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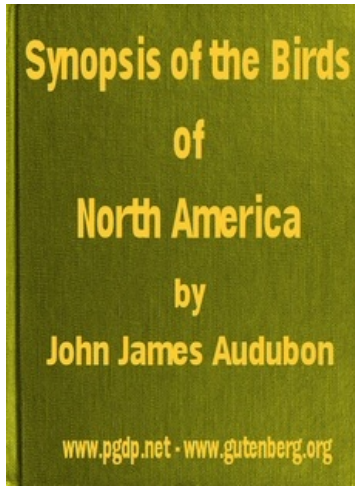
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## **Transcriber's Note**

This book contains numerous references to numbered Plates. Each plate had one or more illustrations pertinent to the species being discussed. The Plates were published and sold separately and were not included in this book.

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**SYNOPSIS OF THE BIRDS  
OF  
NORTH AMERICA.**

[ii]

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**A  
SYNOPSIS OF THE BIRDS  
OF  
NORTH AMERICA.**

**BY  
JOHN JAMES AUDUBON, F.R.SS. L. & E.  
MEMBER OF VARIOUS SCIENTIFIC ASSOCIATIONS IN  
EUROPE AND AMERICA.**

**EDINBURGH:  
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## PREFACE.

[v]

I have been induced to present this Volume to the Public by two considerations. The figures and descriptions contained in the works entitled "The Birds of America," and "Ornithological Biography, or an Account of the Habits of the Birds of the United States," having been issued in the miscellaneous manner which was thought best adapted to the occasion, or which was rendered necessary by circumstances, seemed to require a systematic index, in which the nomenclature should be corrected, and the species arranged agreeably to my present views. This Synopsis, then, will afford a methodical catalogue of all the species hitherto discovered in the vast regions, extending from the northern confines of Mexico to the Polar Seas, and which have been described, and, with few exceptions, depicted in the works above named. Another important object has been to present an arrangement of these birds, so characterized, that a person desirous of studying them, might, without much difficulty, be enabled to discover their names, and trace some of the most important features in their organization.

The species are disposed into genera and families; and, although the location of the groups is not such as, in all respects, to satisfy me, the arrangement will, I trust, be found in some degree useful. It will be seen that, although I have adopted many of the modern groups, I have not sectioned our birds on so minutely divided a scale as that employed by some recent writers. Besides the characters of the Families, Genera, and Species, which are given with considerable detail, I have presented a short account of the Geographical Distribution of the species, and references to the principal authors by whom they have been described. I am confident that these notices will suffice to enable the student to determine with certainty any species that may come under his consideration, and that the information respecting its habits, which he will find in the works referred to, will afford him at least sufficient knowledge to form a basis for the more extended observation which he may contemplate. To the name of the genus I have appended that of the author by whom it has been instituted; and with the specific names I have dealt in the same manner, giving as authorities the individuals who first employed them, although they may have referred them to different genera. It is probable that many errors have been made in this department; but I shall be happy to see them corrected, as my wish is to do justice to all.

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On this occasion I have again to acknowledge the benefit derived from the aid of my friend Mr MACGILLIVRAY, whose general knowledge of ornithology, and perfect candour, have rendered his advice peculiarly valuable.

J. J. AUDUBON.

EDINBURGH, *1st July 1839.*

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## SYNOPSIS.

### FAMILY I. VULTURINÆ. VULTURINE BIRDS, OR VULTURES.

Bill of moderate length, stout, cerate; upper mandible with the tip elongated and decurved; lower mandible rounded and thin-edged at the end. Head rather small, or of moderate size, ovato-oblong, and with part of the neck destitute of feathers. Eyes of moderate size, without projecting ridges. External aperture of ears rather small and simple. Skin over the fore part of the neck bare or merely downy. Tarsus rather stout, bare, and shorter than the middle toe; hind toe much smaller than the second; anterior toes connected at the base by a web; claws large, moderately curved, rather acute. Plumage full and rather compact. Wings very long, subacuminate. Œsophagus excessively wide, and dilated into a crop; stomach rather large, somewhat muscular, with a soft rugous epithelium; intestine of moderate length and width; cœca extremely small. The young when fledged have the head and upper part of the neck generally covered with down. Eggs commonly two.

### GENUS I. CATHARTES, ILLIGER. TURKEY-VULTURE.

Bill of moderate length, rather slender, somewhat compressed; upper mandible with its dorsal outline nearly straight and declinate to the end of the large cere, then decurved, the edges a little festooned, rather thick, the tip descending and rather obtuse; lower mandible with the angle long

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and rather narrow, the dorsal line ascending and slightly convex, the back broad, the edges sharp, towards the end decurved. Nostrils oblong, large, pervious. Head oblong. Tongue deeply concave or induplicate, its edges serrate with reversed papillæ. Œsophagus dilated into an enormous crop; stomach moderately muscular; duodenum convoluted. Head and upper part of neck denuded, being only sparingly covered with very short down. Wings very long and extremely broad; third, fourth, and fifth primaries longest, first much shorter. Tail of moderate length, nearly even. Tarsus short, rather stout, roundish, reticulate. Hind toe very small, second a little shorter than fourth, third very long, all scutellate for more than half their length. Claws strong, arched, compressed, obtuse.

**1. 1. Cathartes Californianus, LATH. Californian Turkey-Vulture.—Turkey-Buzzard.**

PLATE CCCCXXVI. Adult.

Nostrils small, elliptical, occupying only the posterior half of the nasal groove; feathers of the ruff and breast lanceolate and acuminate; primaries finely acuminate, fourth and fifth longest; tail rather short, even. Adult with the head bare and yellowish-red, the plumage brownish-black, the secondaries grey, tipped with white, their coverts large, tipped with the same. Young with the head downy and dusky, the plumage blackish-brown, the feathers edged with light brown, the secondary coverts tipped with brownish-white.

*Male*, length 50. *Female*, length 55.

California and Columbia Rivers. Resident in the south.

*Cathartes Californianus*, BONAP. Syn. p. 22.

Californian Vulture, NUTTALL, Man. vi. p. 39.

Californian Vulture, *Cathartes Californianus*, AUD. v. v. p. 240.

**2. 2. Cathartes Aura, LINN. Red-headed Turkey-Vulture.—Turkey-Buzzard. Turkey-Vulture.**

PLATE CLI. Fig. 1. Male. Fig. 2. Young fledged.

Nostrils very large, elliptical, occupying the whole nasal cavity; feathers of the ruff and breast ovate, rounded; skin over the crop bare; tail rounded. Adult with the skin of the head and neck wrinkled and blood-red, the horny part of the bill yellowish-white; the plumage blackish-brown, deepest on the neck and under parts; feet flesh-coloured, tinged with yellow. Young when fledged with the skin of the head and neck dull flesh-coloured and more downy, the horny tip of the bill light blue, the plumage nearly as in the adult, but the wing-coverts and secondaries spotted with whitish.

*Male*.—Length 32, extent of wings 76.

From Texas to Pennsylvania. Inland westward to the Columbia River. Resident.

Turkey-Vulture or Turkey-Buzzard, *Vultur Aura*, WILS. v. ix. p. 96.

*Cathartes Aura*, BONAP. Syn. p. 22.

*Cathartes Aura*, Turkey-Vulture, RICH. & SWAINS. F. Bor. Amer. v. ii. p. 4.

Turkey-Vulture or Turkey-Buzzard, NUTTALL, Man. v. ii. p. 43.

Turkey-Buzzard, *Cathartes Aura*, AUD. v. ii. p. 296; v. v. p. 339.

**3. 3. Cathartes atratus, WILS. Black-headed Turkey-Vulture.—Black Vulture. Carrion Crow.**

PLATE CVI. Fig. 1. Male. Fig. 2. Female.

Nostrils very large, oblong, occupying the whole nasal cavity; feathers of the neck short, very broad, abruptly rounded, advancing farther on the hind part; skin over the crop feathered; tail even. Adult with the skin of the head and neck corrugated, dusky, the horny part of the bill greyish-yellow, the plumage bluish-black, feet yellowish-grey. Young when fledged with the head and neck closely covered with dusky down; the plumage blackish-brown.

*Male*, length 26, extent of wings 54.

From Texas to New Jersey. Up the Mississippi to the Ohio. Columbia River. Resident.

Black Vulture or Carrion Crow, *Vultur atratus*, WILS. Amer. Orn. v. ix. p. 104.

*Cathartes Iota*, BONAP. Syn. p. 23.

Black Vulture or Carrion Crow, *Cathartes Iota*, NUTTALL, Man. v. i. p. 46.

Black Vulture or Carrion Crow, AUD. v. ii. p. 33; v. v. p. 345.

## FAMILY II. FALCONINÆ. FALCONINE BIRDS.

Bill short, stout, cerate; upper mandible with the tip elongated and decurved; lower mandible rounded and thin-edged at the end. Head rather large, broadly ovate, feathered. Eyes large, with prominent superciliary ridges. External aperture of ears of moderate size, and simple. Tarsus longer than the middle toe; claws very large, much curved, extremely acute. Plumage full and generally compact. Wings very long and broad. Œsophagus excessively wide and dilated into a crop; stomach large, somewhat membranous, its muscular fasciculi being placed in a single series; intestine short and rather wide, or very long and slender; cœca extremely small. The young, when fledged, generally having the lower parts longitudinally streaked. Eggs from two to six, ovate, or roundish. Nest on trees, rocks, or the ground.

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### GENUS I. POLYBORUS, VIEILL. CARACARA.

Bill large, high, rather long, much compressed; cere large, covered with hair-like feathers; upper outline convex and declinate to the edge of the cere, then decurved; edge of upper mandible slightly arched and nearly even, tip of lower compressed and rounded. Nostrils elliptical, oblique, in the anterior part of the cere near the ridge. Eyelids and space anterior to the eye denuded, as is the skin over the crop. Feet rather long; tarsi anteriorly scutellate, sharp-edged and scaly behind; toes rather long, broadly scutellate, the first much shorter than the second; claws long, little curved, that of the middle toe being only slightly arched. Wings long, rounded, the third and fourth quills longest, the first five having the inner web cut out. Tail rather long, rounded.

#### 4. 1. *Polyborus Braziliensis*, GMEL. Brazilian Caracara.—Caracara Eagle.

PLATE CLXI. Young.

Adult with the upper part of the head and nape brownish-black, the throat and ear-coverts yellowish-white; the upper parts finely barred with brown and dull white, the rump and tail lighter, the latter with a large terminal brown band; the lower parts similarly barred with reddish-white and brown. Young with the upper part of the head brown, streaked with dusky, the hind neck and part of the breast pale yellowish-red longitudinally variegated with brown; the middle of the back, scapulars, wing-coverts and secondaries dark brown, as are the hind part of the breast and the tibiæ; the tail nearly as in the adult.

*Male*, 23  $\frac{1}{2}$ , 48.

Texas and Florida. Resident.

Caracara Eagle *Polyborus vulgaris*, AUD. Orn. Biog. v. ii. p. 350; v. v. p. 351.

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### GENUS II. BUTEO, BECHST. BUZZARD.

Bill short, with the upper outline nearly straight and declinate to the edge of the cere, then decurved, the sides rapidly sloping, the edges with a slight festoon, the tip trigonal, acute; lower mandible with the dorsal line convex and ascending, the edges arched, at the end deflected, the tip rounded. Head large, roundish, flattened above. Nostrils, obovate, nearer the ridge than the margin. Neck rather short. Body full. Feet short, robust; tarsi roundish, anteriorly feathered half-way down, and scutellate, posteriorly also scutellate; toes of moderate length, scaly for half their length; claws long, arched, compressed, acuminate. Plumage full and rather blended. Space between the bill and eye covered with bristly feathers. Wings long, broad, the fourth quill longest, the first and seventh or eighth about equal; the first four abruptly cut out on the inner web. Tail rather long, broad, slightly rounded. Cere and feet yellow; bill light blue at the base, black at the tip, in all the American species.

#### 5. 1. *Buteo Harrisii*, AUD. Harris's Buzzard.

PLATE CCCXCII. Female.

Bill higher and feet more robust than in the other species. Wings much rounded, the first quill four inches shorter than the fourth, which is longest, the seventh longer than the second. Chocolate-brown; wing-coverts and tibial feathers brownish-red; upper tail-coverts, base and end of tail white.

*Female*, 24, wing 15  $\frac{1}{4}$ .

Mississippi. Extremely rare. Migratory.

Louisiana Hawk, *Falco Harrisii*, AUD. Orn. Biog. v. v. p. 30.



## 6. 2. *Buteo vulgaris*, WILLOUGHBY. Common Buzzard.

PLATE CCCLXXII. Female.

Upper parts chocolate-brown; primaries black toward the end, part of their inner webs white, barred with brownish-black; tail with about ten dusky bars on a reddish-brown ground, the last dark bar broader; eyelids whitish; throat white, longitudinally streaked with dusky; the rest of the lower parts yellowish or brownish-white, barred with brown. This species is subject to much variation in colour.

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*Female*, 23 inches, wing 17.

Rocky Mountains, Columbia River, and Fur Countries.

*Buteo vulgaris*, Common Buzzard, RICH. & SW. F. Bor. Amer. v. ii. p. 47.

Common Buzzard, *Falco buteo*, AUD. Orn. Biog. v. iv. p. 108.

## 7. 3. *Buteo borealis*, GMEL. Red-tailed Buzzard.—Red-tailed Hawk.—Hen Hawk.

PLATE LI. Fig. 1. Male. Fig. 2. Female.

Male with the upper part of the head and hind neck light greyish-brown, the back and scapulars dark brown, the latter broadly margined with brownish-white; smaller wing-coverts chocolate-brown; larger, lighter, tipped with white; primary quills blackish-brown, secondaries lighter, tipped with brownish-white, all barred with blackish; upper tail-coverts whitish, barred with brown; tail bright yellowish-red, with a narrow bar of black near the end, and tipped with whitish. Lower parts yellowish-white, the fore part of the breast with linear, guttiform, or sagittate spots; feathers of the leg and tarsus pale reddish-yellow. Female similar to the male, but with the upper parts darker, the lower nearly white, there being only a few narrow streaks on the sides of the breast. Young with the upper parts brown, streaked with yellowish-red, the tail-coverts yellowish-white barred with brown, the tail light greyish-brown, barred with dark brown and tipped with white; lower parts yellowish-white, with oblong longitudinal brown spots; the feathers of the sides and tibiae barred with the same.

*Male*, 20  $\frac{1}{2}$ , 46. *Female*, 24.

From Texas northward to the Fur Countries, and westward to the base of the Rocky Mountains. Resident.

Red-tailed Hawk, *Falco borealis*, WILS. Am. Orn. v. vi. p. 76. Adult.

American Buzzard or White-breasted Hawk, *Falco leverianus*, WILS. Am. Orn. v. vi. p. 78.

*Buteo borealis*, Red-tailed Buzzard, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 50.

Red-tailed Hawk or Buzzard, *Falco borealis*, NUTT. Man. v. i. p. 102.

Red-tailed Hawk, *Falco borealis*, AUD. Orn. Biog. v. 1. p. 265; v. v. p. 378.

## 8. 4. *Buteo Harlani*, AUD. Harlan's Buzzard.—Black Warrior.

PLATE LXXXVI. Fig. 1. Male. Fig. 2. Female.

Size of Common Buzzard, which it resembles in form and proportion. General colour of plumage deep chocolate-brown, glossed with greyish-blue; inner webs of quills white, those of the primaries barred with dusky toward the end; tail lighter than the back, rather narrowly barred with brownish-black, and tipped with brownish-red; lower parts paler, anteriorly streaked, posteriorly barred with brownish-black; lower wing-coverts whitish, spotted with deep brown.

*Male*, 21, 45. *Female*, 22.

Louisiana. Extremely rare.

Black Warrior, *Falco Harlani*, AUD. Orn. Biog. v. i. p. 441. v. v. p. 380.

Black Buzzard, *Falco Harlani*, NUTT. Man. v. i. p. 105.

## 9. 5. *Buteo lineatus*, GMEL. Red-breasted Buzzard.—Chicken Hawk, Red-shouldered Hawk, Winter Hawk.

PLATE LVI. Fig. 1. Male. Fig. 2. Female. Adult.

PLATE LXXI. Young male.

Adult with the head, neck, and back light yellowish-red, longitudinally spotted with dark brown; smaller wing-coverts deep yellowish-red, with the centre brown; larger coverts and secondary quills dusky, broadly barred with white; primary quills brownish-black, barred with white; tail brownish-black, narrowly banded and tipped with white. Lower parts of the neck and

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lower wing-coverts light yellowish-red, the former longitudinally lined with dusky and faintly barred with whitish, the rest of the lower parts barred with light red and reddish-white. Young with the upper parts deep brown, the tail-coverts, tail, and quills barred with brownish-white; the lower parts white, longitudinally streaked and spotted with brown.

*Male*, 21  $\frac{1}{2}$ , 44.

From Texas to Nova Scotia, and westward to the Missouri. Very abundant. Resident.

Red-shouldered Hawk, *Falco lineatus*, WILS. Amer. Orn. v. vi. p. 86. Young.

Winter Falcon, *Falco hyemalis*, WILS. Amer. Orn. v. iv. p. 73. Adult.

*Falco hyemalis*, BONAP. Syn. p. 33.

Winter Falcon or Red-shouldered Hawk, *Falco hyemalis*, NUTT. Man. v. i. p. 106.

Red-shouldered Hawk, *Falco lineatus*, AUD. Orn. Biog. v. i. p. 296; v. v. p. 380.

Winter Hawk, *Falco hyemalis*, AUD. Orn. Biog. v. i. p. 364. Young.

## 10. 6. *Buteo Pennsylvanicus*, WILS. Broad-winged Buzzard.

PLATE XCI. Fig. 1. Male. Fig. 2. Female.

General colour of upper parts umber-brown; quills blackish-brown, the greater part of their inner webs whitish, with narrow dusky bands; tail with three very broad bands of dark brown; alternating with two broad white bands, and the tips brownish-white; cheeks reddish-brown, with a dark mystachial band; lower parts yellowish-white, barred with light brown, that colour predominating anteriorly. Female similar, lighter above, more tinged with red beneath, where the spots are larger and more irregular. Young with the upper parts brown, streaked and spotted with white; the tail light greyish-brown, with seven dusky bars; lower parts yellowish-white, longitudinally marked with linear-oblong brown spots.

*Male*, 16, 38. *Female*, 19.

From Maryland to Nova Scotia. Rare in the interior.

Broad-winged Hawk, *Falco Pennsylvanicus*, WILS. Amer. Ornith. v. vi. p. 92.

*Falco Pennsylvanicus*, BONAP. Syn. p. 29.

Broad-winged Hawk, *Falco Pennsylvanicus*, NUTT. Man. v. i. p. 105.

Broad-winged Hawk, *Falco Pennsylvanicus*, AUD. Orn. Biog. v. i. p. 461, v. v. p. 377.

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## 11. 7. *Buteo lagopus*, VIGORS. Rough-legged Buzzard.

PLATE CCCCXXII. Fig. 1. Old Male. Fig. 2. Young, first winter.

PLATE CLXVI. Male. Middle age.

Tarsi feathered in their whole length. Adult male with the general colour of the plumage blackish-brown; the forehead and a large patch on the hind neck white, streaked with blackish-brown; all the feathers of the back, the scapulars, the wing-coverts, the quills, and the tail-feathers, white toward the base, and more or less barred with whitish-grey, or brown; axillar feathers, some of those on the sides, and some of the tibial feathers, with the lower tail-coverts similarly marked; the white forming a conspicuous patch on the under surface of the wing, occupying the greater part of the primaries as well as part of the inner webs of the secondaries; tail brownish-black, barred with greyish-white, there being six black bands on the middle feathers, the last very broad. Female of a uniform dark chocolate-brown, the tail banded, and the same parts white as in the male. Young with the head and neck streaked with umber-brown, and yellowish-white; back umber-brown, variegated with light reddish-brown and yellowish-white; quills dark brown towards the end, the outer webs of the first tinged with grey, the base of all white, that colour extending farther on the secondaries, of most of which, and of some of the primaries, the inner web is irregularly barred with brown; tail white at the base, brown toward the end, with a broad subterminal bar of brownish-black, the tips brownish-white; middle and hind part of the breast, with the sides, brownish-black, the rest of the lower parts pale yellowish-red, streaked or barred with dusky.

*Male*, 21  $\frac{1}{2}$ , 51  $\frac{1}{2}$ . *Female*, 23.

From Maryland northward. Columbia River. Not met with in the interior. Migratory. Not very abundant.

Black Hawk, *Falco niger*, WILS. Amer. Orn. v. vi. p. 82. Adult.

*Falco lagopus*, BONAP. Syn. p. 32. Young.

*Falco Sanci-Johannis*, BONAP. Syn. p. 32. Adult.

Buteo lagopus, Rough-legged Buzzard, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 52.

Rough-legged Falcon, Falco lagopus, WILS. Amer. Orn. v. iv. p. 59, Young; v. v. p. 216, Adult and Young.

### GENUS III. AQUILA, BRISS. EAGLE.

Bill rather short, deep, compressed; upper mandible with the dorsal outline nearly straight and sloping at the base, beyond the cere decurved, the sides sloping and slightly convex, the edges nearly straight, with a slight convexity and a shallow sinus close to the strong subtrigonal tip; lower mandible with the dorsal outline convex, the tip obliquely truncate. Head large, roundish, flattened above. Nostrils oval, oblique, nearer the ridge than the margin. Neck rather short. Body very large. Feet rather short, very robust; tarsi roundish, feathered to the toes; which are rather short, united at the base by short webs, covered above with a series of angular scales, and towards the end with a few large scutella; claws long, curved, rounded, flat beneath, acuminate. Plumage compact, imbricated, glossy; feathers of the head and neck narrow and pointed; space between the bill and eye covered with small bristle-pointed feathers disposed in a radiating manner. Wings long, the fourth quill longest; the first short; the outer six abruptly cut out on the inner web. Tail rather long, ample, rounded.

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#### 12. 1. *Aquila Chrysaetos*, LINN. Golden Eagle.

PLATE CLXXXI. Female.

General colour of the plumage dark brown glossed with purple; occiput, hind part and sides of the neck, light brownish-yellow; wing-coverts light brown; primary quills brownish-black, secondary with the coverts brown, those next the body more or less mottled with brownish-white, excepting at the ends; tail dark brown, lighter towards the base, with a few irregular whitish markings; feathers of the legs and tarsi, and lower tail-coverts, light yellowish-brown. Young with the basal three-fourths of the tail white.

*Male*, 32, 70. *Female*, 38, 84.

From Pennsylvania northward. Never seen far in the interior. Resident.

*Falco fulvus*, BONAP. Syn. p. 25.

*Aquila Chrysaetos*, Golden Eagle, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 12.

Ring-tailed Eagle, *Falco fulvus*, WILS. Amer. Ornith. v. vii. p. 13.

Royal or Golden Eagle, NUTT. Man. v. i. p. 62.

Golden Eagle, *Falco Chrysaetos*, AUD. Ornith. Biog. v. ii. p. 464.

### GENUS IV. HALIAETUS, SAVIGNY. SEA-EAGLE.

Bill rather short, very deep, compressed; upper mandible with the dorsal outline nearly straight at the base, beyond the cere decurved, the sides sloping, the edges nearly straight, with a slight obtuse process, and a shallow sinus close to the strong trigonal tip; lower mandible, with the dorsal outline slightly convex, the tip obliquely truncate. Head large, oblong, flattened above. Nostrils oblong, oblique, near the ridge. Neck of moderate length. Body very large. Feet rather short, very robust; tarsi roundish, covered anteriorly with the transverse scutella, posteriorly with large, laterally with small scales; toes robust, free, scutellate above; claws large, curved, rounded, flat beneath, acuminate. Plumage compact, imbricated; feathers of the head and neck narrow and pointed; space between the bill and eye barish, being sparsely covered with bristle-like feathers, disposed in a radiating manner. Wings long, the second and third quills longest, the outer five cut out abruptly on the inner web. Tail rather long, rounded. Duodenum convoluted.

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#### 13. 1. *Haliaetus Washingtoni*, AUD. Washington Sea-Eagle.

PLATE XI. Male.

Tarsus and toes uniformly scutellate in their whole length. Bill bluish-black, cere yellowish-brown, feet orange-yellow, claws bluish-black. Upper part of the head, hind neck, back, scapulars, rump, tail-coverts, and posterior tibial feathers blackish-brown, glossed with a coppery tint; throat, fore-neck, breast, and belly light brownish-yellow, each feather with a central blackish-brown streak; wing-coverts light greyish-brown, those next the body becoming darker; primary quills dark brown, deeper on their inner webs; secondaries lighter, and on their outer webs of nearly the same light tint as their coverts; tail uniform dark brown.

*Male*, 43, 122.

From Louisiana northward. Exceedingly rare. The specimen figured procured in Kentucky. One seen in Labrador.

## 14. 2. *Haliaeetus leucocephalus*, LINN. White-headed Sea-Eagle.—Bald Eagle.

PLATE XXXI. Adult Male. PLATE CXXVI. Young.

Male. Tarsus with a few scutella; toes terminally scutellate. Male with the bill, cere, iris, and feet yellow; the head, the neck for half its length, the rump, upper and lower tail-coverts, and tail white; the rest of the plumage chocolate-brown, the terminal margins of all the feathers pale greyish-brown. Female similar. Young with the bill brownish-black, iris dark brown, feet yellow; the general colour of the plumage very dark chocolate, uniform, the feathers without edgings, all white at the base, that colour appearing more or less on the hind part, and more especially on the fore part and sides of the neck, and on the sides of the body and lower wing-coverts; quills and tail-feathers brownish-black, tinged with grey toward the base; the latter with the greater part of the inner webs, and a portion of the outer brownish-white, freckled with dusky. In more advanced stages the colours of the plumage vary considerably in different individuals. The general tint continues brown for several years, a variable and often a large proportion of white, or brownish-white, appearing on the neck, the lower part of the body, the sides, and under the wings, the tail meanwhile gradually becoming white in freckled patches, some have a large patch of brownish-white across the breast. When the feathers are new, they are of a glossy deep brown, but when old and worn they present a bleached appearance, and the upper parts are often patched with pale brown or brownish-white. On account of these circumstances, individuals of different ages, and shot at different periods of the year, differ so much from each other in appearance, that one might, without a very extended comparison, conceive that in a collection of specimens, there might be several species. The bill remains dark until the head and tail become white; the anterior tarsal scutella differ from none to six, the posterior from nine to twelve; those on the hind toe are four, on the middle toe from nine to thirteen.

