

Bill, small and flattened, somewhat triangular in shape; gape, very wide; wings, long, usually extending beyond the tail.

Group 1. Wing, 3 25 to 4.75 inches long.





Bank Swallow.

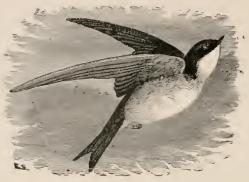
Throat and belly, white; a band of grayish brown on the breast; upper plumage, brownish gray.

Bank Swallow. Clavicola riparia. See No. 463.



Underparts, brownish gray, shading into whitish on the belly; upper parts, grayish brown; no distinct breast band.

Rough=winged Swallow. Stelgidopteryx serripennis. See No. 464.



Tree Swallow.

Entire underparts, white; upper plumage, metallic steel blue; young birds have the upper plumage brownish gray, but the under plumage is pure white.

White-bellied Swallow. Tree Swallow. Tachycineta bicolor. See No. 462.



Upper throat and sides of the head, chestnut brown; belly, whitish; forehead, whitish; crown and back, dark steel blue: upper tail coverts, pale rufous brown.

Cliff Swallow. Petrochelidon lunifrons. See No. 458.



Throat, chestnut; belly, pale brown; entire upper plumage, steel blue; tail, forked; upper tail coverts, steel blue.

Barn Swallow. Chelidon erythrogastra. See page 461.

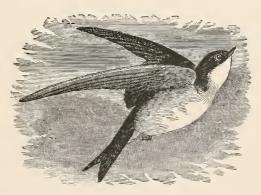
Group 2. Wing, 4.75 to 5.50 inches long.



Male: General plumage (including belly), bluish black, or dark steel blue. Female: Back, like male; underparts, grayish brown, shading into dull white on the belly. Immature birds have the upper plumage, brownish; underparts, brownish on the breast; dull white on the belly.

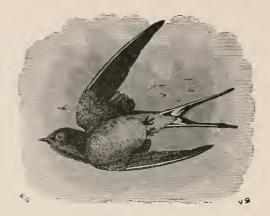
Purple Martin.

Progne subis. See No. 456.



Back, steel blue; belly, white.

Tree Swallow. White=bellied Swallow. Tachycineta bicolor. See No. 462.



Back, steel blue: underparts, cinnamon brown: tail, very deeply forked.

Barn Swallow. Chelidon erythrogastra. See No. 461.



General plumage, sooty brown; showing a faint greenish tinge on the upper parts; throat, ashy white; tail feathers, with sharp spines, or points formed by the shafts of the feathers, extending beyond the webs. The swifts belong to the Family Micropodidæ and are widely separated generically from the swallows; but persons unfamiliar with birds might look for them under the same family.

> Chimney Swift. Chaetura pelagica. See No. 340.

FAMILY AMPELIDÆ.

Waxwings and Cedar Birds.

Bill, without notch; head, with crest; primaries, ten; tarsus, shorter than middle toe and claw; a black stripe from forehead through the eye; inner primaries and tail feathers, often tipped with little hard red bits, like minute drops of sealing wax.



Upper parts, grayish brown; crown and breast, pale chocolate brown; a black streak in front of eye; tail, tipped with yellow; belly, yellowish; wing, less than 4.20 inches long.

> Cedar Waxwing. Cedar Bird. Cherry Bird. Ampelis cedorum. See No. 466.

Cedar Bird.



General plumage, pale chocolate brown; forehead, tinged with rufous; chin, black; under tail coverts, rufous; tail, tipped with yellow; wing, over 4.20 inches long.

> Bohemian Waxwing. Ampelis garrulus. See No. 465.

FAMILY LANIIDÆ.

Shrikes.

Bill, strong, notched near the end, and decidedly hooked; tarsus, scutellate; tail, rounded. But two species occur with us, both grayish birds with blackish wings and tail and a stripe through the eye.



Crown and back, gray; underparts, white; a patch of black on the sides of the head; wing less than 4.15 inches long.

Loggerhead Shrike. Lanius ludovicianus. See No. 468.





Upper plumage, ash gray or gray tinged with buff; underparts,

ashy white, the feathers showing numerous faint narrow black bars; a black streak from bill through the eye; wing, more than 4.15 inches long.

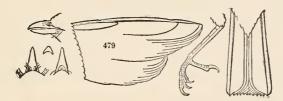
> Northern Shrike Lanius borealis. See No. 467.

FAMILY VIREONIDÆ.

Vireos.

Upper mandible, with very small hook at tip; first primary, very short in some species, in others nearly as long as second; toes, joined at base. Plain colored birds, usually greenish or grayish, but often showing a faint wash of yellow on underparts; tail, always without white spots.

Group 1. Wing, less than 2.37 inches long.





Crown, grayish; orbital ring and lores, dull white. Rarely occurs east of Illinois.

Bell's Vireo. Vireo bellii. See No. 480.



Crown, grayish, often tinged with olive; orbital ring and lores, yellow.

White-eyed Vireo. Vireo noveboracensis, and races. See No. 478.

Group 2. Wing, 2.37 to 2.75 inches long.





First primary, very short; lores and eye ring, whitish; throat, whitish: breast and sides, faintly tinged with yellow; no wing bars.

Warbling Vireo. Vireo gilvus. See No. 473.



First primary, short, but longer than in V. gilvus; lores and eye ring, yellow; back, olive; wing coverts, edged with white.

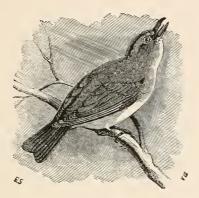
> White-eyed Vireo. Vireo noveboracensis, and races. See No. 478.

First primary, not short; lores and eye ring, dull white; underparts, washed with very pale greenish yellow; no wing bars.

Philadelphia Vireo. Vireo philadelphicus. See No. 472.

Group 3. Wing, from 2.75 to 3.25 inches long.

Bill, with small but distinct hook; no streaks on back or breast; breast or throat, never spotted.





First primary, longer than fourth; back and rump, olive; crown, plumbeous gray, or bluish gray; no dusky streak from base of bill on sides of throat; underparts, white, tinged with pale yellowish green on sides of body.

Red-eyed Vireo. Vireo olivaceus. See No. 470.



Similar to *Vireo olivaceus*, but having a dusky streak or line extending from base of lower mandible on side of throat.

Black-whiskered Vireo. Vireo calidris barbatulus.

See No. 469.

First primary, very short and narrow; crown and back, grayish olive; underparts, dull white, faintly tinged with olive, or yellowish on sides; no white wing bars.

> Warbling Vireo. Vireo gilvus. See No. 473.



First primary, short; crown, gray; back, olive; rump, olive green; throat and belly, white; sides of body, greenish yellow; lores, white; sides of head, gray; wing bars, white.

Solitary Vireo.

Virco solitarius, and races. See No. 475

First primary, not short; lores and eye ring, yellow: throat and breast, yellow; belly, white; wing bars, white.

Yellow-throated Vireo. Vireo flavifrons.

See No. 474.

First primary, equal to fifth; lores and orbital ring, dull white; upper plumage, light olive, tinged with ashy on the erown; underparts, washed with very pale yellow; no white wing bars.

> Philadelphia Vireo. Vireo philadelphicus. See No. 472.

FAMILY CŒREBIDÆ.

Honey Creepers.

Bill, curved; wing, about 2.50; length, about 4.50.



Throat, white; lower breast, yellow; rump, yellow; crown and back, slaty black. A Bahama Island species of rare and accidental occurrence in Florida, not recorded elsewhere in the United States.

> Bahama Honey Creeper. Cærebu bahamensis. See No. 481.

FAMILY MNIOTILTIDÆ.

WARBLERS.

GROUP 1. Wing, less than 2.37 inches long. See page 277.

- Part 1. Throat, breast, and belly, yellow; breast, more or less streaked; some tail feathers, marked with white. See page 278.
- Part 2. Throat, breast, and belly, yellow; breast, more or less streaked; no white on tail feathers. See page 278.
- Part 3. Throat, breast, and belly, yellow, without streaks; some tail feathers, marked with white. See page 279.
- Part 4. Throat, breast, and belly, yellow, without streaks; no white on tail feathers. See page 279.
- Part 5. Throat, yellow; belly, not yellow; tail feathers, marked with more or less white. See page 280.
- Part 6. Throat, yellow; belly, not yellow; no white on tail feathers. See page 281.
- Part 7. Throat, not yellow; belly, yellow; no white on tail feathers. See page 281.
- Part 8. Throat, not yellow; belly, yellow; more or less white on tail feathers. See page 281.
- Part 9. No yellow on throat or belly; no white on tail feathers. See page 282.
- Part 10. No yellow on throat or belly; more or less white ou tail feathers. See page $2^{\circ}2$.
- **GROUP 2.** Wing, 2.37 to 2.75 inches long. See page 284.
 - Part 1. Throat, breast, and belly, yellow; breast, more or less streaked; some tail feathers marked with more or less white. See page 284.
 - Part 2. Throat, breast, and belly, yellow; breast, more or less streaked; no white on tail feathers. See page 286.
 - Part 3. Throat, breast, and belly, yellow, without streaks; some tail feathers marked with more or less white. See page 287.
 - Part 4. Throat, breast, and belly, yellow, without streaks; no white on the tail feathers. See page 289.
 - Part 5. Throat, yellow; belly, not yellow; tail feathers, marked with more or less white. See page 290.
 - Part 6. Throat, not yellow; belly, yellow; no white on tail feathers. See page 292.
 - Part 7. Throat, not yellow; belly, yellow; more or less white on the tail feathers. See page 292.
 - Part 8. Throat, not yellow; belly, not yellow; no white on the tail feathers; breast, streaked or spotted with black or dark brown. See page 294.

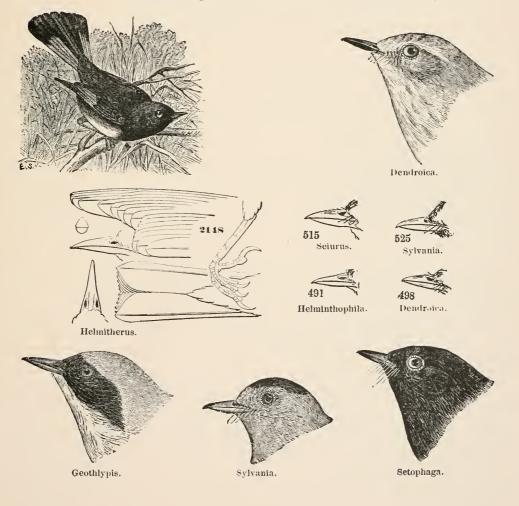
- Part 9. Throat, not yellow; belly, not yellow; no white on the tail feathers; breast, not streaked or spotted with black or dark brown. See page 294.
- Part 10. Throat, not yellow; belly, not yellow; more or less white on the tail feathers; sides of breast and body, with distinct black or blackish streaks. See page 295.
- Part 11. Throat, not yellow; belly, not yellow; more or less white on the tail feathers; sides of breast and body, not marked with numerous distinct black streaks. See page 297.
- GROUP 3. Wing, 2.75 to 3.25 inches long. See page 300.
 - Part 1. Throat, breast, and belly, yellow; breast, more or less streaked; some tail feathers, marked with white. See page 300.
 - Part 2. Throat, breast, and belly, yellow; breast, more or less streaked; no white on the tail feathers. See page 303.
 - Part 3. Throat, breast, and belly, yellow, without streaks; more or less white on the tail feathers. See page 303.
 - Part 4. Throat, breast, and belly, yellow, without streaks; no white on the tail feathers. See page 303.
 - Part 5. Throat, yellow; belly, not yellow; tail feathers, marked with more or less white. See page 304.
 - Part 6. Throat, not yellow; belly, yellow; no white on the tail feathers. See page 305.
 - Part 7. Throat, not yellow; belly, yellow; more or less white on the tail feathers. See page 306.
 - Part 8. Throat, not yellow; belly, not yellow; no white on the tail feathers; breast, not streaked or spotted with black or dark brown. See page 306.
 - Part 9. Throat, not yellow; belly, not yellow; no white on the tail feathers; breast, streaked or spotted with black or dark brown. See page 307.
 - Part 10. Throat, not yellow; belly, not yellow; more or less white on the tail feathers; sides of breast and body, marked with numerous distinct black or blackish streaks. See page 307.
 - Part 11. Throat, not yellow; belly, not yellow; more or less white on the tail feathers; breast and sides of the body, not marked with distinct black streaks. See page 308.
- GROUP 4. Wing, 3.25 to 3.75 inches long. See page 310.

FAMILY MNIOTILTIDÆ

Warblers.

First primary, not short, never less than two thirds as long as third, and often nearly the same length; bill, slender and pointed; back of tarsus, thin and sharp, not rounded as in front; hind toe and claw, not longer than middle toe and claw.

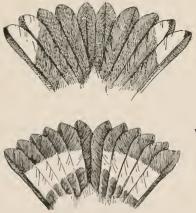
Group 1. Wing, less than 2.37 inches long.





Wing coverts, broadly bordered with yellow; under surface of wing, yellow; white on tail feathers, extending to tip of inner web; crown, not ehestnut brown.

Prairie Warbler. Dendroica discolor. See No. 514.



Dendroica maculosa.

Wing coverts, not bordered with yellow: undertail coverts, yellow.

> Dendroica palmarnm. Palm Warbler. See No. 512.

Wing coverts, showing much white; under surface of wing, white; tail, with band of white, no white at tip; rump, yellow.

> Black and Yellow Warb'er. Dendroica maculosa. See No. 500.

Part 2. The following species have the throat, breast, and belly, yellow; breast, with more or less streaks; no white on tail feathers: —

More or less yellow, on inner webs of primaries and tail feathers.

Summer Warbler. Dendroica æstiva. See No. 496.

Part 3. The following species have the throat, breast, and belly, yellow without streaks; some tail feathers marked with white:—

Crown and sides of head, grayish or slate color; no yellow on forehead; adult birds have patch of chestnut on crown; some tail feathers very narrowly edged with white; under wing coverts, yellow; no black streaks on sides of body.

> Nashville Warbler. Helminthophila rujicapilla. See No. 491.

Wing bars, white; under wing coverts, white; some tail feathers with much white on inner webs; adult birds have forehead and more or less of erown yellow; immature birds have crown yellowish green.

Blue-winged Warbler.

Helminthophila pinus. See No. 487.

No wing bars; under wing coverts, yellow; tail feathers, showing considerable white; throat, more or less black, according to age and season; crown, slaty gray; adult birds have yellow forehead and gray crown, marked with black.

Bachman's Warbler. Helminthophila bachmanii. See No. 486.

Wing bars, yellowish; sides of body, more or less streaked with black.

Prairie Warbler. Dendroica discolor. See No. 514.

Part 4. The following species have the throat, breast, and belly, yellow without streaks; no white on tail feathers: —

Crown and back, greenish yellow; more or less yellow on inner webs of prlmaries and tail feathers; crown, yellowish green.

> Summer Warbler. Dendroica æstiva (female or immature).

See No. 496.

Crown, slate color with patch of chestnut in some plumages; sides of head, slate color; wing, longer than tail; lower belly, tinged with white; rump and upper tail coverts, bright yellowish green.

Nashville Warbler. Helminthophila ruficapilla. See No. 491. Crown, dull olive; throat, bright yellow; belly, much paler, often whitish; tail, brownish olive, without yellow; wing, not longer than tail; males have black patch on face (forehead and sides of head) which is lacking in females.

Maryland Yellowthroat.

Geothlypis trichas. See No. 522.

Throat and belly, nearly the same color; crown, glossy black (male), or olive

green like back (female); tail feathers, slaty brown faintly washed with olive on outer webs; numerous small black bristles at base of bill.

Wilson's Warbler. Wilson's Blackcap. Sylvania pusilla. See No. 526.

Entire underparts, yellow: brightest on the belly; wing, longer than tail; crown, grayish; back and rump, dull olive; tail feathers, not marked with vellow. Mourning Warbler.

> Geothlypis philadelphia (young female). See No. 521.

Part 5. The following species have the throat, yellow; belly, not yellow; tail feathers, marked with more or less white :--

> Back, black or dark; tail, black, with broad band of white; rump, yellow.

> > Black and Vellow Warbler. Dendroica maculosa. See No. 500.

Back, slaty blue, often showing yellowish olive; rump, slate color; sides of head, gravish or slaty blue.

Parula Warbler, Blue, Yellowbacked Warbler. Compsothlypis americana. See No. 494.

Back, dull green; throat, faintly washed with greenish yellow: rump, green; sides, not streaked.

Tennessee Warbler. Helminthophila peregrina. See No. 493.

Back, greenish; rump, greenish; cheeks, yellowish; sides, showing more or less dark streaks.

Black-throated Green Warbler. Dendroica virens.





Part 6. The following species have the throat yellow; belly, not yellow; no white on tail feathers:—



Throat, bright yellow; shading to whitish or olive on belly; forehead and sides of head, black (male); no black on head (female); wing, not longer than tail.

> Maryland Yellowthroat. Geothlypis trichas. See No. 522.

Throat, showing faint tinge of greenish yellow; throat and sides of body, nearly same color; wing, considerably longer than tail.

Tennessee Warbler. Helminthophila peregrina. See No. 493.

Part 7. The following species have the throat, not yellow; belly, yellow; and no white on the tail feathers:—

Legs, dark; throat, whitish; belly, faintly tinged with yellow; under tail coverts, whitish; tail feathers, slaty brown. Bachman's Warbler.

Helminthophila bachmanii (immature in fall). See No. 486.

Head, grayish; back, olive green; belly, bright yellow: throat, blackish (male); throat, grayish (female); legs, pale; tail feathers, olive green; under tail coverts, yellow.

Mourning Warbler. Geothlypis philadelphia. See No. 521.

Back, grayish brown; belly, faintly tinged with yellow; under tail coverts, yellow.

Palm Warbler. Dendroica palmarum.

Part 8. The following species have the throat, not yellow; belly, yellow; tail feathers, marked with more or less white:—

Throat, usually with more or less black (sometimes without trace of black), according to age and season; forchead, yellow; top of head, grayish, showing more or less black; back, green.

Bachman's Warbler. Helminthophila bachmanii. See No. 486.

Part 9. The following species have no yellow on throat or belly, and no white on the tail feathers : ---

Wing, less than 2.25; underparts, whitish, tinged with olive on sides; throat, with faint wash of yellowish buff, almost white; crown, dull olive; tail, entirely olive green.

Maryland Yellowthroat.

Geothlypis trichas (young bird in fall). See No. 522.

Wing, over 2.25: entire underparts, whitish or slightly olive; crown, slaty; back, green; no yellow or orange on tail feathers.

Tennessee Warbler.

Helminthophila peregrina. See No. 493.

Entire underparts, dull olive or olive green: crown, with partially concealed patch of orange brown (sometimes wanting); no yellow or orange on tail feathers.

Orange-crowned Warbler.

Helminthophila celata. See No. 462.



End of tail, brown: basal portion of tail feathers, reddish orange (male), or pale yellow (female); more or less black bristles at base of bill.

Redstart. Setophaga rusticilla. See No. 528.

Part 10. The following species have no yellow on the throat or belly, and more or less white on the tail feathers :--

Wing coverts, broadly edged with yellow; erown, greenish yellow; back, tinged with slate color; tail feathers, marked with white to the tips of inner webs.

Golden-winged Warbler. Helminthophila chrysoptera.

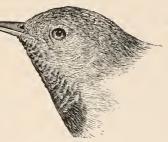
See No. 488.

Wing coverts, not yellow; crown, grayish or greenish; back, yellowish green; some tail feathers, narrowly edged with white near tips of inner webs.

Tennessee Warbler. Helminthophila peregrina. See No. 493.



Bachman's Warbler (male).



Mourning Warbler (male).



Canadian Warbler (male).



Maryland Yellow Throat.



Parula Warbler.



Kentucky Warbler (male).



Yellow Warbler (male).

Palm Warbler (male).



Chestnut-sided Warbler (male).



Hooded Warbler (male).



Black-poll Warbler (male)-

Group 2. Wing, from 2.37 to 2.75 inches long.



Helminthophlla.



Seiurus.

Part 1. The following species have the throat, breast, and belly, yellow; breast, more or less streaked; some tail feathers, marked with more or less white: ---

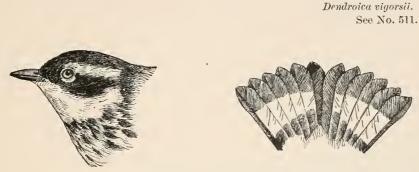
Underparts, yellow; breast, streaked with brown; under tail coverts, yellow; crown, chestnut; back, dull olive; rump, olive greers

Yellow Palm Warbler. Yellow Redpoil Warbler. Dendroica patmarum hypochrysea See Ne 513.



Underparts, pale ye'low; sides of breast, streaked with black; under tail coverts, white; erown, grayish; back and rump, ashy, streaked with black. Kirtland's Warbler.

Kirtland's Warbler Deudroica kirtlandi, See No. 510. Underparts, yellow; sides of breast, streaked with olive; under tail coverts, ashy; erown, back, and rump, olive green. Pine-creeping Warbler.



Head and tail, Black and Yellow Warbler.

Underparts, bright yellow; breast, heavily streaked with black; under tail coverts, white; crown, slaty; back, black; rump, yellow.

Black and Yellow Warbler. Dendroica maculosa. See No. 500.

Underparts, very pale yellowish, almost yellowish white, faintly streaked with black; under tail eoverts, white; crown, back, and rump, olive, streaked with black.

Black-poll Warbler. Dendroica striata (female). See No. 504.





Head and tail, Blackburnian Warbler.

Throat and breast, orange; belly, pale yellow; sides of breast streaked with black; erown, black, streaked with dull white; rump, black; undertail coverts, white.

Blackburnian Warbler. Dendroica blackburniæ. See No. 505.



Underparts, yellow; throat, sometimes marked with rufous brown; breast, streaked with black; erown, black or olive gray; back, olive green, marked with black; **rump**, **yellow**; undertail coverts, yellowish white.

Cape May Warbler.

Dendroica tigrina. See No. 495.



Underparts, very pale yellow, streaked with dark brown; undertail eoverts, yellowish white; crown, back, and rump, dark olive.

> Water Thrush. Water Warbler. Seiurus noveboracensis. See No. 516.

Part 2. The following species have the throat, breast, and belly, yellow; breast, more or less streaked; no white on tail feathers:—

Breast, streaked with rufous brown; major portion of inner webs of tail feathers, yellow.

Summer Warbler. Yellow Warbler. Dendroica æstiva. See No. 496.



Breast, with black or dusky streaks; tail feathers, entirely dull brown.

Canadian Warbler. Sylvania canadensis. See No. 527. Part 3. The following species have the throat, breast, and belly, yellow, without streaks; some tail feathers marked with more or less white:—

Throat and underparts, yellow; lower throat, tinged with black; forehead, yellowish; crown, gray; back and rump, olive green; more or less yellow about eyes; tail feathers, showing considerable white.

> Bachman's Warbler. Helminthophila bachmanii. See No. 486.



Throat and underparts, yellow; under tail coverts, yellow; crown, gray; no yellow about eyes; sides of head, gray; back and rump, olive green; outer tail feathers, very narrowly edged with white (male has a chestnut brown patch on crown).

> Nashville Warbler. Helminthophila ruficapilla. See No. 491.



Head and tail, Black and Yellow Warbler.

Crown, dull gray; back, olive green; rump and belly, yellow; tail feathers, with white spots in the middle.

Black and Yellow Warbler. Dendroica maculosa. See No. 500.

Underparts, bright yellow; crown, yellow; back and rump, bright olive green; a narrow black streak from bill to eye.

Blue-winged Warbler. Helminthophila pinus (male). See No. 487.



Crown, olive green (sometimes with forehead yellow); underparts, greenish yellow; back and rump, olive green: terminal **third of inner webs of outer tail feathers, white.**

> Blue-winged Warbler. Helminthophila pinus (female and immature). See No. 487.

Underparts, tinged with greenish yellow; undertail coverts, white; crown, back, and rump, olive green; outer tail feathers very narrowly edged with white (entirely absent in some specimens).

Tennessee Warbler.

Helminthophila peregrina (female in fall and immature). See No. 493.

Underparts, yellow, washed with olive on sides; sides of head and lores, yellow; crown, olive green; back and rump, olive green; undertail coverts, pale yellow.