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*Male*, 34, 84.

Throughout North America. Resident in the south and west.

Bald Eagle, *Falco Haliaeetus*, WILS. Amer. Ornith. v. iv. p. 89. Adult.

Sea Eagle, *Falco ossifragus*, WILS. Amer. Ornith. v. vii. p. 16. Young.

*Falco leucocephalus*, BONAP. Synops. p. 26.

*Aquila leucocephala*, White-headed Eagle, SWAINS. & RICH. F. Bor Amer. v. ii. p. 15.

White-headed or Bald Eagle, *Falco leucocephalus*, NUTT. Man. v. i. p. 72.

White-headed Eagle, *Falco leucocephalus*, AUD. Ornith. Biog. v. i. p. 160, v. ii. p. 160, v. v. p. 354.

## GENUS V. PANDION, SAV. OSPREY.

Bill short, as broad as deep at the base, the sides convex, the dorsal outline straight at the base, decurved towards the end; upper mandible with a festoon on the edges at the curvature, the tip trigonal, very acute; lower mandible with the edges slightly arched, the tip obtusely truncate. Nostrils oval, oblique, large, half-way between the ridge and the cere. Legs rather long; tarsus very short, remarkably thick, covered all round with hexagonal scales; toes also remarkably thick, the outer versatile larger than the inner, all scutellate only towards the end, and covered beneath with prominent, conical, acuminate scales; claws long, curved, convex beneath, tapering to a fine point. Plumage compact, imbricated; feathers of the head and neck narrow, acuminate; of the tarsus short and very narrow, without the elongated external tufts seen in all the other genera. Tail rather long, a little rounded. Intestine extremely long and slender, its greatest width  $2\frac{1}{4}$  twelfths, the smallest  $\frac{1}{2}$  twelfth.

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## 15. 1. *Pandion Haliaeetus*. Common Osprey.—Fish Hawk. Fishing Eagle.

PLATE LXXXI. Adult male.

Bill bluish-black, cere light blue, feet pale greyish-blue tinged anteriorly with yellow. General colour of upper parts deep umber-brown, the tail barred with whitish on the inner webs; the upper part of the head and neck white, the middle part of the crown dark brown; a broad band of the latter colour from the bill down the side of the neck; lower parts white, the neck streaked with light brown; anterior tibial feather tinged with brown. Young with the feathers of the upper parts broadly tipped with brownish-white, the lower pure white.

*Male*, 23, 54. *Female*, 25  $\frac{1}{2}$ , 58.

From Texas northward, and throughout the interior, as well as along the north-west coast. Resident in the south.

Fish Hawk, *Falco Haliaeetus*, WILS. Amer. Orn. v. v. p. 13.

Falco Haliaetus, BONAP. Syn. p. 26.

Fish Hawk or Osprey, Falco Haliaetus, AUD. Orn. Biog. v. i. p. 415, v. v. p. 362.

## GENUS VI. ELANUS, SAV. ELANUS.

Bill short, small, very wide at the base, much compressed toward the end; upper mandible with the dorsal line convex and declinate to the end of the cere, then decurved, the sides slightly convex, the tip narrow and acute, the edges with a distinct festoon, lower mandible with the angle very wide and long, the dorsal line very short, and slightly convex, the tip obliquely truncate, and narrow. Nostrils elliptical, rather large, about half-way between the cere and ridge. Head rather large, broad, flattened above; neck short; body compact. Legs rather short; tarsus very short, stout, roundish, feathered anteriorly for half its length, the rest covered with small roundish scales; toes short, thick, scaly, with a few terminal scutella; claws long, curved, conical, rounded beneath, acute. Plumage very soft, and rather blended. Wings very long and pointed, the second quill longest. Tail of moderate breadth, long, emarginate, and rounded.

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### 16. 1. *Elanus dispar*, TEMM. Black-shouldered Elanus.

PLATE CCCLII. Male and Female.

Ash-grey above; head, tail, and lower parts white, with a large bluish-black patch on the wing above, and a smaller beneath; feet orange-yellow. Young with the upper parts brownish-grey, the larger feathers tipped with white, the patches on the wings brownish-black.

*Male*, 14, 40. *Female*, 16  $\frac{3}{4}$ , 41  $\frac{1}{2}$ .

From Texas to North Carolina. Rare. Never far inland. Migrates southward.

Black-winged Hawk, Falco melanopterus, BONAP. Amer. Orn. v. ii.

Falco melanopterus, BONAP. Syn. p. 31. Falco dispar, App. p. 435.

Black-shouldered Hawk, Falco dispar, AUD. Amer. Orn. v. iv. p. 397.

## GENUS VII. ICTINIA, VIEILLOT. ICTINIA.

Bill very short, wide at the base, much compressed toward the end; upper mandible with the dorsal line decurved in its whole length, the sides slightly convex, the tip narrow and acute, the edges with an obtuse lobe; lower mandible with the angle very wide, the dorsal line ascending and convex, the tip rather broad and obliquely truncate. Nostrils round, lateral, with a central papilla. Head rather large, roundish, broad, flattened; neck short, body compact. Legs rather short; tarsus stout, covered anteriorly with scutella; toes scutellate above, scabrous beneath, with pointed papillæ; claws rather long, curved, acuminate, flattened beneath. Plumage rather compact. Wings very long, the third quill longest. Tail long, emarginate.

This genus is easily distinguished from Elanus; the tarsi and toes being scutellate in this, and scaly in that; and the festoon on the upper mandible is much more prominent in Ictinia, while the nostrils, instead of being elliptical, are round, as in the Falcons.

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### 17. 1. *Ictinia plumbea*, GMEL. Mississippi Ictinia.—Mississippi Kite.

PLATE CXVII. Male and Female.

Head, secondary quills, and lower parts light ash-grey; back and wing coverts dark leaden-grey; primaries black, margined externally with deep red; tail bluish-black; scutella dark purplish-red.

*Male*, 14, 36. *Female*, 15.

From Texas, where it is abundant, to North Carolina; up the Mississippi to Natchez. Migratory.

Mississippi Kite, Falco Mississippiensis, WILS. Amer. Orn. v. iii. p. 80.

Falco plumbeus, BONAP. Syn. p. 90.

Mississippi Kite, Falco plumbeus, AUD. Orn. Biog. v. ii. p. 108, v. v. p. 374.

## GENUS VIII. NAUCLERUS, VIG. SWALLOW-TAILED-HAWK.

Bill short, wide at the base, much compressed toward the end; upper mandible with the dorsal line decurved from the base, the sides slightly convex, the edges with a slight festoon, the tip

narrow and acute; lower mandible with the angle very wide, the dorsal line straightish, the tip rounded and declinate. Nostrils round, with a central papilla. Head rather large, roundish, flattened; neck short; body compact. Feet short; tarsus very short, thick, scaly all round; toes scutellate above, scabrous beneath, with pointed papillæ; claws rather long, curved, acuminate. Plumage blended, glossy. Wings extremely long, pointed, the third quill longest; secondaries short. Tail extremely long, very deeply forked.

### **18. 1. *Nauclerus furcatus*, LINN. Common Swallow-tailed Hawk.**

PLATE LXXII. Male.

Head, neck all round, and lower parts white; back, wings, and tail black, glossed with blue and purple; feet light blue, tinged with green; claws flesh-coloured.

*Male*, 22, 47. *Female*, 25, 51  $\frac{1}{2}$ .

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From Texas to North Carolina. Rather abundant. Up the Mississippi and Ohio to Louisville. Accidental in Pennsylvania. Migratory.

Swallow-tailed Hawk, *Falco furcatus*, WILS. Amer. Orn. v. vi. p. 70.

*Falco furcatus*, BONAP. Syn. p. 31.

Swallow-tailed Hawk, *Falco furcatus*, AUD. Orn. Biog. v. i. p. 368. v. v. p. 371.

## **GENUS IX. FALCO, LINN. FALCON.**

Bill short, robust; its upper outline decurved from the base; cere short, bare; edge of upper mandible with a festoon and a prominent angular process. Nostrils round, with an internal ridge, ending in a central tubercle. Feet strong; tarsi moderate, reticulate; toes long, broadly scutellate, the anterior webbed at the base; claws long, well curved, very acute. Wings long, pointed; second quill longest, first and third nearly equal; outer toe abruptly cut out on the inner web. Tail rather long, nearly even.

### **19. 1. *Falco islandicus*, LATH. Iceland or Jer Falcon—Gyr Falcon. Labrador Falcon.**

PLATE CCCLXVI. Adult Female. PLATE CXCVI. Young Male and Female.

Tooth-like process of the bill generally obsolete in old, festoon slight in young birds; tail from three to four inches longer than the wings. Adult white, with slate-grey sagittate spots above, the bill pale blue, the cere and feet yellow. Younger birds light grey, the feathers white on the edges; the bill and cere light blue, the feet greyish-blue. Young brownish-grey above, the feathers margined and spotted with reddish-white, the lower parts yellowish-white, longitudinally streaked with dusky.

*Male*, 22  $\frac{1}{2}$ , 49. *Female*, 23  $\frac{1}{2}$ , 51  $\frac{1}{4}$ .

Breeds in the extreme north, and in Labrador. In winter, migrates southward as far as Maine.

*Falco islandicus*, Jer Falcon, RICH. & SWAINS. F. BOR. Amer. v. ii. p. 27.

Gyr Falcon, *Falco islandicus*, NUTT. Man. v. i. p. 51.

Iceland or Jer Falcon, *Falco islandicus*, AUD. Orn. Biog. v. iv. p. 466. Adult Female.

Iceland or Jer Falcon, *Falco islandicus*, AUD. Orn. Biog. v. ii. p. 552. Young Male and Female.

### **20. 2. *Falco peregrinus*, GMEL. Peregrine Falcon.—Large-footed Hawk. Duck Hawk. Wandering Falcon.**

PLATE XVI. Adult Male and Female.

Wings, when closed, of nearly the same length as the tail. Adult male with the upper parts greyish-black, excepting the head and hind neck barred with light greyish-blue, lower parts white, the breast and sides transversely spotted with black. Female with the upper parts darker than those of the male, the lower yellowish or reddish-white, with larger dusky spots on the breast and sides, and oblong streaks on the neck. Young blackish-brown above, the breast of the male yellowish-white, of the female pale yellowish-red, with broad longitudinal dusky streaks. In all stages, a large mystachial patch, black in adult, brown in young birds.

*Male*, 16  $\frac{1}{2}$ , 30. *Female*, 19  $\frac{1}{2}$ , 36.

Breeds in the northern parts, visiting the southern and western in winter as far as Texas.

Great-footed Hawk, WILS. Amer. Orn. v. ix. p. 120.

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Falco peregrinus, BONAP. Synops. p. 27.

Common or Wandering Falcon, Falco peregrinus, NUTTALL, Man. v. i. p. 53.

Great-footed Hawk, Falco peregrinus, AUD. Amer. Orn. v. i. p. 85; v. v. p. 365.

Falco peregrinus, Peregrine Falcon, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 23.

### 21. 3. Falco columbarius, LINN. Pigeon Falcon.—Pigeon Hawk.

PLATE LXXV. Young Male and Female. PLATE XCII. Adult Male.

Wings from two to three inches shorter than the tail, on the middle feathers of which are five, on the lateral six broad whitish bands. Adult male with the cere greenish-yellow, the feet pale orange, the upper parts light bluish-grey, each feather with a black central line; lower parts reddish or yellowish white, the breast and sides with large oblong brown spots; tibial feathers light red, streaked with blackish-brown. Female with the cere and legs greenish-yellow, the upper parts dark greyish-brown, the lower pale red, spotted as in the male. Young with the head light reddish-brown, streaked with dusky, the upper parts brownish-grey, the feathers margined and spotted with pale red, throat white, lower parts pale red, streaked with brown. The tail-bands vary from pale red to white.

This species is so nearly allied to *Falco Æsalon*, that it is extremely difficult to distinguish many individuals. The number and form of the scutella differ; but the most certain distinctive character is found in the light-coloured bands of the tail, which are more numerous in the Merlin, there being seven on its middle, and nine on its lateral tail-feathers.

*Male*, 10  $\frac{3}{4}$ , 27. *Female*, 14, 30.

From Texas northward. Breeds in the Labrador and Arctic regions. Abundant. Migratory.

Pigeon Hawk, Falco columbarius, WILS. Amer. Orn. v. ii. p. 107.

Falco columbarius, BONAP. Syn. p. 38.

Pigeon Hawk, Falco columbarius, NUTT. Man. v. i. p. 60.

Little Corporal Hawk, Falco temerarius, NUTT. Man. v. i. p. 61. Adult Male.

Falco columbarius, Pigeon Hawk, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 35.

Falco Æsalon, Merlin, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 37.

Pigeon Hawk, Falco columbarius, AUD. Orn. Biog. v. i. p. 466; Young, v. i. p. 381, Male; v. v. p. 368.

### 22. 4. Falco sparverius, LINN. Sparrow Falcon.—Sparrow Hawk.

PLATE CXLII. Male and Female.

Male with the upper part of the head and wing-coverts light greyish-blue, seven black spots round the head, and a light red patch on the crown; back light red, spotted with black; tail red, with a broad subterminal black band. Female with the head nearly as in the male, the back, wing-coverts, and tail, banded with light red and dusky. Young similar to the female, but with more red on the head, which is streaked with dusky.

*Male*, 12. *Female*, 12.

Generally distributed. Resident in the south. Abundant.

American Sparrow-Hawk, Falco sparverius, WILS. Amer. Orn. v. ii. p. 117.

Falco sparverius, BONAP. Syn. p. 27.

American sparrow-hawk, Falco sparverius, NUTT. Man. v. i. p. 58.

Falco sparverius, Little Rusty-crowned Falcon, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 31.

American Sparrow-Hawk, Falco sparverius, AUD. Orn. Biog. v. ii. p. 246; v. v. p. 370.

## GENUS X. ASTUR, CUV. HAWK.

Bill short, robust; its upper outline sloping, and nearly straight at the base, then decurved; cere short, bare above; edge of upper mandible with a festoon, succeeded by a broad sinus. Nostrils elliptical. Feet of moderate length; tarsi moderate or slender, feathered at least one-third of their length, broadly scutellate before and behind; first and second toes strongest and equal, third much longer, and connected at the base by a web with the third, which is shortest; claws long, well curved, acuminate. Wings very broad, of moderate length, much rounded, fourth and fifth quills longest, first much shorter, outer four abruptly cut out on the inner web. Tail long,

much exceeding the wings, rounded.

Those of more slender form, with proportionally longer tails and tarsi, are separated by many authors to form a group, to which the name of *Accipiter* and *Nisus* are given.

### 23. 1. *Astur palumbarius*, LINN. Gos Hawk.

[18]

PLATE CXLI. Fig. 1. Adult Male. Fig. 2. Young.

Adult male dark bluish-grey above, the tail with four broad bands of blackish-brown, the upper part of the head greyish-black; a white band, with black lines, over the eyes; lower parts white, narrowly barred with grey, and longitudinally streaked with dark brown. Young brown above, the feathers edged with reddish-white, the head and hind neck pale red, streaked with blackish-brown, the lower parts yellowish-white, with oblong longitudinal dark brown spots.

*Male*, 24, 47.

From Maryland, northward. From Kentucky, northward. Migratory.

Ash-coloured or Black-capped Hawk, *Falco atricapillus*, WILS. Amer. Ornith. v. vi. p. 80.

*Falco palumbarius*, BONAP. Syn. p. 28.

American Goshawk, *Falco atricapillus*, NUTT. Man. v. i. p. 85.

*Accipiter* (*Astur*) *Palumbarius*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 39.

Goshawk, *Falco palumbarius*, AUD. Orn. Biog. v. ii. p. 241.

### 24. 2. *Astur Cooperi*, BONAP. Cooper's Hawk.

PLATE CXLI. Fig. 3. Adult Male. PLATE XXXVI. Young Male and Female.

Tail rounded, tarsi moderately stout. Adult male dull bluish-grey above; the tail with four broad bands of blackish-brown, and tipped with white; the upper part of the head greyish-black; lower parts transversely barred with light red and white, the throat white, longitudinally streaked. Female similar, with the bands on the breast broader. Young umber-brown above, more or less spotted with white, the tail with four blackish-brown bars; lower parts white, each feather with a longitudinal narrow, oblong, brown spot.

*Male*, 20, 36. *Female*, 22, 38.

From Louisiana northward, and all over the interior, in winter. Some breed in the United States. Columbia River.

Cooper's Hawk, *Falco Cooperii*. BONAP. Amer. Orn. Young.

*Falco Cooperii*, BON. Syn. App. p. 433. Young.

Stanley Hawk, *Falco Stanleii*, AUD. Orn. Biog. v. ii. p. 245. Adult Male.

Stanley Hawk, *Falco Stanleii*, AUD. Orn. Biog. v. i. p. 186. Young.

### 25. 3. *Astur fuscus*, GMEL. Sharp-shinned Hawk.

PLATE CCCLXXIV. Adult Male and Female.

Tail even, tarsi extremely slender. Adult male bluish-grey above; the tail with four broad bands of blackish-brown, and tipped with white; upper part of head darker; lower parts transversely barred with light red and white, the throat white, longitudinally streaked. Female similar, more tinged with yellow beneath, and with the bands on the breast broader. Young umber-brown above, more or less spotted with white, the tail with four dark brown bars; lower parts white, each feather with a longitudinal narrow, oblong, brown spot. Miniature of *Falco Cooperii*, and intimately allied to *Astur Nisus*.

[19]

*Male*, 11  $\frac{1}{4}$ , 20  $\frac{1}{2}$ . *Female*, 14, 26.

Generally distributed. Not very abundant. Migratory.

Slate-coloured Hawk, *Falco Pennsylvanicus*, WILS. Amer. Ornith. v. vi. p. 13. Adult Male.

Sharp-shinned Hawk, *Falco velox*, WILS. Amer. Ornith. v. vi. p. 116. Young Female.

*Falco velox*, BONAP. Syn. p. 29.

*Falco fuscus*, BONAP. Syn. Append. p. 433.

*Accipiter Pennsylvanicus*, Slate-coloured Hawk, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 44.



American Brown or Slate-coloured Hawk, NUTT. Man. v. ii. p. 87.

Sharp-shinned or Slate-coloured Hawk, Falco fuscus, AUD. Amer. Orn. v. iv. p. 522.  
Adult.

## GENUS XI. CIRCUS, BECHST. HARRIER.

Bill short, compressed; upper mandible with the dorsal line sloping to beyond the cere, then decurved, the sides sloping, the edge with a festoon a little anterior to the nostril, the tip acute; lower mandible with the dorsal line ascending and convex, the tip rounded. Nostrils large, ovato-oblong, with an oblique ridge from their upper edge. Head of moderate size, oblong, neck rather short; body slender. Legs long and slender; tarsi long, compressed, anteriorly and posteriorly scutellate; toes slender, scutellate unless at the base; claws long, compressed, moderately curved, flat beneath, acuminate. Plumage very soft; a distinct ruff of narrow feathers from behind the eye on each side to the chin, the aperture of the ear being very large. Wings long, much rounded, the fourth quill longest; outer four quills with their inner webs sinuate. Tail straight, long, slightly rounded. Quills and tail-feathers covered with velvety down.

### 26. 1. Circus cyaneus, LINN. Common Harrier.

PLATE CCCLVI. Fig. 1. Male. Fig. 2. Female. Fig. 3. Young.

Adult male light ash-grey; abdomen, tail-coverts, lower wing-coverts, inner webs of secondary quills and tail-feathers, white, primaries black toward the end. Female umber-brown above, head, hind neck and scapulars, streaked with light red; tail-coverts white; tail banded with light red; lower parts light yellowish-red, the neck streaked with brown. Young like the female, but lighter.

[20]

*Male*, 19  $\frac{3}{4}$ , 44. *Female*, 20  $\frac{1}{2}$ , 46  $\frac{3}{4}$ .

Breeds from Texas northward. Columbia River.

Marsh Hawk, Falco uliginosus, WILS. Amer. Orn. v. vi. p. 67. Young Female.

Falco cyaneus, BONAP. Amer. Orn. v. ii. p. 30.

Hen-Harrier or Marsh Hawk, NUTT. Man. v. ii. p. 109.

Marsh Hawk, Falco cyaneus, AUD. Orn. Biog. v. iv. p. 396.

Buteo (Circus) cyaneus? var? Americanus, American Hen-Harrier, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 55.

## FAMILY III. STRIGINÆ. OWLS.

Bill very short, strong, cerate; upper mandible with the tip elongated and decurved; lower mandible with the end rounded and thin-edged. Head extremely large, owing to the wide separation of the tables of the cranium, roundish, more or less vertically flattened behind, feathered. Eyes excessively large, with prominent superciliary ridges, and encircled by series of decomposed feathers. External aperture of ear always very large, frequently excessive, simple or operculate. Tarsus short, very short, or of moderate length, always feathered, as are the toes, of which the outer is versatile, the first shorter than the second, the anterior free; claws very long, slender, curved, extremely acute. Plumage very full and soft. Wings long, broad, rounded, the second, third, and fourth quills longest, the filaments of the outer more or less enlarged and recurved at the end. Tail broad, rather short or of moderate length, of twelve feathers. Œsophagus very wide, without crop or dilatation; stomach very large, round, somewhat membranous, its muscular fasciculi being placed in a single series; intestine short and wide; cœca large, oblong, obtuse, narrowed at the base. Young at first covered with light-coloured down, when fledged, with the face darker than that of adults. Eggs white, somewhat globular or broadly ovate, from four to six. Nests rudely constructed, in hollow trees, on branches, in buildings, or on the ground.

[21]

## GENUS I. SURNIA, DUMERIL. DAY-OWL.

Bill very short, strong, its upper outline decurved from the base; lower mandible abruptly rounded, with a sinus on each side. Nostrils elliptical, rather large. Aperture of ear elliptical, simple, not more than half the height of the head. Feet strong; tarsi very short or of moderate length. Plumage rather dense; facial disks incomplete above. Wings very large, the third quill longest, the first with the filaments thickened and a little free, but scarcely recurved at the end. Tail varying in length.

### 27. 1. Surnia funerea, GMEL. Hawk Day-Owl.—Hawk Owl.

Tail long, much rounded, the lateral feathers two inches shorter than the middle. Upper part of head brownish-black, closely spotted with white, hind neck black, with two broad longitudinal bands of white spots; rest of upper parts dark brown, spotted with white; tail with eight transverse bars of white, the feathers tipped with the same; facial disks greyish-white, margined with black; lower parts transversely barred with brown and dull white.

*Male*, 15  $\frac{3}{4}$ , 31  $\frac{1}{2}$ . *Female*, 17  $\frac{1}{2}$ .

From New Jersey on the east, and from Columbia River on the west, northward; but not in the central plains. Migratory.

Hawk Owl, *Strix hudsonica*, WILS. v. vi. p. 64.

*Strix funerea*, BONAP. Syn. p. 35.

Hawk Owl, *Strix funerea*, NUTT. Man. v. i. p. 115.

## 28. 2. *Surnia nyctea*, LINN. **Snowy Day-Owl.—Snowy Owl.**

PLATE CXXI. Male and Female.

Tail rather long, moderately rounded; plumage white; head and back spotted; wings, tail, and lower parts barred with dusky brown. Young pure white. Individuals vary much in markings.

*Male*, 21, 53. *Female*, 26, 65.

From South Carolina on the east, and Columbia River on the west, northward. Migratory.

Snowy Owl, *Strix nyctea*, NUTT. Man. v. i. p. 116.

Snowy Owl, *Strix nyctea*, AUD. Amer. Orn. v. ii. p. 135: v. v. p. 382.

## 29. 3. *Surnia passerina*, LINN. **Passerine Day-Owl.—Little Night Owl.**

[22]

PLATE CCCCXXXII. Fig. 3. Female.

Tail rather short, arched, nearly even; wings almost as long as the tail, the outer four quills cut out on the inner web, the outer five sinuated on the outer; filaments of the first free and slightly recurved, as are those of the second and third beyond the sinus. General colour of upper parts chocolate-brown, the feather of the head with an oblong median white mark; hind neck with very large white spots, forming a conspicuous patch; on the back most of the feathers with a single large subterminal roundish spot, as is the case with the scapulars and wing-coverts, most of which, however, have two or more spots; quills with marginal reddish-white spots on both webs, the third with six on the outer and four on the inner, with two very faint pale bars toward the end; the tail similarly marked with four bands of transversely oblong, reddish-white spots; feathers of the anterior part of the disk whitish, with black shafts, of the lower part whitish, of the hind part brown tipped with greyish-white; a broad band of white crossing the throat, and curving upwards on either side to the ear; a patch of white on the lower part of the fore-neck; between these a brownish-grey band. Lower parts dull yellowish-white, each feather with a broad longitudinal band of chocolate-brown; abdomen and lower tail-coverts unspotted; tarsal feathers dull white.

*Female*, 10  $\frac{1}{2}$ ; wing from flex. 6  $\frac{1}{4}$ ; tail 3  $\frac{1}{2}$ .

From Nova Scotia eastward. Rather rare.

Little Night Owl, *Strix passerina*, AUD. v. v. p. 269.

## 31. 5. *Surnia cunicularia*, GMEL. **Burrowing Day-Owl.**

PLATE CCCCXXXII. Fig. 1. Male. Fig. 2. Female.