Hooded Warbler.

Sylvania mitrata (female and immature in fall). See No. 525.



Kirtland's Warbler.

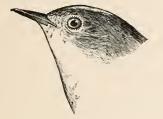
Underparts, yellow; sides, streaked with black; crown, slaty gray; back and rnmp, ashy, streaked with black; lores, black.

Kirtland's Warbler. Dendroica kirtlandii. See No. 510.

Crown, greenish blue; wing coverts, edged with white; back, greenish blue, without streaks; **under tail coverts, whitish;** underparts, tinged with pale yellow.

Cerulean Warbler. Dendroica carulea (female and immature). See No. 501.

Part 4. The following species have the throat, breast, and belly, yellow, without streaks, and no white on the tail feathers : —



Crown, slate color, with patch of chestnut (male), or crown, olive gray (female); rump and upper tail coverts, yellowish green; auricular region (sides of head), grayish; **under tail coverts, yellow.**

> Nashville Warbler. Helminthophila ruficapilla. See No. 491.

Underparts, faintly washed with yellow, or yellowish white; crown, grayish olive; back and rump, olive green; under tail coverts, white; no yellow on tail feathers.

Tennessee Warbler. Helminthophila peregrina (female in fall). See No. 493.

Crown, back, and rump, yellowish green; major part of inner webs of tail feathers, yellow.

Summer Warbler. Yellow Warbler. Dendroica æstiva (female). See No. 496.



Sides of head, yellowish; erown, glossy black (male); crown, bright olive green, like back (female); back and rump, bright olive green; under tail coverts, yellow.

Wilson's Warbler.

Sylvania pusilla. See No. 526.

Crown, grayish; back and rump, dull olive green; entire underparts, yellow, **palest on throat;** no yellow on tail feathers; chin, not whitish; no buffwhite stripe over eye.

> Mourning Warbler. Geothlypis philadelphia (young female). See No. 521.

Crown, grayish; back and rump, green; underparts, pale yellow; chin, whitish; a buff-white stripe over the eye. (This bird belongs in Section 4, but might be mistaken for a warbler by the novice.)

Philadelphia Vireo.

Vireo philadelphins. See No. 472.



Crown and sides of head, with more or less black; a yellow superciliary stripe; back and rump, olive green.

> Kentucky Warbler. Geothlypis formosa. See No. 519.

Underparts, yellowish olive; crown, with partly concealed orange brown spot; under tail coverts, greenish yellow.

Orange-crowned Warbler. Helminthophila celata. See No. 492.

Part 5. The following species have the throat, yellow; belly, not yellow; tail feathers, marked with more or less white : —

Back, green, streaked with black; outer web of outer tail feather, not edged with white; no yellow stripe over eye; chin, whitish; sides of breast and body, streaked.

Black-poll Warbler. Dendroica striata (female). See No. 504.



Crown, black, with patch of orange yellow in centre; back and rump, black, with more or less white; throat, orange; sides, streaked with black.

Blackburnian Warbler. Deudroica blackburniæ (adult male). See No. 505.

Throat, yellow; sides of breast, streaked with blackish; crown, olive, dotted with blackish; back and rump, olive gray, streaked with black; usually a trace of yellow in middle of erown; basal portion of narrow outer web of outer tail feather, edged with white.

Blackburnian Warbler.

Dendroica blackburniæ (female, and immature). See No. 505.

Crown, ash gray; forehead, blackish; throat, yellow; bordered by black; sides of breast, streaked with black; back and rump, slaty gray, not streaked; no white on outer web of outer tail feather.

> Yellow-throated Warbler. Dendroica dominica, and races. See No. 506.



Crown, slaty blue; back, tinged with greenish yellow; rump, like erown; no black streaks on sides of throat, back, or underparts.

Blue Yellow-backed Warbler. Parula Warbler. Compsothlypis americana. See No. 494.

Crown, back, and rump, green (tinged with gray), without streaks; two outer tail feathers with oblique white spots; **lores, yellow.**

Pine Warbler. Dendroica vigorsii. See No. 511.

Crown, back, and rump, green; sides of head, yellowish; outer web of tail feather, edged with white; sides more or less faintly streaked; rump, same color as back.

Black-throated Green Warbler.

Dendroica virens (female and fall plumaye). See No. 508.

Crown, olive; more or less speckled with black; back, olive; rump, yellow or greenish yellow; breast with numerous streaks; no white on outer web of outer tail feathers; sides of head and neck, more or less tinged with yellow.

> Cape May Warbler. Dendroica tigrina (female and immature at some seasons). See No. 495.

Part 6. The following species have the throat not yellow; belly, yellow, and no white on the tail feathers: ---

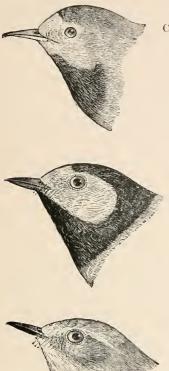


Part 7. The following species have the throat not yellow; belly yellow, and more or less white on tail feathers:---



Upper throat, chestnut; breast, streaked with black; back, greenish; rump, yellow; much white on wing coverts.

> Cape May Warbler. Dendroica tigrina (adv:lt male). See No. 495.



Chin, yellow; throat and upper breast, black; forehead, yellow, bordered by black; rest of crown and nape, gray.

> Bachman's Warbler. Helminthophila bachmanii (adult mate). See No. 486.

Throat, black; forehead and sides of head, yellow; crown, black.

Hooded Warbler. Sylvania mitrata. See No. 525.





Throat, dull white; breast, faintly streaked: under tail coverts, yellow; wing coverts, tipped with brownish; crown, often marked with more or less rufous brown.

Palm Warbler. Red=poll Warbler. Dendroica palmarum. See No. 512.

Crown, bluish green; wing coverts, tipped with white; under tail coverts, whitish; underparts, pale yellowish white.

> Cerulean Warbler. Dendroica carulea (female or immature). See No. 501.

Part 8. The following species have the throat, not yellow; belly, not yellow, and no white on the tail feathers; breast, streaked, or spotted with black, or dark brown:—



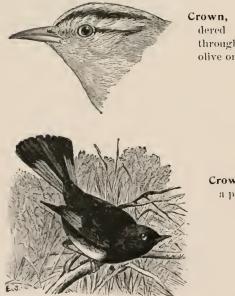
Crown, brownish orange; back. olive green; bill, pale.

Oven Bird. Golden-crowned Thrush. Seiurus aurocapillus. See No. 515.

Crown and back, olive brown; bill, dark.

Water Thrush. Seiurus noveboracensis, and vaces. See No. 516.

Part 9. The following species have the throat, not yellow; belly, not yellow, and no white on the tail feathers; breast, not streaked, or spotted with black, or dark brown :---



Crown, with stripe of tawny buff, bordered by black stripes; a black stripe through the eye; underparts, buffy white; olive on sides.

> Worm-eating Warbler. Helmitherus vermivorus. See No. 485.

Crown and back, black; throat, black; a patch of orange on sides of breast.

Redstart.

Setophaga vuticilla (male). See No. 528. Crown, slaty olive; back, dull olive; underparts, white; a patch of yellow on sides of breast; outer tail feathers, yellow, tipped with brown.

> Redstart. Setophaga ruticilla (female). See No. 528.

Crown, grayish olive, usually with partly concealed orange brown spot; no yellow on tail feathers; underparts, yellowish green.

> Orange=crowned Warbler. Helminthophila celata. See No. 492.

Part 10. The following species have the throat not yellow; belly, not yellow, and more or less white on tail feathers; sides of breast and body with numerous distinct black or blackish streaks:—





Throat, bright orange; crown, black, streaked with white.

Blackburnian Warbler. Dendroica blackburniæ (adult male). See No. 505.

Crown, back, and rump, bright olive green; sides of head, yellowish; throat, usually with more or less indications of black in most specimens; inner webs of two outer tail feathers, white.

> Black-throated Green Warbler. Dendroica virens (fall and immature). See No. 508.



Crown, black; back, grayish olive, streaked with black; rump, like back.

Black=poll Warbler. Dendroica striata. See No. 504. Crown and back, blue; the back, streaked with black: rump, slaty blue.

Cerulean Warbler. Dendroica cærulea.

See No. 501.

Crown, dull olive green, dotted with black; back, grayish olive, streaked with black; rump, like back.

Dendroica striata (fall and immature). See No. 504.



Middle of crown, rump, and sides of the breast, with more or less yellow.

Myrtle Warbler. Yellow-rumped Warbler. Dendroica coronata. See No. 498.



Crown, black, with white stripe in middle; entire plumage, black and white.

Black and White Warbler. Black and White Creeper. Mniotilta varia. See No. 482.

Crown and back, grayish olive; rump, yellowish; a patch of white near the tips of outer tail feathers on the inner webs.

Cape May Warbler. Dendroica tigrina (inmature female). See No. 495.

Part 11. The following species have the throat, not yellow; belly, not yellow, and more or less white on the tail feathers; the sides of breast and body, not marked with numerous distinct black streaks:—



Throat, black; crown, olive green; sides of head, yellow; wing bands, white.

Black-throated Green Warbler.

Dendroica virens (adult male). See No. 508.

Throat, black; ear coverts, black; crown, yellowish; wing bands, yellow.

Golden-winged Warbler. Helminthophila chrysoptera (male). See No. 488.



Throat, black; crown, dull blue; sides of breast, bluish black; a patch of white at base of primaries.

Black-throated Blue Warbler. Dendroica cærulescens (adult male). See No. 497.



Throat and sides, chestnut : crown, chestnut.

Bay-breasted Warbler. Dendroica castanea (adult). See No. 503.

Throat and sides, more or less marked with chestnut; erown, olive green, streaked with black; back, grayish olive, streaked with black; (erown, with indications of chestnut:) belly, cream white.

Bay=breasted Warbler. Dendroica castanea (female). See No. 503.

Throat and underparts, cream white, shading into pale buff; white on flanks: crown and back, green, indistinctly streaked with black; wing bars, white.

> Bay-breasted Warbler. Dendroica castanea (immature). See No. 503.

Throat and underparts, pale yellowish white; crown and back, green, indistinetly streaked: wing bars, white: often very difficult to distinguish from immature specimen of *D. castanea*.

Black=poll Warbler.

Dendroica striata (immature). See No. 504.



Throat and underparts, white; ashy on the sides; crown, slaty gray; back, green; under tail eoverts, white.

> Tennessee Warbler. Helminthophila peregrina (adult mal^e). See No. 493.

Throat and underparts, white; wing bars, yellow; crown and back, bright green.

Chestnut-sided Warbler. Dendroica pennsylvanica (inimature). See No. 502.



Throat and underparts, white; sides, more or less marked with chestnut; erown, greenish yellow; back, greenish, streaked with black; wing bars, yellowish.

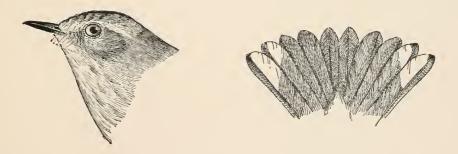
> Chestnut=sided Warbler. Dendroica pennsylvanica. See No. 502.

Throat and underparts, cream white; crown and back, greenish blue; rump, like back; wing coverts, edged with white; under tail coverts, whitish.

> Cerulean Warbler. Dendroica cœrulea (female). See No. 501.

Throat and underparts, dull white; erown and back, grayish olive; wing bars, white; an oblique white spot on inner webs of two outer tail feathers; rest of tail feathers, without white; under tail eoverts, whitish.

Pine Warbler. Dendroica vigorsii (fall and immature). See No. 511.



Throat and underparts, whitish, faintly tinged with yellow; breast, with rather indistinct dusky streaks; erown, grayish olive, usually with at least an indication of ehestnut; back, grayish olive; rump, olive green; under tail coverts, yellow.

Palm Warbler. Red-poll Warbler. Dendroica palmarum. See No. 512.

Throat and underparts, dull yellowish green; crown, green, with partly concealed orange brown patch in centre (wanting in young birds); outer tail feathers, narrowly edged with white on inner web; rest of tail feathers, without white; no white spot at base of primaries.



Orange-crowned Warbler.

Helminthophila celata, See No. 492.

Throat and underparts, buffy white; crown and back, olive green: bases of primaries, white, forming a small spot on wing (female).

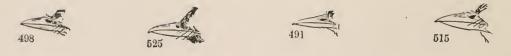
Black-throated Blue Warbler. Deudvoica curulescens. See No. 497.

Throat, gray; belly, white (breast, often washed with yellow); erown, yellowish green; wing coverts, broadly tipped with yellow (female).

Golden-winged Warbler.

Helminthophila chrysoptera. See No. 488.

Group 3. Wing, 2.75 to 3.25 inches long.



Part 1. The following species have the throat, breast, and belly, yel-

low; the breast, more or less streaked; some tail feathers, marked with white: --



Underparts, pale yellow; sides of breast, more or less streaked with black; under tail coverts, white; erown, grayish; back and rump, ashy gray, streaked with black.

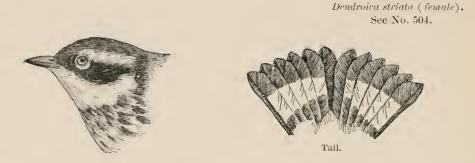
Kirtland's Warbler. Dendroica kirtlandi. See No. 510.

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Throat and breast, orange; belly, pale yellow; sides of breast, streaked with black; erowu, black, with orange spot in centre; back, black, streaked with whitish; **rump**, **black**; under tail coverts, white.

Blackburnian Warbler. Dendroica blackburniæ. See No. 505. Underparts, very pale yellowish, almost yellowish white, **faintly streaked with black**; under tail coverts, white: crown, back, and rump, olive green, streaked with black.



Underparts, yellow; sides of breast, streaked with olive; under tail coverts, ashy; crown, back, and rump, olive green (not streaked).

Pine Warbler. Dendroica vigorsii. See No. 511.

Underparts, yellow; breast, streaked with brown; crown, chestnut; back, dull olive; rump, olive green; under tail coverts, yellow.

Yellow Red-poll Warbler. Dendroica palmarum hypochrysca.

Black=poll Warbler.

See No. 513.

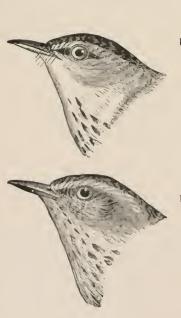
Underparts, yellow; ear coverts, rufous; breast, streaked with black; erown, black, or olive gray; back, olive green, marked with black; rump, yellow; under tail coverts, yellowish white; a patch of white on wing coverts.

Cape May Warbler.

Dendroica tigrina. See No. 495.

Underparts, very pale yellow, streaked with dark brown; under tail coverts, yellowish white; crown, back, and rump, dark olive.

> Water Thrush. Seiurus noveboracensis. See No. 516.



Part 2. The following species has the throat, breast, and belly, yellow; breast, more or less streaked, and no white on the tail feathers: —

Breast, with black or dusky streaks; tail, dull brown.

Canadian Warbler. Sylvania canadensis. See No. 527.

Part 3. The following species have the throat, breast, and belly, yellow, without streaks, and more or less white on the tail feathers: —

Head, neck, and underparts, bright orange yellow; palest on the belly: back, olive green; rump, gray.

Prothonotary Warbler.

Protonotaria citrea. See No. 483.

Crown, brownish faintly tinged v grayish; back or grayish brow the eye.

Crown, brownish; underparts, white, faintly tinged with pale yellow; sides, grayish; back and rump, olive brown or grayish brown; a white stripe over the eve.

> Swainson's Warbler. Helinaia swainsonii. See No. 484.

Underparts, yellow; sides, streaked with black; crown, slaty gray; back and rump, ashy, streaked with black; lores, black.

Kirtland's Warbler. Deudroica kirtlandi. See No. 510.

Underparts, yellow, washed with olive on the sides; sides of head and lores, yellow; crown, olive green; back and rump, olive green; under tail coverts, pale yellow.

Hooded Warbler. Sylvania mitrata. See No. 525.

Part 4. The following species have the throat, breast, and belly, yellow, without streaks; no white on the tail feathers: ---



Crown and sides of head, with more or less black; a yellow stripe over the eye; back and rump, olive green.

Kentucky Warbler. Geothlypis formosa. See No. 519.



Part 5. The following species have the throat, yellow; belly, not yellow; tail feathers, marked with more or less white: —

Back, green, streaked with black; outer web of outer tail feather, not edged with white; no yellow stripe over eye; chin, whitish; sides of breast and body, streaked.

> Black-poll Warbler. Dendroica striata (immature). Sve No. 504.



Crown, black, with patch of orange yellow in centre: back and rump, black, with more or less white: throat, orange; sides, streaked with black.

> Blackburnian Warbler. Dendroica blackburniae (adult male). See No. 505.

Throat, yellow; sides of breast, streaked with blackish; erown, olive, dotted with dull black, and usually showing a trace of yellow in centre; back and rump, olive gray, streaked with black; basal portion of narrow outer web of outer tail feather, edged with white.

> Blackburnian Warbler. Dendroica blackburniw (female and immature). See No. 505.

Crown, ash gray; forehead, blackish; throat, yellow, bordered by black; sides of breast, streaked with black: **back and rump, slaty gray, not streaked**; no white on **outer web** of outer tail feather.

Yellow-throated Warbler.

Dendroica dominica. See No. 506.

Crown, back, and rump, green (tinged with gray), without streaks; two outer tail feathers, with oblique white spots; lores, yellow.

Pine Warbler.

Dendroica vigorsii. See No. 511.

Crown, olive, more or less speekled with black; back, olive; rump, yellow, or greenish yellow; breast, with numerous streaks; no white on outer web of outer tail feather; sides of head and neek, more or less tinged with yellow.

Cape May Warbler. Dendroica tigrina (immature). See No. 495.



Throat and breast, bright yellow; lower belly, white; crown and back, olive green; lores and eye ring, white; tail, over 2.50 inches long.

Yellow-breasted Chat. Icteria virens.

See No. 524.

Upperparts, gray, streaked with black on the back; crown, rump, upper throat, and sides of breast, yellow; breast, grayish, or blackish. Western species are twice recorded from eastern United States.

> Audubon's Warbler. Dendroica auduboni. See No. 499.

Part 6. The following species have the throat, not yellow; belly, yellow, and no white on the tail feathers:—

Throat. grayish or brownish; eye ring, white; back, olive green.

Connecticut Warbler. Geothlypis agilis. See No. 520. Part 7. The following species have the throat, not yellow; belly, yellow, and more or less white on the tail feathers:—



Throat, black; forehead and sides of head, yellow; crown, black.

Hooded Warbler. Sylvania mitrata. See No. 525.

Upper throat, chestnut; breast, streaked with black; back, greenish; rump, yellow; wing coverts, showing much white.

Cape May Warbler. Dendroica tigrina (adult male). See No. 495.

Part 8. The following species have the throat, not yellow; belly, not yellow, and no white on the tail feathers; breast, not streaked or spotted with black or dark brown: —



Crown, with stripe of tawny buff, bordered by black stripe; a black stripe through the eye.

Worm Eating Warbler. Helmitherus vermivorus. See No. 485.

Crown, dull cinnamon brown; a white stripe over the eye; underparts, white, faintly tinged with yellow; sides, tinged with grayish olive.

Swainson's Warbler. Helinaia swainsonii. See No. 484

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Part 9. The following species have the throat, not yellow; belly, not yellow, and no white on the tail feathers; breast, streaked or spotted with black or dark brown: —

Crown and back, olive brown; bill, dark; underparts, white, **tinged with yellow**, and streaked with black (including throat).

Water Thrush. Seiurus noveboracensis, and races. See No. 516.

Crown and back, olive brown; underparts, white, tinged with buff, and streaked with black; throat, not streaked.

Louisiana Water Thrush. Seiurus motacilla. See No. 518.

Crown, brownish orange; back, olive green; bill, pale.

Oven Bird. Golden-crowned Thrush. Seiurus aurocapillus. See No. 515.

Part 10. The following species have the throat, not yellow; belly, not yellow; more or less white on the tail feathers; sides of breast, and body, marked with numerous distinct black or blackish streaks.



Crown, black, with white stripe in the middle; entire plumage, black and white.

Black and White Warbler. Mniotilta varia. See No. 482. Crown and back, grayish olive; **rump**, **yellowish**; a patch of white near the tips of outer tail feathers on the **inner webs**.

Cape May Warbler. Deudroica tigrina (immature female). See No. 495.

Middle of crown, rump, and sides of the breast, more or less yellow.

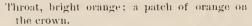
Myrtle Warbler. Yellow-rumped Warbler. Dendroica coronata. See No. 498.

Crown, back, and rump, dull olive or brownish olive; underparts, buffy or grayish, streaked with brown on breast and sides; **outer tail feathers, mostly white, including the outer web;** hind toe nail, as long as the toe. (This species is not a Warbler, and belongs in Family 8 but it might be mistaken for one by the uninitiated.)

American Pipit. Titlark. Anthus pensylvanicus. See No. 530.

Crown, dull olive green, dotted with black; back, grayish olive, streaked with black; rump, like back; outer tail feather, with patch of white on inner webs.

Black-poll Warbler. Dendroica striata (female), See No. 504.



Blackburnian Warbler. Dendroica blackburnia (adult male). See No. 505.

Part 11. The following species have the throat, not yellow; belly, not yellow; more or less white on the tail feathers; breast and sides of body, not marked with numerous distinct black streaks:—

Throat and sides, chestnut; erown, chestnut.

Bay-breasted Warbler. Dendroica castanea. See No. 503.



Throat and sides, more or less chestnut; crown, olive, streaked with black (usually with trace of chestnut); back, grayish olive, streaked with black.

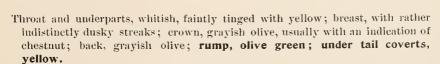
Bay-breasted Warbler. Dendroica castanea (female), See No. 503.

Throat and underparts, cream white, shading to pale buff white on flanks; crown and back, green, indistinctly streaked with black; wing bars, white. (Often difficult to distinguish from female of Black-poll Warbler, *D. striata*, which resembles it very closely in immature plumage, but has the underparts, usually yellowish.)

> Bay-breasted Warbler. Dendroica castanea (inmature) See No. 503.

Throat and underparts, dull white; erown and back, grayish olive; wing bars, white; an oblique white spot on inner webs of two outer tail feathers, rest of tail feathers, without white; under tail coverts, whitish.

Pine Warbler. Deudroica vigorsii (full, and immature) See No 511.



Palm Warbler. Red-poll Warbler. Dendroica palmarum. See No. 512.





Group 4. Wing, 3.25 to 3.75 inches long.



Underparts, white, faintly yellowish, streaked, with brownish black; throat, showing more or less dots or streaks; no white on tail feathers.

> Grinnell's Water-Thrush. Seiurus noveboracensis notabilis. See No. 517.

Throat, white; underparts, white, faintly tinged with tawny; breast and sides of body, streaked with dark brown; throat, not streaked; no white on tail feathers. Louisiana Water-Thrush.

Seiurus motacilla. See No. 518.

Underparts, grayish white or buffy white, more or less streaked with dark brown: greater portion of outer tail feathers, white; hind toe, with claw longer than middle toe, with claw. Belongs in Family Motacillidæ, and is very different from a Warbler, but might be mistaken for one by the novice.



American Pipit. Titlark. Anthus pensilvanicus. See No. 530.

Throat, faintly yellow; underparts, not streaked; more or less black on checks and breast; hind toe nail, straight and long. This species belongs in Family Alaudidae, but is included here as well as in its proper place for the benefit of persons unfamiliar with birds, who might look for it under this section.

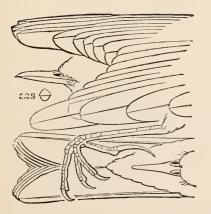
> Prairie Shore Lark. Otocoris pratincola. See No. 358,

FAMILY MOTACILLIDÆ.

Pipits and Wagtails.

Bill, slender; first primary, not short, the first, second, and third. being about equal in length; hind toe and claw, longer than middle toe and claw; hind toe nail, long, in this somewhat resembling larks, but no tufts of hair-like feathers over nostrils.





Crown, back, and rump, dull olive, or brownish olive; underparts, buffy, or grayish, streaked with brown on throat and sides; outer tail feather, mostly white, including the outer web; much less white on second feather; hind toe nail, usually as long as the toe.

> American Pipit. Titlark. Anthus pensilvanicus. See No. 530.

FAMILY TROGLODYTIDÆ.

Wrens and Thrashers.

First primary, less than two thirds as long as third; outer tail feathers, decidedly shorter than middle ones, varying from one eighth to one half inch or more shorter in different species.

Group 1. Wing, less than 3.25 inches long.

SUBFAMILY TROGLODYTINÆ.

Wrens.

Small, brownish, plain colored birds.

Part 1. The following species have the crown or back without white streaks or dots:---



Thryothorus bewickii.



Outer tail feathers, tipped and marked with grayish white: primaries, not barred. Bewick's Wren.

Thryothorus bewickii. See No. 538.



Underparts, grayish; belly, grayish, not speckled; outer tail feathers, not broadly tipped with grayish white; tail, over 1.25 inches long; primaries, showing narrow bars.

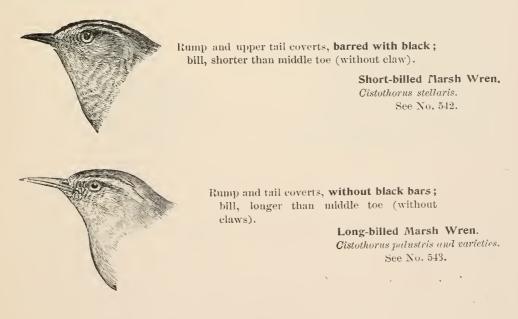
> House Wren. Troglodytes aëdon, and races. See No. 539.



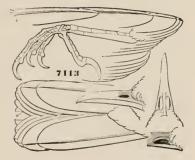
Underparts, distinctly brownish, dotted and speckled with brown on flanks and abdomen; tail, 1.25 or less; primaries, with narrow bars.

Winter Wren. Troglodytes hiemalis. See No. 541.

Part 2. The following species have the crown or back showing more or less white streaks or dots: ---





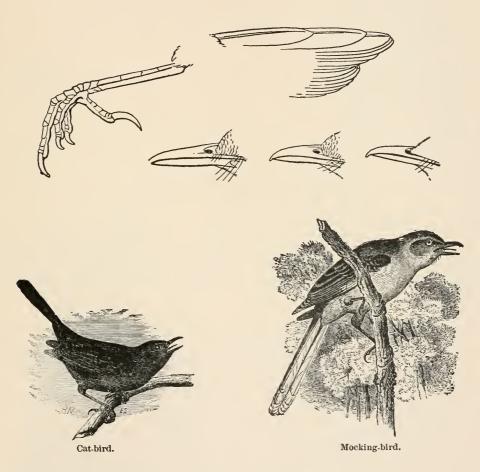


Back, chestnut brown; concealed white spots on rump.

Carolina Wren. Thryothorus ludovicianus, and races.

Group 2. Wing, from 3.25 to 5.50 inches long. SUBFAMILY MIMINÆ.

Thrashers, Cat-birds, Mocking-birds, etc.



General plumage, dark slaty gray; underparts, slaty gray; under tail coverts, dark chestnut brown; crown, blackish; first primary, short.

Cat-bird. Galeoscoptes carolinensis. See No. 534. Upper plumage, ashy gray; basal portion of primaries, white, forming a white wing patch; underparts, ashy white, without streaks.

Mocking-bird. Mimus polyglottos. See No. 533.

Entire upper plumage, rufous brown; underparts, buffy white, streaked with dark brown; wing coverts, tipped with white: tail, more than four inches long.

Brown Thrush. Brown Thrasher. Harporhynchus rufous. See No. 535.

Brown Thrush.

FAMILY CERTHIIDÆ.

Creepers.

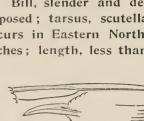
Bill, slender and decurved; tail feathers, stiff and pointed; nostrils, exposed; tarsus, scutellate; first primary, very short. But one species occurs in Eastern North America — a small bird; wing, less than three inches; length, less than six inches.



Brown Creeper. Certhia familiaris americana. See No. 546.

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546

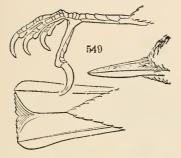


FAMILY PARIDÆ.

Nuthatches, Titmice, etc.

SUBFAMILY SITTINÆ.

Nuthatches.



Bill, as illustrated; nostrils, concealed by bristly tufts; tarsus, scutellate; first primary, very short; tail feathers, not stiff and pointed. The white-bellied Nuthatch is sometimes mistaken by the novice for a small Woodpecker. If tail feathers are stiff and pointed, look for the bird under Family Picidæ.



Crown, black; back, gray, without white; wings, not heavily spotted with white; tail feathers, not stiff or pointed; toes, four, three in front, one behind: wing, 3.50 to 3.75 inches long.

White-breasted Nuthatch.

Sitta carolinensis, and races. See No. 547.

Bill, more than three eighths inch long; underparts, palerufous brown; crown, black (male); erown, bluish gray (female); wing, 2.60 to 2.85 inches long.

> Red-breasted Nuthatch. Sitta canadensis. See No. 549.



Bill, more than three eighths inch long; crown, grayish brown; underparts, dull grayish white; wing, 2.40 to 2.70 inches long.

> Brown-headed Nuthatch. Sitta pusilla. See No. 559.

SUBFAMILY PARINÆ.

Titmice and Chickadees.

Small birds, less than 6.50 inches long; wing, less than 3.50 in the largest; first primary, very short and small; bill, short and stout (as illustrated); nostrils, concealed by bristly feathers; throat, black; crown, black; wing, less than 3 inches long (Chickadee), or forehead, black; sides, with rufous brown; wing, over 3 inches long (Titmouse).



Group 1. Wing, less than 3 inches long.

Bill, less than three eighths inch long; crown and throat, black; greater wing coverts, edged with white; breast, white; belly and sides, pale buff.

Chickadee. Black-capped Titmouse. Parus atricapillus. See No. 552. Bill, less than three eighths inch long; crown and throat, black; greater wing coverts, not edged with white; breast, white; belly and sides, pale buff.

Carolina Chickadee.

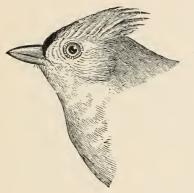
Parus carolinensis. See No. 553.

Throat, black; sides of body, chestnut brown.

Hudsonian Chickadee. Parus hudsonicus.

See No. 554.

Group 2. Wing over 3 inches long.



Throat and underparts, dull white; sides of body, tinged with rufous brown; crown, gray, with more or less of a crest; forehead, black, in adults.

> Tufted Titmouse. Parus bicolor. See No. 551.

FAMILY SYLVIIDÆ.

Kinglets and Gnatcatchers.

Size, small; length, less than 4.75 inches; wing, less than 2.50 inches; first primary, very short.



Gnateateber.

Kinglet.



Back, bluish gray; outer tail feathers, mostly white.

Blue-gray Gnatcatcher. Polioptila carulea. See No. 557.

Back, olive: no white patch on tail; crown, with patch of bright red (male); crown, olive (female).

Ruby-crowned Kinglet.

Regulus calendula. See No. 556.

Back, olive; no white patch on tail; erown, with patch of orange edged with yellow and black (male); crown, with yellow patch edged with black (female).

> Golden-crowned Kinglet. Regulus satrapa.

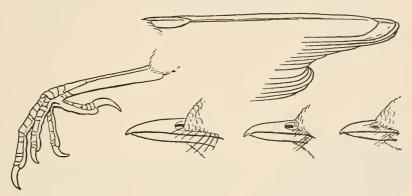
See No. 555.



FAMILY TURDIDÆ.

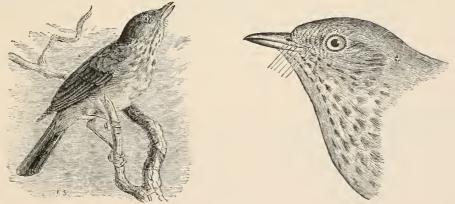
Thrushes and Blue-birds.

First primary, very short; tarsus, booted (no scales showing, except near the toes); bill, shorter than head.



Group 1. Wing, from 3.25 to 4.75 inches long.

Part 1. The following species have the underparts more or less streaked or spotted : —



Thrush.

Back, rump, and upper tail coverts, olive, about the same color; eye ring, cheeks, and lores, pale buff; no white on wing coverts.

Olive=backed Thrush. Turdus ustulatus swainsoni. See No. 564.



Upper plumage, brownish olive; ends of upper tail coverts and tail, rnfons brown, much more rufous than the back; no white on tail; first primary, very small and narrow.

> Hermit Thrush. Turdus aonalaschkæ pallasii. See No. 565.



Back, rump, and upper tail coverts, olive, about the same color: eye ring and lores, white, sometimes faintly tinged with buff, but the eye ring never decidedly buff, as in *swainsoni*; no white on wing coverts.

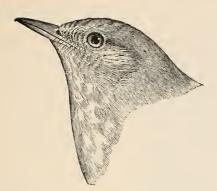
Gray-cheeked Thrush.

Turdus aliciae, and races. See No. 562.



Crown and back, dull cinnamon brown, shading to brownish olive on the upper tail coverts; breast and belly, marked with round brownish black spots; no white on wing coverts.

Wood Thrush. Turdus mustelinus. See No. 559.



Crown, back, and upper tail coverts, pale cinnamon brown, nearly uniform in color; breast and sides of throat, tawny brown, marked with small cinnamon brown spots and streaks; belly, whitish, without spots; no white on wing coverts.

> Wilson's Thrush. Turdus fuscescens. See No. 560.

Wings and tail, tinged more or less with blue (immature).

Blue-bird. Sialia sialis. See No. 570.

Part 2. The following species have no streaks or spots on the underparts: --



Blue bird.

Upper plumage, blue; breast and sides of body, cinnamon rufous; belly, white (male).

Blue=bird.

Sialia sialis. See No. 570.

Upper plumage, ashy gray, with bluish tinge, shading to **blue** on rump, tail, and wings; **breast and sides, pale cinnamon brown**; belly, white (female).

Blue=bird.

Sialia sialis See No. 570.



Wheatear.

Upper plumage, gravish buff; underparts, pale buff; basal two thirds of tail feathers, except middle pair. white; the rest, black; upper tail coverts, white; tail, under three inches long. The Wheatear is an Old World species which occurs in Greenland and Labrador. Stragglers have been taken in Nova Scotia, Maine, and Long Island.

> Wheatear. Stone Chat. Saxicola conanthe. See No. 569.

Group 2. Wing, from 4.75 to 5.50 inches long.



Upper plumage, gravish olive; throat, white, streaked with black; rest of underparts (except lower belly), pale chestnut rufous; young birds have the underparts spotted.

> Robin. American Robin. Merula migratoria. See No. 567.

A LIST

7

OF THE

BIRDS OF EASTERN NORTH AMERICA.

WATER BIRDS.

ORDER PYGOPODES.

Diving Birds.

Suborder PODICIPIDES. Grebes.

GENUS COLYMBUS. LINN.

A. O. U.

NO.

1 (2) COLYMBUS HOLBOELLII. (REINH.) Holboell's Grebe. General, North America; breeds north of the United States.

SUBGENUS DYTES. KAUP.

- 2 (3) COLYMBUS AURITUS. (LINN.) Horned Grebe. "Northern Hemisphere; breeds from northern United States northward." (A. O. U.)
- 3 (4) COLYMBUS NIGRICOLLIS CALIFORNICUS. (HEERM.) American Eared Grebe.

Ranges from Mississippi Valley, westward. Does not occur in the Atlantic States. (Illinois, RIDGWAY.)

GENUS PODILYMBUS. LESS.

4 (6) **PODILYMBUS PODICEPS.** (LINN.) **Pied-billed Grebe.** General, North America; West Indies in winter; breeds throughout range.

Suborder CEPPHI. Loons and Auks.

FAMILY GAVIIDÆ. Loons.

GENUS GAVIA. FORSTER.

5 (7) GAVIA IMBER. (GUNN.) Loon. Northern part of Northern Hemisphere; south in winter to Gulf of Mexico. 326 A. O. U. NO.

6 (9) GAVIA ARCTICA. (LINN.) Black-throated Loon.

Northern species rare, or casual on northern Atlantic coast of United States in winter.

7 (11) GAVIA LUMME. (GUNN.) Red-throated Loon. North America; south, in winter, to Gulf of Mexico.

FAMILY ALCIDÆ. Auks, Murres, and Puffins.

Subfamily FRATERCULINÆ. Puffins.

GENUS LUNDA. PALLAS.

8 (12) LUNDA CIRRATA. PALL. Tufted Puffin. Paeific species, claimed by Audubon to have once been taken on coast of Maine; no other record.

GENUS FRATERCULA. BRISS.

9 (13) FRATERCULA ARCTICA. Puffin.

North Atlantic coast, breeding from Bay of Fundy northward; casual to Long Island, in winter.

10 (13a) Fraterenla arctica glacialis. (TEMM.) Large-billed Puttin.

A race of the common Pullin, which occurs in the Arctic Ocean, Spitzbergen to Greenland. It is larger, but otherwise similar.

GENUS CEPPHUS. PALLAS.

- 11 (27) CEPPHUS GRYLLE. (LINN.) Black Guillemot. Coast of Maine, Labrador, and Newfoundland; south, in winter, to Long Island.
- 12 (28) CEPPHUS MANDTII. LICHT. Mandt's Guillemot. Arctic regions; south in winter to Massachusetts.

Subfamily ALCINÆ.

GENUS URIA. BRISS.

- 13 (30) URIA TROILE. (LINN.) Murre. Northern North America; south in winter to New England.
- 14 (31) URIA LOMVIA. (LINN.) Brunnich's Murre. North Atlantic coast to Arctic Ocean; south in winter to New Jersey.

GENUS ALCA. LINN.

15 (32) ALCA TORDA. LINN. Razor-billed Auk. North Atlantic coast; in winter to Long Island; accidental as far south as North Carolina.

GENUS PLAUTUS. BRÜNN.

16 (33) PLAUTUS IMPENNIS. Great Auk. Formerly North Atlantic coast, now extant.

Subfamily ALLINÆ. Dovekies.

A. O. U.

GENUS ALLE. LINK.

17 (34) ALLE ALLE. (LINN.) Dovekie. Little Auk.

Coast of North Atlantic from eastern Arctic Ocean; south in winter to Long Island.

ORDER LONGIPENNES.

Long-winged Swimmers.

FAMILY STERCORARIIDÆ. Skuas and Jægers.

GENUS MEGALESTRIS. BONAP.

18 (35) MEGALESTRIS SKUA. (BRÜNN.) Skua. North Atlantic; south to Carolina; rare on Atlantic coast of United States.

GENUS STERCORARIUS. BRISS.

- 19 (36) STERCORARIUS POMARINUS. (TEMM.) Pomarine Jæger. North America.
- 20 (37) STERCORARIUS PARASITICUS. (LINN.) Parasitic Jæger. North America; ranges in winter to South America.
- 21 (38) STERCORARIUS LONGICAUDUS. (VIEILL.) Long-tailed Jæger. North America; south in winter to Gulf of Mexico.

FAMILY LARIDÆ. Gulls and Terns.

Subfamily LARINÆ. Gulls.

GENUS PAGOPHILA. KAUP.

22 (39) PAGOPHILA ALBA. (GUNN.) Ivory Gull. Rare winter visitant to New Brunswick and probably northern New England.

GENUS RISSA. STEPH.

23 (40) **RISSA TRIDACTYLA.** (LINN.) **Kittiwake Gull.** Arctic regions; south in winter to Middle States.

GENUS LARUS. LINN.

- 24 (42) LARUS GLAUCUS. BRÜNN. Glaucous Gull. Aretic regions; south to Long Island in winter.
- **25** (43) **LARUS LEUCOPTERUS.** FABER. Iceland Gull. Arctic Regions; south to southern New England in winter.
- 26 (45) LARUS KUMLIENI. BREWST. Kumlien's Gull. Northern species; south in winter to New England and casually to Middle States.

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A, O, NO.

- 27 (47) LARUS MARINUS. LINN. Great Black-backed Gull. North Atlantic Ocean; south in winter to Middle States; accidental in Florida.
- 28 (50) LARUS UFFINUS. REINII. Siberian Gull. Old world species; recorded from Greenland.
- 29 (51) LARUS ARGENTATUS. BRÜNN. Herring Gull. European species; accidental on Atlantic coast of North America.
- 30 (51a) Larus argentatus smithsonianus. COUES. American Herring Gull. North America; generally south to Cuba in winter; the common species of our bays and coast; breeds from Maine northward.
- 31 (54) LARUS DELAWARENSIS. ORD. Ring-billed Gull. General, North America; south to Gulf of Mexico in winter.
- 32 (56) LARUS CANUS. LINN. Mew Gull. European species recorded from Labrador (one record).

33 (58) LARUS ATRICILLA. LINN. Laughing Gull. Atlantic coast of United States; north in summer to Maine and Nova Scotia; in winter, southern United States, West Indies, and northern South America.

- 34 (59) LARUS FRANKLINII. SW. AND RICH. Franklin's Gull. Not common east of the Mississippi River; not found on the Atlantie coast.
- 35 (60) LARUS PHILADELPHIA. (ORD.) Bonaparte's Gull. North America; generally breeds north of United States.
- 36 (60*a*) LARUS MINUTUS. PALL. Little Gull. European species; only once taken on our coast.

GENUS RHODOSTETHIA. MACGIL.

37 (61) RHODOSTETHIA ROSEA. (MACGIL.) Ross's Gull. Aretic species; recorded from Alaska and Greenland.

GENUS XEMA. LEACH.

38 (62) XEMA SABINII. (SAB.) Sabine's Gull. Arctic regions; south in winter to Long Island; rare.

Subfamily STERNINÆ. Terns.

GENUS GELOCHELIDON. BREHM.

39 (63) GELOCHELIDON NILOTICA. (HASSELQ.) Gull-billed Tern. Throughout North America; summer, north to southern New England, winter, south to Brazil.

GENUS STERNA. LINN.

SUBGENUS THALASSEUS. BOIE.

40 (64) STERNA CASPIA. PALLAS. Caspian Tern.
 Whole of North America; cosmopolitan species; breeds on middle Atlantic coast; also Pacific coast and interior.

- A. O. U. SUBGENUS ACTOCHELIDON, KAUP, NO. (65)SIERNA MAXIMA. BODD. Royal Tern. 41 Southern Atlantic coast, Georgia, Florida, and the Gulf States; casual in summer, north to Massachusetts. (67)STERNA SANDVICENSIS ACUFLAVIDA. (CABOT.) Cabot's Tern. 42 Southern coast of United States, West Indies, and Central America, north to North Carolina in summer: accidental in New England. STERNA TRUDEAUI. AUD. Trudeau's Tern. 43 (68)South American species; stragglers have been taken on the Atlantic coast of United States. STERNA FORSTERI, NUTT. Forster's Tern. 44 (69)North America, in general; in winter to West Indies and South America; breeds from Virginia to Manitoba. STERNA HIRUNDO. LINN. Common Tern. "Mackerel Gull." **45** (70) Throughout eastern North America; breeds nearly throughout its range, from Arctic Ocean to Florida; winters from Virginia southward. STERNA PARADISÆA. BRÜNN. Arctic Tern. **46** (71) North America from Arctic Ocean to North Carolina; breeds from Massachusetts northward. STERNA DOUGALLI. MONTAG. Roseate Tern. **47** (72) Southern coast of United States ; north in summer to New England ; accidental in Nova Scotia. SUBGENUS STERNULA. BOIE. STERNA ANTILLARUM. (LESS.) Least Tern. 48 (74) Southern coast of United States and northern South America; in summer north to New England; accidental in Labrador; breeds throughout its range. SUBGENUS ONICHOPRION. WAGLER. STERNA FULIGINOSA. GMEL. Sooty Tern. **49** (75) Semi-tropical species, common in the West Indies; in summer north to North Carolina; accidental in New England. STERNA ANÆTHETUS. SCOP. Bridled Tern. **50** (76) Tropical species, accidental on Florida coast; South Carolina, one record. GENUS HYDROCHELIDON. BOIE. HYDROCHELIDON NIGRA SURINAMENSIS. (GMEL.) Black Tern. **51** (77) North America; breeds from Middle States in the interior northward to the fur countries. HYDROCHELIDON LEUCOPTERA. (MEISN. AND SCHINZ.) White-winged **52** (78)
 - Black Tern. European species, of accidental occurrence in the United States; Wisconsin, one record.

GENUS ANOUS. STEPHENS.

53 (79) ANOUS STOLIDUS. (LINN.) Noddy. South Atlantic States of United States; common in the West Indies.

FAMILY RHYNCHOPIDÆ. Skimmers.

GENUS RHYNCHOPS. LINN.

54 (80) RHYNCHOPS NIGRA. LINN. Black Skimmer. Coasts of the United States south of Virginia; easual to New England.

ORDER TUBINARES.

Tube=nosed Swimmers.

FAMILY DIOMEDEIDÆ. Albatrosses.

GENUS DIOMEDEA. LINN.

55 (81) DIOMEDEA EXULANS. LINN. Wandering Albatross. Species common to southern seas; claimed to have been seen at Tampa Bay, Florida.

GENUS THALASSOGERON. (GOULD)

56 (83) THALASSOGERON CULMINATUS. (GOULD) Yellow-nosed Albatross. South Pacific species, accidental in eastern North America. St. Lawrence River, one record.

FAMILY PROCELLARIIDÆ. Fulmars and Shearwaters.

Subfamily FULMARINÆ. COUES.

GENUS FULMARUS. STEPA.

- 57 (86) FULMARUS GLACIALIS. (LINN.) Fulmar. North Atlantic Ocean, south on coast of United States to Long Island.
- 58 (86a) Fulmarus glacialis minor. KLERBELLING. Lesser Fulmar.
 A small race differing from Glacialis only in size; range about the same.

Subfamily PUFFININÆ.

GENUS PUFFINUS. BRISSON.

- 59 (88) PUFFINUS BOREALIS. CORY. Cory's Shearwater. Known to occur only on coast of Massachusetts and Long Island; winter and breeding range unknown.*
- 60 (89) PUFFINUS MAJOR. FABER. Greater Shearwater. Atlantic Ocean, coasts of both North and South America.

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A. O. U.

NO.

^{*} By some authors supposed to be similar to *P. kaklii*, but *borealis* is larger and the feet in life differently colored.

A. O. U. NO.

- 61 (90) PUFFINUS PUFFINUS. (BRÜNN.) Manx Shearwater. European species; accidental on the Atlantic coast.
- 62 (92) PUFFINUS AUDUBONI. FINSCH. Audubon's Shearwater. Tropical species; common in West Indies; casual on Florida coast; accidental as far north as New Jersey.
- 63 (94) PUFFINUS FULIGINOSUS. STRICK. Sooty Shearwater. Haglet. Sonth Atlantic species; ranging in summer north to coast of United States; New England; common.

GENUS ÆSTRELATA. BONAP.

- 64 (98) ÆSTRELATA HASITATA. (KUHL.) Black-capped Petrel. Tropical and semi-tropical portions of the Atlantic Ocean; accidental in the United States; numerous records.
- 65 (99) ÆSTRELATA SCALARIS BREWST. Scaled Petrel.
 Rare straggler; habitat unknown; one specimen known, taken in western New York.

GENUS BULWERIA. BONAP.

66 (101) BULWERIA BULWERI. (JARD. AND SELBY.) Bulwer's Petrel. Old world species; accidental in Greenland.

Subfamily PROCELLARIINÆ. Coues.

GENUS PROCELLARIA. LINN.

67 (104) PROCELLARIA PELAGICA. LANN. Stormy Petrel. Atlantic ocean; Newfoundland banks not uncommon, but rarely seen near land.

GENUS OCEANODROMA. REICHENBACH.

- 67*a* (106²) OCEANODROMA CRYPTOLEUCA. (RIDGW.) Hawaiian Petrel. Pacific species; accidental in United States; Washington, D.C., one record.
- 68 (106) OCEANODROMA LEUCORHOA. (VIEILL.) Leach's Petrel. Northern portions of Atlantic and Pacific Oceans; breeding on Atlantic coast from Maine northward; in winter, south to Virginia.

Subfamily OCEANITINÆ. Coues.

GENUS OCEANITES. KEYS. AND BLASIUS.