Feet rather long, slender; tarsus covered with short soft feathers, of which the shafts only remain toward the lower part; toes short, their upper surface covered with bristles or the shafts of feathers; tail short, arched, narrow, slightly rounded. Bill greyish-yellow; claws black. General colour of upper parts light yellowish-brown, or umber-brown, spotted with white; the quills with triangular reddish-white spots from the margins of both webs, there being five on each web of the first; the tail similarly barred, there being on the middle feathers four double spots, and the tips of all white. Face greyish-white; throat and ruff white, succeeded by a mottled brown band, beneath which is a patch of white; the rest of the lower parts yellowish-white, with broad bars of light reddish-brown, which are closer on the sides of the breast; abdomen, lower tail-coverts, and legs without spots.

*Male*, 10, 24. *Female*, 11.

Prairies west of the Mississippi. Abundant.

Burrowing Owl, *Strix cucularia*, SAY, in Long's Exped. v. i. p. 200.

Burrowing Owl, *Strix cucularia*, BONAP. Amer. Orn. v. i. p. 68.

Burrowing Owl, *Strix cucularia*, AUD. Orn. Biog. v. v. p. 264.

Burrowing Owl, *Strix cucularia*, NUTT. Man. v. i. p. 118.

### 30. 4. *Surnia passerinoides*, TEMM. Columbian Day-Owl.

PLATE CCCCXXXII. Fig. 4, 5. Male.

Tail of moderate length, straight, slightly rounded; wings rather short, much rounded, fourth quill longest, outer three abruptly cut out on the inner web, the first with its filaments thickened but not recurvate, those of the second and third also thickened toward the end. General colour of the upper parts olivaceous brown; the head with numerous small, roundish, yellowish-white spots margined with dusky, of which there are two on each feather; the rest of the upper parts marked with larger, angular, whitish spots; the quills generally with three small and five large white spots on the outer and inner webs; the tail barred with transversely oblong white spots, of which there are seven pairs on the middle feathers. Facial disk brown, spotted with white; throat white, then a transverse brown band, succeeded by white; the lower parts white, with longitudinal brownish-black streaks, the sides brown, faintly spotted with paler. Young with the upper parts rufous, the head with fewer and smaller white spots; those on the lower part of the hind neck very large; the back, scapulars, and wing-coverts unspotted; the wings marked as in the adult, but with pale red spots in the outer, and reddish-white on the inner webs; the tail with only five bands of spots; the lower parts white, longitudinally streaked with light red, of which colour are the sides of the body and neck, and a band across the throat.

*Male*, 7, wing  $3\frac{7}{12}$ .

Columbia River.

Cheveche chevechoide, *Strix passerinoides*, TEMM. Pl. Col. 344.

Little Columbian Owl, *Strix passerinoides*, AUD. Orn. Biog. v. v. p. 271.

## GENUS II. ULULA. NIGHT-OWL.

Bill short, strong, very deep, its upper outline decurved from the base; lower mandible abruptly rounded, with a notch on each side. Nostrils broadly elliptical, rather large. Conch of ear very large, elliptical, extending from the base of the lower jaw to near the top of the head, with an anterior semicircular operculum in its whole length. Feet rather short, strong; tarsi and toes covered with very soft downy feathers. Plumage full, and very soft; facial disks complete. Wings rather long, very broad, much rounded, the third quill longest; the filaments of the first, half of the second, and the terminal part of the third, free and recurved. Tail of moderate length, arched, slightly rounded.

[24]

### 32. 1. *Ulula Tengmalmi*, GMEL. Tengmalm's Night-Owl.

PLATE CCCLXXX. Male and Female.

General colour of upper parts greyish-brown tinged with olive; feathers of the head with an elliptical central white spot; those of the neck with a larger spot; scapulars with two or four large round spots near the end, and some of the dorsal feathers and wing-coverts with single spots on the outer web; all the quills margined with white spots on both webs, arranged in transverse series, there being six on the outer web of the third; on the tail five series of transversely elongated white spots. Disk yellowish-white, anteriorly black; ruff yellowish-white, mottled with dusky; throat brown, chin white; lower parts yellowish-white, longitudinally streaked with brown; some of the feathers of the sides with two white spots; tarsal and digital feathers greyish-yellow, with faint transverse brown bars.

*Male*, 11, wing  $6\frac{10}{12}$ . *Female*, 12.

From Maine on the east, and from Columbia River on the west, northward.

*Strix Tengmalmi*, Tengmalm's Owl, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 94.

Tengmalm's Owl, *Strix Tengmalmi*, AUD. Orn. Biog. v. iv. p. 559.

### 33. 2. *Ulula Acadica*, GMEL. Acadian Night-Owl.—Little Owl. Saw-whet.

PLATE CXCIX. Male and Female.

General colour of upper part olivaceous brown; scapulars and some of the wing-coverts spotted with white; the first six primary quills obliquely barred with white; tail darker, with two narrow white bars; upper part of head streaked with greyish-white; disks pale yellowish-grey; ruff white, spotted with dusky. Lower parts whitish, the sides and breast marked with broad

elongated patches of brownish-red.

*Male*, 7 ½, 17. *Female*, 8 ½, 18.

From North Carolina on the east, and from Columbia River on the west, northward.

Little Owl, *Strix passerina*, WILS. Amer. Orn. v. iv. p. 61.

*Strix acadica*, BONAP. Syn. p. 38.

*Strix acadica*, American Sparrow Owl, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 97.

Acadian Owl, *Strix acadica*, NUTT. Man. v. i. p. 137.

Little or Acadian Owl, *Strix acadica*, AUD. Orn. Biog. v. ii. p. 567: v. v. p. 397.

### GENUS III. STRIX, LINN. SCREECH-OWL.

Bill short, compressed, deep, strong; upper mandible with its dorsal outline straight to the end of the cere, then curved, the sides nearly flat and erect, the tip deflected, with a rounded but sharp-edged point; lower mandible with the dorsal line convex, the sides convex, the edges arched, the tip obliquely truncate. Conch of the ear semicircular, extending from over the anterior angle of the eye to the middle of the lower jaw; aperture large, somewhat square, with an anterior operculum fringed with feathers. Legs rather long, tarsus long, feathered, scaly at the lower part; toes large, the first short, the inner nearly as long as the middle, all with series of small tuberculiform oblong scales, intermixed with a few bristles, and three broad scutella at the end. Claws arched, long, extremely sharp, the edge of the third thin and transversely cracked in old birds. Plumage very soft and downy; facial disks complete. Wings long, ample, rounded; the first quill with the filaments recurved. Tail rather short, even.

[25]

#### 34. 1. *Strix Americana*, AUD. American Screech-Owl.—Barn Owl.

PLATE CLXXI. Male and Female.

Feathers margining the operculum with the shaft and webs undeveloped. Bill pale greyish-yellow; claws and scales brownish-yellow. General colour of upper parts greyish-brown, with light yellowish-red interspersed, produced by very minute mottling; each feather having toward the end a central streak of deep brown, terminated by a small oblong greyish-white spot; wings similarly coloured; secondary coverts and outer edges of primary coverts with a large proportion of light brownish-red; quills and tail transversely barred with brown; lower parts pale brownish-red, fading anteriorly into white, each feather having a small dark brown spot at the tip.

Closely allied to *Strix flammea*, but larger, and differing somewhat in colour, being generally darker, with the ruff red. A character by which they may always be distinguished is found in the operculum, the feathers margining which are in the present species reduced to their tubes, the shafts and filaments being wanting, whereas in the European species each tube bears a very slender shaft, about half an inch long, and furnished with about half a dozen filaments on each side.

*Male*, 17, 42. *Female*, 18, 46.

Southern States. Breeds from Texas to North Carolina. Never seen in the interior, or to the north. Rather common.

White or Barn Owl, *Strix flammea*, WILS. Amer. Orn. v. vi. p. 57.

*Strix flammea*, BONAP. Synops. p. 38.

White or Barn Owl, *Strix flammea*, NUTT. Man. v. i. p. 139.

Barn Owl, *Strix flammea*, AUD. Orn. Biog. v. ii. p. 403: v. v. p. 388.

[26]

### GENUS IV. SYRNIUM, CUV. HOOTING-OWL.

Bill short, stout, broad at the base; upper mandible with its dorsal outline convex to the end of the cere, then curved, the sides sloping and nearly flat, the tip compressed, decurved, acute; lower mandible small, with the dorsal line convex, the tip narrow, the edges decurved toward the end. Nostrils large, elliptical. Conch of the ear of medium size, and furnished with an anterior semicircular operculum, beset with slender feathers. Legs rather short; tarsi very short, and with the toes feathered. Claws slightly curved, long, slender, compressed, acuminate. Plumage very soft and downy; facial disks complete. Wings very large, much rounded, the outer quill with the tips of the filaments separated and recurved, as are those of the terminal portion of the next; the outer six with the inner webs sinuate. Tail broad, rounded.

#### 35. 1. *Syrnium cinereum*, LINN. Great Cinereous Hooting-Owl.—Cinereous Owl.

Upper parts greyish-brown, variegated with greyish-white in irregular undulated markings; the feathers on the upper part of the head with two transverse white spots on each web; the smaller wing-coverts of a darker brown, and less mottled than the back; the outer scapulars with more white on their outer webs; primaries blackish-brown toward the end, in the rest of their extent marked with a few broad light grey oblique bands, dotted and undulated with darker; tail similarly barred; ruff-feathers white toward the end, dark brown in the centre; disks on their inner sides grey, with black tips, in the rest of their extent greyish-white, with six bars of blackish-brown very regularly disposed in a concentric manner; lower parts greyish-brown, variegated with greyish and yellowish-white; feet barred with the same.

*Female*, 30  $\frac{1}{2}$ , 48  $\frac{1}{2}$ .

From Massachusetts on the east, and Columbia River on the west, northward. Migratory.

Great Grey or Cinereous Owl, *Strix cinerea*, NUTT. Man. v. i. p. 128.

Cinereous Owl, *Strix cinerea*, SWAIN. & RICH. F. Bor. Amer. v. ii. p. 77.

Great Cinereous Owl, *Strix cinerea*, AUD. Orn. Biog. v. iv. p. 364.

[27]

### 36. 2. *Syrnium nebulosum*, LINN. Barred Hooting-Owl. Barred Owl.

PLATE XLVI. Male.

General colour of upper parts light reddish-brown; face and greater part of the head brownish-white; the feathers of the latter broadly marked with brown, of which a narrow band passes from the bill along the middle of the head; feathers of the back and most of the wing-coverts largely spotted with white; primary coverts, quills, and tail, barred with light brownish-red; wings and tail tipped with greyish-white; lower parts pale brownish-red, longitudinally streaked with brown, excepting the neck and upper part of the breast, which are transversely marked, the abdomen, which is yellowish-white, and the tarsal feathers, which are light reddish.

*Male*, 18, 40.

From Texas to Nova Scotia. Resident in the south and west. Very abundant.

Barred Owl, *Strix nebulosa*, WILS. Amer. Orn. v. iv. p. 61.

*Strix nebulosa*, BONAP. Syn. p. 38.

Barred Owl, *Strix nebulosa*, NUTT. Man. v. i. p. 133.

Barred Owl, *Strix nebulosa*, AUD. Orn. Biog. v. i. p. 242: v. v. p. 386.

## GENUS V. OTUS, CUV. EARED-OWL.

Bill short, stout, broader than high at the base, compressed toward the end; upper mandible with its dorsal line slightly curved from the base, toward the end decurved, the ridge broad at the base, narrowed anteriorly, the sides convex toward the tip, which is acute, and descends obliquely; lower mandible straight, with the dorsal line very short and slightly convex, the back and sides convex, the edges toward the end decurved, and with a slight sinus on each side, the tip obliquely truncate. Nostrils large, oblique, oblong. Conch of extreme size; extending from the level of the forehead over the eye to the chin in a semilunar form, with an anterior semicircular flap in its whole length, the aperture large, of a rhomboidal form. Feet of moderate length, and stout; tarsi short, feathered, as are the toes; the first shortest, the second and fourth nearly equal; claws long, curved in the fourth of a circle, extremely acute, the first and second rounded beneath. Plumage extremely soft and downy, facial disks complete, ruff distinct. Two small tufts of elongated feathers on the head. Wings long and broad; the second quill longest; the outer in its whole length, the second toward the end, and the first alular feather, with the filaments disunited and recurved at the ends. Tail rather short, a little rounded.

[28]

### 37. 1. *Otus vulgaris*, FLEMING. Common Eared-Owl.—Long-eared Owl.

Tufts elongated; general colour of plumage buff, mottled and spotted with brown and greyish-white; dirty whitish anteriorly, with the tips black, posteriorly reddish-white; ruff mottled with red and black; upper part of head minutely mottled with whitish, brownish-black, and light red; the tufts light reddish toward the base, brownish-black in the centre toward the end, the inner edge white, dotted with dark brown; upper parts buff, variegated with brown and whitish-grey, minutely mottled or undulatingly barred; first row of coverts tipped with white; quills and scapulars pale grey barred with dark brown, the primaries buff toward the base externally. Tail with ten bars on the middle and eight on the outer feathers; lower parts with more buff and fewer spots than the upper, each feather with a long dark brown streak, and several irregular transverse bars; legs and toes pure buff.

*Male*, 14  $\frac{1}{2}$ , 38. *Female*, 16, 40.

From Maryland eastward, and Kentucky westward to the Missouri. Rather rare. Resident.

Long-eared Owl, *Strix Otus*, WILS. Amer. Orn. v. vi. p. 52.

*Strix Otus*, BONAP. Syn. p. 37.

Long-eared Owl, *Strix Otus*, NUTT. Man. v. i. p. 130.

Long-eared Owl, *Strix Otus*, AUD. Orn. Biog. v. iv. p. 573.

### **38. 2. *Otus brachyotus*, LINN. Short-tufted Eared-Owl.—Short-Eared Owl.**

Tufts inconspicuous, general colour of plumage buff variegated with dark brown; eye surrounded by a ring of brownish-black, much broader behind; anterior half of disk white, with the tips black, posterior yellowish; anterior auricular ruff white, posterior yellowish, each feather with an oblong dark brown spot; upper parts buff, longitudinally streaked with dark brown; scapulars and wing-coverts spotted and banded in large patches, many with a large yellowish-white spot on the outer web near the end; quills buff, with two or three dark brown bands; tail similar, with five broad dark bands, the tip yellowish-white; on the middle feathers, the light-coloured spaces have a brown central patch; lower parts pale buff, whitish behind, the neck with oblong, the breast and sides with linear dark brown streaks; chin, feet, abdomen, and lower tail-coverts unspotted.

*Male*, 15, 40. *Female*, 17, 45.

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From Texas eastward. Columbia River. Common. Migratory.

Short-eared Owl, *Strix brachyotos*, WILS. Amer. Orn. v. iv. p. 64.

*Strix brachyotos*, BONAP. Syn. p. 37.

Short-eared Owl, *Strix brachyotos*, NUTT. Man. v. i. p. 132.

Short-eared Owl, *Strix brachyotos*, AUD. Orn. Biog. v. v. p. 273.

## **GENUS VI. BUBO, CUVIER. HORNED-OWL.**

Bill short, stout, broader than high at the base, compressed toward the end; upper mandible with its dorsal line curved from the base, the edges with a slight festoon, the tip trigonal, very acute; lower mandible with the dorsal line convex, the tip obliquely truncate. Nostrils broadly elliptical, aperture of ear elliptical, less than half the height of the head, without operculum. Feet of ordinary length; tarsi and toes feathered. Plumage full and very soft; facial disks complete; a tuft of elongated feathers on each side of the crown of the head. Wings ample, the first quill short, the fourth longest. Tail of ordinary length, rounded.

### **39. 1. *Bubo Virginianus*, GMEL. Virginian Horned-Owl.—Great Horned-Owl.**

PLATE LXI. Male and Female.

Upper part of the head brownish-black, mottled with light brown, the tufts of the same colour, margined with brown; face brownish-red, with a circle of blackish-brown; upper parts undulatingly banded and minutely mottled with brownish-black and yellowish-red, behind tinged with grey; wings and tail light brownish-yellow, barred and mottled with blackish-brown and light brownish-red; chin white; upper part of throat light reddish, spotted with black, a band of white across the middle of fore neck; its lower part and the breast light yellowish-red, barred with deep brown, as are the lower parts generally; several longitudinal brownish-black patches on the lower fore neck; tarsal feathers light yellowish-red, obscurely barred.

*Male*, 23, 56. *Female*, 25, 60.

From Texas northward. Resident. Not rare in the south.

Great Horned-Owl, *Strix Virginiana*, WILS. Amer. Orn. v. vi. p. 52.

*Strix Virginiana*, BONAP. Syn. p. 37.

Great Horned-Owl or Cat Owl, *Strix Virginiana*, NUTT. Man. v. i. p. 124.

Great Horned-Owl, *Strix Virginiana*, AUD. Orn. Biog. v. i. p. 313; v. v. p. 393.

### **40. 2. *Bubo Asio*, LINN. Mottled Horned-Owl.**

PLATE XCVII. Adult and Young.

Adult with the upper parts pale brown, spotted and dotted with brownish-black; a pale grey line from the base of the upper mandible over each eye; quills light brownish-grey, barred with brownish-black, their coverts dark brown, secondary coverts with the tip white; throat yellowish-grey, lower parts light grey, patched and sprinkled with brownish-black; tail-feathers tinged with red. Young with the upper parts light brownish-red, each feather with a central blackish-brown

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line; tail and quills barred with dull brown; a line over the eye, and the tips of the secondary coverts reddish-white; breast and sides light yellowish-grey, spotted and lined with brownish-black and bright reddish-brown, the rest of the lower parts yellowish-grey, the tarsal feathers pale yellowish-red.

*Male*, 10, 22. *Female*, 10, 23.

From Texas eastward. Columbia River. Resident. Abundant.

Mottled Owl, *Strix nœvia*, WILS. Amer. Orn. v. iii. p. 16. Adult.

Red Owl, *Strix asio*, WILS. Amer. Orn. v. v. p. 83. Young.

Mottled and Red Owl, *Strix asio*, NUTT. Man. v. i. p. 120.

Little Screech Owl, *Strix asio*, AUD. Orn. Biog. v. i. p. 486; v. v. p. 392.

## FAMILY VI CAPRIMULGINÆ. GOATSUCKERS.

Mouth opening to beneath the centre of the eyes; bill much depressed, generally feeble, the horny part being small; upper mandible with the tip somewhat decurved. Nostrils elliptical, prominent, marginate. Eyes extremely large. Aperture of ear elliptical, very large. Head of extreme breadth, depressed; body very slender. Feet very small; tarsus partially feathered, scaly; anterior toes webbed at the base; hind toe small, and versatile, all scutellate above; claw of third toe generally elongated, with the inner margin thin and pectinate. Plumage very soft and blended. Wings very long, the second and third quills longest. Tail long, of ten feathers. Œsophagus rather wide, without crop; stomach very large, roundish, its muscular coat very thin, and composed of a single series of strong fasciculi; epithelium very hard, with longitudinal rugæ; intestine short and wide; cœca large, oblong, narrow at the base; cloaca globular. Trachea of nearly uniform width, without inferior laryngeal muscles. Nest on the ground, or in hollow trees. Eggs generally two. Young covered with down. Very nearly allied in some respects to the Owls.

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### GENUS I. CAPRIMULGUS, LINN. GOATSUCKER.

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Bill feeble, gape extending to beneath the posterior angle of the eye. Nostrils elliptical, prominent. Wings long, pointed, the second quill longest; tail long. Claw of middle toe pectinate. Along the base of the bill on each side, a series of feathers having very strong shafts, terminating in an elastic filamentous point, and with the barbs or lateral filaments extremely slender, distant, and not extended beyond the middle of the shaft. Plumage very soft and blended. Wings long and pointed, the second quill longest; tail long, rounded.

#### 41. 1. *Caprimulgus Carolinensis*, GMEL. Carolina Goatsucker.—Chuck-will's-widow.

PLATE LII. Male and Female.

Bristles with lateral filaments; tail slightly rounded. Head and back dark brown, minutely mottled with yellowish-red, and longitudinally streaked with black; three bands of the latter colour, from the lower mandible diverging along the head; a yellowish-white line over the eye; wings barred with yellowish-red and brownish-black, and minutely sprinkled with the latter colour, as are the wing-coverts, which, together with the scapulars, are largely spotted with black, and tinged with grey; tail similarly barred and dotted; terminal half of the inner webs of the three outer feathers white, their extremities light red; lower parts dull reddish-yellow, sprinkled with dusky; a band of whitish feathers barred with black on the fore neck. Female like the male, but without white on the tail.

*Male*, 12  $\frac{3}{4}$ , 26. *Female*, 13  $\frac{1}{4}$ , 30.

From Texas to North Carolina. Up the Mississippi to Natchez. Resident in the Floridas.

Chuck-will's-widow, *Caprimulgus Carolinensis*, WILS. Amer. Orn. v. vi. p. 95.

*Caprimulgus Carolinensis*, BONAP. Syn. p. 61.

Chuck-will's-widow, *Caprimulgus Carolinensis*, v. i. p. 612.

Chuck-will's-widow, *Caprimulgus Carolinensis*, AUD. Orn. Biog. v. i. p. 273; v. v. p. 401.

#### 42. 2. *Caprimulgus vociferus*, WILS. Whip-poor-will Goatsucker.

Bristles without lateral filaments; tail much rounded. General colour of upper parts dark brownish-grey, streaked and minutely sprinkled with brownish-black; quills and coverts dark brown, spotted in bars with light brownish-red; four middle tail-feathers like those of the back,

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the three lateral white in their terminal half; throat and breast similar to the back, with a transverse band of white on the fore neck, the rest of the lower parts paler and mottled. Female like the male, but with the lateral tail-feathers reddish-white toward the tip only, and the band across the fore neck pale yellowish-brown.

*Male*, 9  $\frac{1}{2}$ , 19. *Female*.

From Texas to Lake Huron, and the base of the Rocky Mountains. A few remain in winter in Florida.

Whip-poor-will, *Caprimulgus vociferus*, WILS. Amer. Orn. v. v. p. 71.

*Caprimulgus vociferus*, BONAP. Syn. p. 62.

Whip-poor-will, *Caprimulgus vociferus*, AUD. Orn. Biog. v. i. p. 422; v. v. p. 405.

Whip-poor-will, *Caprimulgus vociferus*, NUTT. Man. v. i. p. 614.

## GENUS II. CHORDEILES, SWAINSON. NIGHT-HAWK.

Mouth opening to beneath the centre of the eyes; bill extremely small; upper mandible with the tip decurved, and a deep lateral groove. Nostrils oblong, prominent, marginate. Eyes very large. Aperture of ear elliptical, very large. Head very large, depressed, but less so than in *Caprimulgus*. Claw of middle toe pectinate. No bristles at the base of the upper mandible. Wings very long, pointed, with the first quill longest, and the secondaries very short. Tail emarginate.

### 43. 1. *Chordeiles Virginianus*, BRISS. *Virginian Night-Hawk*.—*Bat. Crapaud volant*.

PLATE CXLVII. Male and Female.

Upper parts brownish-black, mottled with white and pale reddish-brown; a conspicuous white bar extending across the inner web of the first, and the whole breadth of the next four quills; tail-feathers barred with brownish-grey, the four outer on each side plain brownish-black towards the end, with a large white spot; sides of the head and fore neck mottled like the back; a broad white band, in the form of the letter V reversed on the throat and sides of the neck; the rest of the lower parts greyish-white, transversely undulated with dark brown. Female similar, with the dark parts more brown, the white more tinged with red, the band on the throat brownish-white, and the white spots on the tail-feathers wanting.

*Male*, 9  $\frac{1}{2}$ , 23  $\frac{1}{2}$ . *Female*, 9  $\frac{3}{4}$ , 23  $\frac{3}{4}$ .

From Texas northward. Columbia River. Throughout the interior. Migratory. Very abundant.

Night-Hawk, *Caprimulgus Americanus*, WILS. Amer. Ornith. Biog. v. v. p. 65.

*Caprimulgus Virginianus*, BONAP. Syn. p. 62.

*Caprimulgus (Chordeiles) Virginianus*, SWAINS. & RICH. F. Bor. Amer. v. i. p. 62.

Night-Hawk, *Caprimulgus Americanus*, NUTT. Man. v. i. p. 619.

Night-Hawk, *Caprimulgus Virginianus*, AUD. Orn. Biog. v. ii. p. 273; v. v. p. 406.

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## FAMILY V. CYPSELINÆ. SWIFTS.

Mouth opening to beneath the hind part of the eyes; bill extremely short, very broad at the base, compressed at the end; upper mandible decurved at the point, the edge inflected, with an indistinct sinus. Nostrils basal, approximate, oblong. Head large and depressed; neck short; body rather slender. Feet extremely short; tarsus rounded, destitute of scutella; toes extremely short, the three anterior nearly equal; hind toe very small, and versatile; claws strong, compressed, arched, very acute. Plumage compact; no bristles at the base of the upper mandible; wings extremely elongated, falciform, the first quill longest; tail of ten feathers. Œsophagus of moderate width, without crop; stomach oblong, moderately muscular, with a dense rugous epithelium; intestine short, and rather wide; no cœca. No inferior laryngeal muscles. Nest in crevices or holes, or attached to high places. Eggs elongated, white.

## GENUS I. CHÆTURA, STEPHENS. SPINE-TAIL.

All the characters as above. Tarsus bare, longer than the middle toe, which scarcely exceeds the outer. Tail short, even, the shafts very strong, and prolonged into acuminate points.

### 44. 1. *Chætura pelasgia*, LINN. *American Spine-tail*.—*Chimney Swallow*. *American Swift*.



Brownish-black, lighter on the rump, with a slight greenish gloss on the head and back; throat greyish-white, lower parts greyish-brown, tinged with green; loreal space black, and a greyish-white line over the eye. Female similar to the male.

*Male*, 4  $\frac{1}{4}$ , 12.

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Extends as far eastward as Nova Scotia. Abundant. Migratory.

Chimney Swallow, *Hirundo pelagica*, WILS. Amer. Ornith. v. v. p. 48.

*Cypselus pelagius*, BONAP. Syn. p. 63.

Chimney Swift or Swallow, *Cypselus pelagius*, NUTT. Man. v. i. p. 609.

Chimney Swallow or American Swift, *Cypselus pelagius*, AUD. Ornith. Biog. v. ii. p. 329; v. v. p. 419.

## FAMILY VI. HIRUNDINÆ. SWALLOWS.

Bill very short, much depressed and very broad at the base, compressed toward the tip; upper mandible with the dorsal line convex, the edges overlapping, with a small notch close to the slightly decurved tip. Head broad, depressed; neck very short, body moderate. Feet very short, tarsus very short, anteriorly scutellate; toes of moderate size; first large, all scutellate in their whole length; claws rather strong, compressed, well curved, acute. Plumage soft, blended, glossy. No bristles at the base of the bill. Wings extremely long, narrow, pointed, somewhat falciform; secondaries very short. Tail generally emarginate, of twelve feathers. Mouth extremely wide; œsophagus rather wide, without crop; stomach elliptical or roundish, muscular, with a dense rugous epithelium; cœca very small. Four pairs of inferior laryngeal muscles. Nest in holes in banks, buildings, or trees, or attached to the surface of these objects. Eggs from four to six, white, plain, or spotted.

## GENUS I. HIRUNDO, LINN. SWALLOW.

Characters as above; tail emarginate or forked.

### 45. 1. *Hirundo purpurea*, LINN. Purple Martin.

PLATE XXIII. Male and Female.

Bill rather stout; wings as long as the tail, which is deeply emarginate. Plumage silky, shining, purplish-black, with steel blue reflections; quills and tail-feathers brownish-black; tarsi and toes purplish-black. Female with the upper parts paler, and tinged with grey, the lower light grey, longitudinally streaked with black.

*Male*, 7  $\frac{1}{2}$ , 16. *Female*, 7  $\frac{1}{2}$ , 15  $\frac{1}{2}$ .

From the Texas northward. Rocky Mountains, and all intermediate districts. Migratory.

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Purple Martin, *Hirundo purpurea*, WILS. Amer. Orn. v. i. p. 58.

*Hirundo purpurea*, BONAP. Syn. p. 64.

Purple Martin, *Hirundo purpurea*, NUTT. Man. v. i. p. 598.

Purple Martin, *Hirundo purpurea*, AUD. Orn. Biog. v. i. p. 115; v. v. p. 408.

### 46. 2. *Hirundo bicolor*. VIEILL. White-bellied Swallow.

PLATE XCVIII. Male and Female.

Wings a little longer than the tail, which is deeply emarginate. Upper parts steel blue, with green reflections, lower white; feet flesh-coloured. Female similar to the male.

*Male*, 5  $\frac{1}{4}$ , 10. *Female*.

From Texas northward. Columbia River, and all intermediate districts. Winters in Florida and Louisiana.

Green-blue or White-bellied Swallow, *Hirundo viridis*, WILS. Amer. Ornith. v. iii. p. 44.

*Hirundo bicolor*, BONAP. Syn. p. 65.

White-bellied Swallow, *Hirundo bicolor*, NUTT. Man. v. i. p. 605.

White-bellied Swallow, *Hirundo bicolor*, AUD. Orn. Biog. v. i. p. 491; v. v. p. 417.

### 47. 3. *Hirundo fulva*, VIEILL. Cliff-Swallow,—Republican Swallow.

Bill shorter than in the last species; wings of the same length as the tail, which is slightly emarginate. Upper part of head, back, and smaller wing-coverts black with bluish-green reflections; forehead white, generally tinged with red; loreal space and a band on the lower part of the forehead black; chin, throat, and sides of the neck deep brownish-red; a patch of black on the fore-neck; rump light yellowish-red; lower parts greyish-white, anteriorly tinged with red. Female similar to the male. Young dark greyish-brown above, reddish-white beneath.

*Male*, 5  $\frac{1}{2}$ , 12. *Female*, 5  $\frac{1}{2}$ , 12  $\frac{3}{4}$ .

From Kentucky northward. Abundant from New York to Nova Scotia. Columbia River. Rocky Mountains. Migratory.

Fulvous or Cliff Swallow, *Hirundo fulva*, BONAP. Amer. Orn. v. i. p. 63.

*Hirundo fulva*, BONAP. Syn. p. 64.

Fulvous or Cliff Swallow, *Hirundo fulva*, NUTT. Man. v. i. p. 603.

Republican or Cliff Swallow, AUD. Orn. Biog. v. i. p. 353; v. v. p. 415.

### 48. 4. *Hirundo rustica*, LINN. Chimney-Swallow.—Barn-Swallow.

PLATE CLXXIII. Male and Female.

Tail very deeply forked, the lateral feathers much exceeding the wings. Forehead and throat bright chestnut; upper parts and a band on the fore-neck glossy deep steel-blue; quills and tail brownish-black glossed with green; the latter with a white spot on the inner web of each of the feathers, except the two middle. Female similar to the male. Young less deeply coloured, the forehead and throat pale red, the band on the fore-neck dusky tinged with red; lateral tail-feathers not exceeding the wings. [36]

*Male*, 7, 13. *Female*, 6  $\frac{5}{12}$ , 12  $\frac{9}{12}$ .

Throughout North America, Europe, and Africa. Migratory.

Barn Swallow, *Hirundo Americana*, WILS. Amer. Orn. v. v. p. 34.

*Hirundo Americana*, American Barn Swallow, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 329.

*Hirundo rufa*, BON. Syn. p. 64.

Barn Swallow, *Hirundo rufa*, NUTT. Man. v. i. p. 601.

Barn Swallow, *Hirundo rustica*, AUD. Orn. Biog. v. ii. p. 413; v. v. p. 411.

### 49. 5. *Hirundo thalassina*, SWAINS. Violet-green Swallow.

PLATE CCCLXXXV. Fig. 4. Male. Fig. 5. Female.

Bill narrower than in the preceding species; wings extremely long, extending far beyond the tail, which is emarginate. Upper part of head deep green, gradually shaded into the dark purple of the hind neck; back rich grass-green, rump and upper tail-coverts carmine purple; a line over the eye, cheeks, and all the lower parts pure white, excepting the wing-coverts, which are light grey. Female with the upper part of the head and hind neck light greyish-brown, glossed with green; the back as in the male, the rump greyish-brown; lower parts white, anteriorly tinged with grey.

*Male*, 4  $\frac{10}{12}$ , wing 4  $\frac{6}{12}$ .

California, Rocky Mountains, and Oregon Territory. Migratory.

*Hirundo thalassinus*, SWAINS. Syn. of Mex. Birds, Phil. Mag. for 1827, p. 365.

Violet-green Swallow, *Hirundo thalassina*, AUD. Orn. Biog. v. iv. p. 597.

### 50. 6. *Hirundo riparia*, LINN. Bank Swallow.

PLATE CCCLXXXV. Fig. 1. Male. Fig. 2. Female. Fig. 3. Young.

Tail slightly forked, margin of first quill smooth, tarsus with a tuft of feathers behind; upper parts greyish-brown, lower whitish, with a dusky band across the fore part of the neck. Young with the feathers of the upper parts margined with reddish-white.

*Male*, 5, 11. *Female*, 4  $\frac{7}{8}$ .

From Texas northward. Rocky Mountains. Columbia River. Migratory; but vast numbers winter in Florida.

Bank Swallow or Sand Martin, *Hirundo riparia*, WILS. Amer. Orn. v. v. p. 46.

*Hirundo riparia*, BONAP. Syn. p. 65.

*Hirundo riparia*, Sand Martin, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 333.

Bank Swallow or Sand Martin, *Hirundo riparia*, NUTT. Man. v. i. p. 607.

Bank Swallow or Sand Martin, *Hirundo riparia*, AUD. Orn. Biog. v. iv. p. 584.

### 51. 7. *Hirundo serripennis*, AUD. Rough-winged Swallow.

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Tail slightly emarginate, margin of first quill rough with the strong decurved tips of the filaments, tarsus bare; upper parts greyish-brown, lower pale greyish-brown, white behind. Very nearly allied to the last in form and colour, but readily distinguishable by drawing the finger along the edge of the wing, when the stiff projecting tips of the filaments are felt like the edge of a fine saw.

*Male*, 5  $\frac{3}{4}$ , 12  $\frac{1}{2}$ .

Louisiana and South Carolina. Migratory.

Rough-winged Swallow, *Hirundo serripennis*, AUD. Orn. Biog. v. iv. p. 593.

## FAMILY VII. MUSCICAPINÆ. FLYCATCHERS.

Bill depressed, triangular, compressed at the end, upper mandible notched, lower with the point slightly ascending. Head rather large, depressed; neck short; body rather slender. Feet generally short; tarsus short, slender, with very broad scutella; toes four, free; the hind toe not proportionally large; claws arched, compressed, acute. Plumage soft and blended. Wings long, with the first quill generally long, the outer three longest. Tail various. Tongue flattened, sagittate, bristly at the tip; œsophagus wide, without crop; stomach elliptical, moderately muscular, with the lateral muscles distinct, the epithelium thin, dense, longitudinally rugous; intestine short; cœca extremely small; cloaca globular. Trachea simple; inferior laryngeal muscles, forming on each side a large pad, but not divisible into several portions as in the singing birds. Nests regularly formed, cup-shaped. Eggs from four to six.

## GENUS I. MILVULUS, SWAINS. SWALLOW-TAIL.

Bill moderate, rather stout, straight, broad at the base, gradually compressed toward the end; upper mandible with the dorsal outline a little convex, the edges sharp and nearly perpendicular, with a very small notch close to the small deflected tip; lower mandible with the ridge very broad at the base, the sides rounded, the tip minute and ascending. Nostrils basal, broadly elliptical. Head rather large, depressed; neck short; body rather slender. Feet rather short; tarsus short, slender, compressed, with very broad scutella, some of which almost meet behind; toes free, the hind toe not proportionally larger, all scutellate above; claws of moderate size, arched, compressed, acute. Plumage soft and blended. Wings long, second quill longest, first almost as long as third, the three outer abruptly notched near the attenuated tip. Tail extremely elongated and forked, the middle feathers being of ordinary length, the lateral longest.

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### 52. 1. *Milvulus Tyrannus*, LINN. Prairie Swallow-tail.—Fork-tailed Flycatcher.

PLATE CLXVIII. Male.

Tail more than twice the length of the body; upper part of head and cheeks deep black, the feathers of the crown bright yellow at the base; back ash-grey, rump bluish-black; wings and tail brownish-black, the lateral feathers of the latter with the outer web white for half its length; lower parts white.

*Male*, 14  $\frac{1}{4}$ , 14.

In Louisiana, very rare. Accidental in New Jersey.

Fork-tailed Flycatcher, *Muscicapa Savana*, BONAP. Amer. Orn. v. i. p. 1.

*Muscicapa Savana*, BONAP. Syn. p. 67.

Fork-tailed Flycatcher, *Muscicapa Savana*, NUTT. Man. v. i. p. 274.

Forked-tailed Flycatcher, *Muscicapa Savana*, AUD. Orn. Biog. v. ii. p. 387.

### 53. 2. *Milvulus forficatus*, GMEL. Red-shouldered Swallow-tail.—Swallow-tailed Flycatcher.

PLATE CCCLIX. Fig. 3. Male.

Tail longer than the body; upper part of the head, cheeks, and hind neck ash-grey; back brownish-grey, rump dusky; anterior wing-coverts scarlet, quills brownish-black, tail-feathers deep black, the three outer on each side rose-coloured to near the end; lower parts white before, rose-coloured behind.

*Male*, 11, wing  $5 \frac{1}{8}$ .

Arkansas. Rare in Louisiana.

Swallow-tailed Flycatcher, *Muscicapa forficata*, BONAP. Amer. Orn. v. i. p. 15.

*Muscicapa forficata*, BONAP. Syn. p. 275.

Swallow-tailed Flycatcher, *Muscicapa forficata*, NUTT. Man. v. i. p. 275.

Swallow-tailed Flycatcher, *Muscicapa forficata*, AUD. Orn. Biog. v. iv. p. 426.

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## GENUS II. MUSCICAPA, LINNÆUS. FLYCATCHER.

Bill moderate, or rather long, stout, straight, broad at the base, gradually compressed toward the end; upper mandible with the dorsal outline sloping, the edges sharp and overlapping, with a very small notch close to the small deflected tip; lower mandible with the ridge very broad at the base, the sides rounded, the tip minute and ascending. Nostrils basal, roundish. Head rather large, depressed; neck short; body rather slender. Feet short; tarsus very short, slender, with six very broad scutella, three of which almost meet behind; toes free, the hind toe large, all scutellate above; claws rather long, very slender, arched, finely pointed. Plumage soft and blended. Wings long, second and third quills longest; outer primaries generally attenuated at the end. Tail long, even, or emarginate.

\* Bill large. Head with a vermilion patch, outer quills attenuated. Tyrannus of authors.

### 54. 1. *Muscicapa verticalis*, SAY. Arkansaw Flycatcher.

PLATE CCCLIX. Fig. 1. Male. Fig. 2. Female.

The outer five primaries much attenuated toward the end, the first more so, the fifth least, the third longest, but the outer four nearly equal; tail almost even. Upper parts ash-grey, the back tinged with yellow; a patch of bright vermilion on the top of the head; wing-coverts and quills chocolate-brown; upper tail-coverts and tail black, the outer web of the lateral feathers yellowish-white; throat greyish-white, sides and fore part of neck ash-grey, the rest of the lower parts pure yellow. Female similar.

*Male*, 9, 15  $\frac{1}{2}$ .

Columbia River, Rocky Mountains, and across to Texas. Accidental in Louisiana. Migratory.

*Tyrannus verticalis*, SAY Long's Exped. v. ii. p. 60.

Arkansaw Flycatcher, *Muscicapa verticalis*, BONAP. Amer. Orn. v. i. p. 18.

*Muscicapa verticalis*, BONAP. Syn. p. 67.

Arkansaw Flycatcher, *Muscicapa verticalis*, NUTT. Man. v. i. p. 273.

Arkansaw Flycatcher, *Muscicapa verticalis*, AUD. Orn. Biog. v. iv. p. 422; v. v.

### 55. 2. *Muscicapa dominicensis*, BRISSON. Pipiry Flycatcher.

PLATE CLXXII. Male.

The outer six primaries attenuated at the end, the first more so, the sixth least; the third longest, but the second almost equal, the fourth and fifth very little shorter, the first much longer than the seventh; tail emarginate. Upper parts dull ash-grey, shaded with brown posteriorly; a concealed patch of bright vermilion on the top of the head; wing-coverts, quills and tail chocolate-brown, margined with brownish-white; lower parts anteriorly ash-grey, behind greyish-white tinged with yellow, lower wing-coverts pale sulphur yellow. Female similar.

[40]

*Male*, 8  $\frac{7}{8}$ , 14  $\frac{3}{8}$ .

Florida Keys; and southern parts of South Carolina. Abundant. Migratory.

*Tyrannus griseus*, VIEILL., Ois. d'Amer. pl. 46.

Pipiry Flycatcher, *Muscicapa dominicensis*, AUD. Orn. Biog. v. ii. p. 392.

### 56. 3. *Muscicapa Tyrannus*, LINN. Tyrant Flycatcher,—King Bird.

The outer two primaries attenuated at the end, the second longest, the first longer than the third; tail even. Upper parts dark bluish-grey, the head greyish-black, with a bright vermilion patch margined with yellow; quills, coverts, and tail-feathers brownish-black, the former margined with dull white; the latter largely tipped with white; lower parts greyish-white, the breast pale grey. Female duller, the upper parts tinged with brown, the lower more dusky.

*Male*, 8  $\frac{1}{2}$ , 14  $\frac{1}{2}$ .

North America generally. Migratory. A few winter in South Florida.

Lanius Tyrannus, LINN. Syst. Nat. v. i. p. 136.

Tyrant Flycatcher, Muscicapa Tyrannus, WILS. Amer. Orn. v. i. p. 66.

Muscicapa Tyrannus, BONAP. Syn. p. 66.

King-bird or Tyrant Flycatcher, Muscicapa Tyrannus, NUTT. Man. v. i. p. 265.

Tyrant Flycatcher, Muscicapa Tyrannus, AUD. Orn. Biog. v. i. p. 403; v. v. p. 420.

\*\* Bill large. Head plain, crested, quills not attenuated.

#### **57. 4. Muscicapa crinita, LINN. Great Crested Flycatcher.**

PLATE CXXIX. Male.

Third quill longest, first and sixth equal; upper parts dull greenish-olive; quills and coverts dark brown, the primaries margined with light red, the secondaries with yellowish-white, of which there are two bars across the wing, formed by the tips of the secondary coverts and first row of small coverts; inner webs of the tail-feathers, except the two middle, light red; margins of inner webs of quills tinged with the same; fore-neck and sides of the head greyish-blue, the rest of the lower parts yellow. Female similar.

*Male*, 8  $\frac{1}{2}$ , 13.

From Texas northward, generally distributed. Abundant. Migratory.

[41]

Great Crested Flycatcher, Muscicapa crinita, WILS. Amer. Orn. v. ii. p. 75.

Muscicapa crinita, BONAP. Syn. p. 67.

Great Crested Flycatcher, NUTT. Man. v. i. p. 271.

Great Crested Flycatcher, Muscicapa crinita, AUD. Orn. Biog. v. ii. p. 176; v. v. p. 423.

#### **58. 5. Muscicapa Cooperi, NUTTALL. Cooper's Flycatcher.—Olive-sided Flycatcher.**

Wing pointed, second quill longest, first longer than third, tail emarginate, the three first primaries very slightly attenuated at the ends; upper parts, cheeks, and sides of the neck, dusky brown, tinged with greyish-olive, the head darker; quills and tail blackish-brown, the secondaries margined with brownish-white; downy feathers on the sides of the rump white; lower parts greyish-white, the sides dusky grey. Young similar to adult.

*Male*, 7  $\frac{1}{2}$ , 12  $\frac{3}{4}$ .

From Texas northward along the Atlantic. Never seen far in the interior. Columbia River. Migratory.

Olive-sided Flycatcher or Pe-pe, Muscicapa Cooperi, NUTT. Man. v. i. p. 282.

Tyrannus borealis, Northern Tyrant, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 141.

Olive-sided Flycatcher, Muscicapa Cooperi, AUD. Orn. Biog. v. ii. p. 422; v. v. p. 422.

\* Bill more slender. Tyrannula of authors.

#### **59. 6. Muscicapa Saja, BONAP. Say's Flycatcher.**

PLATE CCCLIX. Fig. 4. Male. Fig. 5. Female.

Third quill longest, second and fourth scarcely shorter, first a little longer than sixth; tail very slightly emarginate; upper parts greyish-brown; upper tail-coverts and tail brownish-black; wings of a darker tint than the back, the feathers margined with brownish-white; a dusky spot before the eye; fore part and sides of neck light greyish-brown, shaded with pale brownish-red on the breast and abdomen; lower wing-coverts reddish-white.

*Male*, 7, wing  $4\frac{1}{2}$ .

Arkansas. Columbia River. Fur Countries. Never seen along the Atlantic. Abundant. Migratory.

Say's Flycatcher, *Muscicapa Saya*, BONAP. Amer. Orn. v. i. p. 20.

*Muscicapa Saya*, BONAP. Syn. p. 67.

*Tyrannula Saya*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 142.

Say's Flycatcher, *Muscicapa Saya*, NUTT. Man. v. i. p. 277.

Say's Flycatcher, *Muscicapa Saya*, AUD. Orn. Biog. v. iv. p. 428.

## 60. 7. *Muscicapa nigricans*, SWAINS. Rocky Mountain Flycatcher.

PLATE CCCCXXXIV. Fig. 6. Male.

Third quill longest, second and fourth little shorter, first and sixth about equal; tail very slightly emarginate; head, hind neck, fore part of back, fore neck, a portion of the head, and sides, dark sooty-brown; the rest of the upper parts greyish-brown; secondary coverts tipped, and secondaries margined with greyish-white, of which colour is the great part of the outer web of the lateral tail-feathers; middle of breast, abdomen, and lower tail-coverts white; lower wing-coverts greyish-brown, edged with white.

[42]

*Male*, 7, wing  $3\frac{7}{12}$ .

Mexico and California. Rare. Migratory.

*Tyrannula nigricans*, SWAINS. Syn. of Mex. Birds, Phil. Mag. N. S. v. i. p. 367.

Rocky Mountain Flycatcher, *Muscicapa nigricans*, AUD. Orn. Biog. v. v. p. 302.

## 61. 8. *Muscicapa Phoebe*, LATH. Short-legged Pewit Flycatcher.

PLATE CCCCXXXIV. Fig. 5. Male.

Second quill longest, third almost equal, first and fourth nearly equal; tail slightly emarginate; upper parts dark olivaceous brown; the head darker, wings and tail blackish-brown, secondary coverts tipped with brownish-white, and secondary quills margined with the same; outer edges of lateral tail-feathers pale brownish-grey; fore part of neck, breast, and sides light dusky grey tinged with olive, abdomen pale dull yellow, lower tail-coverts brownish-grey margined with yellowish-white.

*Male*,  $6\frac{9}{12}$ , wing  $3\frac{1}{4}$ .

Columbia River. Fur Countries. Labrador. Rare. Migratory.

*Tyrannula Richardsonii*, Swainson's Short-legged Pewit, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 146.

Short-legged Pewee Flycatcher, *Muscicapa Richardsonii*, AUD. Orn. Biog. v. v. p. 299.

## 62. 9. *Muscicapa acadica*, GMEL. Small Green-crested Flycatcher.

PLATE CXLIV. Male and Female.

Bill broad and much depressed; second quill longest, third a little shorter, first shorter than fourth; tail scarcely emarginate, upper parts dull greenish-olive, the head darker; wings and tail dusky-brown; two bands of dull pale yellow on the wing, the secondary quills broadly edged and tipped with the same; a narrow ring of yellowish-white round the eye; throat greyish-white; sides of neck and fore part of breast greyish-olive, the rest of the lower parts yellowish-white.

*Male*,  $5\frac{1}{2}$ ,  $8\frac{1}{2}$ .

From Texas northward. Migratory.

Small Green Crested Flycatcher, *Muscicapa querula*, WILS. Amer. Orn. v. ii. p. 77.

Small Pewee, NUTT. Man. v. i. p. 288.

*Muscicapa acadica*, BONAP. Syn. p. 68.

Small Green-Crested Flycatcher, *Muscicapa acadica*, AUD. Orn. Biog. v. ii. p. 256; v. v. p. 427.

[43]

## 63. 10. *Muscicapa fusca*, GMEL. Pewee Flycatcher.

PLATE CXX. Male and Female.

Wing much rounded, third quill longest, fourth scarcely shorter, but considerably longer than second, first intermediate between sixth and seventh; tail emarginate; upper parts dull olive, the head much darker; quills and tail dusky brown, secondaries and their coverts edged with pale brown; outer tail-feathers whitish on the outer edge, unless toward the tip; lower parts dull yellowish white, the breast tinged with grey.

*Male*, 7, 9  $\frac{1}{2}$ .

Throughout the United States, and northward. Spends the winter in vast numbers in the southern parts.

Pewit Flycatcher, *Muscicapa nunciola*, WILS. Amer. Orn. v. ii. p. 78.

*Muscicapa fusca*, BONAP. Syn. p. 68.

Pewit Flycatcher or Phœbe, NUTT. Man. v. i. p. 278.

Pewee Flycatcher, *Muscicapa fusca*, AUD. Orn. Biog. v. ii. p. 122; v. v. p. 424.

#### **64. 11. *Muscicapa virens*, LINN. Wood Pewee Flycatcher.**

PLATE CXV. Male.

Slightly crested; second quill longest, first shorter than third and longer than sixth; tail deeply emarginate; upper parts dusky olive, upper part of head much darker; a pale greyish ring round the eye; two bands of greyish-white on the wings, secondaries margined with the same; quills and tail-feathers blackish-brown; throat and breast ash-grey tinged with green, the rest of the lower parts pale greenish-yellow.

*Male*, 6  $\frac{1}{2}$ , 11.

Throughout the United States. British Provinces. Labrador. Newfoundland. Rocky Mountains. Columbia River. Migratory.

Wood Pewee, *Muscicapa rapax*, WILS. Amer. Orn. v. ii. p. 81.

Wood Pewee, *Muscicapa virens*, NUTT. Man. v. i. p. 285.

*Muscicapa virens*, BONAP. Syn. p. 68.

Wood Pewee, *Muscicapa virens*, AUD. Orn. Biog. v. ii. p. 93; v. v. p. 425.

#### **65. 12. *Muscicapa Traillii*, AUD. Traill's Flycatcher.**

PLATE XLV. Male.

Slightly crested; wing rounded, with the third quill longest, second and fourth almost equal, first a little longer than sixth; tail slightly rounded, and faintly emarginate; upper parts dusky olive, upper part of head much darker; a pale greyish ring round the eye; two bands of greyish-white on the wings, secondaries margined with the same; throat and breast ash-grey, the rest of the lower parts shaded into pale yellow.

[44]

*Male*, 5  $\frac{3}{4}$ , 8  $\frac{1}{2}$ .

Arkansas. Columbia River. Migratory.

Traill's Flycatcher, *Muscicapa virens*, AUD. Orn. Biog. v. i. p. 236; v. v. p. 426.

#### **66. 13. *Muscicapa pusilla*, SWAINS. Least Pewee Flycatcher.**

PLATE CCCCXXXIV. Fig. 1. Adult.

Third quill longest, fourth scarcely shorter, second nearly one-twelfth shorter, and exceeding the first by three and a quarter twelfths; tail slightly emarginate; upper parts light greenish-brown; loreal band whitish, a narrow pale ring surrounding the eye; wings olive-brown, with two bands of dull white, secondaries margined with the same; tail olive-brown, the lateral feathers lighter, the outer web pale brownish-grey; fore part of neck and a portion of the breast and sides ash-grey, the rest of the lower parts pale yellow.