69 (109) OCEANITES OCEANICUS. (KUHL.) Wilson's Petrel. Atlantic Ocean; common off coast of United States in summer.

GENUS CYMODROMA. RIDGW.

70 (110) CYMODROMA GRALLARIA. (VIEILL.) White-bellied Petrel. Tropical species; once taken near St. Marks, Florida.

GENUS PELAGODROMA. REICH.

71 (111) PELAGODROMA MARINA. (LATH.) White-faced Petrel. South Atlantic species; accidental off coast of Massachusetts.

ORDER STEGANOPODES.

Totopalmate Swimmers.

FAMILY PHAËTHONTIDÆ. Tropic Birds.

A. O. U. NO. GENUS PHAËTHON. LINN.

- 72 (112) PHAËTHON AMERICANUS. GRANT. Yellow-billed Tropic Bird. Common in West Indies, where it breeds off Florida coast in summer; accidental in New York (one record).
- 73 (113) PHAËTHON ÆTHEREUS. LINN. Red-billed Tropic Bird. Accidental on Newfoundland Banks.

FAMILY SULIDÆ. Gannets.

GENUS SULA. BRISS.

- 74 (114) SULA CYANOPS. SUND. Blue-faced Booby. Accidental on Florida coast; not uncommon in West Indies.
- 75 (115) SULA SULA. (LINN.) Booby. Tropical species; common in West Indies; coast of Florida, in summer; accidental, north to Long Island.
- 76 (116) SULA PISCATOR. (LINN.) Red-footed Booby. Tropical species; accidental on Florida coast.

SUBGENUS DYSPORUS. ILLIGER.

77 (117) SULA BASSANA. (LINN.) Gannet. Coasts of North Atlantic Ocean; south, in winter, to Florida and Gulf of Mexico; breeds from shores of Nova Scotia and Gulf of St. Lawrence, northward.

FAMILY ANHINGIDÆ. Darters.

GENUS ANHINGA. BRISS.

78 (118) ANHINGA ANHINGA. (LINN.) Anhinga.

Tropical America; common in Florida; casual, north to South Carolina; accidental in Illinois.

FAMILY PHALACROCORACIDÆ. Cormorants.

GENUS PHALACROCORAX. BRISS.

79 (119) PHALACROCORAX CARBO. (LINN.) Cormorant.

North Atlantic; sonth to Carolinas, in winter; at one time bred from Massachusetts, northward; now becoming much less numerous, and breeding range restricted to few localities. LIST OF THE BIRDS OF EASTERN NORTH AMERICA.

A. O. U. NO.

- 80 (120) PHALACROCORAX DILOPHUS. (Sw. AND RICH.) Double-crested Cormorant. Eastern North America; south, in winter, to Georgia and northern Florida; breeds from Bay of Fundy, northward.
- 81 (120a) Phalacrocorax dilophus floridanus. (AUD.) Florida Cormorant.
 A small race of the preceding species, inhabiting Southern States; common in Florida and Gulf States; north in Mississippi Valley to Illinois.
- 82 (121) PHALACROCORAX MEXICANUS. (BRANDT.) Mexican Cormorant. Southern species; casual in Mississippi Valley to Illinois; not uncommon in Cuba, and is claimed to occur on west coast of Florida.

FAMILY PELECANIDÆ. Pelicans.

GENUS PELECANUS. LINN.

- 83 (125) PELECANUS ERYTHRORHYNCHOS. GMEL. American White Pelican.
 Gulf coast of United States; breeds in the interior from Minnesota, northward; rare on Atlantic coast, except Florida, where it still occurs in some numbers; accidental in New England.
- 84 (126) PELECANUS FUSCUS. LINN. Brown Pelican.
 Abundant in Florida and portions of Gulf coast; north in summer to the Carolinas; accidental in New England and Illinois.

FAMILY FREGATIDÆ. Man=0'=War Birds.

GENUS FREGATA. BRISS.

85 (128) FREGATA AQUILA. (LINN.) Man=o'=War Bird.

Tropical and sub-tropical seas; common on coast of Florida; accidental north to New England; Nova Scotia (one record).

ORDER ANSERES.

Lamellirostral Swimmers.

FAMILY ANATIDÆ. Ducks, Geese, and Swans.

Subfamily MERGINÆ. Mergansers.

GENUS MERGANSER. BRISS.

- 86 (129) MERGANSER AMERICANUS. (Cass.) American Merganser. Sheldrake. General North America; breeds south to Pennsylvania; casual in Florida in winter.
- 87 (130) MERGANSER SERRATOR. (LINN.) Red-breasted Merganser. Sheldrake. General, North America; south in winter to the Gulf States and Cuba.

A. O. U. NO.

GENUS LOPHODYTES. REICH.

88 (131) LOPHODYTES CUCULLATUS. (LINN.) Hooded Merganser.

General, North America; south in winter to Gulf States and Cuba; breeds throughout its range.

Subfamily ANATINÆ. River Ducks.

GENUS ANAS. LINN.

- 89 (132) ANAS BOSCHAS. LINN. Mallard Duck. Northern North America; south in winter to Gulf Coast, Florida, and Cuba.
- 90 (133) ANAS OBSCURA. GMEL. Black Duck. Eastern North America, from Mississippi Valley to Labrador; breeds from northern border of United States northward; south in winter to Florida and Gulf coast.
- 91 (134) ANAS FULVIGULA. RIDGW. Florida Duck. Florida Black Duck. Florida and Gulf coast, west to Louisiana.

SUBGENUS CHAULELASMUS. BONAP.

92 (135) ANAS STREPERA. LINN. Gadwall. Widely distributed species occurring in Europe and Africa; throughout North America; breeds in interior of United States.

SUBGENUS MARECCA. STEPH.

- 93 (136) ANAS PENELOPE. LINN. Widgeon. European Widgeon. European species; often taken on our coast.
- 94 (137) ANAS AMERICANA. GMEL. American Widgeon. Baldpate. Throughout North America, from Arctic Ocean to Gulf coast; breeds north of United States.

SUBGENUS NETTION. KAUP.

- 95 (138) ANAS CRECCA. LINN. European Teal. Accidental in eastern North America; New England, several records.
- 96 (139) ANAS CAROLINENSIS. GMEL. Green-winged Teal. North America; south in winter to Central America and Cuba; breeds north of United States.

SUBGENUS QUERQUEDULA. STEPH.

- 97 (140) ANAS DISCORS. LINN. Blue-winged Teal. Throughout eastern North America; West Indies and South America in winter; breeds as a rule in interior from Illinois northward.
- 98 (111) ANAS CYANOPTERA. VIEILL. Cinnamon Teal. Western species, which occasionally occurs in Mississippi Valley and Western Florida.

GENUS SPATULA. BOIE.

99 (142) SPATULA CLYPEATA. (LINN.) Shoveller Duck. Broad-bill. North America; abundant in winter in Southern States. A. O. U. NO.

GENUS DAFILA. STEPH.

- 100 (143) DAFILA ACUTA. LINN. Pintail Duck. Sprigtail. North America; breeding from northern portions of northern States
 - northward; south in winter to Cuba.

GENUS AIX. BOIE.

101 (144) AIX SPONSA. (LINN.) Wood Duck. Summer Duck. Temperate North America; south in winter to Cuba; breeds throughout its range.

Subfamily FULIGULINÆ. Sea Ducks.

GENUS NETTA. KAUP.

102 (145) NETTA RUFINA. (PALL.) Rufous-crested Duck. European species; New York, one record.

GENUS AYTHYA. BOIE.

- 103 (146) AYTHYA AMERICANA. (EYT.) Red-head Duck. North America in general; breeds from northern portions of United States northward.
- 104 (147) AYTHYA VALLISNERIA. (WILS.) Canvas-back Duck.
 - North America in general; breeds from Minnesota north and west to Alaska; not common on New England coast, but abundant about Chesapeake Bay and Carolina coasts; casual, south in winter to Florida and Cuba.

SUBGENUS FULIGULA. STEPH.

105 (148) AYTHYA MARILA. (LINN.) American Scaup Duck. Blue-bill or Blackhead.

Throughout North America; breeds north of United States.

- 106 (149) AYTHYA AFFINIS. (EYT.) Lesser Scaup Duck. Blue-bill or Black-head. Ranges throughout North America; south in winter to West Indies; abundant in Florida.
- 107 (150) AYTHYA COLLARIS. (DONOV.) Ring=necked Duck.
 - Throughout North America; in winter south to West Indies; breeds far north.

GENUS GLAUCIONETTA. STEJN.

108 (151) GLAUCIONETTA CLANGULA AMERICANA. (BONAP.) American Goldeneye Duck. Whistler.

North America; breeding from northern New England northward; south in winter to the Gulf coast and Cuba.

109 (152) GLAUCIONETTA ISLANDICA. (GMEL.) Barrow's Golden-eye Duck. Northern North America; breeding from Gulf of St. Lawrenee northward; south in winter to New York; not common on New England coast. A, O, U, NO

GENUS CHARITONETTA. STEJN.

110 (153) CHARITONETTA ALBEOLA. (LINN.) Buffle-head Duck. Dipper. North America; south in winter to Florida and Cuba; breeds from Maine northward.

GENUS CLANGULA. LEACH.

111 (154) CLANGULA HYEMALIS. (LINN.) Old Squaw. Long-tailed Duck. Northern portion of North America; breeding far north; south in winter to Middle States; easual in Florida.

GENUS HISTRIONICUS. LESS.

112 (155) HISTRIONICUS HISTRIONICUS. (LINN.) Harlequin Duck. Northern North America; breeds from Newfoundland, northward; in winter, south to Middle States; accidental in Florida.

GENUS CAMPTOLÆMUS. GRAY.

113 (156) CAMPTOLÆMUS LABRADORIUS. (GMEL.) Labrador Duck. Probably extinct; formerly, North Atlantic coast, breeding from Labrador, northward.

GENUS ENICONETTA. GRAY.

114 (157) ENICONETTA STELLERI. (PALL.) Steller's Duck. Arctic species, which occurs in Greenland.

GENUS SOMATERIA. LEACH.

115 (159) SOMATERIA MOLLISSIMA BOREALIS. (BREIIM.) Northern Eider Duck.

Northeastern North America; south, in winter, to Massachusetts.

116 (160) SOMATERIA DRESSERI. SHARPE. American Eider Duck. Atlantic coast of North America; south, in winter, to Delaware; breeds from Maine, northward.

SUBGENUS ERIONETTA. COUES.

117 (162) SOMATERIA SPECTABILIS. (LINN.) King Eider Duck. Northern species; in winter, south to New England; accidental as far south as Georgia; breeds in the far north.

GENUS OIDEMIA. FLEMING.

- 118 (163) OIDEMIA AMERICANA. Sw. AND RICH. American Scoter Duck. Velvet Scoter. Butter-bill Coot.
 - Breeds from Labrador, northward; occurs both on coast and iuland lakes; south to Florida, in winter. One of the Coots of New England gunners.
- 119 (164) OIDEMIA FUSCA. (LINN.) Black Scoter. European species, recorded from Greenland.

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A. O. U. NO.

SUBGENUS MELANITTA. BOIE.

- 120 (165) OIDEMIA DEGLANDI. BONAP. White-winged Scoter Duck. Whitewinged Coot.
 - Northern North America, breeding from Labrador, northward; south, in winter, to North Carolina; common on New England coast during migrations.
- 121 (166) OIDEMIA PERSPICILLATA. (LINN.) Surf Scoter Duck. Skunk-head Coot.
 - Northern North America, on both Atlantic and Paeific coasts, and interior lakes; breeds far north; south, in winter, to Florida; accidental in Cuba and Jamaica; a common Coot of New England gunners.

GENUS ERISMATURA. BONAP.

122 (167) ERISMATURA JAMAICENSIS. (GMEL.) Ruddy Duck.

Ranges throughout North America, breeding nearly throughout its range; winters in the Southern States and along Gulf; common in Florida; also in West Indies, and northern South America.

GENUS NOMONYX. RIDGW.

 123 (168) NOMONYX DOMINICUS. (LINN.) Masked Duck. Tropical species; accidental in eastern United States; specimens have been taken in New York, Wisconsin, and Massachusetts.

Subfamily ANSERINÆ. Geese.

GENUS CHEN. BOIE.

- 124 (169) CHEN HYPERBOREA. (PALL.) Lesser Snow Goose. Rare in eastern United States; aceidental on New England coast; occurs in Illinois; common on Paeific coast; breeds in Alaska.
- 125 (169a) Chen hyperborea nivalis. (FORST.) Greater Snow Goose.
 - Eastern race of preceding species, the principal difference being in size; exact breeding range unknown; winters on Atlantic coast from Virginia to Cuba.
- 126 (1691) CHEN CŒRULESCENS. (LINN.) Blue Goose.
 - Little known species, breeding about Hudson Bay, migrating south in winter, through Mississippi Valley to Gulf coast; apparently not common anywhere.

GENUS ANSER. BRISS.

- 127 (171) ANSER ALBIFRONS. (GMEL.) White-fronted Goose. European species; recorded from Greenland.
- 128 (171a) Anser albifrons gambeli. (HARTL.) American White-fronted Goose. Larger than European species; occurs throughout North America; breeding far north and ranging, winter, south to Mexico and Cuba.

A, O, U, NO

GENUS BRANTA. SCOPOLI.

129 (172) BRANTA CANADENSIS. LANN. Canada Goose.

- Temperate North America; breeding in Northern United States and British Provinces; ranges in winter as far south as Mexico and Jamaica; winters in great numbers on Atlantic coast, south of Virginia.
- (172a) Branta canadensis hutchinsii. (Sw. AND RICH.) Hutchins's Goose. Similar to the Canada Goose, but smaller; wing usually less than 16 inches long (carpus to tip); western species rare, east of Mississippi Valley.
- 131 (172c) Branta canadensis minima. Ridgw. Cackling Goose.
 - A still smaller race; wing, rarely over 14.50; underparts darker, having the breast and upper belly tinged with brownish; Pacific species casual as far east as Wisconsin; not recorded farther east than Illinois.
- 132 (173) BRANTA BERNICLA. (LINN.) Brant. From Arctic Circle where it breeds; south in eastern North America to Georgia; accidental in Florida.
- 133 (174) BRANTA NIGRICANS. (LAWR.) Black Brant. Western species, occasionally taken on Atlantic coast.
- 134 (175) BRANTA LEUCOPSIS. (BECHST.) Barnacle Goose.
- The Enropean Barnacle Goose occurs in Greenland; it is rare on Atlantic coast of United States. The white on forehead and sides of head and chin will always distinguish it from American species.

Subfamily CYGNINÆ. Swans.

GENUS OLOR. WAGLER.

- 135 (179) OLOR CYGNUS. (LINN.) Whooping Swan.
 - Old world species which occurs in Greenland, but not elsewhere in North America. It has the base of the mandible and bare loral skin yellow.
- 136 (180) OLOR COLUMBIANUS. (ORD.) Whistling Swan.
 - Whole of North America; breeding far north; common on coast of Virginia and Carolinas in winter.
- 137 (181) OLOR BUCCINATOR. (RICH.) Trumpeter Swan. Western species; rare on Atlantic coast of United States; Illinois.

ORDER ODONTOGLOSSÆ. Lamellirostral Grallatores.

FAMILY PHENICOPTERIDÆ. Flamingoes.

A. O. U. NO. GENUS PHŒNICOPTERUS. LINN.

138 (182) PHENICOPTERUS RUBER. (LINN.) American Flamingo.

Tropical species; a small colony exists in southern Florida.

ORDER HERODIONES.

Herons, Ibises, Spoonbills, etc.

Suborder IBIDES. Spoonbills and Ibises.

FAMILY PLATALEIDÆ. Spoonbills.

GENUS AJAJA. REICH.

139 (183) AJAJA AJAJA. (LINN.) Roseate Spoonbill.

Tropical species; ranges throughout South America; resident in Gulf States and Florida.

FAMILY IBIDIDÆ. Ibises.

GENUS GUARA. REIGH.

 140 (184) GUARA ALBA. (LINN.) White Ibis.
 South Atlantic and Gulf States; south throughout West Indies to northern South America; accidental in New England and Illinois.

141 (185) GUARA RUBRA. (LINN.) Scarlet Ibis.

A tropical species; no evidence of its recent occurrence in North America.

GENUS PLEGADIS. KAUP.

- 142 (186) PLEGADIS AUTUMNALIS. (HASSELQ.) Glossy lbis. Tropical species; casual in United States; New England, Illinois.
- 143 (187) PLEGADIS GUARAUNA. (LINN.) White-faced Glossy lbis. Western species; once recorded from Florida.

Suborder CICONIÆ. Storks, etc.

FAMILY CICONIIDÆ. Storks and Wood Ibises.

Subfamily TANTALINÆ. Wood Ibises.

GENUS TANTALUS. LINN.

144 (188) TANTALUS LOCULATOR. LINN. Wood Ibis.

Southwestern species common and resident in Florida, where it breeds in colonies; accidental north to New York.

Suborder HERODII. Herons, Egrets, Bitterns, etc.

FAMILY ARDEIDÆ. Herons, Bitterns, etc.

Subfamily BOTAURINÆ. Bitterns.

A. O. U.

GENUS BOTAURUS. HERMANN.

145 (190) BOTAURUS LENTIGINOSUS. (MONTAG.) American Bittern. Temperate North America; common in eastern United States; south in winter to Cuba.

GENUS ARDETTA. GRAY.

- 146 (191) ARDETTA EXILIS. (GMEL.) Least Bittern.
 - "Temperate North America; north to the British Provinces and south to the West Indies and Brazil" (A. O. U.); breeds nearly throughout its range.
- 147 (1911) ARDETTA NEOXENA. CORY. Cory's Least Bittern. Southern Florida; stragglers have been taken in various widely separated localties; Ontario, Michigan.

Subfamily ARDEINÆ. Herons and Egrets.

GENUS ARDEA. LINN.

- 148 (192) ARDEA OCCIDENTALIS. AUD. Great White Heron. Resident in Florida; breeds in December on the keys; has been taken in Illinois.
- 149 ARDEA WUERDEMANNI. BAIRD. Wuerdemann's Heron. Southern Florida; probably a colored phase of A. occidentalis, or an abnormally colored specimen of Ardea wardi.
- 150 (193) ARDEA WARDI. Ribgw. Ward's Heron. Florida.
- 151 (194) ARDEA HERODIAS. LINN. Great Blue Heron. The common large Heron of the Atlantic coast (except Florida); ranges from Arctic regions to northern South America.
- 152 (195) ARDEA CINEREA. LANK. European Blue Heron. European species, recorded from Greenland.

SUBGENUS HERODIAS. BOIE.

153 (196) ARDEA EGRETTA. GMEL. American Egret.

Southern United States to South America; casual north to New England; accidental in Nova Scotia; breeds in colonies in Southern States in February; abundant in parts of Florida.

SUBGENUS GARZETTA. KAUP.

154 (197) ARDEA CANDIDISSIMA. GMEL. Snowy Heron.

Tropical and semi-tropical species, not uncommon on Gulf coast; breeds in Florida in May; accidental in New England and Illinois. A. O. U. SUBGENUS DICROMANASSA. RIDGW.

155 (198) ARDEA RUFESCENS. GMEL. Reddish Egret.

Gulf States; apparently not abundant anywhere in United States; casual north to Illinois; breeds in southern Florida, West Indies, and Mexico.

SUBGENUS HYDRANASSA. BAIRD.

156 (199) ARDEA TRICOLOR RUFICOLLIS. (GOSSE.) Louisiana Heron. Gulf States; common in Florida; breeds occasionally north to New England and Illinois.

SUBGENUS FLORIDA. LINN.

157 (200) ARDEA CŒRULEA. LINN. Little Blue Heron. Eastern United States; common on Gulf coast and Florida, where it breeds in summer; casual to New England and Illinois.

SUBGENUS BUTORIDES. BLYTH.

- 158 (201) ARDEA VIRESCENS. LINN. Green Heron.
 - Temperate North America; Canada to Gulf States, and West Indies; breeds nearly throughout its range.

GENUS NYCTICORAX. STEPH.

159 (202) NYCTICORAX NYCTICORAX NÆVIUS. (BODD.) Black=crowned Night Heron.

North and South America; breeds in West Indies; common in New England.

160 (203) NYCTICORAX VIOLACEUS. (LINN.) Yellow-crowned Night Heron. Warmer portions of North America; Gulf States to Carolinas; casual in New England and Illinois; common in Florida.

ORDER PALUDICOLÆ.

Cranes, Rails, etc.

Suborder GRUES. Cranes.

FAMILY GRUIDÆ. Cranes.

GENUS GRUS. PALLAS.

- 161 (204) GRUS AMERICANA. (LINN.) Whooping Crane. Interior of North America; rare on Atlantic coast; accidental in New England; casual in Florida.
- 162 (205) GRUS CANADENSIS. (LINN.) Little Brown Crane. Western species; two records east of Mississippi River.
- 163 (206) GRUS MEXICANA. (MÜLL.) Sandhill Crane. Warmer parts of North America; common in parts of Georgia and Florida, where it breeds; accidental in New England and Illinois.

Suborder RALLI. Rails, Gallinules, Coots, etc.

FAMILY ARAMIDÆ. Courlans.

A. O. U. NO. GENUS ARAMUS. VIEILL.

164 (207) ARAMUS GIGANTEUS. (BONAP.) Limpkin. Tropical species; resident and breeds in Florida.

FAMILY RALLIDÆ. Rails, Gallinules, and Coots.

Subfamily RALLINÆ. Rails.

GENUS RALLUS. LINN.

165 (208) RALLUS ELEGANS. AUD. King Rail. Fresh-water marshes of eastern United States; easual north of North Carolina, New England, and Illinois; recorded as far north as Ontario.

- 166 (211) RALLUS CREPITANS. GMEL. Clapper Rail. Salt-water marshes; New England to Gulf States.
- (211a) Rallus crepitans saturatus. (RIDGW.) Louisiana Clapper Rail.
 A dark race of R. crepitans, which occurs in the salt-water marshes of Louisiana.
- 167a (-) Rallus crepitans waynei. BREWSTER. Wayne's Clapper Rail.
 - This race is described as differing from true *crepitans* in being darker, "the underparts with more ashy, the under tail coverts with fewer markings." (Brewster Auk, p. 50, 1899.) Habitat, coast of Georgia to middle Florida (head of Indian River).
- 168 (211b) RALLUS SCOTTII. (SENN.) Scott's Rail Florida Clapper Rail. Florida.
- 169 (212) RALLUS VIRGINIANUS. LINN. Virginia Rail. North America, Canada to Cuba; often occurring in large numbers on New England marshes during migrations.

GENUS PORZANA. VIEILL.

- 170 (213) PORZANA PORZANA. (LINN.) Spotted Crake. European species; recorded from Greenland.
- 171 (214) PORZANA CAROLINA. (LANN.) Sora. Carolina Rail. North America; common on Atlantic coast, Florida, and Gulf States; West Indies and South America in winter.
 - SUBGENUS COTURNICOPOS. BONAP.
- 172 (215) PORZANA NOVEBORACENSIS. (GMEL.) Yellow Rail. Hudson Bay to Florida and Cuba; apparently not common anywhere.

A. O. U SUBGENUS CRACISCUS. CABAN.

173 (216) PORZANA JAMAICENSIS. (GMEL.) Black Rail. From Massachusetts and Illinois to West Indies; apparently nowhere common; breeds throughout its range.

GENUS CREX. BECHS.

174 (217) CREX CREX. (LINN.) Corn Crake. European species ; accidental in eastern North America.

Subfamily GALLINULINÆ. Gallinules.

GENUS IONORNIS. REICH.

 (218) IONORNIS MARTINICA. (LINN.) Purple Gallinule. Gulf States; casually north to New England and Illinois; breeds from southern Illinois and Carolinas southward.

GENUS GALLINULA. BRISS.

176 (219) GALLINULA GALEATA. (LICHT.) Florida Gallinule.

Warmer parts of America, from Canada to Chili; breeds from New England southward; common in Southern States.

Subfamily FULICINÆ. Coots.

GENUS FULICA. LINN.

- 177 (220) FULICA ATRA. LINN. European Coot. European species; recorded from Greenland.
- 178 (221) FULICA AMERICANA. GMEL. American Coot.
 Common in warmer portions of United States, but casual from Canada (and even Greenland) to West Indies; abundant in Georgia, Florida, and Gulf States.