*Male*, 5  $\frac{7}{12}$ , wing 2  $\frac{5}{12}$ .

Columbia River. Fur countries. Labrador. Newfoundland. Rare in the Atlantic States.

Tyrannula pusilla, Little Tyrant Flycatcher, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 144.

Little Tyrant Flycatcher, *Muscicapa pusilla*, AUD. Orn. Biog. v. v. p. 288.

#### **67. 14. *Muscicapa minuta*, WILS. Small-headed Flycatcher.**

PLATE CCCCXXXIV. Fig. 2. Male.

Wings short, the second quill longest; tail of moderate length, even; general colour of upper parts light greenish-brown; wings and tail dark olive-brown, the outer feathers of the latter with a terminal white spot on the inner web; a narrow white ring surrounding the eye; two bands of dull white on the wing; sides of the head and neck greenish-yellow, the rest of the lower parts pale yellow, gradually fading into white behind.

*Male*, 5, 8  $\frac{2}{3}$ .

Kentucky, Pennsylvania, and New Jersey. Exceedingly rare. Migratory.

Small-headed Flycatcher, *Muscicapa minuta*, WILS. Amer. Orn. v. vi. p. 62.

*Sylvia minuta*, BONAP. Syn. p. 86.

Small-headed Sylvan Flycatcher, NUTT. Man. v. i. p. 296.

## 68. 15. *Muscicapa Rutcilla*, LINN. Redstart Flycatcher.—American Redstart.

PLATE XL. Fig. 1. Male. Fig. 2. Female.

Second and third quills equal and longest, fourth longer than first; tail rounded. Male with the head, neck all round, fore part of breast, and back, glossy bluish-black; sides of the breast, lower wing-coverts, a patch on the wings formed by the margins of the primaries and the basal half of most of the secondaries, together with three-fourths of both webs of the outer four tail-feathers on each side, and the outer web of the next, bright orange-red; abdomen and lower tail-coverts white. Female with the upper parts yellowish-brown, the head grey, the quills greyish-brown, the tail darker, the parts yellow which in the male are bright orange; the rest of the lower parts white, tinged with yellow. Young similar to the female, more grey above, and with less yellow beneath.

[45]

*Male*, 5, 6  $\frac{1}{2}$ . *Female*.

Throughout the United States. Abundant. Migratory.

American Redstart, *Muscicapa Rutcilla*, WILS. Amer. Orn. v. i. p. 103.

*Muscicapa Rutcilla*, BONAP. Syn. p. 68.

American Redstart, *Muscicapa Rutcilla*, AUD. Amer. Orn. v. i. p. 202; v. v. p. 428.

American Redstart, *Muscicapa Rutcilla*, NUTT. Man. v. i. p. 291.

## GENUS V. PTILOGONYS, SWAINS. PTILOGONYS.

Bill short, rather strong, somewhat triangular, depressed at the base, a little compressed at the end; upper mandible with the dorsal line convex at the end, the nasal groove wide, the sides convex toward the end, with a distinct notch, the tip short, rather obtuse; lower mandible with the angle rather long and wide, the dorsal line ascending and convex, the sides convex toward the end, the tip small, with a slight notch behind. Nostrils linear, oblong, partially concealed by the feathers. Head ovato-oblong; neck rather short; body slender. Feet short, and rather slender; tarsus shorter than the middle toe with its claw, compressed, covered anteriorly with a long plate and three inferior scutella; toes free, the outer only adherent at the base; hind toe rather large, stouter, outer a little longer than inner; claws moderate, arched, much compressed, laterally grooved, acute. Plumage soft and blended; slight bristles at the base of the upper mandible, and the feathers in the angle of the lower jaw bristle-tipped and curved forward. Wings long, rounded; first quill very small, fourth longest. Tail very long, straight, emarginate, and rounded, of twelve feathers.

This genus seems to connect the Thrushes with the Flycatchers.

## 69. 1. *Ptilogonys Townsendi*, AUD. Townsend's Ptilogonys.

[46]

PLATE CCCCXIX. Fig. 2. Female.

General colour dull brownish-grey; quills and coverts dusky brown; edge of wing dull white; basal part of primaries pale yellow, of secondaries ochre-yellow; edges of all the quills dull greyish-white; secondaries with a faint patch of light brownish-grey on the outer web toward the end; middle tail-feathers greyish-brown, the rest blackish-brown, the outer with an oblique white space, including, from the tip, a considerable portion of the inner web, and more than two-thirds of the outer; the next with a white patch at the end; lower parts paler than the upper; lower tail and wing-coverts broadly tipped with dull white, some of the inner wing-coverts white.

*Female*, 8  $\frac{1}{4}$ , wing, 4  $\frac{1}{2}$ .

Columbia River.

Townsend's Ptilogonys, *Ptilogonys Townsendi*, AUD. Orn. Biog. v. v. p. 206.



## GENUS IV. CULICIVORA, SWAINS. GNAT-CATCHER.

Bill of moderate length, depressed at the base, rapidly attenuated, becoming very slender toward the end; upper mandible with the ridge distinct, the tip extremely narrow and deflected, the edges overlapping, the notch distinct, but very small; lower mandible with the angle of moderate length, the ridge narrowed towards the end, the edges inclinate, the tip acute. Nostrils oblong, exposed. Head ovate; neck short; body slender. Feet of moderate length, tarsus longer than the middle toe, extremely slender, with the upper scutella indistinct; toes very small, extremely compressed; hind toe proportionally very large; outer adherent at the base. Claws well arched, extremely compressed, laterally grooved, acute. Plumage very soft and blended. Wings of moderate length, concave; the first quill about a third of the length of the second, fourth longest, third and fifth little shorter. Tail long, slender, much rounded.

### 70. 1. *Culicivora cœrulea*, LATH. Blue-grey Gnat-catcher.

PLATE LXXXIV. Male and Female.

Upper parts bright blue, deeper on the head, paler on the tail-coverts; a narrow black band on the forehead, extending over the eyes; wings brownish-black, margined with blue, some of the secondaries with bluish-white; tail glossy black, the outer feather on each side nearly all white, the next with its terminal half, and the third with its tip of that colour; lower parts greyish-white. Female similar, but with the tints duller, and the black band on the head wanting.

[47]

*Male*, 4  $\frac{1}{2}$ , 6  $\frac{1}{2}$ .

From Texas northward. Abundant. Migratory.

Blue-grey Flycatcher, *Muscivora cœrulea*, WILS. Amer. Orn. v. ii. p. 164.

*Sylvia cœrulea*, BONAP. Syn. p. 85.

Blue-grey Sylvan Flycatcher, *Muscivora cœrulea*, NUTT. Man. v. i. p. 297.

Blue-grey Flycatcher, *Muscivora cœrulea*, AUD. Orn. Biog. v. i. p. 431.

## FAMILY VIII. SYLVICOLINÆ. WOOD-WARBLED.

Bill short, or of moderate length, rather slender, somewhat conical, considerably broader than high at the base, gradually compressed toward the end; upper mandible with its dorsal outline straight until near the end, the point very narrow, the notches very slight; lower mandible with the angle rather short and narrow, the dorsal line straight, the edges somewhat involute, the tip acute. Head moderate, ovate; neck short; body rather slender. Feet of moderate length; tarsus longer than the middle toe, slender, much compressed, with eight anterior scutella, of which the upper are blended; toes rather small, or of moderate size, hind toe proportionally stout, outer adherent for a short way at the base; claws moderate, much compressed, arched, acute. Plumage generally soft and blended. Wings of moderate length. Tail of moderate length, of twelve feathers. Tongue of moderate length, sagittate, tapering. Œsophagus of moderate width, without dilatation, proventriculus bulbiform; stomach of moderate size, roundish or elliptical, moderately muscular, with the muscles distinct; epithelium dense, longitudinally rugous; intestine short, rather wide; cœca very small; cloaca oblong. Trachea simple; with four pairs of inferior laryngeal muscles.

[48]

## GENUS I. MYIODIOTES, AUD. FLYCATCHING-WARBLED.

Bill of moderate length, stoutish, straight, considerably broader than high, compressed toward the end; upper mandible with the ridge distinct, the dorsal line convex toward the end, the edges sharp and overlapping, with a very faint notch close to the slightly deflected tip; lower mandible with the ridge indistinct, the sides rounded, the edges somewhat involute, the tip narrow, not ascending. Nostrils basal, oblong. Head ovate, of moderate size; neck short; body rather slender. Feet of moderate length; tarsus pretty stout, much compressed; scutella blended, excepting the lower three; toes of moderate length, very slender, the hind toe proportionally large, the third and fourth united at the base, all scutellate. Claws moderate, extremely compressed, well arched, very acute. Bristles at the base of the bill elongated but slender. Wings of moderate length, the second and third quills longest, the first scarcely shorter than the fourth. Tail moderate, slightly rounded. Name from [Greek: Myia], an insect, [Greek: Diôchtês], a pursuer.

### 71. 1. *Myiodiotes mitratus*, LATH. Hooded Flycatching-Warbler.—Hooded Flycatcher. Hooded Warbler.

PLATE CX. Male and Female. PLATE IX. Young.

Third quill longest, second longer than fourth, which slightly exceeds the first; tail slightly emarginate and rounded. Male with the forehead, sides of the head, breast, sides, abdomen, lower wing and tail coverts, rich pure yellow; hind head and neck all round black; upper parts yellowish-olive; wings and tail dusky brown, margined with yellowish-olive, an oblique patch of white on the inner webs of the three outer tail-coverts. Female with the forehead, the sides of the head, the throat, and all the lower parts yellow, the hind part of the head dusky, the upper part as in the male. Young similar to the female, but with the tints a little duller.

*Male*, 5  $\frac{1}{2}$ , 8.

From Texas to Virginia. In the interior, as far as Memphis on the Mississippi. Rather common. Migratory.

Hooded Flycatcher, *Muscicapa cucullata*, WILS. Amer. Orn. v. iii. p. 101.

*Sylvia mitrata*, BONAP. Syn. p. 79.

Hooded Warbler, *Sylvia mitrata*, AUD. Orn. Biog. v. ii. p. 66. Adult Male and Female; v. v. p. 465. [49]

Selby's Flycatcher, *Muscicapa Selbyi*, AUD. Orn. Biog. v. i. p. 46. Young.

## 72. 2. *Myiodioides canadensis*, LINN. Spotted Canadian Flycatching Warbler.—Canadian Flycatcher. Canada Warbler.

PLATE CIII. Male and Female.

Third quill longest, scarcely exceeding the second, fourth slightly shorter, first intermediate between the fourth and fifth; tail rounded. Male with the upper parts ash-grey; the feathers of the wings and tail brown, edged with grey; the head spotted with black; loreal space, a band beneath the eye, proceeding down the side of the neck, and a belt of triangular spots across the lower part of the fore neck, black; the lower parts, and a bar from the nostril over the eye, pure yellow; lower wing and tail-coverts white. Female similar to the male, but with the black spots on the neck smaller and fainter. Young similar to the female, with the tints paler, and the neck unspotted.

*Male*, 5  $\frac{1}{4}$ , 9.

From Kentucky northward. Not found in the Atlantic districts. Migratory.

*Motacilla canadensis*, LINN. Syst. Nat. v. i. p. 27.

Canada Flycatcher, *Muscicapa canadensis*, WILS. Amer. Orn. v. iii. p. 100.

*Sylvia pardalina*, BONAP. Syn. p. 79.

Canada Flycatcher, *Muscicapa canadensis*, AUD. Orn. Biog. v. ii. p. 17.

## 73. 3. *Myiodioides Bonapartii*, AUD. Bonaparte's Flycatching Warbler.

PLATE V. Male.

Bristles longer than in the last, second quill longest; tail very long, nearly even; upper parts light greyish-blue; quills dusky brown, their outer webs greyish-blue, the two outer margined with white; middle tail-feathers and edges of the rest like the back; lower parts and a band on the forehead ochre-yellow, with a few faint dusky spots on the lower part of the fore neck. This species differs from the last chiefly in being of a more elongated form, in having the bristles much longer, the upper parts of a much lighter tint; in wanting the black band down the side of the neck, and the yellow band over the eye, the bill is straighter and more pointed, and the outer primaries are edged with white.

*Male*, 5  $\frac{1}{4}$ .

Louisiana. Only one specimen ever found.

Bonaparte's Flycatcher, *Muscicapa Bonapartii*, AUD. Orn. Biog. v. i. p. 27.

## 74. 4. *Myiodioides formosus*, WILS. Kentucky Flycatching Warbler.—Kentucky Warbler. [50]

PLATE XXXVIII. Male and Female.

Third quill longest, second scarcely shorter, first longer than fourth, the outer three being nearly equal. Tail slightly emarginate and slightly rounded. Male with the upper part of the head and a band from the base of the upper mandible under the eye and down the side of the neck black; a streak from the nostril over the eye, and all the lower parts bright yellow; the upper parts yellowish-olive; wings brown, the feathers margined with yellowish-olive; tail light greenish-brown. Female similar, without the black band on the cheek and neck, and the black of the head

less extended.

*Male*, 5  $\frac{1}{2}$ , 8.

Valley of the Mississippi, and Kentucky. Migratory.

Kentucky Warbler, *Sylvia formosa*, WILS. Amer. Orn. v. iii. p. 85.

*Sylvia formosa*, BONAP. Syn. p. 34.

Kentucky Warbler, *Sylvia formosa*, AUD. Orn. Biog. v. i. p. 196.

## 75. 5. **Myiodioctes Wilsonii**, BONAP. **Wilson's Flycatching Warbler.**

PLATE CXXIV. Male and Female.

Wings short, the second and third quills longest and about equal, the first much shorter than the fourth and a little longer than the fifth; tail even. Back, rump, and upper tail-coverts yellowish-green; crown glossy bluish-black, bordered on the forehead and over the eyes with a broad band of bright yellow, of which colour are all the lower parts; wings and tail dusky brown, the feathers margined with yellowish-green. Female similar to the male, but with the black of the crown of much less extent. Young similar to the female, without black on the head.

*Male*, 4  $\frac{1}{2}$ , 6  $\frac{3}{4}$ .

From Texas northward, Columbia River, and intervening regions. Not in the Fur Countries. Rather rare. Migratory.

Green Black-capt Flycatcher, *Muscicapa pusilla*, WILS. Amer. Orn. v. iii. p. 103.

*Sylvia Wilsonii*, BONAP. Syn. p. 86.

Green Black-capt Warbler, NUTT. Man. v. i. p. 149.

Green Black-capped Flycatcher, *Muscicapa Wilsonii*, AUD. Orn. Biog. v. ii. p. 148.

## GENUS II. SYLVICOLA, SWAINSON. WOOD-WARBLER.

Bill short, straight, rather strong, tapering, scarcely broader than high at the base, compressed toward the end; upper mandible with its dorsal outline declinate and nearly straight, the tip slightly declinate, the edges overlapping, with a slight notch; lower mandible with the angle short and rounded, the dorsal line straight, the sides convex, the edges a little inclinate, the tip narrow. Nostrils basal, oval or oblong, partially concealed by the feathers. Head of ordinary size; neck short; body rather slender. Feet of ordinary length, rather slender; tarsus longer than the middle toe, much compressed, covered anteriorly with seven scutella, very sharp behind; toes of moderate length, slender, free, the outer united as far as the second joint, the hind toe proportionally large; claws moderate, well arched, much compressed, laterally grooved, very acute. Plumage soft and blended. Bristles at the base of the upper mandible feeble. Wings rather long, little curved, pointed; the second quill longest, the first and third slightly shorter. Tail rather long, emarginate.

[51]

### 76. 1. **Sylvicola coronata**, LATH. **Yellow-crowned Wood-Warbler.—Yellow-crowned Warbler. Yellow-rump Warbler.**

Second quill longest, third scarcely shorter, first longer than fourth; tail slightly emarginate. Male with the upper parts deep ash-grey, streaked with black; crown, rump, and a patch on the sides of the body, rich yellow: secondary coverts, and first row of small coverts tipped with white, which forms two bars on the wing; quills dark brown, margined with light greyish-brown; tail feathers brownish-black, margined with ash-grey, the outer three on each side with a white patch on the inner web near the end; a slender white line over the eye; feathers of the eyelids white; lore and cheek black; throat white; lower neck, fore part of breast and sides variegated with black, the tips of the feathers being white; the rest of the lower parts white. Female without the yellow spot on the crown, although the feathers there are tinged with that colour at the base; the upper parts tinged with light brown, the yellow spots on the sides and rump paler.

*Male*, 5  $\frac{1}{4}$ , 8  $\frac{1}{2}$ .

From Texas northward, and throughout the interior. Extremely common. Migratory.

Yellow-rump Warbler, *Sylvia coronata*, WILS. Amer. Orn. v. ii. p. 138.

*Sylvia coronata*, BONAP. Syn. p. 78.

Yellow-crowned Warbler, or Myrtle Bird, *Sylvia coronata*, NUTT. Man. v. i. p. 361.

Yellow-rump Warbler, *Sylvia coronata*, AUD. Orn. Biog. v. ii. p. 303.

### 77. 2. **Sylvicola Auduboni**, TOWNSEND. **Audubon's Wood-Warbler,—Audubon's**

[52]

## Warbler.

PLATE CCCXCV. Fig. 1. Male. Fig. 2. Female.

Outer four quills nearly equal, second longest; tail slightly emarginate. Male with the upper parts bluish ash-grey, streaked with black; crown, rump, upper part of throat, and a patch on the sides of the body, rich yellow; first row of small coverts largely tipped, and secondary coverts broadly margined and tipped with white, which thus forms a conspicuous patch on the wing; quills and tail brownish-black, narrowly margined with greyish-white; a patch of white on the inner webs of all the tail-feathers, but on the central reduced to a mere edging; a small white spot on each of the eyelids; loreal space and cheek black; lower part of neck anteriorly, fore part of breast, and sides, variegated with black and white or ash-grey, the latter colours margining the feathers; the rest of the lower parts white. Female without the yellow spot on the crown, although the feathers there are tinged with that colour at the base; upper parts light brownish-grey, streaked with dusky; lower parts whitish, tinged with brown, and streaked with dusky; throat and rump yellow, but of a lighter tint than in the male, and but slight indications of the yellow patch on the sides; there is much less white on the wings, and the white patches on the tail-feathers are of less extent.

In size, form, and proportion, this species and *Sylvicola coronata* are almost precisely similar; and their colours are almost exactly alike, the only remarkable difference in this respect being, that the throat of the present species is yellow, while that of the former is white.

*Male*, 5  $\frac{3}{4}$ , wing, 3  $\frac{1}{2}$ .

Columbia River, northward. Common. Migratory.

*Sylvia Audubonii*, Audubon's Warbler, TOWNSEND, Journ. Acad. Nat. Sc., Philadelphia, v. vii. p. 190.

Audubon's Warbler, *Sylvia Audubonii*, AUD. Orn. Biog. v. v. p. 52.

### 78. 3. *Sylvicola striata*, LATH. Black-poll Wood-Warbler.

PLATE CXXXIII. Male and Female.

First and second quills equal and longest, third a little shorter; tail emarginate. Male with the upper parts bluish ash-grey, streaked with black; the upper part of the head deep black; the secondary coverts and first row of small coverts largely tipped with white; quills and tail-feathers blackish-brown; primaries narrowly edged with greenish-yellow, secondaries broadly with white; three outer tail-feathers with a patch of white on the inner web at the end; cheeks and lower parts white; a band of black spots from the base of the lower mandible down the side of the neck and body. Female with the upper parts oil-green, streaked with black; the rump and upper tail-coverts plain and edged with grey; white wing-bands tinged with yellow; cheeks yellowish-grey, mottled with dusky, lower parts dull white, tinged with yellow and reddish the sides of the neck and body with fainter dark streaks. Young like the female.

[53]

*Male*, 5  $\frac{1}{4}$ , 8  $\frac{1}{2}$ .

From Texas to Labrador, where it breeds. Columbia River. Common. Migratory.

Black-poll Warbler, *Sylvia striata*, WILS. Amer. Orn. v. iv. p. 40.

*Sylvia striata*, BONAP. Syn. p. 81.

*Sylvicola striata*, Black-poll Warbler, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 218.

Black-poll Warbler, *Sylvia striata*, NUTT. Man. v. i. p. 383.

Black-poll Warbler, *Sylvia striata*, AUD. Orn. Biog. v. ii. p. 201.

### 79. 4. *Sylvicola pensilis*, LATH. Yellow-throated Wood-Warbler.

PLATE LXXXV. Male.

Outer three quills almost equal, second quill longest, fourth shorter than first; tail slightly emarginate. Male with the upper parts light greyish-blue; the forehead black, the crown spotted with the same; a white line over the eye; secondary coverts and first row of small coverts largely tipped with white; quills greyish-black, margined with light greyish-blue; tail-feathers of the same colour, the outer three with a patch of white on the inner web at the end; loreal space, a band under the eye, ear-coverts, a band down the side of the neck, and numerous oblong spots on the sides of the body, black; throat bright yellow; rest of lower parts white. Female similar, but with the tints paler.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

From Texas to New Jersey. In the interior along the Mississippi to Natchez. Common. Migratory.

Yellow-throated Warbler, *Sylvia flavicollis*, WILS. Amer. Orn. v. ii. p. 64.

*Sylvia pensilis*, BONAP. Syn. p. 79.

Yellow-throated Warbler, *Sylvia pensilis*, AUD. Orn. Biog. v. i. p. 434.

### **80. 5. *Sylvicola castanea*, WILS. Bay-breasted Wood-Warbler.—Bay-breasted Warbler.**

PLATE LXIX. Male and Female.

Outer three quills almost equal, fourth considerably shorter; tail slightly emarginate. Male with the upper part of the head, the fore neck, and the sides, chestnut-red; forehead and cheeks, including a small space over the eye, deep black, behind which is a transverse patch of yellowish-white on the sides of the neck; back bluish ash-grey, streaked with black; tips of the secondary coverts and first row of small coverts white; quills and tail-feathers brownish-black edged with grey, the outer three of the latter with a white patch on the inner web near the end; middle of breast, abdomen, and lower tail-coverts, white, tinged with reddish. Female similar to the male, but with the tints fainter, especially the chestnut of the head and throat, which are converged into light brownish-red. [54]

*Male*, 5  $\frac{1}{4}$ , 11.

From Texas northward. Rather common. Migratory.

Bay-breasted Warbler, *Sylvia castanea*, WILS. Amer. Orn. v. ii. p. 97.

*Sylvia castanea*, BONAP. Syn. p. 80.

Bay-breasted Warbler, *Sylvia castanea*, NUTT. Man. v. i. p. 382.

Bay-breasted Warbler, *Sylvia castanea*, AUD. Orn. Biog. v. i. p. 358.

### **81. 6. *Sylvicola icterocephala*, LATH. Chestnut-sided Wood-Warbler.—Chestnut-sided Warbler.**

PLATE LIX. Male and Female.

Outer three quills nearly equal, second slightly longer; tail slightly emarginate. Male with the upper part of the head light yellow, a small part of the forehead white; loreal space and two bands proceeding from it, one over and behind the eye, the other downwards, black; upper parts bluish ash-grey, tinged behind with greenish-yellow, and streaked with black; secondary coverts and first row of small coverts largely tipped with pale yellow; quills and tail-feathers brownish-black, primaries edged with greyish-white, secondaries with yellowish-green; outer three tail-feathers on each side with a white patch on the inner web at the end; lower parts white, sides of the neck and body deep chestnut. Female similar, but with the chestnut on the sides less extended, and the yellow on the head tinged with green.

*Male*, 5  $\frac{1}{4}$ , 8.

From Texas northward. Rather common. Migratory.

Chestnut-sided Warbler, *Sylvia icterocephala*, WILS. Amer. Orn. v. i. p. 99.

*Sylvia icterocephala*, BONAP. Syn. p. 80.

Chestnut-sided Warbler, *Sylvia icterocephala*, NUTT. Man. v. i. p. 380.

Chestnut-sided Warbler, *Sylvia icterocephala*, AUD. Orn. Biog. v. i. p. 806.

### **82. 7. *Sylvicola pinus*, LATH. Pine-creeping Wood-Warbler.**

PLATE CXI. Male and Female. PLATE XXX. Young Male.

Wings of moderate length, with the outer three quills almost equal, the first and second longest; tail emarginate. Male with the upper parts light yellowish-green, inclining to olive, the rump brighter; a streak over the eye, the eyelids, throat, breast, and sides, bright yellow, with a greenish tinge, the rest of the lower parts white; wings and tail blackish-brown; secondary coverts and first row of small coverts largely tipped with dull white; primaries edged with whitish, secondaries with brownish-grey; outer two tail-feathers with a patch of white on the inner web near the end. Female with the upper parts yellowish-brown tinged with grey, the lower parts of paler and duller tints than in the male. Young similar to the female.

*Male*, 5, 8.

From Texas to Maine. Very abundant. Resident in the Southern and Middle States.

Pine Creeping Warbler, *Sylvia pinus*, WILS. Amer. Orn. v. iii. p. 25. [55]

*Sylvia pinus*, BONAP. Syn. p. 81.

Pine Warbler, *Sylvia pinus*, NUTT. Man. v. i. p. 387.

Pine Creeping Warbler, *Sylvia pinus*, AUD. Orn. Biog. v. ii. p. 232.

Vigors's Warbler, *Sylvia Vigorsii*, AUD. Orn. Biog. v. i. p. 153. Young.

### 83. 8. *Sylvicola parus*, WILS. Hemlock Warbler.

PLATE CXXXIV. Male and Female. PLATE LXXXVIII. Young.

Wings of moderate length, with the outer two quills almost equal, the first longest, the third little shorter; tail very slightly emarginate. Male with the upper parts yellowish-green, spotted with dusky, the head greenish-yellow; secondary coverts and first row of small coverts largely tipped with white; quills and tail-feathers blackish-brown; primaries narrowly edged with greenish-white, secondaries broadly with white; outer two tail-feathers with the greater part white; a bright yellow streak over the eye; a dusky band on the lore and behind the eye; fore neck and breast bright yellow, the rest of the lower parts white, the sides streaked with black. Female similar to the male, but rather paler. Young with the upper parts light olive-brown; a pale line over the eye, which is encircled by a narrow line of whitish; wings and tail dark brown, the former with two brownish-white bands, the quills edged with brownish-white, the two outer tail-feathers with a white patch on the inner web; the lower parts dull white, tinged on the neck with yellow, on the sides with greyish-brown.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

Middle districts. Rather common. Migratory.

Hemlock Warbler, *Sylvia parus*, WILS. Amer. Orn. v. v. p. 114. Male.

Autumnal Warbler, *Sylvia autumnalis*, WILS. Amer. Orn. v. iii. p. 65. Young.

*Sylvia parus*, BONAP. Syn. p. 82.

*Sylvia autumnalis*, BONAP. Syn. p. 74.

Hemlock Warbler, *Sylvia parus*, AUD. Orn. Biog. v. ii. p. 205. Adult.

Autumnal Warbler, *Sylvia autumnalis*, AUD. Orn. Biog. v. i. p. 447.

### 84. 9. *Sylvicola virens*, LATH. Black-throated Green Wood-Warbler.

PLATE CCCXCIX. Fig. 1. Male. Fig. 2. Female.

Outer three quills almost equal, second very slightly longer; tail slightly emarginate. Male with the upper parts very light yellowish-green; the anterior part of the forehead, a band over the eye, the cheeks, and the sides of the neck, bright yellow; the fore part of the neck, anterior part of the sides, and some spots on the hind parts of the latter, black; the rest of the lower parts white, partially tinged with yellow; quills and tail-feathers brownish-black; secondary coverts and first row of small coverts largely tipped with white, quills margined with greyish-white, as are the tail-feathers, of which the greater part of the outer three, and a patch on the inner web of the fourth, are white. Female with the upper parts similar, but with less yellow on the forehead; ear-coverts greenish; the yellow band over the eye less bright, the yellow on the sides of the neck of less extent; the lower parts dull yellowish-white, the sides streaked with dusky.

*Male*, 4  $\frac{10}{12}$ , wing, 2  $\frac{1}{2}$ . *Female*, 4  $\frac{1}{2}$ , wing, 2  $\frac{5}{12}$ .

From Texas to Newfoundland. Abundant. Migratory.

Black-throated Green Warbler, *Sylvia virens*, WILS. Amer. Orn. v. ii. p. 127.

*Sylvia virens*, BONAP. Syn. p. 80.

Black-throated Green Warbler, NUTT. Man. v. i. p. 376.

Black-throated Green Warbler, *Sylvia virens*, AUD. Orn. Biog. v. iv. p. 70.

### 85. 10. *Sylvicola maritima*, WILS. Cape May Wood-Warbler.

PLATE CCCCXIV. Male and Female.

Wings pointed, first quill longest, the second a quarter of a twelfth shorter, the third a twelfth shorter; tail slightly emarginate. Male with the upper part of the head and fore part of the back yellowish-olive, streaked with black; the rump, throat, and a collar scarcely meeting behind, yellow; ear-coverts and a band over the eye yellowish-red, loreal space paler; a white patch on the wing, formed by the first row of small coverts and the outer edges of the secondary coverts; quills and tail-feathers blackish-brown, edged with dull greyish-white, the secondaries more broadly; tail-feathers edged with yellow at the base, the outer three with a white patch on the inner web near the end; lower parts yellow, streaked with black, abdomen and lower tail-coverts white, the latter tinged with yellow. Female similar to the male, with the tints duller, the dusky streaks on the upper parts very faint, the rump greenish-yellow, the ear-coverts dull yellow, the white of the

abdomen more extended, and the black streaks on the breast less distinct.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

New Jersey, and Blue Mountains of Vermont. Exceedingly rare.

Cape May Warbler, *Sylvia maritima*, WILS. Amer. Orn. v. iv. p. 99.

*Sylvia maritima*, BONAP. Syn. p. 79.

Cape May Warbler, *Sylvia maritima*. NUTT. Man. v. i. p. 156.

Cape May Warbler, *Sylvia maritima*, AUD. Orn. Biog. v. v. p. 156.

## 86. 11. *Sylvicola cœrulea*, WILS. Cœrulean Wood-Warbler.

PLATE XLVIII. Males. PLATE XLIX. Young Male.

Wings long, with the outer three quills nearly equal, the first and second longest; tail slightly emarginate, upper parts of a fine light blue, brighter on the head, the back marked with longitudinal streaks of blackish; a narrow band of black from the forehead along the lore to behind the eye; two conspicuous white bands on the wings, formed by the tips of the secondary coverts and first row of small coverts; quills black, margined with pale blue; tail-feathers black, edged with blue, all with a white patch on the inner web near the end; lower parts white, with a band of dark bluish-grey across the fore neck, and oblong spots of the same along the sides. Female with the upper parts light bluish-green, the lower and a streak over the eye very pale yellow. Young of both sexes like the female.

[57]

*Male*, 4  $\frac{1}{2}$ , 8.

From Texas to Nova Scotia. Columbia River. Rather common. Migratory.

Cœrulean Warbler, *Sylvia cœrulea*, WILS. Amer. Orn. v. ii. p. 141. Male.

Blue-green Warbler, *Sylvia rara*, WILS. Amer. Orn. v. iii. p. 119. Young.

*Sylvia azurea*, BONAP. Syn. p. 85.

*Sylvia rara*, BONAP. Syn. p. 82.

Cœrulean Warbler, *Sylvia azurea*, BONAP. Amer. Orn. v. ii. p. 27. Female.

Azure Warbler, *Sylvia azurea*, AUD. Orn. Biog. v. i. p. 255, Male; v. v. p. 456.

Blue-green Warbler, *Sylvia rara*, AUD. Orn. Biog. v. i. p. 258. Young Male.

## 87. 12. *Sylvicola Blackburniæ*, LATH. Blackburnian Wood-Warbler.— Blackburnian Warbler.

PLATE CXXXV. Male. PLATE CCCXCIX. Fig. 3. Female.

Outer three quills nearly equal, first generally longest; tail slightly emarginate. Male black above, streaked with white; a small patch on the top of the head, a band from the base of the upper mandible over the eye, passing down the neck and curving forwards, and a small band under the eye, orange-yellow; lore and a patch behind the eye black; quills black, the outer margined with grey, the inner with white, of which there is a large patch on the wing, including the inner secondary coverts, and the tips of the outer, with those of the first row of small coverts; three outer tail-feathers on each side white, excepting an oblong portion toward the end, the next also partially white; throat and fore part of breast rich reddish-orange; breast dull yellow, the rest white; the sides of the neck and body streaked with black. Female with the upper parts light olivaceous, each feather dusky in the centre, the other parts as in the male, but the tints much paler, the spot on the top of the head greenish-yellow, the feathers tipped with dusky, the band over the eye pale yellow, that on the lore and ear-coverts brown, the fore part of the neck yellow, and the sides less strongly streaked than black.

*Male*, 4  $\frac{3}{4}$ , 7  $\frac{3}{4}$ . *Female*, 4  $\frac{9}{12}$ , wing 2  $\frac{7}{12}$ .

From Texas northward. Rather rare. Migratory.

Blackburnian Warbler, *Sylvia Blackburniæ*, WILS. Amer. Orn. v. iii. p. 67.

*Sylvia Blackburniæ*, BONAP. Syn. p. 80.

Blackburnian Warbler, *Sylvia Blackburniæ*, NUTT. Man. v. i. p. 379.

Blackburnian Warbler, *Sylvia Blackburniæ*, AUD. Orn. Biog. v. ii. p. 208; v. v. p. 78.

## 88. 13. *Sylvicola æstiva*, GMEL. Yellow-Poll Warbler.

PLATE XCV. Male. PLATE XXXV. Young Male and Female.

Outer four quills nearly equal, second longest; tail emarginate. Male with the upper parts pale yellowish-green, the rump greenish-yellow, the fore part of the head, cheeks, throat, sides of the neck and lower parts pure yellow, the breast and sides streaked with brownish-red; feathers of the wings deep brown, primaries margined with yellowish-green, secondaries, their coverts, and the first row of small coverts with yellow; tail-feathers brown, with the greater part of the inner webs and a portion of the outer yellow, excepting the middle two. Female similar, but with the colours less bright, and the streaks on the breast and sides obsolete. Young with the upper parts yellowish-green, tinged with brown, forehead, sides of head, and lower parts deep yellow.

*Male*, 4  $\frac{3}{4}$ , 8.

From Texas northward, and throughout the interior. Abundant. Migratory.

Blue-eyed Warbler, *Sylvia citrinella*, WILS. Amer. Orn. v. ii. p. 111.

*Sylvia æstiva*, BONAP. Syn. p. 83.

Yellow-poll Warbler, *Sylvia æstiva*, AUD. Orn. Biog. v. i. p. 476. Adult Male.

Children's Warbler, *Sylvia Childrenii*, AUD. Orn. Biog. v. i. p. 180. Young.

### 89. 14. *Sylvicola Rathbonii*, AUD. Rathbone's Wood-Warbler.

PLATE LXV. Male and Female.

Wings of ordinary length, the second quill longest; tail nearly even. The general colour of the plumage bright yellow, the upper parts olivaceous; quills and tail wood-brown, the former yellow on the outer web, the latter margined externally with the same. Female similar.

*Male*, 4  $\frac{1}{2}$ .

Mississippi. Only one pair seen.

Rathbone Warbler, *Sylvia Rathbonia*, AUD. Orn. Biog. v. i. p. 333.

### 90. 15. *Sylvicola petechia*, LATH. Yellow Red-poll Wood-Warbler.

PLATE CLXIII. Fig. 1. Male. Fig. 2. Young Male.

PLATE CLXIV. Fig. 1. Male. Fig. 2. Female.

Wings of ordinary length, with the outer three quills almost equal, the second longer than the first, which slightly exceeds the fourth; tail emarginate. Male with the crown of the head deep brownish-red, the upper parts yellowish-olive, streaked with brown, the rump greenish-yellow, without streaks; quills dusky brown, primaries edged with whitish, secondaries with yellowish; tail feathers dusky brown, margined with greenish-yellow, the outer two with a white patch on the inner web at the end, sometimes the outer white on both webs at the end; a bright yellow streak from the nostril over the eye; lore dusky; ear-coverts brownish-red; lower parts yellow, the sides of the neck, its lower part, and the sides of the body, streaked with deep red. Female similar to the male, but with the tints duller and paler, the red of the head scarcely apparent, and the fore-neck very faintly streaked. Young dull light greenish-brown, tinged with grey, the head streaked with dusky; lower parts yellowish-grey, the sides of the neck and body, with the breast, faintly streaked with greyish-brown.

*Male*, 4  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

From Texas northward. Very abundant. Spends the winter in all the Southern States.

Yellow Red-poll Warbler, *Sylvia petechia*, WILS. Amer. Orn. v. vi. p. 19.

*Sylvia petechia*, BONAP. Syn. p. 83; *S. palmarium*, p. 78.

*Sylvicola petechia*, Yellow Red-poll Warbler, SWAIN. & RICH. F. Bor. Amer. v. ii. p. 215.

Yellow Red-poll Warbler, *Sylvia petechia*, NUTT. Man. v. i. p. 364.

Yellow Red-poll Warbler, *Sylvia petechia*, AUD. Orn. Biog. v. ii. p. 259, Adult Male and Young; p. 360, Adult Male and Female.

### 91. 16. *Sylvicola Americana*, LATH. Blue Yellow-backed Wood-Warbler,—Yellow-backed Warbler,—Blue Yellow-back Warbler.

PLATE XV. Male and Female.

Bill much attenuated; outer three quills nearly equal, first or second longest; tail almost even, with the feathers pointed. Male with the upper parts light blue, the fore part of the back yellowish-green; two broad bands of white on the wing, formed by the tips of the secondary coverts, and first row of small coverts; quills and tail-feathers dusky, margined with blue; a white spot on the outer three of the latter; loreal space black; both eyelids with a white spot; throat



yellow, with whitish patches, a lunular band of blackish on the fore neck; breast yellow, spotted with dull orange, the rest of the lower parts yellowish, fading into white, the sides pale greyish-blue. Female similar but paler; the loral band wanting; throat, fore neck, and breast yellow, without the black lunule.

Although the bill of this species is much attenuated, it is not essentially different in form from that of *S. Blackburniæ*, and others of this genus; the wings are similar to those of the rest, and there seems no reason for setting it apart to form a genus, as has been done by Bonaparte.

*Male*,  $4 \frac{1}{6}$ ,  $6 \frac{1}{2}$ .

From Texas, generally distributed. Exceedingly abundant. Migratory.

Blue Yellow-back Warbler, *Sylvia pusilla*, WILS. Amer. Orn. v. iv. p. 17.

*Sylvia Americana*, BONAP. Syn. p. 33.

Blue Yellow-backed Warbler, *Sylvia Americana*, AUD. Orn. Biog. v. i. p. 78.

## 92. 17. *Sylvicola Townsendi*, NUTT. Townsend's Wood-Warbler.

PLATE CCCXCIII. Fig. 1. Male.

Wings of moderate length, rather pointed, with the second and third quills longest, the first and second nearly equal and very little shorter; tail scarcely emarginate. Upper parts light greenish-olive, more yellow behind, all the feathers dusky in the centre; cheeks, ear-coverts, and throat black; a band over the eye, a broader band on the side of the neck, and the fore part of the breast bright yellow; the rest of the lower parts white, but the sides marked with oblong dusky spots; wings blackish-brown; the secondary coverts and first row of small coverts largely tipped with white, the quills margined with light grey; tail-feathers blackish-brown, edged with grey; outer two on each side almost entirely white, the next with a small white spot.

[60]

*Male*,  $4 \frac{1}{12}$ , wing  $2 \frac{9}{12}$ .

Columbia River, northward. Migratory.

*Sylvia Townsendi*, Townsend's Warbler, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 191.

Townsend's Warbler, *Sylvia Townsendi*, AUD. Orn. Biog. v. v. p. 36.

## 93. 18. *Sylvicola occidentalis*, TOWNS. Hermit Wood-Warbler.

PLATE CCCXCV. Fig. 3. Male. Fig. 4. Female.

Wings of moderate length, the outer three quills almost equal, the third longest; tail slightly emarginate. Male with the upper parts bluish-grey, spotted with black; the upper part of the head, which is similarly spotted, the cheeks, and sides of the neck, bright yellow; throat black; breast and abdomen white; ground and tail-feathers greyish-dusky; two white bands on the wing formed by the tips of the secondary coverts and first row of small coverts; two outer tail-feathers on each side almost entirely white. Female with the upper parts of a duller grey, the yellow of the head less extended and not so bright; throat whitish, spotted with dusky.

*Male*,  $3 \frac{5}{12}$ , wing  $2 \frac{9}{12}$ .

Columbia River. Migratory.

*Sylvicola occidentalis*, Hermit Wood-Warbler, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 190.

Hermit Warbler, *Sylvia occidentalis*, AUD. Orn. Biog. v. v. p. 55.

## 94. 19. *Sylvia nigrescens*, TOWNS. Black-throated Grey Wood-Warbler.

PLATE CCCXCV. Figs. 5 and 6. Male.

Wings of moderate length, with the outer three quills nearly equal, the second longest, the first shorter than the fourth; tail slightly rounded and emarginate. Male with the upper parts bluish ash-grey, the middle of the back and tail-coverts streaked with black; the upper part of the head and neck, the loral space and cheeks, and the fore part of the neck, with a small portion of the breast black; a band from the nostril to near the eye yellow; a band over the eye, and another from the lower mandible along the side of the neck white; breast and abdomen white, the sides tinged with grey, and streaked with black; wings blackish-brown, with two white bands formed by the tips of the secondary coverts and first row of small coverts; quills edged with light grey; tail blackish-brown, the two outer feathers on each side almost entirely white, the next with a white patch on the inner web.

[61]

*Male*, 5, wing  $2 \frac{9}{12}$ .

Columbia River. Migratory.

*Sylvia nigrescens*, Black-throated Grey Warbler, Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 191.

Black-throated Grey Warbler, *Sylvia nigrescens*, AUD. Orn. Biog. v. v. p. 57.

**95. 20. *Sylvicola canadensis*, LINN. Canada or Black-throated Blue Wood-Warbler.**

PLATE CLV. Male. PLATE CXLVIII. Female and Young.

Wings rather long, with the third quill longest, the second almost equal, the fourth longer than the first; tail even. Male dull light blue above, white beneath; frontal band, cheeks, throat, and sides, black; a white patch on the wing formed by the bases of the primaries; outer three tail-feathers with a patch of white on the inner web near the end, all the rest with a touch of the same. Female greenish-olive above, light dull-yellow below, with a less extended white patch on the wing, the white on the tail unobscured. Young similar to the female.

*Male*, 5, 7  $\frac{1}{2}$ .

From Texas northward. Migratory. Abundant.

*Motacilla canadensis*, LINN. Syst. Nat. v. i. p. 334.

Black-throated Blue Warbler, *Sylvia canadensis*, WILS. Amer. Orn. v. ii. p. 115. Male.

*Sylvia canadensis*, BONAP. Syn. p. 84. Male.

Black-throated Blue Warbler, *Sylvia canadensis*, NUTT. Man. v. i. p. 398. Male.

Black-throated Blue Warbler, *Sylvia canadensis*, AUD. Orn. Biog. v. ii. p. 309. Male.

Pine-swamp Warbler, *Sylvia pusilla*, WILS. Amer. Orn. v. v. p. 100. Young.

*Sylvia sphagnosa*, BONAP. Syn. p. 85. Young.

Pine-swamp Warbler, *Sylvia sphagnosa*, NUTT. Man. v. i. p. 406. Young.

Pine-swamp Warbler, *Sylvia sphagnosa*, AUD. Orn. Biog. v. ii. p. 279. Female and Young.

**96. 21. *Sylvicola maculosa*, LATH. Blue-headed Yellow-rumped Wood-Warbler.—Black-and-Yellow Warbler.**

PLATE CXXIII. Male and Female. PLATE L. Young.

Wings of moderate length, the outer four quills nearly equal, the second and third longest and equal, the fourth longer than the first; tail almost even. Upper part of head and hind neck ash-grey; eyelids, and a band over the eye, white; part of forehead, loreal space, and a broad band down the side of the neck, with the fore part of the back, and upper tail-coverts deep black; lower parts and rump bright yellow; the lower part of the throat, the breast and sides, spotted with black; wings and tail-feathers brownish-black, edged with grey; two white bands on the wing; all the tail-feathers, except the middle two, with a large patch of white on the inner web, at about two-thirds of their length. Young yellowish-grey above, with the head light grey, the rump yellow; lower parts of a duller yellow, with only faint dusky streaks on the sides.

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*Male*, 5, 7  $\frac{1}{2}$ .

From Texas northward. Very abundant. Migratory.

Black-and-Yellow Warbler, *Sylvia magnolia*, WILS. Amer. Orn. v. iii. p. 63. Adult.

*Sylvia maculosa*, BONAP. Syn. p. 78.

Black-and-Yellow Warbler, *Sylvia maculosa*, NUTT. Man. v. i. p. 370.

*Sylvicola maculosa*, Yellow-rump Warbler, F. Bor. Amer. v. ii. p. 213.

Black-and-Yellow Warbler, *Sylvia maculosa*, AUD. Orn. Biog. v. ii. p. 145, Adult; v. i. p. 260, Young; v. v. p. 458.

**97. 22. *Sylvicola discolor*, VIEILL. Prairie Wood-Warbler.**

PLATE XIV. Male and Female.

Wings rather short, with the outer four quills nearly equal, the second and third longest; tail emarginate and rounded. Male with the upper parts yellowish-green, the back spotted with chestnut-red; lower parts, and a band over the eye, bright yellow; two bands of dull yellow on the wing; outer four tail-feathers with a white patch on the inner web; a small streak before and behind the eye, one on the cheek, a spot on the side of the neck, and oblong markings on the

sides, black. Female similar, but paler, especially beneath, and without the black streaks on the side of the head.

*Male*, 5, 7.

From Texas to Massachusetts. Migratory. Abundant.

Prairie Warbler, *Sylvia minuta*, WILS. Amer. Orn. v. iii. p. 87.

*Sylvia discolor*, BONAP. Syn. p. 83.

Prairie Warbler, *Sylvia discolor*, NUTT. Man. v. i. p. 294.

Prairie Warbler, *Sylvia discolor*, AUD. Orn. Biog. v. i. p. 76.

### 98. 23. *Sylvicola montana*, WILS. Blue-Mountain Warbler.

PLATE CCCCXXXIV. Fig. 3. Male.

No bristles at the base of the bill; wings rather short, the third and fourth quills longest; tail much rounded. Upper parts light greenish-olive; a band across the forehead, one over the eye, the cheeks, throat, fore part and sides of neck bright yellow; the rest of the lower parts yellowish-white, the sides marked with narrow longitudinal dusky streaks; wings dusky brown, all the feathers edged with yellowish-white, the secondary quills more broadly, the first row of small coverts and the secondary coverts tipped with white, forming two conspicuous bands; tail brownish-black, the feathers edged with yellowish-green, the two outer on each side white in their terminal half.

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*Male*,  $4\frac{1}{2}$ , wing  $2\frac{6}{12}$ .

Blue Mountains. Only one individual seen.

Blue-Mountain Warbler, *Sylvia montana*, WILS. Amer. Orn. v. v. p. 113.

*Sylvia tigrina*, BONAP. Syn. p. 83; but not of Gmelin or Latham, as the figure of Edwards, to which reference is made, has the tail not rounded, but emarginate.

### 99. 24. *Sylvicola agilis*, WILS. Connecticut Wood Warbler.—Connecticut Warbler.

PLATE CXXXVIII. Male and Female.

Wings long, with the first quill longest, and exceeding the first secondary by eleven-twelfths of an inch; middle toe and claw longer than the tarsus; tail of moderate length, nearly even, with acuminate feathers. Male olive-green above; a ring of yellowish-white round the eye; the head, neck all round, and part of the breast ash-grey, the sides greyish-green; the rest of the lower parts bright yellow. Female olive-green above, yellow beneath, the sides of the neck and a band across the breast tinged with brown.

*Male*,  $5\frac{3}{4}$ , 8.

New Jersey, Pennsylvania, and Connecticut. Very rare. Migratory.

Connecticut Warbler, *Sylvia agilis*, WILS. Amer. Orn. v. v. p. 64.

*Sylvia agilis*, BONAP. Syn. p. 84.

Connecticut Warbler, *Sylvia agilis*, NUTT. Man. v. i. p. 399.

This species forms a connecting link between *Sylvicola* and *Trichas*, having the long pointed wings of the former, and the general appearance of the latter, which it resembles, especially in its tail, which is neither emarginate, nor marked with the white spots seen on that of almost all the other *Sylvicolæ*, but which do not exist in the genus *Trichas*. Some of the *Sylvicolæ* are, in like manner, assimilated to *Myiodoctes*, and others to *Vermivora*. Of the former may be mentioned, *Sylvicola Auduboni* and *S. coronata*; of the latter, *S. Blackburniæ*.

## GENUS III. TRICHAS, SWAINS. GROUND-WARBLER.

Bill of moderate length, similar in form to that of *Sylvicola*, differing only in being a little decurved. The general form does not differ materially from that of *Sylvicola*, the head being ovate and of moderate size, the neck short, the body rather slender; the feet of moderate length, slender; tarsus slender, much compressed, longer than the middle toe with its claw, anteriorly covered with eight scutella, of which the upper are blended; toes of moderate size, hind toe proportionally large, lateral toes equal, fourth adherent at the base; claws rather long, arched, much compressed, laterally grooved, very acute. Plumage soft and blended. Wings rather short, convex, considerably rounded, the third and fourth quills longest, the fifth little shorter. Tail of moderate length, rounded, always plain, or without white spots.

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**100. 1. Trichas Macgillivrayi, AUD. Macgillivray's Ground-Warbler.—Macgillivray's Warbler.**

PLATE CCCXCIX. Fig. 4. Male. Fig. 5. Female.

Wings rather short, the second quill longest, the fourth longer than the first, the tail long, considerably rounded, its feathers rounded; tarsus longer than the middle toe and claw. Male olive-green above; the head, hind part, and sides of the neck bluish-grey; the fore neck and part of the breast greyish-black, lunulated with greyish-white; a black loreal band; a conspicuous white spot on each eyelid; the lower parts bright yellow. Female olive-green above, yellow beneath, the sides of the neck and a band across the breast ash-grey.

*Male*, 5  $\frac{1}{4}$ , 6  $\frac{1}{2}$ . *Female*, 5, wing 2  $\frac{4}{12}$ .

Columbia River. Common.

Macgillivray's Warbler, *Sylvia Macgillivrayi*, AUD. Orn. Biog. v. v. p. 75.

**101. 2. Trichas Philadelphia, WILS. Mourning Ground-Warbler.—Mourning Warbler.**

Wings of moderate length, with the second quill longest, the fourth shorter than the first; the tail long, considerably rounded, its feathers scarcely pointed; tarsus longer than the middle toe and claw. Male olive-green above, the head, hind part and sides of the neck, bluish-grey; the fore neck and part of the breast deep black, lunulated with white; a blackish loreal band, margins of eyelids dusky grey; the lower parts bright yellow. Female olive-green above, yellow beneath, the sides of the neck and a band across the breast ash-grey, the throat yellowish-white.

*Male*, 5, 8.

New Jersey and Blue Mountains of Vermont. Rare. Migratory.

Mourning Warbler, *Sylvia Philadelphia*, WILS. Amer. Orn. v. ii. p. 101.

*Sylvia Philadelphia*, BONAP. Syn. p. 85.

Mourning Warbler, *Sylvia Philadelphia*, NUTT. Man. v. i. p. 404.