ORDER LIMICOLÆ.

Shore Birds. Marsh Birds.

FAMILY PHALAROPODIDÆ. Phalaropes.

GENUS CRYMOPHILUS. VIEILL.

179 (222) CRYMOPHILUS FULICARIUS. (LINN.) Red Phalaropes.

Breeds in Arctic regions; south in winter to Middle States; accidental on Florida coast; New England, Illinois.

GENUS PHALAROPUS. BRISS.

180 (223) PHALAROPUS LOBATUS. (LINN.) Northern Phalarope.

"Northern portions of Northern Hemisphere; breeding in Arctic latitudes; south in winter to the tropics." (A. O. U.) New England, Illinois.

- 344 LIST OF THE BIRDS OF EASTERN NORTH AMERICA. NO. U. NO.
- 181 (224) PHALAROPUS TRICOLOR. (VIEILL.) Wilson's Phalarope. Chiefly interior of North America; breeds from northern Illinois northward; in winter, south to South America; common in Mississippi Valley; casual on Atlantic coast.

FAMILY RECURVIROSTRIDÆ. Avocets and Stilts.

GENUS RECURVIROSTRA. LINN.

182 (225) RECURVIROSTRA AMERICANA. GMEL. American Avocet. Temperate North America; breeds from Illinois to the Saskatchewan and Great Slave Lake; in winter, Central America and West Indies; rare on Atlantic coast except Florida, where it is casual; accidental in New England.

GENUS HIMANTOPUS. BRISS.

- 183 (226) HIMANTOPUS MEXICANUS. (Mëll.) Black-necked Stilt.
 - Temperate North America, from the northern United States southward to the West Indies, northern Brazil, and Peru; rare in eastern United States, except Florida; breeds in some numbers in Florida in May.

FAMILY SCOLOPACIDÆ. Snipes, Sandpipers, etc.

GENUS SCOLOPAX. LINN.

184 (227) SCOLOPAX RUSTICOLA. LINN. European Woodcock. European species e aceidental in eastern North America; several records.

GENUS PHILOHELA. GRAY.

185 (228) PHILOHELA MINOR. (GMEL.) American Woodcock. Eastern North America from British Provinces to Gulf States; breeds throughout its range, but by far the greater number breed north; very numerous in Gulf States in winter.

GENUS GALLINAGO. LEACH.

- 186 (229) GALLINAGO GALLINAGO. (Laxx.) European Snipe. European species ; occurs in Greenland.
- 186a (230¹) GALLINAGO MAJOR. (GMEL.) Greater Snipe. Old world species accidental in North America, recorded from Hudson Bay.
- 187 (230) GALLINAGO DELICATA. (ORD.) Wilson's Snipe. Jack Snipe. Breeds from northern United States, northward; south in winter to West Indies and South America.

	A 0. U. NO.	GENUS MACRORHAMPHUS. LEACH.
188	(231)	MACRORHAMPHUS GRISEUS. (GMEL.) Dowitcher. Red-breasted
	•	Snipe. Breeds in the Arctic regions; in winter to West Indies and South
		America; abundant on Atlantic coast during migrations; Illinois.
189	(232)	MACRORHAMPHUS SCOLOPACEUS. (SAY.) Long-billed Dowitcher.
	()	Western Red-breasted Snipe.
		Western species which occasionally occurs on Atlantic coast; common
		in Florida, in winter.
		Genus MICROPALAMA. BAIRD.
190	(233)	MICROPALAMA HIMANTOPUS. (BONAP.) Stilt. Sandpiper.
		Eastern North America; in winter to West Indies; breeds north of
		United States; common in Florida, during migrations; Illinois.
		GENUS TRINGA. LINN.
		SUBGENUS TRINGA.
191	(234)	TRINGA CANUTUS. LINN. Knot.
		Breeds in high latitudes; south in winter to South America; common
		on Atlantic coast during migrations; called Robin Snipe by New
		England gunners.
		Subgenus ARQUATELLA. BAIRD.
192	(235)	TRINGA MARITIMA. BRÜNN. Purple Sandpiper.
		Breeds far north; south in winter to New England and Middle States;
		accidental in Florida; sometimes observed in midwinter on New
		England coast; feeding on algae on rocks, exposed at low water.
		SUBGENUS ACTODROMAS. KAUP.
193	(239)	TRINGA MACULATA. VIEILL. Pectoral Sandpiper. Grass=bird.
		Both North and South America; breeds in the far north; very common
		on Atlantic coast during migrations; New England, Florida, and
104	(240)	Allinois.
194	(240)	TRINGA FUSCICOLLIS. VIEILL. White-rumped Sandpiper. Bona- parte's Sandpiper.
		Eastern North America; breeds in high latitudes; south in winter to
		West Indies and Central America; New England and Illinois.
195	(241)	TRINGA BAIRDII. (COUES.) Baird's Sandpiper.
		Common in interior of North America; breeds in Alaska; south in
		winter to South America; rare on Atlantic coast; New England
		and Illinois.
196	(242)	TRINGA MINUTILLA. VIEILL. Least Sandpiper.
		Common through the Americas; breeds north of United States; abun-
		dant during migrations on Atlantic coast; New England and

Illinois.

SUBGENUS PELIDNA. CUVIER.

197 (243) TRINGA ALPINA. LINN. Dunlin.

European species, accidental in North America.

198 (243a) Tringa alpina pacifica. (COUES.) Red-backed Sandpiper. American Dunlin.

> North America; breeds in high latitudes; winters from Florida and Gulf States southward; New England and Illinois during migrations.

SUBGENUS ANCYLOCHILUS. KAUP.

199 (244) TRINGA FERRUGINEA. BRÜNN. Curlew Sandpiper. European species; of rare occurrence in eastern North America; New England.

GENUS EREUNETES. ILLIGER.

- 200 (246) EREUNETES PUSILLUS. (LINN.) Semipalmated Sandpiper. Breeds north of United States; winters in West Indies and South America; common on Atlantic coast during migrations; Illinois.
- 201 (247) EREUNETES OCCIDENTALIS. LAWR. Western Sandpiper.
 Western species; breeding in high latitudes and ranging in winter to South America; not uncommon on Atlantic coast during migrations.

GENUS CALIDRIS. CUVIER.

202 (248) CALIDRIS ARENARIA. (LINN.) Sanderling. Sandpiper. Bull Peep. Cosmopolitan species; breeds in far north; south in winter to South America; common on Atlantic coast during migrations; New England, Florida, Illinois.

GENUS LIMOSA. BRISS.

- 203 (249) LIMOSA FEDOA. (LINN.) Marbled Godwit. North America, chiefly west : breeds from Nebraska north
 - North America, chiefly west; breeds from Nebraska northward, migrating in winter to Central America; not common on Atlantic coast; New England, casual; Florida, Illinois.
- 204 (251) LAMOSA HÆMASTICA. (LINN.) Hudsonian Godwit. Goose Bird. Eastern North America; south in winter to South America; breeds far north; at one time abundant on Atlantic coast during migrations, now less common; New England, Florida, Illinois.
- 205 (252) LIMOSA LIMOSA. (LANN.) Black-tailed Godwit. European species, which occurs in Greenland.

GENUS TOTANUS. BECH.

206 (253) TOTANUS NEBULARIUS. (GUNN.) Green-shank. Old world species; accidental in Florida; no recent records.

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V. O. U.

- A. O. U. SUBGENUS GLOTTIS. KOCH.
- 207 (254) TOTANUS MELANOLEUCUS. (GMEL.) Greater Yellow-legs. Winter Yellow-legs.
 - North America; breeding from northern Illinois northward; in winter, south to South America (Chili); eommon during migrations on Atlantic coast.
- 208 (255) TOTANUS FLAVIPES. (GMEL.) Yellow-legs. Summer Yellow-legs. North America; breeding from northern Illinois northward; south in winter to South America; abundant during migrations on Atlantic coast.

GENUS HELODROMUS. KAUP.

- (256) HELODROMUS SOLIFARIUS. (WILS.) Solitary Sandpiper. North America; breeding from northern United States northward; in winter, south to South America; New England, Florida, Illinois.
- 210 (257) HELODROMUS OCHROPUS. (LINN.) Green Sandpiper. European species; once recorded from Nova Scotia.

GENUS SYMPHEMIA. RAFINESQUE.

- (258) SYMPHEMIA SEMIPALMATA. (GMEL.) Willit.
 Eastern North America, from Florida to New England; breeding occasionally as far north as Maine; south in winter to South America.
- 212 (258a) Symphemia semipalmata inornata. BREWST. Western Willet.
- A western race of the Willet, which occurs in Florida and on Gulf coast inwinter, and perhaps occasionally farther north; its true habitat is from Mexico to Manitoba; it differs from the eastern Willet in being larger, and in summer the middle tail feathers lack the black bars and the back marking is less pronounced; in winter the two forms differ little, except in size.

GENUS PAVONCELLA. LEACH.

213 (260) PAVONCELLA PUGNAX. (LINN.) Ruff. European species; accidental in United States; several New England records.

GENUS BARTRAMIA. LESSON.

- 214 (261) BARTRAMIA LONGICAUDA. (BECHST.) Bartramian Sandpiper. Upland Plover.
 - North America; in winter to South America; breeds nearly throughout its range; once abundant on Atlantic coast, now less common; Illinois common.

A. O. U.

GENUS TRYNGITES. CABAN.

- 215 (262) TRYNGITES SUBRUFICOLLIS. (VIEILL.) Buff-breasted Sandpiper.
 - North America; more commonly in interior; breeds north of United States; south in winter to South America; not common on Atlantic coast.

GENUS ACTITIS. ILLIGER.

 216 (263) ACTITIS MACULARIA. (LINN.) Spotted Sandpiper.
 The common Sandpiper of our ponds and streams occurs in North and South America; breeds throughout temperate North America.

GENUS NUMENIUS. BRISS.

- 217 (264) NUMENIUS LONGIROSTRIS. WILS. Long-billed Curlew. Sickle-bill Curlew.
 - Temperate North America; south to Central America and the West Indies; breeds in southern Atlantic States, and in interior to Canada; not common on Atlantic coast.
- 218 (265) NUMENIUS HUDSONICUS. LATH. Hudsonian Curlew. Jack Curlew. Throughout North America; breeding in Arctic regions; in winter to Gulf States and South America; common on Atlantic coast during migrations.
- 219 (266) NUMENIUS BOREALIS. (FORST.) Eskimo Curlew. Dough Bird. Ranges from the Arctic regions where it breeds to South America; in winter more common in the interior than on the coast; prefers the fields to the beaches, being often found in company with Golden Plover.
- 220 (267) NUMENIUS PHÆOPUS. (LINN.) Whimbrei. Not recorded from United States; it has been taken in Greenland.

FAMILY CHARADRIIDÆ. Plovers.

GENUS VANELLUS. BRISS.

221 (269) VANELLUS VANELLUS. (LINN.) Lapwing.

European species; occurs in Greenland; one record for eastern United States.

GENUS CHARADRIUS. LINN.

SUBGENUS SQUATAROLA. CUVIER.

222 (270) CHARADRIUS SQUATAROLA. (LINN.) Black-bellied Plover. Beetle Head.

Ranges from Arctic regions to South America; breeds in the far north; common on Atlantic coast during migrations.

SUBGENUS CHARADRIUS. LINN.

223 (271) CHARADRIUS APRICARIUS. LINN. Golden Plover.

European species, which occurs in Greenland.

A. O. U. NO.

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- (272) CHARADRIUS DOMINICUS. Müll. American Golden Plover. Green Plover.
 - Ranges from Arctic regions, where it breeds, to South America; common on Atlantic coast during migrations; prefers the fields to the marshes.

GENUS ÆGIALITIS. BOIE.

225 (273) ÆGIALITIS VOCIFERA. (LINN.) Kildeer Plover.

- Ranges from Newfoundland and Manitoba, breeding throughout its range; common in winter from Gulf States and Carolinas to the West Indies and South America; as a rule not common on New
 England coast, but in November, 1888, a great flight occurred on shores of Massachusetts, and hundreds were killed and offered for sale in the Boston markets.
- 226 (274) ÆGIALITIS SEMIPALMATA. BONAP. Semipalmated Plover. Ranges from Arctic regions to South America; breeding from Labrador northward; common on Atlantic coast during migrations.
- (275) ÆGIALITIS HIATICULA. (LINN.) Ring Plover.
 Old world species; not recorded from United States; it occurs in Greenland.
- 228 (277) ÆGIALITIS MELODA. (ORD.) Piping Plover.
 - From Labrador to the West Indies and South America, being a familiar bird on our shores; breeds from Virginia to Labrador and Newfoundland.
- 229 (277a) Ægialitis meloda circumcineta. RIDGW. Belted Piping Plover.
 - Is similar to a *meloda* but differs in having an unbroken black band on the neck forming a complete collar; breeds from northern Illinois northward; migrates in winter to Gulf of Mexico.
- 229a (278) ÆGIALITIS NIVOSA. CASS. Snowy Plover.
 Western species; not uncommon in winter on the northwest coast of Florida.

SUBGENUS OCHTHODROMUS. REICH.

- 230 (280) ÆGIALITIS WILSONIA. (ORD.) Wilson's Plover.
 - Atlantic and Pacific coasts of North America; on the Atlantic side from Long Island to the West Indies and South America; breeds from Virginia; southern stragglers have been taken as far north as Nova Scotia.

SUBGENUS PODASOCYS. COUES.

231 (281) ÆGIALITIS MONTANA. (Towns.) Mountain Plover. Western species; accidental or casual in Florida.

FAMILY APHRIZIDÆ. Surf Birds and Turnstones.

Subfamily ARENARIINÆ. Turnstones.

A. O. U. NO.

GENUS ARENARIA. BRISS.

232 (283) ARENARIA INTERPRES. (LINN.) Turnstone.

Both coasts of North America, and in the interior on the larger lakes and rivers; breeds in the Arctic regions; in winter to South America.

FAMILY HÆMATOPODIDÆ. Oyster Catchers.

GENUS HÆMATOPUS. LINN.

233 (285) HÆMATOPUS OSTRALEGUS. LINN. Oyster Catcher.

European species, which occurs in Greenland.

234 (286) HÆMATOPUS PALLIATUS. TEMM. American Oyster Catcher. Coasts of the warmer portions of America, from New Jersey to South America; accidental in New England; common in Florida, and breeds.

LAND BIRDS.

ORDER GALLINÆ.

Gallinaceous Birds.

Suborder PHASIANI. Pheasants, Grouse, Partridges, Quail, etc.

FAMILY TETRAONIDÆ. Grouse, Partridges, etc.

Subfamily PERDICINÆ. Partridges and Quail.

A. O. U.

GENUS COLINUS. LESSON.

- (289) COLINUS VIRGINIANUS. (LINN.) Quail. Bob-white. Eastern United States; west to Kansas, Dakotah, and eastern Texas; breeds throughout range.
- **236** (289a) Colinus virginianus floridamus. (COUES.) Florida Quail. A Florida race, smaller and darker than C. virginianus.

Subfamily TETRAONINÆ. Grouse, etc.

GENUS CANACHITES. STEJN.

237 (298) CANACHITES CANADENSIS. (LINN.) Canada Grouse. Spruce Partridge.

Throughout British America; occurs in United States in northern New England, New York, Minnesota, and Michigan.

237a (---) Canachites canadensis labradorius. BANGS. Labrador Spruce Grouse.
 A Labrador race of the Canada Grouse; the males differ but slightly, but the females are described as being less buffy above the back, being nearly black and gray, and the underparts whiter.

GENUS BONASA. STEPH.

238 (300) BONASA UMBELLUS. (LINN.) Ruffed Grouse.

Eastern United States and southern Canada; south to mountains of northern Georgia; west to Minnesota and Michigan.

239 (300a) Bonasa umbellus togata. (LINN.) Canadian Ruffed Grouse.

The Canadian race of the Ruffed Grouse occurs throughout southern British America as far north as James Bay; it occurs in northern New York and northern New England; it is more gray on the upper parts, and the underparts are more distinctly barred.

GENUS LAGOPUS. BRISS.

240 (301) LAGOPUS LAGOPUS. (LINN.) Willow Ptarmigan. Arctic species; accidental in New England.

(351)

- 352 LIST OF THE BIRDS OF EASTERN NORTH AMERICA.
- 241 (301a) Lagopus lagopus alleni. STEJN. Allen's Ptarmigan.
 A race peculiar to Newfoundland; differs in having the shafts of the secondaries black.
- 242 (302) LAGOPUS RUPESTRIS. (GMEL.) Rock Ptarmigan. Arctic America, from southern Labrador to Alaska, Anticosti.
- 243 (302a) Lagopus rupestris reinhardti. (BREIM.) Reinhardt's Ptarmigan.
 A race inhabiting northern Labrador and Greenland; the female has the greater portion of the back, black, in summer; the male has the barring on the upper parts finer and more uneven.
- 244 (303) LAGOPUS WELCHI. BREWS. Welch's Ptarmigan. Peculiar to Newfoundland.

GENUS TYMPANUCHUS. GLOGER.

245 (305) TYMPANUCHUS AMERICANUS. (REICH.) Prairie Hen.

Prairies of Mississippi Valley, Kentucky, Ohio, Indiana, Michigan, Minnesota, Iowa, and Missouri; north and west to Manitoba, Dakotah, and Indian Territory; south to southwestern Louisiana, and Texas, where it is replaced by a paler and smaller race called *T. a. attwateri.*

246 (306) TYMPANUCHUS CUPIDO. (LINN.) Heath Hen.

Island of Martha's Vineyard, Mass.; once abundant, now nearly extinct; resembles the Prairie Hen, but may be distinguished by its *barred axillars*, scapulars broadly tipped with buff, and tufts of feathers on the neck consisting of less than ten feathers.

GENUS PEDIŒCETES. BAIRD.

247 (308b) PEDIŒCETES PHASIANELLUS CAMPESTRIS. Rubgw. Prairie Sharp-tailed Grouse.

Western species, which sometimes occurs in Wisconsin and Illinois.

FAMILY PHASIANIDÆ. Pheasants, Turkeys, etc.

Subfamily MELEAGRINÆ. Turkeys.

GENUS MELEAGRIS. LINN.

248 (310) MELEAGRIS GALLOPAVO. LINN. Wild Turkey.

United States, from Chesapeake Bay to the Gulf coast, and west to the plains along wooded river valleys. (A. O. U.)

249 (310a) Meleagris gallopavo osceola. Scorr. Florida Turkey.

Differs in having the white bands on the primaries broken and uneven, and in being somewhat smaller; also other slight differences in color; inhabits southern Florida, where the northern Turkey does not occur.

ORDER COLUMBÆ.

Pigeons.

FAMILY COLUMBIDÆ. Pigeons.

A. O. U. GENUS COLUMBA. LINN.

- **250** (314) **COLUMBA LEUCOCEPHALA.** LINN. White-crowned Pigeon. West. Indian species; casual in southern Florida.
- 250a (-) COLUMBA CORENSIS. GMEL. Wood Pigeon. West Indian species; accidental at Key West, Fla. (Atkins, Auk, 1899, p. 272.)

GENUS ECTOPISTES. SWAINS.

251 (315) ECTOPISTES MIGRATORIUS. (LINN.) Passenger Pigeon. Eastern North America; north to Hudson Bay; west to the plains; breeds in Canada and northern border of United States; now rare

in localities where it was once very abundant.

GENUS ZENAIDURA. BONAP.

252 (316) ZENAIDURA MACROURA. (LINN.) Mourning Dove. Throughout United States and southern Canada, Central America, and West Indies; breeds throughout its range.

GENUS ZENAIDA. BONAP.

253 (317) ZENAIDA ZENAIDA. (BONAP.) Zenaida Dove. West Indies and Yucatan; accidental on Florida Keys.

GENUS MELOPELIA. BONAP.

254 (319) MELOPELIA LEUCOPTERA. (LINN.) White-winged Dove. Semi-tropical species ranging throughout southwestern United States, Central America, and West Indies; accidental in Florida.

GENUS COLUMBIGALLINA. BOIE.

255 (320) COLUMBIGALLINA PASSERINA TERRESTRIS, CHAPMAN, Ground Dove.

Southern States of United States; breeds from South Carolina to Louisiana, West Indies, and northern South America.

GENUS GEOTRYGON. Gosse.

- 256 (322) GEOTRYGON CHRYSEA. Gosse. Key West Quail-Dove. West Indian species ; recorded from Florida Keys.
- **257** (322¹) **GEOTRYGON MONTANA.** (LINN.) **Mountain Dove.** West Indian species; once recorded from Key West, Fla.

GENUS STARNŒNAS. BONAP.

258 STARNŒNAS CYANOCEPHALA. (LINN.) Blue-headed Quail-Dove. (323)Cuban species ; aceidental on Florida Keys.

ORDER RAPTORES.

Birds of Prey.

Suborder SARCORHAMPHI, American Vultures,

FAMILY CATHARTIDÆ. American Vultures.

GENUS CATHARTES. HLIGER.

259 (325)CATHARTES AURA. (LINN.) Turkey Vulture. Turkey Buzzard. Greater part of North and South America; in eastern United States from New Jersey to the Gulf of Mexico; abundant and resident in Southern States.

GENUS CATHARISTA. VIETLL.

(326)CATHARISTA URUBU. VIEILL. Black Vulture. Carrion Crow. Southern portion of North America, West Indies, and Central and South America; breeds in eastern United States from North Carolina and Illinois to the Gulf; accidental in New England

Suborder FALCONES. Falcons, Hawks, Eagles, etc.

FAMILY FALCONIDÆ. Vultures, Falcons, Hawks, Eagles, etc.

Subfamily ACCIPITRINÆ. Kites, Hawks, Eagles, etc.

GENUS ELANOIDES. VIEILL.

261 (327) ELANOIDES FORFICATUS. (LINN.) Swallow-tailed Kite. Central and South America; in United States south of Carolina and Minnesota; accidental in New England; breeds commonly in some of Southern States; especially Florida.

GENUS ELANUS. SAVIGNY.

262 ELANUS LEUCURUS. (VIEILL.) White-tailed Kite. (328)Southern United States; from South Carolina and Southern Illinois. Central and South America : breeds in Southern States.

GENUS ICTINIA. VIEILL.

263 (329)ICTINIA MISSISSIPPIENSIS. (WILS.) Mississippi Kite. Southern United States; from South Carolina, Gulf States to Central America.

A. O. U.

260

 264 (330) ROSTRHAMUS SOCIABILIS. (VIEILL.) Everglade Kite. Central America and eastern South America; common in South Florida where it breeds.

GENUS CIRCUS. LACÉPÈDE.

265 (331) CIRCUS HUDSONIUS. (LINN.) Marsh Hawk.

A. O. U.

North and Central America; breeding throughout its range; one of the most common species in eastern United States; frequenting marshes.

GENUS ACCIPITER. BRISS.

SUBGENUS ACCIPITER.

- 266 (332) ACCIPITER VELOX. (WILS.) Sharp-shinned Hawk. North America; breeding throughout its range; in winter south to Mexico and Central America; common in eastern United States.
- 267 (333) ACCIPITER COOPERI. (BONAP.) Cooper's Hawk. North America and Mexico; breeds throughout its range; common in

eastern United States.

SUBGENUS ASTUR. LACÉPÈDE.

268 (334) ACCIPITER ATRICAPILLUS. (WILS.) American Goshawk. Greater portion of North America, north of the Middle States; breeds from northern border of United States northward.

GENUS PARABUTEO. RIDGW.

269 (335) **PARABUTEO UNICINCTUS HARRISI.** (AUD.) **Harris's Hawk.** Western species, which occurs in Louisiana.

GENUS BUTEO. CUVIER.

- 270 (336) BUTEO BUTEO. (LINN.) European Buzzard. European species; once taken in United States; Michigan, one record.
- 271 (337) BUTEO BOREALIS. (GMEL.) Red-tailed Hawk. Eastern North America and Canada; south to Mexico; breeds nearly throughout its range.
- 272 (337a) Buteo borealis kriderii. HOOPES. Krider's Hawk.
 - Western race, which occasionally occurs as far east as Illinois; differs in being much paler; more white in the plumage; underparts, faintly streaked.
- 273 (337b) Buteo borealis calurus. (CASS.) Western Red-tail.
 - This race has been recorded from Illinois; its true range is west of the Rocky Mountains; it differs in being much darker than *borealis*, and shows more dusky and rufous brown in the plumage; some specimens are almost entirely black, with breast dark reddish brown.