Mourning Warbler, *Sylvia Philadelphia*, AUD. Orn. Biog. v. v. p. 79.

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**102. 3. Trichas Marilandica, LINN. Maryland Ground-Warbler.—Maryland Yellow-throat. Yellow-breasted Warbler.**

PLATE XXIII. Male and Female. PLATE XXIV. Young Male.

Wings rather short, with the third and fourth quills longest, fifth longer than second, first and sixth equal; tail considerably rounded, the lateral feathers being three-twelfths shorter than the middle. Male with a broad band of black across the forehead, including the loreal space and eyes, and terminating in a rather pointed form behind the ear-coverts; over this band a narrow one of very pale blue, or bluish-white; upper parts yellowish-green, on the head slightly tinged with red; quills and tail-feathers wood-brown, margined with yellowish-green; the edge of the wing and the margin of the outer primary yellow; fore part of neck bright yellow, as is the anterior part of the breast and the lower tail-coverts, the rest pale, the sides shaded with dull yellowish-brown; the axillaries and some of the lower wing-coverts white. Female with the upper parts lighter, the lower less bright, tinged with reddish-brown, the head of pale brownish-red, without the bands so conspicuous in the male. Young similar to the female, the males with a black mystachial band.

*Male*, 4  $\frac{3}{4}$ , 6  $\frac{1}{2}$ .

From Texas northward to Nova Scotia, and throughout the interior; Columbia River.

Maryland Yellow-throat, *Sylvia Marilandica*, WILS. Amer. Orn. v. i. p. 88, Male; v. ii. p. 163, Female.

*Sylvia Marilandica*, BONAP. Syn. p. 85.

Maryland Yellow-throat, NUTT. Man. v. i.

Yellow-breasted Warbler, or Maryland Yellow-throat, *Sylvia Trichas*, AUD. Orn. Biog. v. i. p. 121, Adult; v. v. p. 463.

Roscoe's Yellow-throat, *Sylvia Roscoe*, AUD. Orn. Biog. v. i. p. 124. Young.

**103. 4. Trichas Delafieldii, AUD. Delafield's Ground-Warbler.**

Wing rather long, much rounded, with the third and fourth quills longest, sixth longer than second, first and tenth about equal; tail much rounded, the lateral feathers being half an inch shorter than the middle. Male with a band of black across the forehead, including the loreal space and eyes, and terminating on the ear-coverts; upper part of head light greyish-blue, tinged

behind with green; the rest of the upper parts dull yellowish-green; quills and tail-feathers wood-brown on the inner webs, the edge of the wing and margin of the outer primary yellow; all the lower parts rich yellow, excepting the sides, which are shaded into dull greenish-yellow.

[66]

*Male*, 5  $\frac{1}{4}$  , wing, 2  $\frac{5}{12}$  .

North California.

Delafield's Yellow-throat, *Sylvia Delafieldii*, AUD. Orn. Biog. v. v. p. 307.

## GENUS IV. HELINAIA, AUD. SWAMP-WARBLEDERS.

Bill rather long, being nearly of the same length as the head, straight, or slightly decurved, tapering to a very acute point, much compressed; the upper mandible with the ridge distinct, the sides declinate and flat at the base, the edges somewhat inflected beyond the middle, the notch obsolete; lower mandible with the dorsal line straight, the edges involute, the tip extremely acute. Nostrils oblong; exposed. Feet of moderate length; tarsus about equal to the middle toe and claw, slender, much compressed, with the upper scutella blended; toes slender; claws rather long, moderately arched, slender, much compressed, laterally grooved, extremely acute, plumage soft and blended. Bristles obsolete. Wings rather long, somewhat pointed, the outer three nearly equal, the second longest. Tail of moderate length, nearly even.—Name from [Greek: Helos], a swamp, and [Greek: Naiô], to inhabit.

### 104. 1. *Helinaia Swainsonii*, AUD. Swainson's Swamp-Warbler.

PLATE CXCVIII. Male.

Bill as long as the head, much compressed; wings rather long, second and third quills equal and longest; tail even; upper parts olive-brown, the head strongly tinged with red; lower parts and a band over the eye pale yellowish-grey, the feathers on the cheeks tipped with brown, the sides of the neck and body more grey, the abdomen whitish.

*Male*, 5  $\frac{1}{4}$  , 8  $\frac{1}{2}$  .

South Carolina to Massachusetts. Very rare. Migratory.

Swainson's Warbler, *Sylvia Swainsonii*, AUD. Orn. Biog. v. ii. p. 568; v. v. p. 462.

### 105. 2. *Helinaia vermivora*, LATH. Worm-eating Swamp-Warbler.

PLATE XXXIV. Male and Female.

Bill nearly as long as the head, less compressed than in the last; wings rather long, second quill longest, first and third equal; tail very slightly rounded. Upper parts light olive-green; head and lower parts pale brownish-yellow, the former with four longitudinal black bands; throat and abdomen nearly white.

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*Male*, 5  $\frac{1}{2}$  , 8  $\frac{1}{2}$  .

From Texas northwards, and in the interior to the Missouri. Not very abundant. Migratory.

Worm-eating Warbler, *Sylvia vermivora*, WILS. Amer. Orn. v. iii. p. 74.

*Sylvia vermivora*, BONAP. Syn. p. 86.

Worm-eating Warbler, *Sylvia vermivora*, AUD. Orn. Biog. v. i. p. 177; v. v. p. 460.

### 106. 3. *Helinaia Protonotarius*, LATH. Prothonotary Swamp-Warbler.

PLATE III. Male and Female.

Bill nearly as long as the head; first quill longest; tail even. Male with the head, neck, breast, and sides rich yellow, abdomen and lower tail-coverts white; hind neck and fore part of back greenish-yellow, rump, tail-coverts, smaller wing-coverts and margin of the quills and tail-feathers light greyish-blue; the latter, except the middle, having the greater part of their inner webs white.

*Male*, 5  $\frac{1}{2}$  , 8  $\frac{1}{2}$  .

From Texas eastward to Nova Scotia. In the interior to Kentucky. Saskatchewan. Rather rare. Migratory.

Prothonotary Warbler, *Sylvia Protonotarius*, WILS. Amer. Orn. v. iii. p. 72.

*Sylvia Protonotarius*, BONAP. Syn. p. 86.

Prothonotary Warbler, *Sylvia Protonotarius*, v. i. p. 410.

**107. 4. *Helinaia chrysoptera*, LINN. Golden-winged Swamp-Warbler.**

PLATE CCCCXIV. Fig. 1. Male. Fig. 2. Female.

Bill slightly shorter than the head, tapering to an acute point; wings with the second and third quills equal and longest, the fourth and first about equal; tail even. Male light ash-grey above, greyish-white beneath; upper part of head, and a patch on the wing, formed by the first row of small coverts and the secondary coverts, bright yellow; a band from the bill to the eye, continued under it, and including the ear-coverts, black, as is the throat; a white band from the upper mandible over the eye, and another from the lower mandible down the neck. Female with the tints less bright, the back tinged with green, the side of the head and the throat grey, and the white bands on the head narrower and less extended.

*Male*,  $5 \frac{1}{4}$ ,  $7 \frac{5}{8}$ . *Female*,  $5$ ,  $7 \frac{1}{4}$ .

From Texas to Nova Scotia. In the interior to Kentucky. Rather rare. Migratory.

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Golden-winged Warbler, *Sylvia chrysoptera*, WILS. Amer. Orn. v. ii. p. 113.

*Sylvia chrysoptera*, BONAP. Syn. p. 87.

Golden-winged Warbler, *Sylvia chrysoptera*, NUTT. Man. v. i. p. 411.

Golden-winged Warbler, *Sylvia chrysoptera*, AUD. Orn. Biog. v. v. p. 154.

**108. 5. *Helinaia Bachmanii*, AUD. Bachman's Swamp-Warbler.**

PLATE CLXXXV. Male and Female.

Bill nearly as long as the head, slightly decurved, much attenuated; outer four quills nearly equal, second longest, tail even. Male with the upper parts yellowish-green, the feathers of the crown black, with greyish margin; the hind neck grey; forehead, a line over the eye, cheeks, chin, sides of neck, flexure of wing, lower wing-coverts, and breast, yellow; sides greenish-grey, lower tail-coverts white; a patch of black, enlarging beneath, on the fore neck; quills and tail greyish-brown; a patch of white on each of the tail-feathers, excepting the middle. Female with the tints fainter, the forehead yellowish-green, the fore neck dusky.

*Male*,  $4 \frac{1}{12}$ ,  $6 \frac{1}{4}$ . *Female*,  $3 \frac{10}{12}$ .

South Carolina. Rare. Migratory.

Bachman's Warbler, *Sylvia Bachmanii*, AUD. Orn. Biog. v. ii. p. 483.

**109. 6. *Helinaia carbonata*, AUD. Carbonated Swamp-Warbler.**

PLATE LX. Male.

Bill shorter than the head, straight, very acute; wing with the second quill longest; tail slightly emarginate. Male with the upper part of the head black; fore part of back, smaller wing-coverts, and sides dusky green, spotted with black; a line over the eye, the sides of the neck, throat, the rest of the lower parts, and the rump yellow.

*Male*,  $4 \frac{3}{4}$ .

Kentucky. Only two specimens procured. Migratory.

Carbonated Warbler, *Sylvia carbonata*, AUD. Orn. Biog. v. i. p. 308.

**110. 7. *Helinaia peregrina*, WILS. Tennessee Swamp-Warbler.**

PLATE CLIV. Male.

Bill shorter than the head, straight, very acute; wing with the second and third quills longest; tail nearly even. Upper parts yellowish-olive, the head darker; lower parts cream-coloured, fading behind into white; a pale yellow line over the eye; quills and tail-feathers dusky, the primaries margined with whitish, the secondaries with greenish-yellow.

[69]

*Male*,  $4 \frac{1}{2}$ ,  $8$ .

Florida to New York, and in the interior to Kentucky. Rare. Migratory.

Tennessee Warbler, *Sylvia peregrina*, WILS. Amer. Orn. v. iii. p. 83.

*Sylvia peregrina*, BONAP. Syn. p. 87.

Tennessee Warbler, *Sylvia peregrina*, NUTT. Man. v. i. p. 412.

**111. 8. *Helinaia solitaria*, WILS. Blue-winged Yellow Swamp-Warbler.**

PLATE XX. Male and Female.

Bill shorter than the head, straightish, very acute; wings with the outer four quills almost equal, the second longest; tail nearly even. Forehead, crown, and lower parts bright yellow; hind part of the head, neck, and back light green, rump greenish-yellow; lore black; wings and tail greyish-blue, the feathers margined with greyish-white; two bands of white on the wing, formed by the tips of the first row of small coverts and the secondary coverts; tail-feathers, except the middle, with a patch of white on the inner web. Young with the upper parts, including the forehead, yellowish-green, the lower pale greenish-yellow.

*Male*,  $4\frac{3}{4}$ , 7.

From Texas to Massachusetts. In the interior, to Kentucky. Rather rare. Migratory.

Blue-winged Yellow Warbler, WILS. Amer. Orn. v. ii. p. 109.

*Sylvia solitaria*, BONAP. Syn. p. 87.

Blue-winged Yellow Warbler, *Sylvia solitaria*, NUTT. Man. v. i. p. 410.

Blue-winged Yellow Warbler, *Sylvia solitaria*, AUD. Orn. Biog. v. i. p. 102.

**112. 9. *Helinaia celata*, SAY. Orange-crowned Swamp-Warbler.**

PLATE CLXXVIII. Male and Female.

Bill shorter than the head, very much attenuated; wings with the outer four quills almost equal, the second longest; tail even. Male with the upper parts dull green, the rump yellowish-green; a patch of dull reddish-orange on the crown, concealed by the grey tips of the feathers; lower parts dull olivaceous yellow; lower tail-coverts light yellow; quills and tail-feathers greyish-brown, edged with yellowish-green. Female similar, with the orange on the crown duller. Young with the lower parts paler, and without red on the head.

This species and the next seem to form the transition from the Sylvicolinæ to the Reguli, as *Mniotilta varia* does to the Certhiæ.

*Male*,  $5\frac{1}{2}$ ,  $7\frac{1}{2}$ .

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In summer from Texas to Nova Scotia. Winters in the southern states. Columbia River. Rather common.

*Sylvia celata*, SAY, Long's Exped. v. i. p. 169.

*Sylvia celata*, BONAP. Syn. p. 38.

Orange-crowned Warbler, *Sylvia celata*, BONAP. Amer. Orn. v. i. p. 45.

Orange-crowned Warbler, *Sylvia celata*, NUTT. Man. v. i. p. 413.

Orange-crowned Warbler, *Sylvia celata*, AUD. Orn. Biog. v. ii. p. 449.

**113. 10. *Helinaia rubricapilla*, WILS. Nashville Swamp-Warbler.**

PLATE LXXXIX. Male and Female.

Bill shorter than the head, very much attenuated; wings with the outer four quills almost equal, the second longest; tail slightly emarginate. Upper part of the head, cheeks, hind part and sides of neck light bluish-grey; a patch of dull red on the crown, concealed by the grey tips of the feathers; upper parts of the body yellowish-green, lower parts greenish-yellow; quills and tail-feathers greyish-brown, edged with yellowish-green, the primaries with greyish-white. Female similar but paler, and with faint indications of red on some of the feathers on the crown. Young similar to the female.

*Male*,  $4\frac{1}{2}$ , 7.

Texas to Massachusetts. Inland to Kentucky. Columbia River. Rare. Migratory.

Nashville Warbler, *Sylvia rubricapilla*, WILS. Amer. Orn. v. iii. p. 120.

*Sylvia rubricapilla*, BONAP. Syn. p. 87.

Nashville Warbler, *Sylvia rubricapilla*, NUTT. Man. v. i. p. 412.

Nashville Warbler, *Sylvia rubricapilla*, AUD. Orn. Biog. v. i. p. 450.

## GENUS V. MNIOTILTA, VIEILL. CREEPING-WARBLER.

Bill rather long, straight, very slender, nearly as broad as high at the base, much compressed toward the end; upper mandible with the dorsal line very slightly convex, the edges a little inflected toward the end, the notches obsolete, the tip acute; lower mandible with the dorsal line straight, the sides convex, the edges involute, the tip attenuated. General form slender. Feet of moderate length, very slender; tarsus shorter than the middle toe and claw, much compressed, the upper scutella blended; toes rather long, extremely compressed, the first very long, the second shorter than the third, which is adherent at the base, claws rather long, well arched, extremely compressed, and acute. Plumage very soft and blended. Bristles obsolete. Wings long, with the second and third quills longest and about equal, the first slightly shorter, and exceeding the fourth. Tail of moderate length, nearly even. This genus connects the Sylvicolinæ with the Certhianæ.

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### 114. 1. *Mniotilta varia*, LINN. Black-and-white Creeping Warbler.

PLATE XC. Male.

Male with the plumage white, variegated with glossy black, longitudinally disposed; a band along the middle of the head and hind neck, a streak over the eyes, a band along the sides of the neck, two bars on the wings, the middle of the breast and abdomen, with a patch at the end of the outer two tail-feathers, white. Female with the upper parts similar, but with the black less deep, the lower parts greyish-white, the sides and lower tail-coverts marked with black. Young light brownish-grey above, paler beneath, with the abdomen white.

*Male*, 5  $\frac{1}{2}$ , 7  $\frac{1}{2}$ .

Generally distributed. Migratory.

Black-and-white Creeper, *Certhia varia*, WILS. Amer. Orn. v. iii. p. 23.

*Sylvia varia*, BONAP. Syn. p. 81.

Black-and-white Creeper, *Certhia varia*, AUD. Orn. Biog. v. i. p. 452; v. v. p. 471.

## FAMILY IX. CERTHIANÆ. CREEPERS.

Bill of moderate length or rather long, slender, slightly arched, much compressed, acute; upper mandible with its dorsal outline convex or arched, the ridge narrow, the notches slight or obsolete, lower mandible with the angle rather long and narrow, the dorsal line straight or slightly decurved, the edges inclinate, the tip acute. Head moderate, ovate; neck short, body slender. Feet of moderate length, or rather short; tarsus about the same length as the middle toe, compressed, with eight anterior scutella, toes of moderate length, much compressed, hind toe proportionally long, outer adherent at the base; claws rather long, extremely compressed, arched, acute. Wings short or of moderate length. Tail of twelve feathers, generally much rounded. Tongue slender, emarginate and papillate at the base, very narrow, tapering to a lacerated point. Œsophagus of moderate width, without crop; proventriculus bulbiform; stomach of moderate size, oblong, or elliptical, moderately muscular, with the muscles distinct; epithelium dense, longitudinally rugous; intestine short, rather wide; cœca very small; cloaca globular. Trachea simple, with four pairs of inferior laryngeal muscles.

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## GENUS I. CERTHIA, LINN. TREE-CREEPER.

Bill about the same length as the head, very slender, arched, much compressed, acute; upper mandible with the dorsal line arched, the ridge narrow, the sides sloping at the base, nearly erect in the rest of their extent, the edges sharp, arched, without notch, the tip acute; lower mandible with the angle rather long, narrow, and pointed, the outline decurved, the sides erect and convex, the edges inclinate, the tip acute. Nostrils linear-oblong, operculate. Head ovate; neck short; body slender. Feet rather short, very slender, tarsus rather shorter than the middle toe, very slender, much compressed; toes extremely compressed; the first comparatively large, longer than the middle toe, including the claw; the inner toe shorter than the outer; claws long, moderately arched, slender, extremely compressed, laterally grooved, acute, that of the hind toe very long. Plumage long, loose, very soft. Bristles obsolete. Wings of moderate length, very broad; the first quill very short, the fourth and fifth longest. Tail long, graduated, of twelve moderately stiff pointed feathers.

### 115. 1. *Certhia familiaris*, LINN. Brown Tree-Creeper.

PLATE CCCCXV. Male and Female.

Upper parts reddish-brown, the head darker, the rump light brownish-red; all the feathers with a central dull whitish streak; wings deep brown, the coverts tipped, the secondaries barred at the base with dull yellow, of which a broad band, in the midst of a brownish-black space,

[73]



crosses both webs of the quills, excepting the inner webs of the outer four, and the outer webs of the outer three; most of the quills also with a greyish-yellow patch along the outer web toward the tip, which is dull white; tail-feathers yellowish-brown; with shafts of a lighter tint, the webs darker toward the end; a silvery white band over the eye; cheeks dark brown; lower parts silvery white, sides tinged with brown.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

From Louisiana to Maryland, and in the interior to Kentucky, during winter. From Pennsylvania eastward to Nova Scotia, in summer, breeding in all the intermediate parts. Common.

Brown Creeper, *Certhia familiaris*, WILS. Amer. Orn. v. i. p. 122.

*Certhia familiaris*, BONAP. Syn. p. 280.

Brown Creeper, NUTT. Man. v. i. p. 585.

Brown Creeper, *Certhia familiaris*, AUD. Orn. Biog. v. v. p. 158.

## GENUS II. TROGLODYTES, CUV. WREN.

Bill of moderate length, or nearly as long as the head, slender, slightly arched, much compressed toward the end; upper mandible with the dorsal line slightly convex, the edges a little inflected toward the end, the notches slight, the tip rather acute; lower mandible with the angle rather long and narrow, the outline slightly decurved, the sides erect and convex, the edges inclinate, the tip acute. Nostrils oblong, operculate, exposed. Head oblong; neck short; body slender. Feet of ordinary length, rather strong; tarsus longer than the middle toe, compressed, with eight anterior distinct scutella; toes of moderate size, the third and fourth united at the base, the first very large, the lateral nearly equal; claws rather long, moderately arched, much compressed, very acute. Plumage soft and blended. Bristles obsolete. Wings of moderate length, or short, convex, much rounded; the first quill very small, the fourth and fifth longest. Tail rather short, rounded, of twelve slightly arched, weak, rounded feathers.

### 116. 1. *Troglodytes obsoletus*, SAY. Rock-Wren.

PLATE CCCLX. Fig. 4. Female.

Upper parts dull yellowish-brown, and, excepting the rump, barred with greyish-brown; wings similarly barred, excepting the primaries; secondary coverts with a small white spot near the tip; tail-coverts and two middle tail-feathers barred with dusky; the rest broadly tipped with pale yellowish-red, undulated with dusky, behind which is a broad band of brownish-black, the remaining or basal part banded like the central feathers, the outer with four reddish-white spots or bars on the outer web, the intervals being brownish-black, and a spot of white on the inner web; lower parts greyish-white, tinged with sienna, the sides inclining to yellowish-red; lower tail-coverts barred with dusky.

[74]

*Female*, 6, wing 2  $1\frac{1}{2}$ .

Rocky Mountains and Columbia River. Abundant. Migratory.

*Troglodytes obsoleta*, SAY, Long's Exped.

*Troglodytes obsoleta*, BONAP. Amer. Orn. v. i. p. 6.

Rocky Mountain Wren, *Troglodytes obsoleta*, NUTT. Man. v. i. p. 435.

Rock Wren, *Troglodytes obsoletus*, AUD. Orn. Biog. v. iv. p. 443.

### 117. 2. *Troglodytes ludovicianus*, BONAP. Great Carolina Wren.

PLATE LXXVIII. Male and Female.

Bill stouter than in the last, nearly as long as the head; wing with the fourth and fifth quills longest; tail much rounded; upper parts brownish-red; a yellowish-white streak over the eye, extending far down the neck, and edged above with dark brown; a broader band of reddish-brown behind the eye; quills, coverts, and tail barred with blackish-brown; secondary and first row of small coverts tipped with white, shafts of the latter also white; throat greyish-white, lower parts light reddish-buff, deeper behind; lower tail-coverts white, barred with black. Female lighter above, tinged with grey beneath, without white on the wing-coverts.

*Male*, 5  $\frac{1}{2}$ , 7  $\frac{1}{2}$ .

From Texas to New York, along the Atlantic coast. In the interior to the Missouri, and up the Ohio to Pittsburgh. Resident in the Southern States. Abundant.

Great Carolina Wren, *Certhia Caroliniana*, WILS. Amer. Orn. v. ii. p. 61.

Troglodytes ludovicianus, BONAP. Syn. p. 93.

Great Carolina Mocking Wren, NUTT. Man. v. i. p. 429.

Great Carolina Wren, Troglodytes ludovicianus, AUD. Orn. Biog. v. i. p. 399; v. v. p. 466.

### 118. 3. Troglodytes Bewickii, AUD. Bewick's Wren.

PLATE XVIII. Male.

Bill more slender than that of the last, nearly as long as the head, slightly arched; wing very short, with the fifth quill longest, but little exceeding the fourth and sixth; tail rather long, graduated. Upper parts dusky brown tinged with grey; lower greyish-white, the sides tinged with brown; a band of yellowish-white from the upper mandible over the eye to half-way down the neck; quills and wing-coverts barred with dusky, as are the tail-coverts and two middle tail-feathers; outer web of the lateral tail-feathers, and the terminal portions of the others whitish, barred with black, their middle parts black, toward the base barred with reddish-brown.

[75]

*Male*, 5, 6  $\frac{1}{2}$ .

From Louisiana to Columbia River on the one hand, and to Pennsylvania on the other, principally on high grounds. Not very common. Migratory.

Bewick's Wren, NUTT. Man. v. i. p. 434.

Bewick's Wren, Troglodytes Bewickii, AUD. Orn. Biog. v. i. p. 96; v. v. p. 467.

### 119. 4. Troglodytes Americanus, AUD. Wood-Wren.

PLATE CLXXIX. Male.

Bill of moderate length, nearly straight; wings short, with the third, fourth, and fifth quills almost equal, the fourth longest; tail rather long, much rounded. Upper parts dark reddish-brown, duller and tinged with grey on the head, indistinctly barred with dusky; lower parts brownish-grey, faintly barred on the fore neck, breast, and sides, the abdomen and lower tail-coverts distinctly barred; feathers of the cheeks light grey tipped with brown, wings and tail undulatingly banded with blackish-brown.

*Male*, 4  $\frac{7}{8}$ , 6  $\frac{3}{4}$ .

Northern parts of Vermont and Maine, during summer. Winters in South Carolina. Not very rare.

Wood-Wren, Troglodytes Americana. AUD. Orn. Biog. v. ii. p. 452; v. v. p. 469.

### 120. 5. Troglodytes ædon, VIEILL. House-Wren.

PLATE LXXXIII. Male, Female, and Young.

Bill of moderate length, nearly straight, a little stouter than that of the last; wings short, with the third, fourth, and fifth quills almost equal, the fourth longest; tail rather short, much rounded. Upper parts dull reddish-brown, darker on the head, brighter on the tail-coverts, indistinctly barred with dusky; lower parts brownish-grey, faintly barred on the fore neck and breast, the sides, abdomen, and lower tail-coverts distinctly barred; feathers of the cheeks grey, tipped with brown; wings and tail undulatingly banded with blackish-brown. This species differs from the last in being considerably smaller, in having the bill shorter and stouter, the lower parts more tinged with brown; but the colouring of the two is extremely similar.

*Male*, 4  $\frac{1}{2}$ , 5  $\frac{1}{2}$ .

From Maryland to Nova Scotia, and across the continent to the Columbia River. Very abundant. Migratory.

House Wren, Sylvia domestica, WILS. Amer. Orn. v. i. p. 129.

Troglodytes ædon, BONAP. Syn. p. 92.

House Wren, NUTT. Man. v. i. p. 422.

Troglodytes ædon, House Wren, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 316.

House Wren, Troglodytes ædon, AUD. Orn. Biog. v. i. p. 427; v. v. p. 470.

[76]

### 121. 6. Troglodytes hyemalis, VIEILL. Winter-Wren.

PLATE CCCLX. Fig. 1. Male. Fig. 2. Female. Fig. 3. Young.