LIST OF THE BIRDS OF EASTERN NORTH AMERICA.

A. O. U. NO.

274 (338) Buteo borealis hurlani. (AUD.) Harlan's Hawk.

- Differs from *borealis* in being somewhat heavier; the general plumage is dark sooty or black, showing more or less white streaks, the concealed portion of feathers being white; underparts, more or less white, with various markings; it occurs in Georgia and Florida, and the Gulf States to the Mississippi Valley; north to Illinois and Iowa, and casually to Pennsylvania.
- 275 (339) BUTEO LINEATUS. (GMEL.) Red-shouldered Hawk. Throughout eastern North America; breeding throughout its range.
- 276 (339a) Buteo lineatus alleni. Rubgw. Florida Red-shouldered Hawk.
 - Differs from *lineatus* in being smaller, and the adults have no rufous on the head: Gulf States, from Texas to the Carolinas; but most common in Florida and along the southern coast.

SUBGENUS TACHYTRIORCHIS. KAUP.

- 277 (342) BUTEO SWAINSONI. BONAP. Swainson's Hawk.
 Western species; occasionally occurring in eastern United States; casual in Florida; recorded from Maine and Massachusetts.
- 278 (343) BUTEO LATISSIMUS. (WILS.) Broad-winged Hawk. Throughout eastern North America; from Canada to West Indies and South America; breeds throughout its range.

SUBGENUS BUTEOLA. BONAP.

279 (344) BUTEO BRACHYURUS. VIEILL. Short-tailed Hawk. Black Hawk. Tropical species; resident in Florida.

GENUS ASTURINA. VIEILL.

280 (346) ASTURINA PLAGIATA. SCHLEGEL. Mexican Goshawk. Western species; once observed in Illinois; no other record for eastern North America.

GENUS ARCHIBUTEO. BREHM.

281 (347a) ARCHIBUTEO LAGOPUS SANCTI-JOHANNIS. (GMEL.) American Rough-legged Hawk.

New England and Illinois.

(348) ARCHIBUTEO FERRUGINEUS. (LIGHT.) Ferruginous Rough-leg.

North America; from Gulf States northward; breeds north of United States.

GENUS AQUILA. BRISS.

- 283 (349) AQUILA CHRYSAËTOS. (LINN.) Golden Eagle.
 - North America; breeding in mountains in unsettled localities throughout its range; much less common than the Bald Eagle on the Atlantic coast.

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	A, O, U. NO,	GENUS HALIAËTUS. SAVIG.
284	(351)	HALIAËTUS ALBICILLA. (LINN.) Gray Sea Eagle.
		Occurs in Greenland, but has not been taken in the United States.
285	(352)	HALIAËTUS LEUCOCEPHALUS. (LINN.) Bald Eagle.
		Throughout North America to northern Mexico; breeding throughout its
		range.
		Mr. C. H. Townsend has lately separated the northern and southern birds, giving the range of <i>Haliaëtus leucocephalus</i> as practically restricted to the United States. To the bird which occurs in the British possessions west to Alaska, which is larger, he has given the name of <i>Haliaëtus leucocepha-</i> <i>lus alascanus</i> , Northern Bald Eagle.
		Subfamily FALCONINÆ. Falcons.
		Genus FALCO. LINN.
2 86	(3 53)	FALCO ISLANDUS. BRÜNN. White Gyrfalcon.
287	(954)	Arctic America; south in winter to Labrador and northern Maine.
201	(354)	FALCO RUSTICOLUS. LYNN. Gray Gyrfalcon. Arctic America; accidental in winter as far south as Maine.
288	(354a)	Falco rusticolus gyrfalco. (LINN.) Gyrfalcon.
200	(A grayish race with faintly barred back; occurs in Arctic America;
		accidental in winter in New England (Massachusetts and Rhode Island).
289	(354b)	Falco rusticolus obsoletus. (GMEL.) Black Gyrfalcon.
		A dark race with back dark slate; sometimes almost black and not barred; underparts dark; it occurs in Labrador; accidental in winter as far south as Canada, Maine, Massachusetts, and New York.
290	(355)	FALCO MEXICANUS. SCHLEG. Prairie Falcon.
		Western species; casual in Illinois; breeds throughout its range.
		SUBGENUS RHYNCHODON. NITZSCH.
291	(356)	FALCO PEREGRINUS ANATUM. (BONAP.) Duck Hawk. Peregrine
		Falcon.
		North America and northern South America; breeds throughout its
		range. Subgenus ÆSALON. KAUP.
292	(357)	FALCO COLUMBARIUS. LINN. Pigeon Hawk.
		North America, West Indies, and northern South America; breeds from
	(0.5.0.1)	northern border of United States, northward.
293	(358^{1})	FALCO REGULUS. PALL. Merlin.
		European species; recorded from Greenland.
201	(0.501)	SUBGENUS TINNUNCULUS. LINN.
294	(326_{1})	FALCO TINNUNCULUS. LINN. Kestrel.
		European species; once taken in Massachusetts.

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295 (360) FALCO SPARVERIUS. LINN. American Sparrow Hawk.

"North America; east of the Rocky Mountains and from Great Slave Lake, south to northern South America." (A. O. U.)

296 (361) FALCO SPARVERIOIDES. VIG. Cuban Sparrow Hawk. Cuban species ; accidental in Florida.

GENUS POLYBORUS. VIEILL.

- 297 (362) POLYBORUS CHERIWAY. (JACQ.) Audubon's Caracara. Mexican Buzzard.
 - Texas and Arizona to South America; occurs in eastern United States only in southern Florida where it breeds.

GENUS PANDION. SAVIG.

298 (364) PANDION HALIAËTUS CAROLINENSIS. (GMEL.) American Osprey. Fish Hawk.

> Greater portion of North America, the West Indies, and northern South America; common in many parts of eastern United States; breeds throughout its range.

Suborder STRIGES. Owls.

FAMILY STRIGIDÆ. Barn Owls.

GENUS STRIX. LINN.

- 299 (365) STRIX PRATINCOLA. BONAP. American Barn Owl.
 - Throughout United States, Mexico, and northern West Indies; more common in the Southern States; breeds rarely as far north as latitude 40°.

FAMILY BUBONIDÆ. Horned Owls.

GENUS ASIO. BRISS.

- **300** (366) **ASIO WILSONIANUS.** (LESS.) American Long-eared Owl. Temperate North America to Mexico; breeds throughout its range.
- **301** (367) **ASIO ACCIPITRINUS.** (PALL.) **Short-eared Owl.** North America ; breeds north of latitude 39°.

GENUS SYRNIUM. SAVIG.

- 302 (368) SYRNIUM NEBULOSUM. (FORST.) Barred Owl. Southern and eastern United States; north to Nova Scotia; breeds throughout its range.
- 303 (368a) Symium nebulosum alleni, Ridgw. Florida Barred Owl.
 - A southern race of the Barred Owl, averaging somewhat smaller and darker, having the toes nearly bare of feathers; Gulf States; common in Florida.

A, O, U, NO.

GENUS SCOTIAPTEX. SWAINS.

- **304** (370) **SCOTIAPTEX CINEREA.** (GMEL.) Great Gray Owl.
 - Arctic species, which occurs in winter as far south as New England and Illinois; numerous records for Massachusetts, New York, Ohio, etc.

GENUS NYCTALA. BREHM.

- 305 (371) NYCTALA TENGMALMI RICHARDSONI. (BONAP.) Richardson's Owl. Aretic species; easual in winter in northern United States; New England, Illinois, etc.; breeds north of United States.
- **306** (372) NYCTALA ACADICA. (GMEL.) Saw-whet Owl. Acadian Owl. North America; breeds from middle United States northward.
- 307 (373) MEGASCOPS ASIO. (LINN.) Screech Owl. Eastern North America; Canada to Georgia; breeds nearly throughout its range.
- 308 (373a) Megascops asio floridanus. (RIDGW.) Florida Screech Owl.
 - A rather small southern race of the Screech Owl, somewhat darker and the markings heavier; occurs in Gulf States from South Carolina to Louisiana.

GENUS BUBO. DUMERIL.

- **309** (375) **BUBO VIRGINIANUS.** (GMEL.) **Great Horned Owl.** Eastern North America; north to Labrador; breeds throughout its range.
- 310 (375a) Bubo virginianus arcticus. SWAINS. Arctic Horned Owl.
 Pale birds have occasionally been taken in northeastern North America which may be referable to this race.
- 311 (375c) Bubo virginianus saturatus. Ridgw. Dusky Horned Owl.
 - A dark race; ranging from Labrador and Hudson Bay westward to Alaska; south to Louisiana and Arizona; some Louisiana specimens are very dark.

GENUS NYCTEA. STEPH.

312 (376) NYCTEA NYCTEA. (LINN.) Snowy Owl. Northern North America; in winter, south to Middle States; breeds north of United States.

GENUS SYRNIA. DUMERIL.

 313 (377a) SURNIA ULULA CAPAROCH. (Müll.) American Hawk Owl.
 Aretie North America; south in winter to borders of United States; New England and Illinois; breeds from New England northward.

GENUS SPEOTYTO. GLOGER.

- **314** (378) **SPEOTYTO CUNICULARIA HYPOGÆA.** (BONAP.) **Burrowing Owl.** Western species; one record from Massachusetts.
- 315 (378a) Spectyto cunicularia floridana. RIDGW. Florida Burrowing Owl. Resident in southern Florida ; a rather dark form, having the feet and legs (tarsus) almost without feathers; breeds in a hole in the ground.

ORDER PSITTACI. Parrots, Paroquets, etc. FAMILY PSITTACIDÆ.

A. O. U. NO. GENUS CONURUS. KUHL.

316 (382) CONURUS CAROLINENSIS. (LINN.) Carolina Paroquet.

At one time not uncommon in many of our Southern States; at present occurs only in Florida, Arkansas, and Indian Territory; breeds in holes in trees.

ORDER COCCYGES.

Cuckoos.

FAMILY CUCULIDÆ. Cuckoos, Anis, etc.

Subfamily CROTOPHAGINÆ. Anis.

GENUS CROTOPHAGA. LINN.

317 (383) CROTOPHAGA ANI. LINN. Ani.

West Indian species; recorded from Florida, Louisiana, and Pennsylvania; the bird is entirely black; the bill is not like that of a Cuckoo, being very thin and somewhat Parrot-like in shape.

Subfamily COCCYZINÆ. Cuckoos.

GENUS COCCYZUS. VIEILL.

- 318 (386) COCCYZUS MINOR. (GMEL.) Mangrove Cuckoo. West Indian species; casual in southern Florida.
- 319 (386a) Cocryzns minor maynardi. Ridgw. Maynard's Cnekoo.
 - A Bahama race of *C. minor*; casual in southern Florida; it is much paler on the underparts, lacking the strong tawny buff on the belly; the bill is slightly smaller.
- 320 (387) COCCYZUS AMERICANUS. (LINN.) Yellow-billed Cuckoo.
 - Eastern North America; from the plains to the coast and Canada to Gulf of Mexico; breeding throughout its range; in winter to West Indies and Central America.

321 (388) COCCYZUS ERYTHROPHTHALMUS. (WILS.) Black-billed Cuckoo.

Eastern North America; from Rocky Mountains to the coast; breeds United States to Labrador; south, in winter to West Indies and northern South America.

Suborder ALCYONES. Kingfishers.

FAMILY ALCEDINIDÆ. Kingfishers.

A, O, U, NO,

GENUS CERYLE. BOIE.

322 (390) CERYLE ALCYON. (LINN.) Belted Kingfisher.

North America; at large from Arctic regions to the Gulf of Mexico; in winter, extends its range to West Indies and Central America; breeds from Gulf States throughout its northern range.

ORDER PICI.

Woodpeckers, etc.

FAMILY PICIDÆ. Woodpeckers.

GENUS CAMPEPHILUS. GRAY.

323 (392) CAMPEPHILUS PRINCIPALIS. (LINN.) Ivory=billed Woodpecker. Florida; some of the Gulf States to Mississippi Valley; now rare except in parts of Florida.

GENUS DRYOBATES. BOIE.

- 324 (393) DRYOBATES VILLOSUS. (LINN.) Hairy Woodpecker. Northern and middle portions of eastern United States.
- 325 (393b) Dryobates villosus audubonii. (SWAINS.) Southern Hairy Woodpecker. Southern race; ranging from eastern Texas to South Carolina; it differs in being smaller and perhaps slightly darker.
- 326 (394) DRYOBATES PUBESCENS. (LINN.) Downy Woodpecker. Eastern North America; in winter, south to the Gulf of Mexico.

Birds inhabiting the region north of North Carolina are larger than southern birds, and have been recognized as a race and named 324a Dryobates publicents medianus. BREWSTER.

327 (395) DRYOBATES BOREALIS. (VIEILL.) Red-cockaded Woodpecker. Southeastern and southern United States from Carolina to Texas.

GENUS PICOIDES. LACEP.

- 328 (400) PICOIDES ARCTICUS. (SWAINS.) Arctic Three-toed Woodpecker. Northern North America; south to northern United States, New England, Michigan, etc.
- 329 (401) PICOIDES AMERICANUS. BREHM. American Three-toed Woodpecker. Northern North America; south to northern border of United States; Maine and northern New York.

A. O. U. GENUS SPHYRAPICUS. BAIRD.

330 (402) SPHYRAPICUS VARIUS. (LINN.) Yellow-bellied Sapsucker. Yellowbellied Woodpecker.

> Eastern North America; south in winter to West Indies and Mexico; breeds in Massachusetts northward.

GENUS CEOPHLOEUS. CABAN.

- 331 (405) CEOPHLŒUS PILEATUS. (LINN.) Pileated Woodpecker.
 Southern United States; from North Carolina southward; replaced farther north by the northern race.
- 331a (405a) Ceophliens pileatus albieticola. BANGS. Northern Pileated Woodpecker. A northern race; differing mainly in size.

GENT'S MELANERPES. SWAINS.

SUBGENUS MELANERPES.

- 332 (406) MELANERPES ERYTHROCEPHALUS. (LINN.) Red-headed Woodpecker.
 - Eastern United States; from Rocky Mountains to Florida, and north to about latitude 50°; easual east of Hudson River; not uncommon in fall in Massachusetts.

SUBGENUS CENTURUS. SWAINS.

333 (409) MELANERPES CAROLINUS. (LINN.) Red-bellied Woodpecker. Eastern and southern United States; from New York and Michigan to the Gulf States; not numerous in northern part of its range.

GENUS COLAPTES. SWAINS.

334 (412) COLAPTES AURATUS. (LINN.) Flicker. Golden-winged Woodpecker. Eastern North America; from the Rocky Mountains to the Atlantic; winters from latitude of Illinois sonthward; one of our most familiar birds, and known by many names, among which are High Hole, Yellowhammer, Harrywicket, etc.

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ORDER MACROCHIRES.

Goatsuckers, Swifts, etc.

Suborder CAPRIMULGI. Goatsuckers.

FAMILY CAPRIMULGIDÆ. Goatsuckers. GENUS ANTROSTOMUS. GOULD.

A. O. U.

335	(416)	ANTROSTOMUS CAROLINENSIS. (GMEL.) Chuck-will's-widow. Southern United States; from Virginia to Mexico, and Cuba, Jamaica, and Porto Rico; casual to southern Illinois; accidental in Massa- chusetts.
336	(417)	ANTROSTOMUS VOCIFERUS. (WILS.) Whip-poor-will. Eastern and southern North America; from about latitude 50° to
		Mexico and Porto Rico; a common species in localities in New England, Illinois, etc.

GENUS CHORDEILES. SWAINS.

- (420) CHORDEILES VIRGINIANUS. (GMEL.) Nighthawk. 337 Eastern North America; from the plains to the Atlantic, and from Labrador to the West Indies and South America; breeds from southern United States northward.
- 338 (420a) Chordeiles virginianus henryi. (CASS.) Western Nighthawk. Western race; once recorded from Illinois; it is paler, and the back is more gray and buff.
- 339 (420c) Chordeiles virginianus chapmani. (SENNETT.) Florida Nighthawk. A small southern race; resident in Florida and along the Gulf coast; it is somewhat paler in coloration, and decidedly smaller.

Suborder CYPSELI, Swifts.

FAMILY MICROPODIDÆ. Swifts.

Subfamily CHÆTURINÆ. Swifts.

GENUS CHÆTURA. STEPH.

340 (423) CHÆTURA PELAGICA. (LINN.) Chimney Swift.

Eastern North America; north to Labrador, and in winter south to Mexico: breeds from the Gulf States northward.

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Suborder TROCHILI, Hummingbird.

FAMILY TROCHILIDÆ. Hummingbirds.

GENUS TROCHILUS. LINN.

341 (428) TROCHILUS COLUBRIS. LINN. Ruby-throated Hummingbird.

Eastern North America; from the plains to the Atlantie, and from Labrador, or about latitude 52°, to the Gulf of Mexico; breeding throughout its range; south in winter to Cuba, Porto Rico, and Mexico.

ORDER PASSERES.

Perching Birds.

Suborder CLAMATORES. Songless Birds.

FAMILY TYRANNIDÆ. Tyrant Flycatchers.

GENUS MILVULUS. SWAINS.

- 342 (442) MILVULUS TYRANNUS. (LINN.) Fork-tailed Flycatcher. South American species; occasionally taken in the United States; recorded from New Jersey and Mississippi.
- 343 (443) MILVULUS FORFICATUS. (GMEL.) Scissor-tailed Flycatcher. Western species; accidental in eastern United States, New England, Florida, etc.

GENUS TYRANNUS. CUVIER.

- 344 (444) TYRANNUS TYRANNUS. (LINN.) Kingbird. Nearly the whole of North America; south in winter to Cuba and South America; a familiar species known by various names such as Bee Martin, Bee-bird, etc.
- 345 (445) TYRANNUS DOMINICENSIS. (GMEL.) Gray Kingbird. Semi-tropical species; not uncommon in Florida; accidental in Georgia, South Carolina, and New England.
- 346 (447) TYRANNUS VERTICALIS. SAY. Arkansas Kingbird.

Western species; accidental east of the Mississippi; it has been taken in Maine, Massachusetts (Great Island), New York, New Jersey, District of Columbia, and Iowa.

GENUS MYIARCHUS. CABAN.

347 (452) MYIARCHUS CRINITUS. (LINN.) Crested Flycatcher.

Eastern United States; from the plains to the Atlantic, and southern Canada to the Gulf of Mexico; in winter Mexico and Central America; breeds from the Gulf States northward.

A. O. U. NO.

- A. O. U. GENUS SAYORNIS. BONAP.
- 348 (456) SAYORNIS PHŒBE. (LATH.) Phœbe.
 Ranges from Colorado and Texas to the Atlantic, and from Canada to Cuba and Mexico; breeds from the Carolinas, northward.
- 349 (457) SAYORNIS SAYA. (BONAP.) Say's Phœbe.
 Western species; only once recorded from New England; casual in Illinois and Wisconsin.

GENUS CONTOPUS. CABAN.

- 350 (459) CONTOPUS BOREALIS. (SWAINS.) Olive-sided Flycatcher. North America; breeding from Massachusetts, northward; south in winter to Central and South America.
- 351 (461) CONTOPUS VIRENS. (LINN.) Wood Pewee. Flycatcher. Eastern North America; from the plains to the Atlantic, and Canada to Florida and Mexico; breeds throughout eastern United States; north to Newfoundland.

GENUS EMPIDONAX. CABAN.

- 352 (463) EMPIDONAX FLAVIVENTRIS. BAIRD. Yellow-bellied Flycatcher. Eastern North America; breeds from northern United States, northward; south in winter to Central America.
- 353 (465) EMPIDONAX VIRESCENS. (VIEILL.) Acadian Flycatcher.
 - Eastern United States; from New York and Connecticut, southward, breeding as far south as Florida; winters in Mexico and Central America.
- 354 EMPIDONAX TRAILLII ALNORUM. BREWSTER. Alder Flycatcher. Eastern United States; from Illinois and Michigan to Atlantic; breeds from northern Illinois and northern New England, northward; winters south to Central America.
- 355 (467) EMPIDONAX MINIMUS. BAIRD. Least Flycatcher.
 - Eastern United States; from Gulf of St. Lawrence to Gulf of Mexico; south in winter to Central America; breeds from northern United States, northward, usually north of latitude 42°.

Suborder OSCINES. Song Birds.

FAMILY ALAUDIDÆ. Larks.

GENUS ALAUDA. LINN.

356 (473) ALAUDA ARVENSIS. LINN. European Skylark. Accidental in Greenland.

GENUS OTOCORIS. BONAP.

- 357 (474) OTOCORIS ALPESTRIS. (LINN.) Horned Lark. Shore Lark.
 - "Northeastern North America, Greenland, and northern parts of the old world; in winter, south; in eastern United States to the Carolinas, Illinois, etc." (A. O. U.); breeds north of United States, Labrador, Hudson Bay, etc.
- 358 (474b) Otocoris alpestris praticola. HENSIL Prairie Horned Lark.
 - The Mississippi Valley form of the Horned Lark; breeds as far eastward as Massachusetts and New York; it differs in having the forehead and streak over the eye white instead of yellow; it is also somewhat smaller and paler.

FAMILY CORVIDÆ. Crows, Jays, and Magpies. Subfamily GARRULINÆ. Magpies and Jays.

GENUS PICA. BRISS.

359 (475) PICA PICA HUDSONICA, (SAB.) American Magpie.

A western species; stragglers have been recorded from Illinois and Moutreal, Canada.

GENUS CYANOCITTA. STRICK.

- 360 (477) CYANOCITTA CRISTATA. (LINN.) Blue Jay.
 "Eastern North America to the plains and from the fur countries south to Florida and eastern Texas" (A. O. U.); breeds nearly throughout its range.
- 361 (477a) Cyanocitta cristata florincola. Cours. Florida Blue Jay.

Southern race of the Blue Jay, which occurs in Florida and along the Gulf coast; it is smaller and grayer than the northern Blue Jay, but otherwise similar.

GENUS APHELOCOMA. CABAN.

362 (479) APHELOCOMA CYANEA. (VIEILL.) Florida Jay. Florida.

GENUS PERISOREUS. BONAP.

363 (481) PERISOREUS CANADENSIS. (LINN.) Canada Jay.

"Northern New York, northern New England, and northern Michigan; north to Arctic America." (A. O. U.)

- 364 (484c) Perisoreus canadensis nigricapillus. Rudgw. Labrador Jay.
 - A Labrador race of the Canada Jay; somewhat darker and having the black of the head often extending in front of the eye; the breast is deep slate gray.

A. O. U. NO.

Subfamily CORVINÆ. Crows.

	A. O. U. NO.	Genus CORVUS. LINN.
365		CORVUS CORAX PRINCIPALIS. RIDGW. Northern Raven.
		Northern North America; from Illinois, Michigan, Maine, etc., north-
		ward; accidental as far sonth as North Carolina.
366	(488)	CORVUS AMERICANUS. AUD. American Crow.
		North America; from Hudson Bay to Gulf of Mexico; breeds nearly
		throughout its range.
367	(488a)	Corvus americanus pascuus. Cours. Florida Crow.
		Florida race of the Crow, which differs in having larger bill and feet.
368	(490)	CORVUS OSSIFRAGUS. WILS. Fish Crow.
		Eastern and southern United States; from Connecticut to Louisiana;
		accidental in Massachusetts: abundant in Georgia and Florida.

FAMILY STURNIDÆ. Starlings.

GENUS STURNUS. LINN.

369 (493) STURNUS VULGARIS. LINN. Starling.

An old world species; accidental in Greenland; some years ago it was introduced in New York, and is now not uncommon in Central Park.

FAMLIY ICTERIDÆ. Blackbirds, Orioles, etc.

GENUS DOLICHONYX. SWAINS.

370 (494) DOLICHONYX ORYZIVORUS. (LINN.) Bobolink.

Ranges in eastern North America; from Rocky Mountains to the Atlantic, and from Ontario to Gulf of Mexico; also occurs west of the Rocky Mountains; breeds north of Middle States; in winter West Indies and South America.

GENUS MOLOTHRUS. SWAINS.

371 (495) MOLOTHRUS ATER. (BODD.) Cowbird.

United States in general and part of Canada; south in winter to Mexico; breeds throughout its summer range; the female deposits her egg in other birds' nests.

GENUS XANTHOCEPHALUS. BONAP.

372 (497) XANTHOCEPHALUS XANTHOCEPHALUS. (BONAP.) Yellow-headed Blackbird.

Western North America; from Illinois and Wisconsin to Pacific coast; accidental in eastern United States, New England, Florida, etc. A. O. U. NO.

GENUS AGELAIUS. VIEILL.

- 373 (498) AGELAIUS PHENICEUS. (LINN.) Red-winged Blackbird.
 - Common throughout North America; from about latitude 52° to the Gulf; replaced in southern Florida and Gulf coast of Louisiana by the following race.
- 374 (498b) Agelaius phaniceus bryanti, Ribgw. Bahaman Red-winged Blackbird.
 - A small race, having a more slender bill, which inhabits the Bahaman Islands, southern Florida, and portions of the Gulf coast to Louisiana; the females are not as heavily streaked on the underparts.

GENUS STURNELLA. VIEILL.

- 375 (501) STURNELLA MAGNA. (LINN.) Meadow-lark.
 - "Eastern United States and southern Canada to the plains; breeds from the Gulf of Mexico northward." (A. O. U.)
- 376 (501b) Sturnella magna neglecta. (AUD.) Western Meadow-lark.
 - Western race which occurs in Illinois and Wisconsin; it differs in having the yellow of the throat extending upon the checks or malar region, also in having the lower under tail coverts white, or nearly white, not buff as in *S. magna*.

GENUS ICTERUS. BRISS.

 377 (502) ICTERUS ICTERUS. (LINN.) Troupial.
 South American species : recorded by Audubon from South Carolina ; no subsequent records for eastern North America.

SUBGENUS PENDULINUS. VIEILL.

378 (506) ICTERUS SPURIUS. (LINN.) Orchard Oriole.
 Eastern United States; from northern New England, Michigan, Illinois, and Dakota, to the Gulf of Mexico; breeds throughout its summer range; winters as far south as northern South America.

SUBGENUS YPHANTES. VIEILL.

- 379 (507) ICTERUS GALBULA. (LINN.) Baltimore Oriole.
 - Eastern United States; from Rocky Mountains to the Atlantic Ocean, and from Ontario to the Gulf of Mexico; winters south to Mexico and South America.
- 380 (508) ICTERUS BULLOCKI. (SWAINS.) Bullock's Oriole.

Western species; only once recorded from our Eastern States; Bangor, Me., one record.

GENUS SCOLECOPHAGUS. SWAINS.

381 (509) SCOLECOPHAGUS CAROLINUS. (MÜLL.) Rusty Blackbird. Eastern and northern North America west to the plains; breeds from northern United States north to Labrador; winters from Virginia southward.

368

A. O. U. NO.

382 (510) SCOLECOPHAGUS CYANOCEPHALUS. (WAGL.) Brewer's Blackbird. A western species, which sometimes occurs in Illinois; stragglers have been killed in South Carolina and Louisiana.

GENUS QUISCALUS. VIEILL.

- 383 (511) QUISCALUS QUISCULA. (LINN.) Purple Grackle.
 - "Northern Alabama, eastern Tennessee, and east of the Alleghanies from Georgia to Massachusetts" (A. O. U.); in winter south to the Gulf.
- 384 (511a) Quiscalus quiscula aglœus. (BAIRD.) Florida Graekle.
 - A smaller southern race; ranging from Virginia along the Atlantic coast and Gulf States to Texas.
- 385 (511b) Quiscalus quiscula ceneus. (RIDGW.) Bronzed Grackle.
 - Eastern North America; west of the Alleghanies; New England to Labrador and Hudson Bay; west to Rocky Mountains, and south to the lower Mississippi Valley; this Grackle has the back a uniform bronze or golden-olive, but not the various tints of bluepurple bronze, etc., as in true *quiscula*.
- 386 (513) QUISCALUS MAJOR. (VIEILL.) Boat=tailed Grackle.
 - "Coast region of Atlantic and Gulf States; from Virginia to Texas." (A. O. U.)

FAMILY FRINGILLIDÆ. Finches, Sparrows, etc.

GENUS COCCOTHRAUSTES. BRISS.

387 (514) COCCOTHRAUSTES VESPERTINA. (COOP.) Evening Grosbeak. Western species; casual in eastern United States; Illinois, Michigan, New England, etc.

GENUS PINICOLA. VIEILL.

388 (515) PINICOLA ENUCLEATOR. (LINN.) Pine Grosbeak. Northern North America; breeds from northern New England northward.

GENUS CARPODACUS. KAUP.

- 389 (517) CARPODACUS PURPUREUS. (GMEL.) Purple Finch.
 - "Eastern North America; from the Atlantic coast to the plains; breeds from the Middle States northward." (A. O. U.)

GENUS PASSER. LINN.

- **390** (-) **PASSER DOMESTICUS.** (LINN.) **English Sparrow.** European species; introduced into United States.
- **391** (--) **PASSER MONTANUS. European Tree Sparrow.** European species; introduced into United States.

A. O. U. GENUS LOXIA. LINN.

- 392 (521) LOXIA CURVIROSTRA MINOR. (BREHM.) American Crossbill.
 - Northern North America; mainly north of United States; occurs irregularly in eastern United States, as far south as Maryland; accidental to South Carolina.

393 (522) LOXIA LEUCOPTERA. GMEL. White-winged Crossbill.

"Northern parts of North America; south into the United States in winter; breeds from northern New England northward." (Λ. Ο. U.)

GENUS ACANTHIS. BECHST.

394 (527) **ACANTHIS HORNEMANNII.** (HOLB.) **Greenland Redpoll.** Northern Greenland; breeding from 69° to 73° north latitude, and

eastern Arctic America; south to Labrador in winter." (RIDGW.)

- 395 (527a) Acanthis hornemannii exilipes. (COUES.) Hoary Redpoll.
 - A race differing in smaller size; length, less than 5.35; wing, less than 5.30; it inhabits the far north, but occurs in winter in the northern United States; easual in New Eugland and Illinois.

396 (528) ACANTHIS LINARIA. (LINN.) Redpoll. Redpoll Linnet.

- Northern species, which occurs in winter as far south as Virginia and Illinois; casual in New England.
- 397 (528a) Acanthis linaria holballii. (BREHM.) Holball's Redpoll.
 - A somewhat larger bird than A. *linaria*, with somewhat longer bill; wing, less than 3.15; northern portion of both continents; casual in eastern North America; south in winter to New York and Massachusetts.
- 398 (528b Acanthis linaria rostrata, (COUES.) Greater Redpoll.

Similar to *linaria*, but slightly larger, and the bill stouter; wing, over 3.15; southern Greenland and Labrador; south to New England and Illinois in winter.

399 CARDUELIS CARDUELIS. LINN. European Goldfinch. Introduced in Massachusetts and New York,

GENUS ASTRAGALINUS. CAB.

- 400 (529) ASTRAGALINUS TRISTIS. (LANN.) American Goldfinch. Yellow Bird. North America; south of about latitude 54° to the Gulf States; breeding from about latitude 38° northward.
- 401 (532) ASTRAGALINUS NOTATUS. (DUBUS.) Black-headed Goldfinch. Mexican species; recorded by Andubon from Kentucky.
- 402 (533) ASTRAGALINUS PINUS. (WILS.) Pine Siskin. Pine Finch. North America; breeds from northern border of United States, northward; winters south to Gulf of Mexico.

	AOU, NO.	GENUS PASSERINA. VIEILL.
403	(534)	PASSERINA NIVALIS. (LINN.) Snowflake. Snow Bunting. Northern North America; breeds in high latitudes; south in winter to
		New England, Illinois, etc.; accidental as far south as Florida.
		GENUS CALCARIUS. BECHS.
404	(536)	CALCARIUS LAPPONICUS. (LINN.) Lapland Longspur. Northern North America; breeding in the far north; south in winter to Middle States; common in the interior to Kansas and Colorado.
405	(537)	 CALCARIUS PICTUS. (SWAINS.) Smith's Longspur. "Interior of North America; from the Arctic coast to Illinois and Texas; breeding far north." (A. O. U.)
406	(538)	CALCARIUS ORNATUS. (Towns.) Chestnut-collared Longspur. Western species; accidental in Massachusetts and New York.
		Genus RHYNCHOPHANES. BAIRD.
407	(539)	RHYNCHOPHANES MCCOWNII. (LAWR) McCown's Longspur. Western species; casual in Illinois.
		Genus POOCÆTES. BAIRD.
408	(540)	POOCÆTES GRAMINEUS. (GMEL.) Vesper Sparrow. Bay-winged Bunting.
		Eastern North America; from the plains to the Atlantic Ocean; breeds from Virginia to Ontario.
		GENUS AMMODRAMUS. SWAINS.
439	(541)	AMMODRAMUS PRINCEPS. (MAYN.) Ipswich Sparrow. "Atlantic coast from Nova Scotia; south in winter to Georgia; breeds
410	(542a)	on Sable Island, Nova Scotia." (Λ. O. U.) AMMODRAMUS SANDWICHENSIS SAVANNA. (WILS.) Savanna
		Sparrow."Eastern North America; breeding from the northern United States to Labrador and Hudson Bay Territory." (A. O. U.)
		SUBGENUS COTURNICULUS. BONAP.
411	(546)	AMMODRAMUS SAVANNARUM PASSERINUS. (WILS.) Grasshop-
		 per Sparrow. Yellow-winged Sparrow. " Eastern United States and southern Canada; west to the plains; south in winter to Florida, Cuba, Porto Rico, and Central America."
412	(547)	(A. O. U.) AMMODRAMUS HENSLOWII. (AUD.) Henslow's Sparrow. "Eastern United States; west to the plains; north to southern New
		England and Ontario." (A. O. U.)

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- 413 (548) AMMODRAMUS LECONTEII. (AUD.) Leconte's Sparrow.
 - Great plains and more western prairies; breeding from Dakota, Minnesota, etc., to Manitoba; migrating southward and eastward in winter through Illinois, Iowa, Kansas, etc., to South Carolina and Gulf States to Florida and Texas.
- 414 (549) AMMODRAMUS CAUDACUTUS. (GMEL) Sharp-tailed Sparrow. Sharp-tailed Finch.
 - Breast, pale buff with distinct dark streaks; breeds on salt marshes of the Atlantic coast from New England to Maryland; south in winter to the Gulf States.
- 415 (549a) AMMODRAMUS NELSONI. ALLEN. Nelson's Sparrow.
 - "Fresh water marshes of the interior; from northern Illinois, northward to North Dakota and Manitoba; south in winter to Texas; in migrations, visits Atlantic coast (New England and Lower Hudson Valley) to Charleston, S. C." (A. O. U.)
- 416 (549b) Ammodramus nelsoni subvirgatus. (DWIGHT.) Acadian Sharp-tailed Sparrow.

Breast and sides, pale buff, not tawny or ochraceons buff as in nelson.

- "Coast of southern New Brunswick, Frince Edward Island (and probably Nova Scotia), and southward in migration to South Carolina." (A. O. U.)
- 417 (550) AMMODRAMUS MARITIMUS. (WILS.) Seaside Sparrow. Seaside Finch.
 Salt marshes of Atlantic coast; from Connecticut southward to Georgia; accidental in Massachusetts." (Λ. Ο. U.)
- 418 (550a) Animodramus maritimus peninsalæ, Allex, Scott's Seaside Sparrow. A dark race of maritimus which occurs from South Carolina to the northeast and northwest coast of Florida.
- 418a Ammodramus maritimus fisheri, CHAPMAN, Louisiana Seaside Sparrow. Coast of Louisiana to Texas.
- 418b Ammodramus maritimus macgillivraii. (AUD.) Macgillivray's Seaside Sparrow.

Coast of South Carolina and Georgia.

419 (551) AMMODRAMUS NIGRESCENS. Ridgw. Dusky Seaside Sparrow. Head of Indian River and Salt Lake; eastern Florida.

GENUS CHONDESTES. SWAINS.

 420 (552) CHONDESTES GRAMMACUS. (SAY.) Lark Sparrow. Lark Finch. From Illinois and Michigan westward to the plains; not common on Atlantic coast.

GENUS ZONOTRICHIA. SWAINS.

- 421 (553) ZONOTRICHIA QUERULA. (NUTT.) Harris's Sparrow.
 - Middle United States; Illinois to Kansas, and easually to Oregon; no New England record.

A. O. U. N.O.

422 (554) ZONOTRICHIA LEUCOPHRYS. (FORST.) White-crowned Sparrow.

"North America at large; breeding chiefly in the Rocky Mountains, the Sierra Nevada, and northeast to Labrador; south in winter to the Valley of Mexico." (A. O. U.)

423 (558) ZONOTRICHIA ALBICOLLIS. (GMEL.) White-throated Sparrow.

Eastern North America; from the plains to the Atlantic Ocean; north to Labrador, and south to the Carolinas, and easually to Florida; breeds from northern New England and New York northward.

GENUS SPIZELLA. BONAP.

- 424 (559) SPIZELLA MONTICOLA. (GMEL.) Tree Sparrow.
 Eastern North America; from Arctic Ocean to the Carolinas; breeds north of United States.
- **425** (560) **SPIZELLA SOCIALIS.** (WILS.) **Chipping Sparrow.** Eastern North America; from Rocky Mountains north to fur countries, and south to the Gulf; breeds nearly throughout its range.
- 426 (561) SPIZELLA PALLIDA. (SWAINS.) Clay=colored Sparrow.
- Middle North America; from Illinois to Rocky Mountains; breeds from Iowa northward; accidental on Atlantic coast (North Carolina).
- **427** (562) **SPIZELLA BREWERI.** CASS. **Brewer's Sparrow.** Western species; once taken in Massachusetts.
- 428 (563) SPIZELLA PUSILLA. (WILS.) Field Sparrow.
 Eastern United States; from the plains to the Atlantic; breeds from the Carolinas and Illinois north to Canada.
- **429** (563*a*) Spizella pusilla arenacea. CHADB. Western Field Sparrow. This race is of accidental occurrence in southern Louisiana.

GENUS JUNCO. WAGL.

- 430 (567) JUNCO HYEMALIS. (LINN.) Slate-colored Junco. Snowbird. New England, Florida, and Illinois.
- Junco hyemalis shufeldti. COALE. Shufeldt's Junco.
 Western race; accidental in Massachusetts, Illinois, and Maryland; it is browner on the back, and the sides are vinaceous brown.
- **432** (567¹) Junco hyemalis carolinensis. BREWST. Carolina Junco.
 - Rather larger than *hyemalis*; the back and breast slate color; not tinged with brown; Alleghany Mountains, from Virginia to the Carolinas.
- 433 (--) JUNCO MONTANUS. RIDGW. Montana Junco. Northwestern species; ranging as far east as Illinois, and stragglers reaching the Atlantic coast.

GENUS PEUCÆA. AUD.

434 (575) PEUCÆA ÆSTIVALIS. (LICHT.) Pine-woods Sparrow. Southern Georgia and Florida.

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- 435 (575a) Pencora æstivalis bachmanii. (Λυρ.) Bachman's Sparrow.
 Coast States; from the Carolinas to Texas; north to Illinois in summer; it is a darker bird than æstivalis, the back being darκ rnfous brown, not light chestnut.

GENUS MELOSPIZA. BAIRD.

- 436 (581) MELOSPIZA FASCIATA. (GMEL.) Song Sparrow.
 "Eastern United States to the plains; breeding from Virginia and the sonthern portion of the Lake States northward to the fur countries." (A. O. U.)
 437 (583) MELOSPIZA LINCOLNI. (AUD.) Lincoln's Sparrow.
- Throughout North America; breeds from northern border of United States northward; south in winter to Central America.
- 438 (584) MELOSPIZA GEORGIANA. (LATH.) Swamp Sparrow.
 Whole of eastern North America; from Labrador and Newfoundland to the Gulf of Mexico; breeds from the northern States northward.

GENUS PASSERELLA. SWAINS.

439 (585) PASSERELLA ILIACA. (MERR.) Fox Sparrow.
 Eastern North America; from the Arctic to the Gulf of Mexico, west to the plains; breeds north of the United States.

GENUS PIPILO. VIEILL.

- 440 (587) PIPILO ERYTHROPHTHALMUS. (LINN.) Towhee.
 Eastern United States; from Canada to Georgia; breeds from Georgia northward; common in New England.
- 441 (587a) Pipilo erythrophthalmus alleni. COUES. White-eyed Towhee. Florida race, which occurs as far north as South Carolina; it differs in having the iris white or yellowish, and only the two outer tail feathers are marked with white.

GENUS CARDINALIS. BONAP.

- 442 (593) CARDINALIS CARDINALIS. (LINN.) Cardinal. Cardinal Grosbeak. Eastern United States; from New England (easual) to the Gulf of Mexico.
- 442a (593d) Cardinalis cardinalis floridanus. Ridgw. Florida Cardinal. Local race; resident in Florida.

GENUS HABIA. REICH.

- 443 (595) HABIA LUDOVICIANA. (LINN.) Rose-breasted Grosbeak.
 Eastern United States; from the plains and from Canada to Central America; breeding from Carolinas northward.
- 444 (596) HABIA MELANOCEPHALA. (SWAINS.) Black-headed Grosbeak. A western species, which has been taken in Michigan-

	A. O. U. NO.	GENUS GUIRACA. SWAINS.
445	(597)	GUIRACA CÆRULEA. (LINN.) Blue Grosbeak.
		Eastern United States; from Illinois and New England (not common) to the Gulf and Cuba.
		GENUS CYANOSPIZA. BAIRD.
446	(598)	CYANOSPIZA CYANEA, (LINN.) Indigo Bunting,
		Eastern United States; from the Canadian border to the Gulf and Central America.
447	(600)	CYANOSPIZA VERSICOLOR. (BONAP.) Varied Bunting.
448	(601)	Western species, which has been taken in Michigan.
440	(601)	CYANOSPIZA CIRIS. (LINN.) Painted Bunting. Eastern United States; from Illinois and North Carolina south to the
		Gulf, and in winter to Central America.
		GENUS EUETHEIA. REICH.
449	(603)	EUETHEIA BICOLOR. (LINN.) Grassquit. Black-faced Finch.
450	(603 ¹)	West Indian species; recorded from Florida Keys. EUETHEIA CANORA. (GMEL.) Melodious Grassquit. Cuban Finch.
100	(000)	Cuban species; recorded from Florida Keys.
		GENUS SPIZA. BONAP.
451	(604)	SPIZA AMERICANA. (GMEL.) Dickcissel. Black-throated Bunting.
		Eastern United States; from Rocky Mountains to the Alleghanies; and casual, or accidental to New England; breeding from Texas to the
		Canadian border; south in winter to Central and South America.
		GENUS CALAMOSPIZA. BONAP.
452	(605)	CALAMOSPIZA MELANOCORYS. STEJN. Lark Bunting.
		Western species; recorded from Massachusetts and Long Island.
		FAMILY TANAGRIDÆ. Tanagers.
		GENUS PIRANGA. VIEILL.
453	(607)	PIRANGA LUDOVICIANA. (WILS.) Louisiana Tanager.
454	(608)	Western species; recorded from Massachusetts and New York. PIRANGA ERYTHROMELAS. VIEILL. Scarlet Tanager.
104	(000)	Eastern United States; from the plains to the Atlantic, and Ontario to
		the West Indies, and South America; breeds from Illinois and
455	(610)	Virginia northward.
455	(610)	PIRANGA RUBRA. (LINN.) Summer Tanager. Eastern United States; but more southerly in its range than the Scar-
		let Tenegron, werely reaching conthern New England although

let Tanager; rarely reaching southern New England, although stragglers occur as far north as New Brunswick; breeds in Virginia (and occasionally still further north) to Florida.

FAMILY HIRUNDINIDÆ. Swallows.

		FAMILI IIKUNDINIDAL. Swallows.
	Λ Ο. Γ. NO.	GENUS PROGNE. BOIE.
456		PROGNE SUBIS. (LINN.) Purple Martin. Eastern North America; from Ontario to the Gulf of Mexico; south in winter to South America.
457	(611^{1})	PROGNE CRYPTOLEUCA. BABRD. Cuban Martin. Cuban species; casual in southern Florida.
		GENUS PETROCHELIDON. CABAN.
458	(612)	PETROCHELIDON LUNIFRONS. (SAY.) Cliff Swallow. North America; from the Arctic Ocean to the Gulf of Mexico, and in
459	(—)	winter to South America. PETROCHELIDON FULVA. (VIEILL.) Cuban Cliff Swallow. West Indian species; accidental at Dry Tortugas, Fla. GENUS CALLICHELIDON . BAIRD.
460	(—)	CALLICHELIDON CYANEOVIRIDIS. (BRYANT.) Bahaman Swallow. Bahaman species; accidental at Dry Tortugas, Fla.
		GENUS HIRUNDO. (LINN.)
461	(613)	HIRUNDO ERYTHROGASTER. BODD. Barn Swallow. North America ; breeding from the fur countries to the Gulf of Mexico ; south in winter in the West Indies and South America.
		GENUS TACHYCINETA. CABAN.
462	(614)	TACHYCINETA BICOLOR. (VIEILL.) Tree Swallow. White-bellied Swallow.

Throughout North America; from Labrador to the Gulf; breeds nearly throughout its range; winters from Middle States to West Indies and Central America.

GENUS CLIVICOLA. FORSTER.

 463 (616) CLIVICOLA RIPARIA. (LINN.) Bank Swallow.
 North America in general; ranges in the eastern portion, from Labrador to the Gulf, and northern South America; breeds from Middle States northward.

GENUS STELGIDOPTERYX. BAIRD.

 464 (617) STELGIDOPTERYX SERRIPENNIS. (AUD.) Rough-winged Swallow. United States; from British Columbia to Mexico; breeds in United States throughout its range.

FAMILY AMPELIDÆ. Waxwings.

GENUS AMPELIS. LINN.

465 (618)AMPELIS GARRULUS. LINN. Bohemian Waxwing.

> Northern North America; breeding north of United States; casual in winter as far south as Illinois; recorded from Pennsylvania.

(619)AMPELIS CEDRORUM. (VIEILL.) Cedar Waxwing. Cedar Bird. Cherry Bird.

> Throughout North America; from Hudson Bay to the Gulf and West Indias in winter; breeds from about latitude of Alleghanies northward; a familiar New England bird, usually seen in flocks.

FAMILY LANDILÆ. Shrikes.

GENUS LANIUS. LINN.

- LANIUS BOREALIS. VIEILL. Northern Shrike. Butcher Bird. 467 (621)
- Northern North America; ranging in winter south to Virginia, Illinois, Kansas, etc.; not uncommon in New England; breeds north of United States; known as Butcher Bird on account of habit of impaling small birds on thorns.
- 468 (622)LANIUS LUDOVICIANUS. LINN. Loggerhead Shrike.
 - Eastern United States; from the plains to the Atlantic, and from Canada through the interior, including western New England, to the Gulf of Mexico; rare or casual north of Virginia on the coast.

FAMILY VIREONIDÆ. Vireos.

GENUS VIREO. VIEILL.

SUBGENUS VIREOSYLVIA. BONAP.

- 469 (623)VIREO CALIDRIS BARBATULUS. (CAB.) Black-whiskered Vireo. West Indian species; accidental in southern Florida.
- 470 (624)VIREO OLIVACEUS. (LINN.) Red=eyed Vireo. Eastern North America; from the Rocky Mountains to the Atlantic; north to the Aretic regions, and south to northern South America; breeds nearly throughout its North American range; common in New England.

SUBGENUS LANIVIREO. BAIRD.

- 471 (625)VIREO FLAVOVIRIDIS. (CASS.) Yellow-green Vireo. Mexican species; once recorded from Province of Quebec.
- 472 (626)VIREO PHILADELPHICUS. (CASS.) Philadelphia Vireo. Eastern North America; from Hudson Bay to the Gulf; breeds from northern New England northward.

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473 (627) VIREO GILVUS. (VIEILL.) Warbling Vireo.

Throughout North America; breeding nearly throughout its range.

- **474** (628) **VIREO FLAVIFRONS.** VIEILL. **Yellow-throated Vireo.** Eastern United States; from the British Provinces to Florida; breeds throughout its range.
- 475 (629) VIREO SOLITARIUS. (Wills.) Blue-headed Vireo.
 Eastern United States; from Hudson Bay to the Gulf and Central America in winter; breeds from southern New England and Illinois northward.
- 476 (629b) Vireo solitarius plumbeus. (COUES.) Plumbeous Vireo.
 Western species; one record in New York State; its occurrence is purely accidental east of the Mississippi.
- 477 (629c) Vireo solitarius alticola. BREWST. Mountain Solitary Vireo.
 Differs mainly in having a larger bill and slate-blue back; ranges from the Alleghanies in the Carolinas; south in winter to Florida.

SUBGENUS VIREO. VIEILL.

- 478 (631) VIREO NOVEBORACENSIS. (GMEL.) White-eyed Vireo. Eastern United States; from Rocky Mountains to the coast, and from southern New England and Michigan to the Gulf of Mexico; breeds throughout its United States range.
- 479 (631a) VIREO NOVEBORACENSIS MAYNARDI. BREWST. Key West Vireo. A rather small, pale race, which is resident in southern Florida.
- 480 (633) VIREO BELLII. (AUD.) Bell'S Vireo. Western species which occurs in the northern Mississippi Valley, Illinois, and Indiana, southwest to Mexico.

FAMILY CŒREBIDÆ. Honey Creepers.

GENUS CŒREBA. VIEILL.

481 (635) CŒREBA BAHAMENSIS. (REICH.) Bahama Honey Creeper. Bahaman species; stragglers have been taken on the Florida Keys.

FAMILY MNIOTILTIDÆ. Wood Warblers.

GENUS MNIOTILTA. VIEILL.

482 (636) MNIOTILTA VARIA. (LINN.) Black and White Warbler. Eastern United States; south to West Indies and northern South America; breeds north of Virginia.

GENUS PROTONOTARIA. BAIRD.

483 (637) PROTONOTARIA CITREA. (BODD.) Prothonotary Warbler. Eastern United States; from Illinois, Michigan, and New England to the Gulf, and in winter to South America; breeds throughout its range.

	A. O. U.	Genus HELINAIA. Audubon.
484	ю. (638)	HELINAIA SWAINSONII. AUD. Swainson's Warbler. Southeastern United States; from Virginia to Texas; accidental in Illinois.
485	(639)	GENUS HELMITHERUS. RAFINESQUE. HELMITHERUS VERMIVORUS. (GMEL.) Worm-eating Warbler. Eastern United States; from southern New England to the Gulf; south in winter to South America.
		GENUS HELMINTHOPHILA. RIDGW.
486	(640)	HELMINTHOPHILA BACHMANI. (AUD.) Bachman's Warbler. Cuba and Florida, north; easually as far as Virginia, and west to
487	(641)	Louisiana. HELMINTHOPHILA PINUS. (LINN.) Blue-winged Warbler. Eastern United States; from southern New England to the Gulf; south
488	(642)	in winter to Mexico. HELMINTHOPHILA CHRYSOPTERA. (LINN.) Golden-winged Warbler. Eastern United States; Minnesota and southwestern Ontario to South
489		 America; breeds from New Jersey and Indiana, northward, and in the Alleghanies to South Carolina. HELMINTHOPHILA LAWRENCEI. (HERRICK.) Lawrence's Warbler. New Jersey, Connecticut, etc.; probably a hybrid between <i>H. pinus</i>
490		and <i>H. chrysoptera</i> . HELMINTHOPHILA LEUCOBRONCHIALIS. (BREWST.) Brewster's Warbler.
491	(645)	 Southern New England, Michigan, etc.; probably a hybrid between H. pinus and H. chrysoptera. HELMINTHOPHILA RUFICAPILLA. (WILS.) Nashville Warbler. Eastern United States; from the plains to the Atlantic Ocean, and from British North America to Mexico; breeds from northern United
492	(646)	States, northward. HELMINTHOPHILA CELATA. (SAY.) Orange-crowned Warbler. Eastern North America; from the sub-arctic regions to the Gulf of
		Mexico; rare east of the Alleghany Mountains north of Virginia; breeds north of the United States, except in the Rocky Mountains.
493	(647)	HELMINTHOPHILA PEREGRINA. (WILS.) Tennessee Warbler. Eastern North America; from Hudson Bay to Central America; breeds
494	(648)	from northern New England northward. COMPSOTHLYPIS AMERICANA. (LINN.) Parula Warbler. "South Atlantic and Gulf States, east of Texas; northward, near the
		Atlantic coast to the District of Columbia, and in the interior to Mt. Carmel, Ill." (BREWSTER.)

- 380 LIST OF THE BIRDS OF EASTERN NORTH AMERICA.
- 494a (648a) Compsothlypis americana usnew. BREWST- Northern Parula Warbler.
- "Averaging slightly larger, but with a shorter bill; adult male, with less yellow on the underparts and more black or blackish on the lores and malar region; the dark collar across the jugulum, black or blackish, broad and conspicuous; the chest mottled or spotted with rich brownish chestnut; breeding range, New England, New York, and westward, along the northern tier of States, northward, into the Maritime Provinces and Canada." (BREWSTER.)
- 495 (650) DENDROICA TIGRINA. (GMEL.) Cape May Warbler.
 Eastern North America; from Hudson Bay to the Gulf States and the West Indies; breeds from northern New England northward.
- 496 (652) DENDROICA ÆSTIVA. (GMEL.) Yellow Warbler. Throughout North America, except southwestern portion, where it is replaced by an allied form; south in winter to northern South America.
- **497** (654) **DENDROICA CÆRULESCENS.** (GMEL.) **Black-throated Blue Warbler.** Eastern North America; from Labrador to the West Indies and Central America; breeds from northern New England northward.
- 497a (-) Dendroica corrulescens cairnsı. Coues. Cairn's Warbler.
 - A local race, resident in the Alleghany Mountains, but occurring in southeastern Atlantic States; differs in having the back darker, sometimes almost wholly black, and more white on the outer tail feathers.
- 498 (655) DENDROICA CORONATA, (LINN.) Yellow-rumped Warbler. Myrtle Warbler.
 - Eastern North America, and casual to the Pacific; winters from southern New England to Central America; breeds from northern United States northward.
- 499 (656) DENDROICA AUDUBONI. (TOWNS.) Audubon's Warbler.
 - A western species; stragglers have been taken in Massaehusetts and Pennsylvania.
- 500 (657) DENDROICA MACULOSA. (GMEL.) Magnolia Warbler. Black and Yellow Warbler.
 - Eastern North America; from British Columbia to the West Indies; breeds from nerthern New England northward.
- 501 (658) DENDROICA RARA. (WILS.) Cerulean Warbler. Eastern United States; from Ontario to the Gulf; rare east of the Alleghanies; breeds from Virginia and Tennessee to Minnesota.
- 502 (659) DENDROICA PENNSYLVANICA. (LINN.) Chestnut-sided Warbler. Eastern North America; from southern Ontario to Central America and Bahamas; breeds from Illinois and New York northward.
- 503 (660) DENDROICA CASTANEA. (Wills.) Bay-breasted Warbler. Eastern North America; breeding from Hudson Bay to New England; sonth in winter to Central America.

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504 (661) DENDROICA STRIATA. (FORST.) Black-poll Warbler. Eastern North America; breeding from Labrador and Greenland to

northern New England; south in winter to northern South America.

- 505 (662) DENDROICA BLACKBURN Æ. (GMEL.) Blackburnian Warbler. Eastern North America; breeding from Massachusetts to Labrador; south in winter to South America.
- 506 (663) DENDROICA DOMINICA. (LANN.) Yellow-throated Warbler. Southeastern United States; from Virginia to West Indies.
- 507 (663a) Dendroica dominica albilora. BAIRD. Syeamore Warbler.
 - A western form which occurs in Mississippi Valley westward; accidental or easual to North Carolina; differs in having the stripe in front of the eye white instead of yellow.
- 508 (667) DENDROICA VIRENS. (GMEL.) Black-throated Green Warbler. Eastern North America; from Hudson Bay to the West Indies; breeds southern New England and Illinois northward.
- 509 (668) DENDROICA TOWNSENDI. (NUTT.) Townsend's Warbler. A western species; one record from Pennsylvania.
- 510 (670) DENDROICA KIRTLANDI. BAIRD. Kirtland's Warbler.
 Eastern United States and Bahamas; little known as to its range; specimens have been taken in Florida, South Carolina, Virginia, Illinois, Minnesota, etc.; not uncommon in the Bahama Islands in winter.
- 511 (671) DENDROICA VIGORSII. (AUD.) Pine Warbler.
 Eastern United States; from Manitoba and Ontario to the Gulf and West Indies; breeds locally throughout its range.
- 512 (672) DENDROICA PALMARUM. (GMEL.) Palm Warbler. Redpoll Warbler. British America to the Gulf States and West Indies; mostly in the interior, but casual in New England and Atlantic coast States.
- 513 (672a) Dendroica palmarum hypochrysea. RIDGW. Yellow Palm Warbler.
- Atlantic States; from Hudson Bay to Gulf; common in Florida; in winter differs from *palmarum*, in having the underparts **yellow**, not white, or yellowish white.
- 514 (673) DENDROICA DISCOLOR. (VIEILL.) Prairie Warbler.
 Eastern United States; from Michigan and New England to Florida and West Indies; breeds throughout its eastern United States range.

GENUS SEIURUS. SWAINS.

515 (674) SEIURUS AUROCAPILLUS. (LINN.) Oven-bird.

- Eastern North America; breeding from Virginia to Labrador; winters in Florida, West Indies, and Central America.
- 516 (675) SEIURUS NOVEBORACENSIS. (GMEL.) Water-thrush. Great part of eastern North America; breeds from northern New England northward; winters south to South America.

LIST OF THE BIRDS OF EASTERN NORTH AMERICA.

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- 517 (675a) Seiurus noveboracensis notabilis. (GRINN.) Grinnell's Water-thrush.
 - Illinois, westward; occasionally east to Virginia and New Jersey; differs in being larger and the superciliary stripe whiter.
- 518 (676) SEIURUS MOTACILLA. (VIEILL.) Louisiana Water-thrush. Eastern United States; from southern New England to West Indies and Central America.

GENUS GEOTHLYPIS. CABAN.

- 519 (677) GEOTHLYPIS FORMOSA. (WILS.) Kentucky Warbler. Eastern United States; from southern New England to the Gulf States and West Indies, and Central America in winter; breeds nearly throughout its United States range.
- 520 (678) GEOTHLYPIS AGILIS. (WILS.) Connecticut Warbler.
 Eastern North America; south in winter to South America; breeds north of United States.
- 521 (679) GEOTHLYPIS PHILADELPHIA. (WILS.) Mourning Warbler. Eastern North America; breeding from New England and Michigan, northward; South and Central America in winter.
- 522 (681) GEOTHLYPIS TRICHAS. (LINN.) Maryland Yellow-throat. Eastern United States; from Labrador to the Gulf States, West Indies, and Central America in winter; breeds from Georgia to Massachusetts.
- 523 (-) Geothlypis trichas ignota. CHAPMAN. Florida Yellow-throat.
 Southern race, which is resident in southern Georgia and Florida; it differs in being deeper yellow below, the black mask of the male wider, and the upper parts browner.

GENUS ICTERIA. VIEILL.

524 (683) ICTERIA VIRENS. (LINN.) Yellow-breasted Chat. Eastern United States; from Ontario to the Gulf of Mexico, in winter; breeds from southern New England northward.

GENUS WILSONIA. BONAP.

525 (684) SYLVANIA MITRATA. (GMEL.) Hooded Warbler.

Eastern United States; from southern Ontario to the Gulf States, and west to plains; breeds nearly throughout its range; West Indies and Central America in winter.

- 526 (685) WILSONIA PUSILLA. (WILS.) Wilson's Warbler.
 - Eastern North America; from Rocky Mountains to Atlantic Ocean and Labrador, and Hudson Bay to Mexico; breeds from border of United States northward.

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527 (686) WILSONIA CANADENSIS. (LINN.) Canadian Warbler.

Eastern North America; from the great plains to the Atlantic Ocean, and Labrador to Central America; breeds from the mountains of southern New England and the Alleghanies northward.

GENUS SETOPHAGA. SWAINS.

528 (687) SETOPHAGA RUTICILLA. (LINN.) American Redstart. North America; breeds from about latitude of North Carolina northward; south in winter to southern South America.

FAMILY MOTACILLIDÆ. Wagtails.

GENUS MOTACILLA. LINN.

529 (694) **MOTACILLA ALBA.** (LINN.) White Wagtail. Old world species; accidental in Greenland.

GENUS ANTHUS. BECHS.

- **530** (697) ANTHUS PENNSYLVANICUS. (LATH.) Titlark. American Pipit. Whole of North America; breeds from Labrador northward; south in winter to Gulf States and Central America.
- 531 (698) ANTHUS PRATENSIS. (LINN.) Meadow Pipit. European species; accidental in Greenland.
- **532** (700) **ANTHUS SPRAGUEII.** (AUD.) Sprague's Pipit. Western species; Charleston, S. C., one record.

FAMILY TROGLODYTIDÆ. Wrens, Thrashers, etc.

Subfamily MIMINÆ. Thrashers

GENUS MIMUS. BOIE.

533 (703) MIMUS POLYGLOTTOS. (LINN.) Mockingbird. "United States; south into Mexico; rare and of irregular distribution;

from Maryland northward to Massachusetts." (A. O. U.)

GENUS GALEOSCOPTES. CABAN.

534 (704) GALEOSCOPTES CAROLINENSIS. (LINN.) Catbird.

Eastern United States and British Provinces; breeds nearly throughout its North American range; winters in the Gulf States, Cuba, and Central America.

GENUS HARPORHYNCHUS. CABAN.

535 (705) HARPORHYNCHUS RUFUS. (LINN.) Brown Thrasher. Brown Thrush. Eastern United States and Ontario to the Gulf States; breeds nearly throughout its range.

Subfamily TROGLODYTINÆ. Wrens.

GENUS THRYOTHORUS. VIEILL.

536 (718) THRYOTHORUS LUDOVICIANUS. (LATH.) Carolina Wren. Eastern United States; from Illinois and Connecticut to the Guif of

Mexico; breeds nearly throughout its range.

537 (718a) Thryothorus ludoviciauns mutmensis. (RIDGW.) Florida Wren. A Florida race, differing in being larger and darker.

GENUS THRYOMANES. SCLATER.

538 (719) THRYOMANES BEWICKII. (AUD.) Bewick's Wren.

"Eastern United States; rare and local east of the Alleghanies, and north of 40°; west to the edge of great plains; winters in more southern districts." (Ridgway.)

GENUS TROGLODYTES. VIEILL.

- 539 (721) TROGLODYTES AËDON. VIEILL. House Wren.
 - "Eastern United States and southern Ontario, west to Indiana and Louisiana; resident from middle districts, southward." (A. O. U.)
- 540 (721b) Troglodytes aëdon aztecus. (BAIRD.) Western House Wren.
 Western race, which occurs as far east as Illinois and Minnesota; it is higher colored and the back shows more or less bars.

GENUS ANORTHURA. RENNIE.

- 541 (722) ANORTHURA HIEMALIS. VIEILL. Winter Wren.
 - Eastern North America; breeding in the Alleghany Mountains and from the northern border of the United States, northward; south in winter to Florida and the Gulf States.

GENUS CISTOTHORUS. CABAN.

- **542** (724) **CISTOTHORUS STELLARIS.** (LIGHT.) **Short-billed Marsh Wren.** Eastern North America; from Ontario to the Gulf States.
- 543 (725) CISTOTHORUS PALUSTRIS. (WILS.) Long-billed Marsh Wren. Eastern North America; south from Ontario and Massachusetts to the Gulf; breeds throughout its range.
- 544 (725b) Cistothorus pudustris griseus. BREWST. Worthington's Marsh Wren. Local race which occurs on coast of South Carolina and Georgia; it differs in having the sides grayish, not a decided brown, and the black of the upper parts duller.
- 545 (725¹) Cistothorns palastris mariana. (SCOTT.) Marian's Marsh Wren. Gulf coast of Florida; decidedly darker and having the under tail coverts spotted or barred.

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FAMILY CERTHIIDÆ. Creepers.

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GENUS CERTHIA. LINN.

(726) CERTHIA FAMILIARIS AMERICANA. (BONAP.) Brown Creeper.

Whole of North America to the limit of large timber; breeds from northern border of United States, northward.

FAMILY PARIDÆ. Nuthatches and Tits.

Subfamily SITTINÆ. Nuthatches.

GENUS SITTA. LINN.

- 547 (727) SITTA CAROLINENSIS. LATH. White-breasted Nuthatch. Eastern United States; from Georgia north to the southern British Provinces, and west to the Rocky Mountains.
- 548 (727a) Sitta carolinensis atkinsi. (SCOTT.) Florida White-breasted Nuthatch.
 South Carolina to Florida; differs in being somewhat smaller; the wing coverts usually not tipped with white.
- 549 (728) SITTA CANADENSIS. LINN. Red=breasted Nuthatch.

"Whole of North America; breeding chiefly north of the United States, except in western mountainous districts; eastern United States chiefly in winter." RIDGWAY.

550 (729) SITTA PUSILLA. LATH. Brown-headed Nuthatch.
"South Atlantic and Gulf States; north to southern Maryland and (casually) Ohio, Missouri, etc." (A. O. U.)

Subfamily PARINÆ. Titmice.

GENUS PARUS. LINN.

SUBGENUS LOPHOPHANES. KAUP.

 551 (731) PASUS BICOLOR. (LINN.) Tufted Titmouse.
 Eastern United States; from New Jersey and southern New England to the Gulf.

SUBGENUS PARUS. LINN.

- (735) PARUS ATRICAPILLUS. (LINN.) Chickadee.
 "Eastern North America, north of the Potomac and Ohio Valley." (A. O. U.)
- 553 (736) PARUS CAROLINENSIS. ORD. Carolina Chickadee.
 "Southeastern States; north to New Jersey and Illinois, west to Missouri." (A. O. U.)
- 554 (740) PARUS HUDSONICUS. FORST. Hudsonian Chickadee. Northern North America; from Northern New England and Michigan, northward.

FAMILY SYLVIIDÆ. Warblers, Kinglets, Gnatcatchers. Subfamily REGULINÆ. Kinglets.

A. O. U.	Genus	REGULUS.	CUVIER.

- 555 (748) REGULUS SATRAPA. LICHT. Golden-crowned Kinglet.
 Eastern North America; breeding from higher northern boundary of the United States northward; winters as far south as Guatemala.
- 556 (749) REGULUS CALENDULA. (LINN.) Ruby-crowned Kinglet.

North America; from the fur countries to Central America; breeds north of the United States, except on high mountain ranges.

Subfamily POLIOPTILINÆ. Gnatcatchers.

GENUS POLIOPTILA. SCLATER.

557 (751) POLIOPTILA CÆRULEA. (LINN.) Blue-gray Gnatcatcher. Southern portion of the United States; casual as far north as Massachusetts; winters in the Gulf States, Cuba, and Central America.

FAMILY TURDIDÆ. Thrushes, Solitaires, Stonechats, Bluebirds, etc.

Subfamily MYADESTINÆ. Solitaires.

GENUS MYADESTES. SWAINS.

558 (754) MYADESTES TOWNSENDII. (AUD.) Townsend's Solitaire. Western species; accidental in Illinois; one record.

Subfamily TURDINÆ. Thrushes.

GENUS TURDUS. LINN.

SUBGENUS HYLOCICHLA. BAIRD.

- 559 (755) TURDUS MUSTELINUS. GMEL. Wood Thrush. Eastern United States; from Massachusetts south to the Gulf States and Central America; breeds from Virginia northward.
- 560 (756) TURDUS FUSCESCENS. STEPH. Wilson's Thrush. Eastern North America; from Anticosti to the Gulf of Mexico; the greater portion winters south of the United States.
- 561 (756a) Turdus fuscescens salicicola. (RIDGW.) Willow Thrush.
- Western race, which occurs as far east as Illinois; it differs but little from *fuscescens*, the breast spots are slightly wider and the back somewhat darker.

562 (757) TURDUS ALICIÆ. BAIRD. Gray-cheeked Thrush.

North America; from Labrador and Alaska to the Gulf of Mexico and Central America; breeds from Labrador and Hudson Bay northward. A, O U. NO

- 563 (757a) Turdus alicie bicknelli. (Ridgw.) Bicknell's Thrush.
 - "Mountainous part of the northeastern States (Catskills, White Mountains, etc.) and Nova Scotia; migrating south in winter." (A. O. U.)
- 564 (758a) TURDUS USTULATUS SWAINSONII. (CAB.) Olive-backed Thrush. Eastern North America; from Rocky Mountains to the Atlantic; winters in Central and South America and the West Indies, breeds in the Alleghanies and mountains of southern New England, and farther north in western United States.
- 565 (759b) TURDUS AONALASCHKÆ PALLASII. (CAB.) Hermit Thrush.
 Eastern North America; breeds from Massachusetts northward; winters from Illinois and southern New York to the Gulf.

SUBGENUS TURDUS. LINN.

566 (760) **TURDUS ILIACUS.** LINN. **Red-winged Thrush.** European species ; accidental in Greenland.

GENUS MERULA. LEACH.

- 567 (761) MERULA MIGRATORIA. (LINN.) American Robin.
 - "Eastern North America to the Rocky Mountains, including eastern Mexico and Alaska; breeds from Virginia and Kansas northward to the Arctic coast; winters from southern Canada and northern United States southward" (A. O. U); occurs in great flocks at times in southern States during migrations.

GENUS HESPEROCICHLA. BAIRD.

- 568 (763) HESPEROCICHLA NÆVIA. (GMEL.) Varied Thrush.
 - Pacific coast species; stragglers have been taken in Massachusetts, Long Island, and New Jersey.

GENUS SAXICOLA. BECHS.

569 (765) SAXICOLA ŒNANTHE. (LINN.) Wheatear. Old-world species, which occurs in Greenland and Labrador; stragglers have been taken in Nova Scotia, Maine, and Long Island.

GENUS SIALIA. SWAINSON.

- 570 (766) SIALIA SIALIS. (LINN.) Bluebird
 - Eastern United States; from the Rocky Mountains to the Atlantic, north to the British Provinces, and south to Gulf of Mexico and Cuba; breeds from the Gulf States, northward; winters from southern Illinois and New Jersey, southward.







- 1. GREEN-WINGED TEAL, MALE. 2. GREEN-WINGED TEAL, FEMALE. 3. RLUE-WINGED TEAL, MALE. 4. BLUE-WINGED TEAL, FEMALE. 5. CINNAMON TEAL.

- SHOVELLER DUCK. MALE.
 SHOVELLER DUCK. FEMALE.
- SHOVELLER DUCK. FEMALE
 PINTAIL DUCK. MALE.
 PINTAIL DUCK. FEMALE,
 WOOD DUCK. MALE.
- WOOD DUCK, FEMALE.
 REDHEAD DUCK. MALE.
 REDHEAD DUCK. FEMALE.
 CANVAS-BACK DUCK. MALE.
 CANVAS-BACK DUCK. FEMALE.

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- AMERICAN SCAUP DUCK. MALE.
 AMERICAN SCAUP DUCK. FEMALE.
 LESSER SCAUP DUCK.
 RING-NECKED DUCK. MALE.
 RING-NECKED DUCK. FEMALE.

- OLD-SQUAW. Male.
 OLD-SQUAW. FEMALE.
 HARLEQUIN DUCK. Male.
 HARLEQUIN DUCK. FEMALE.
 STELLER'S DUCK.



- NORTHERN EIDER DUCK.⁻
 AMERICAN EIDER DUCK. MALE.
 AMERICAN EIDER DUCK. FEMALE.
 KING EIDER DUCK.

- 5. AMERICAN SCOTER DUCK. MALE.
- AMERICAN SCOTER DUCK, FEMALE.
 WHITE-WINGED SCOTER DUCK, MALE.
 WHITE-WINGED SCOTER DUCK, FEMALE.
 SURF SCOTER DUCK, MALE.
 SURF SCOTER DUCK, FEMALE.

RUDDY DUCK, MALE.
 RUDDY DUCK, FEMALE.
 MASKED DUCK, MALE.
 MASKED DUCK, FEMALE.