Bill of moderate length, nearly straight; wings shortish, with the fourth quill longest; tail short,

much rounded. Upper parts reddish-brown, faintly barred with dusky, darker on the head, brighter on the tail-coverts, quills, and tail; lower parts pale reddish-brown, the sides and abdomen barred with brownish-black and greyish-white; fore neck and breast more faintly barred; lower wing-coverts and axillars greyish-white, barred with dusky, lower tail-coverts brownish-red, barred with dusky, and having the tip white; a whitish streak over the eye; cheeks brown, spotted with brownish-white; secondary coverts, and first small coverts, each with a white spot at the tip, forming two inconspicuous bands; wing-coverts and quills banded with blackish-brown and brownish-red; tail with twelve dusky bands.

This species is very nearly allied to *Troglodytes Europæus*.

*Male*, 3  $\frac{7}{8}$ , 6  $1\frac{1}{4}$ . *Female*, 3  $\frac{5}{8}$ , 5  $\frac{3}{8}$ .

Generally distributed in the middle and southern districts during winter. Breeds from Pennsylvania northwards to Hudson's Bay. Columbia River.

Winter-Wren, *Sylvia Troglodytes*, WILS. Amer. Orn. v. i. p. 139.

*Troglodytes europæus*, BONAP. Syn. p. 93.

*Troglodytes hyemalis*, Winter Wren, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 318.

Winter-Wren, *Troglodytes hyemalis*, NUTT. Man. v. i. p. 427.

Winter-Wren, *Troglodytes hyemalis*, AUD. Orn. Biog. v. iv. p. 430.

## 122. 7. *Troglodytes Parkmanii*, AUD. Parkman's Wren.

Bill rather long, slightly arched (much longer, stouter, and more curved than that of the last species); wings of moderate length, with the fourth quill longest; tail rather long, much rounded, (half an inch longer, and more rounded). Upper parts reddish-brown, faintly barred with dusky; lower parts dull brownish-white, sides barred with brownish-black and greyish-white, fore neck and breast with scarcely any markings, lower wing-coverts and axillars greyish-white, obscurely barred with dusky.

Length, 4  $\frac{7}{8}$ , wing 2  $\frac{1}{4}$ .

Columbia River. Not very rare.

Parkman's Wren, *Troglodytes Parkmanii*, AUD. Orn. Biog. v. v. p. 310.

## 123. 8. *Troglodytes palustris*, WILS. Marsh Wren.

PLATE C. Male and Female.

Bill rather long, slightly arched; wings short, with the fourth quill longest. Upper parts dark brown, the sides of the head deeper, the fore part of the back brownish-black, longitudinally and conspicuously streaked with white, the quills externally margined with lighter brown, the tail barred with dark brown; a white line over the eye, extending down the neck; the sides of the latter mottled with light brown and grey; the lower parts of a silvery greyish-white; abdominal feathers and lower tail-coverts tipped with brown. Female differs only in having the black of the back of a less deep tint, the white lines less conspicuous, and the lower parts of a duller white.

[77]

*Male*, 5, 6  $\frac{1}{4}$ .

Breeds from Texas to Massachusetts, along all the shores of the Atlantic. Resident in Louisiana. Occurs accidentally far in the interior.

Marsh-Wren, *Troglodytes palustris*, WILS. Amer. Orn. v. iii. p. 58.

*Troglodytes palustris*, BONAP. Syn. p. 93.

Marsh-Wren, *Troglodytes palustris*, NUTT. Man. v. i. p. 439.

*Troglodytes palustris*, Marsh Wren, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 319.

Marsh-Wren, *Troglodytes palustris*, AUD. Orn. Biog. v. i. p. 500; v. v. p. 467.

## 124. 9. *Troglodytes brevirostris*, NUTT. Short-billed Marsh-Wren.

PLATE CLXXV. Male and Female.

Bill comparatively very short, nearly straight; wings short, very convex, with the third, fourth, and fifth quills almost equal. Upper parts blackish-brown, each feather with a brownish-white line along the shaft, and the outer edge toward the end reddish-brown; quills dusky, the outer webs barred with pale yellowish-brown; upper tail-coverts and tail similarly barred; a pale yellowish streak over the eye; throat and central part of the breast greyish-white, the rest of the lower parts pale reddish-brown, the sides under the wings faintly barred with dusky.

*Male*, 4  $\frac{3}{8}$ , 5  $\frac{5}{8}$ .

Resident during winter from Texas to South Carolina. In spring proceeds as far eastward as Massachusetts, breeding in all the fresh-water marshes.

Short-billed Marsh-Wren, *Troglodytes brevirostris*, NUTT. Man. v. i. p. 436.

Nuttall's Short-billed Marsh-Wren, *Troglodytes brevirostris*, AUD. Orn. Biog. v. ii. p. 427; v. v. p. 469.

## FAMILY X. PARINÆ. TITS.

Bill very short or of moderate length, straight, strong, compressed, rather sharp; both mandibles with the dorsal line sloping and slightly convex, the sides convex, the edges sharp; notches obsolete. Nostrils basal, roundish, concealed by the feathers. Head rather large, roundish; neck short; body short, and rather full. Feet of moderate length, rather stout; tarsus rather short, compressed, with eight distinct scutella; toes large, the three anterior united as far as the second joint, the hind toe much stronger and flattened beneath; claws rather long, stout, arched, much compressed, acute. Plumage very soft, blended, and full. Feathers at the base of the bill directed forwards. Wings of moderate length, much rounded, with the first quill very small, the fourth and fifth longest. Tail rather long, slender, of twelve narrow rounded feathers. Tongue emarginate and papillate at the base, abrupt at the tip, with four bristles. Œsophagus narrow, without dilatation; proventriculus oblong; stomach a rather strong oblong gizzard, with the muscles distinct, the epithelium dense, thin, longitudinally rugous; intestine short, of moderate width; cœca very small; cloaca oblong. Trachea simple, with four pairs of inferior laryngeal muscles.

[78]

## GENUS I. PARUS, LINN. TIT.

Bill short, stout; upper mandible with the dorsal line slightly decurved toward the end, the edges overlapping, with a slight lobe or festoon near the base, destitute of notch, rather acute; lower mandible with the dorsal outline slightly convex, the edges direct, the tip rather acute. Nostrils roundish, covered by bristly feathers. Head rather large, roundish; neck short. Feet proportionally large; tarsus of moderate length; hind toe very large and strong, the two lateral nearly equal, the outer adherent at the base; claws large, much compressed, very acute. Wings of moderate length, convex. Tail long, or of moderate length, rounded or graduated, of twelve rather narrow feathers.

### 125. 1. *Parus bicolor*, LINN. Tufted Titmouse.—Crested Titmouse. Great Chicadee.

PLATE XXXIX. Male and Female.

Bill very stout; feathers of the upper part of the head elongated into a crest; tail long, slightly rounded; upper parts leaden-blue, forehead black, lower parts greyish-white, the sides light red.

[79]

*Male*, 6  $\frac{1}{2}$ , 9.

From Texas, where it breeds, to the Fur Countries, generally distributed eastward of the Rocky Mountains. Resident in the middle, southern, and western districts. Abundant.

Crested Titmouse, *Parus bicolor*, WILS. Amer. Orn. v. i. p. 187.

*Parus bicolor*, BONAP. Syn. p. 100.

Tufted Titmouse, *Parus bicolor*, NUTT. Man. v. i. p. 236.

Crested Titmouse, *Parus bicolor*, AUD. Orn. Biog. v. i. p. 199; v. v. p. 472.

### 126. 2. *Parus atricapillus*, LINN. Black-cap Tit.—Black-cap Titmouse, or Chicadee.

PLATE CCCLIII. Fig. 3. Male. Fig. 4. Female.

Bill moderately stout; tail long, emarginate, and rounded. Upper part of the head and hind neck, with a large patch on the fore neck, black; cheeks and sides of the neck white; back yellowish-grey; quills and tail-feathers dark greyish-brown, margined with bluish-white; the secondaries broadly edged with white; lower parts pale yellowish-red, the breast white.

*Male*, 5  $\frac{1}{8}$ , 8  $\frac{1}{4}$ .

From Maryland eastward and northward to Lat. 65°. In Kentucky during winter. Never in the southern parts.

Black-capt Titmouse, *Parus atricapillus*, WILS. Amer. Orn. v. i. p. 134.

*Parus atricapillus*, BONAP. Syn. p. 100.

Black-capt Titmouse, NUTT. Man. p. 241.

Black-capt Titmouse, *Parus atricapillus*, AUD. Orn. Biog. v. iv. p. 374.

### 127. 3. *Parus Carolinensis*, AUD. Carolina Tit.

PLATE CLX. Male and Female.

Bill very short, moderately stout; tail rather long, emarginate, and rounded. Upper part of the head and hind neck, with a large patch on the fore neck, black; cheeks and sides of the neck greyish-white; back yellowish-grey; quills and tail-feathers dark greyish-brown, margined with bluish-white, secondaries not conspicuously; lower parts greyish-white, tinged with yellow. This species is very similar to the last, but much inferior in size.

*Male*,  $4 \frac{1}{4}$ , 6.

Breeds from Texas to New Jersey. Rather abundant. Resident.

Carolina Titmouse, *Parus Carolinensis*, AUD. Orn. Biog. v. ii. p. 341; v. v. p. 474.

### 128. 4. *Parus Hudsonicus*, LATH. Hudson's Bay Tit.

PLATE CXCIV. Male, Female, and Young.

Bill short, moderately stout; tail long, emarginate, and considerably rounded. Upper parts dull light brown, tinged with grey; fore neck black; cheeks and sides of the neck white; breast and abdomen white, sides light yellowish-brown. [80]

*Male*, 5, 7.

Northern parts of Maine, during winter. Breeds from New Brunswick to Labrador and Hudson's Bay. Common. Migratory.

*Parus Hudsonicus*, LATH. Ind. Orn. v. ii. p. 566.

Hudson's Bay Titmouse, AUD. Orn. Biog. v. ii. p. 543.

### 129. 5. *Parus rufescens*, TOWNS. Chestnut-backed Tit.

PLATE CCCLIII. Fig. 1. Male. Fig. 2. Female.

Bill moderately stout; tail rather long, emarginate, scarcely rounded; upper part of head and hind neck dark brown, fore neck of a deeper tint of the same; cheeks and sides of neck white; back, rump, and sides of the body under the wings bright chestnut; the rest of the lower parts greyish-white.

*Male*,  $4 \frac{1}{2}$ , wing,  $2 \frac{3}{8}$ .

Columbia River. Abundant. Resident.

*Parus rufescens*, Chestnut-backed Titmouse, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 190.

Chestnut-backed Titmouse, *Parus rufescens*, AUD. Orn. Biog. v. iv. p. 371.

### 130. 6. *Parus minimus*, TOWNS. Chestnut-crowned Tit.

PLATE CCCLIII. Fig. 5. Male. Fig. 6. Female.

Upper mandible with its outline more arched, the tip acute and considerably elongated; tail very long, emarginate, and much rounded; upper part of the head and hind neck pale brown; upper parts brownish-grey; wings and tail dusky, margined with greyish-white; cheeks of a paler tint than the head; all the lower parts brownish-white, the sides tinged with reddish.

*Male*,  $4 \frac{1}{2}$ , wing,  $1 \frac{10}{12}$ .

Columbia River. Common. Migratory.

*Parus minimus*, Chestnut-crowned Titmouse, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 190.

Chestnut-crowned Titmouse, *Parus minimus*, AUD. Orn. Biog. v. iv. p. 382.

## FAMILY XI. SYLVIANÆ. WARBLERS.

Bill of moderate length, slender, straight, a little broader than high at the base, compressed toward the end; upper mandible with its dorsal line straight and declinate, convex at the end, the tip small, acute, the notches small; lower mandible with the angle of moderate length and [81]

narrow, the dorsal line straight, the sides convex, the tip narrow. Nostrils basal, oval or oblong. Head rather large, ovate; neck short; body rather slender. Feet of ordinary length, slender; tarsus compressed, with seven anterior scutella; toes moderate, compressed; first stouter, second and fourth nearly equal, third much longer, and adherent at the base; claws moderate, arched, slender, compressed, acute. Plumage soft and blended. Bristles short or weak. Wings of moderate length or long; the first quill very small, the second, third, and fourth longest. Tail long or of moderate length, of twelve feathers. Tongue, sagittate, slender, tapering to a slit and lacerated point. Œsophagus rather narrow, without crop; proventriculus oblong; stomach a gizzard of moderate strength, with the muscles distinct, the epithelium dense and rugous; intestine of moderate length; cœca very small. Trachea simple, with four pairs of inferior laryngeal muscles.

Of this family, which in Europe is so numerous, there are in North America only two genera, *Regulus* and *Sialia*, the former composed of very small birds, allied in manners to the Tits, the latter approaching the Thrushes in form. The connecting links being wanting with us, these genera might seem at first sight very dissimilar.

## GENUS I. REGULUS, Cuv. KINGLET.

Bill short, straight, very slender, a little broader than high at the base, compressed toward the end; upper mandible nearly straight in its dorsal outline, the edges slightly notched, the tip a little declinate, acute; lower mandible with its outline ascending, nearly straight, the tip acute. Nostrils basal, elliptical, concealed by the reversed feathers. Head large, broadly ovate; neck short; body short. Legs rather long; tarsus slender, longer than the middle toe, much compressed, scutella blended, excepting the lower four toes, rather small, much compressed, hind toe large; lateral equal; claws rather long, arched, much compressed, acute. Plumage very loose and full. Short bristles at the base of the bill. Feathers of the head elongated and silky in the adults. Wings of ordinary length, with the first quill very small, the fourth and fifth longest. Tail of ordinary length, emarginate.

[82]

### 131. 1. *Regulus Cuvieri*, AUD. Cuvier's Kinglet.

PLATE LV. Male.

Upper parts dull greyish-olive; anterior part of forehead, lore, and a line behind the eye, black; a greyish-white band across the forehead over the eye; a semilunar band of black on the forehead and sides of the head, enclosing a vermilion space; wings and tail dusky, edged with greenish-yellow; secondary coverts, and first row of small coverts tipped with greyish-white; lower parts greyish-white.

*Male*, 4  $\frac{1}{4}$ , 6.

Pennsylvania. Only one specimen found.

Cuvier's Crested Wren, *Regulus Cuvierii*, NUTT. Man. v. i. p. 416.

Cuvier's *Regulus*, *Regulus Cuvierii*, AUD. Orn. Biog. v. i. p. 288.

### 132. 2. *Regulus Satrapa*, LICHTENSTEIN. American Golden-crested Kinglet.

PLATE CLXXXIII. Male and Female.

Male with the upper parts yellowish-green, changing to ash-grey on the neck and sides of the head, to greenish-yellow on the rump; a band of greyish-white across the anterior part of the forehead, which, at the eye, separates into two bands, one extending over, the other under the eye; above this, a broadish band of black, also margining the head on either side; the inner webs and tips of the feathers of this black band pure yellow; the crown of the head, in the included space, bright orange with silky gloss; a dusky spot at the anterior angle of the eye; an obscure dusky line from the angle of the mouth to beneath the eye; quills and coverts dusky, the former margined with greenish-yellow; secondary coverts and first row of small coverts broadly tipped with yellowish-white; base of all the quills, except the four outer yellowish-white; from the seventh primary to the innermost secondary but two, a broad bar of blackish-brown; tail dusky, the feathers edged with greenish-yellow, lower parts greyish-white. Female differs chiefly in having pale yellow substituted for the flame colour of the crown, and less grey on the hind neck. Young without coloured feathers on the head.

*Male*, 4, 7.

Breeds in Labrador and Newfoundland. In autumn migrates to the Southern States, as far as Texas. Columbia River.

Golden-crested Wren, *Sylvia Regulus*, WILS. Amer. Orn. v. i. p. 126.

*Regulus cristatus*, BONAP. Syn. p. 91.

American Fiery-crowned Wren, *Regulus tricolor*, NUTT. Man. v. i. p. 420.

American Golden-crested Wren, *Regulus tricolor*, AUD. Orn. Biog. v. ii. p. 476.

[83]

### 133. 3. *Regulus Calendula*, LINN. Ruby-crowned Kinglet.

PLATE CXCIV. Male and Female.

Upper parts greenish-olive, anteriorly tinged with grey, on the rump inclining to yellow; a patch of vermilion on the crown of the head; quills and tail dusky, edged with greenish-yellow; secondary coverts and first row of small coverts tipped with greyish-white, a circle of the same round the eye; lower parts greenish-white. Female similar, with the tints duller, especially the greenish-yellow of the wings. Young without the coloured patch on the crown, and more deeply tinged with yellow beneath.

*Male*,  $4\frac{1}{4}$ , 6.

Breeds in Labrador. In autumn migrates to the Southern States, as far as Texas. Abundant.

Ruby-crowned Wren, WILS. Amer. Orn. v. i. p. 83.

*Regulus Calendula*, BONAP. Syn. p. 91.

Ruby-crowned Wren, *Sylvia Calendula*, NUTT. Man. v. i. p. 415.

Ruby-crowned *Regulus*, *Regulus Calendula*, AUD. Orn. Biog. v. ii. p. 546.

## GENUS II. *SIALIA*, SWAINS. BLUE BIRD.

Bill of ordinary length, nearly straight, broader than high at the base, compressed toward the end; upper mandible with the dorsal line straight and slightly declinate, until near the end, when it becomes convex, the ridge narrow, the sides convex toward the end, the edges overlapping, with a distinct notch close to the narrow deflected tip; lower mandible with the angle of moderate length, and narrow, the dorsal line straight, the sides convex, the edges direct, the tip narrow. Nostrils basal, oval. Head rather large, ovate, neck short; body moderately full. Feet of ordinary length, rather slender; tarsus shorter than the middle toe and claw, its lower scutella only distinct; toes of moderate length, the first stouter, the lateral equal, the third much longer; the fourth adherent at the base; claws moderate, well curved, compressed, laterally grooved, acute. Plumage soft and blended; short bristles at the base of the upper mandible. Wings very long, pointed; the first quill very small, second, third, and fourth longest. Tail rather long, emarginate, of twelve rather strong feathers.

[84]

### 134. 1. *Sialia Wilsoni*, SWAINS. Common Blue Bird.

PLATE CXIII. Male, Female, and Young.

Male with the upper parts ultramarine blue, the lower parts light chestnut-red, excepting the abdomen, which is white. Female with the upper parts dull greyish-blue, brighter behind; lower parts as in the male, but much duller. Young with the upper part of the head, hind neck, and part of the back greyish-brown, the rest as in the female, the lower parts light grey, the feathers on the breast and sides margined with brown.

*Male*, 7, 10. *Female*,  $6\frac{1}{2}$ .

Generally distributed from Texas to the Fur Countries. Vast numbers spend the winter in the Southern States. Columbia River. Migratory.

Blue Bird, *Sylvia Sialis*, WILS. Amer. Orn. v. i. p. 56.

*Saxicola Sialis*, BONAP. Syn. p. 39.

*Erythaca (Sialia) Wilsonii*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 210.

Blue Bird, *Ampelis Sialis*, NUTT. Man. v. i. p. 444.

Blue Bird, *Sylvia Sialis*, AUD. Orn. Biog. v. ii. p. 84; v. v. p. 452.

### 135. 2. *Sialia occidentalis*, TOWNSEND. Western Blue Bird.

PLATE CCCXCIII. Fig. 4. Male. Fig. 5. Female.

Male with the upper parts and throat ultramarine blue; fore part of back, breast, and sides, light chestnut-red; rest of lower parts light blue, the abdomen whitish. Female with the upper parts dull greyish-blue, the back tinged with brown, the wing-coverts and rump brighter; lower parts pale red, the abdomen light grey.

*Male*, 7; wing,  $4\frac{5}{12}$ . *Female*,  $6\frac{3}{4}$ .

North California, and Oregon Territory. Abundant. Migratory.

*Sialia occidentalis*, Western Blue Bird, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 188.

### 136. 3. *Sialia arctica*, SWAINS. Arctic Blue Bird.

PLATE CCCXCIII. Fig. 2. Male. Fig. 3. Female.

Male with the upper parts light ultramarine, with a tinge of green; sides of the head, fore neck, and sides of neck, and the anterior half of the breast, light greenish-blue, that colour gradually fading into white behind. Female with the upper parts light greyish-brown, the rump and wing-coverts blue; fore part of neck and anterior portion of the breast reddish-grey, the rest of the lower parts pale brownish-grey. [85]

*Male*,  $7 \frac{1}{4}$ ; wing,  $4 \frac{7}{8}$ . *Female*,  $6 \frac{3}{4}$ ; wing,  $4 \frac{2}{2}$ .

Columbia River, Rocky Mountains, and Fur Countries. Abundant. Migratory.

Erythaca (*Sialia*) *Arctica*, Arctic Blue Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 209.

Arctic Blue Bird, *Sialia Arctica*, NUTT. Man. v. ii. p. 573.

Arctic Blue Bird, *Sylvia Arctica*, AUD. Orn. Biog. v. v. p. 38.

## FAMILY XII. TURDINÆ. THRUSHES.

Bill short, or of moderate length, rather strong, straight, compressed toward the end; upper mandible with its dorsal outline a little convex and declinate, the tip small, rather acute, the notches small; lower mandible with the angle rather short, of moderate width, the dorsal line straight, the sides convex, the tip acute. Head oblong, compressed, of moderate size; neck rather short; body moderate. Eyes of moderate size. External aperture of ear large and roundish. Feet of moderate strength; tarsus compressed, with seven anterior scutella; toes rather strong, compressed; first, second, and fourth, nearly equal, third much longer, and adherent to the fourth at the base; claws rather long, arched, compressed, laterally grooved, acute. Plumage rather blended. Bristles small. Wings of moderate length, broad, rounded; the first quill very small, third and fourth longest. Tail of twelve feathers, varying in length. Tongue sagittate, and papillate at the base, slender, tapering, its tip slit. Œsophagus rather narrow, without crop; proventriculus oblong; stomach a gizzard of moderate strength, its lateral and lower muscles distinct; the epithelium dense and rugous; intestine of moderate length; cœca very small, cylindrical. Trachea simple, with four pairs of inferior laryngeal muscles.

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## GENUS I. CINCLUS, BECHST. DIPPER. [86]

Bill rather short, slender, slightly ascending, much compressed toward the end; upper mandible with its dorsal line straight until toward the end, the ridge rounded, the sides convex, the edges somewhat inflected, with an obscure notch close to the narrow deflected tip; lower mandible slightly bent upwards, the angle medial and very narrow, the dorsal line ascending and slightly convex, the tip narrow and rather acute. Nostrils linear, direct, exposed. General form short, full, and compact. Head oblong, compressed. Legs strong; tarsus of moderate length, compressed, covered anteriorly with a long undivided plate and four inferior scutella; toes rather large and strong; claws arched, much compressed, laterally grooved, that of the hind toe considerably larger. Plumage ordinary, rather blended. Bristles obsolete. Wings rather short, convex, rounded. Tail short, even.

### 137. 1. *Cinclus Americanus*, SWAINS. American Dipper.

PLATE CCCLXX. Adult. PLATE CCCCXXXV. Young.

Head and neck chocolate-brown, upper parts very deep bluish-grey, lower somewhat lighter, and tinged anteriorly with brown. Young with the upper parts deep bluish-grey, the head and hind neck slightly tinged with brown; lower parts lighter, the feathers margined with whitish, the throat with a slight tinge of brown.

*Male*,  $7 \frac{1}{2}$ ,  $10 \frac{1}{2}$ .

Rocky Mountains. Oregon Territory. North California. Not abundant.

*Cinclus Pallasii*, BONAP. Amer. Orn. v. ii. p. 173.

*Cinclus Americanus*, American Dipper, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 173.

Black Water-Ouzel or Dipper, NUTT. Man. v. ii. p. 358.

American Dipper, *Cinclus Americanus*, AUD. Orn. Biog. v. iv. p. 493; v. v. p. 303.



## GENUS II. ORPHEUS, SWAINS. MOCKING-BIRD.

Bill of moderate length or longish, rather slender, straight or slightly arched, broader than high at the base, compressed toward the end, acute; upper mandible with the ridge rather narrow, the sides convex toward the end, the notches very slight, the tip narrow; lower mandible with the angle of moderate length, the dorsal line straight or slightly decurved toward the end, the sides nearly erect, the tip narrow. Nostrils oblong, partially concealed by the feathers. Head of ordinary size, ovato-oblong; neck of moderate length; body rather slender. Feet of ordinary length, slender; tarsus scarcely so long as the middle toe and claw; hind toe of moderate length, stout, lateral toes equal; claws moderate, arched, compressed, acute. Plumage soft and blended. Bristles rather long. Wings of ordinary length, broad, rounded, the first quill very small, the fourth and fifth longest. Tail very long, straight, much rounded, or graduated.

[87]

### 138. 1. *Orpheus polyglottus*, LINN. Grey Mocking-Bird.

PLATE XXI. Male and Female.

Upper parts light grey tinged with yellowish-brown; feathers of the wings and tail greyish-black; primary coverts white, as are the primary quills in their proximal part; secondary coverts and first row of small coverts tipped with white; outer tail-feather white, as are the greater part of the next, and a portion of the third toward the end; lower parts greyish-white, on the breast tinged with brown, on the sides and under the tail with yellow. Female smaller, with the tints duller, and the white markings on the wings less extended.

*Male*, 9  $\frac{1}{2}$ , 13  $\frac{1}{2}$ . *Female*, 9, 12  $\frac{1}{2}$ .

From Texas to Massachusetts. In the interior up the Mississippi and Ohio, to Henderson in Kentucky. Abundant and resident in the southern parts.

Mocking Bird, *Turdus polyglottus*, WILS. Amer. Orn. v. ii. p. 14.

*Turdus polyglottus*, BONAP. Syn. p. 74.

Mocking Bird, *Turdus polyglottus*, NUTT. Man. v. i. p. 320.

Mocking Bird, *Turdus polyglottus*, AUD. Orn. Biog. v. i. p. 108; v. v. p. 438.

### 139. 2. *Orpheus montanus*, TOWNSEND. Mountain Mocking-Bird.

PLATE CCCLXIX. Fig. 1. Male.

Upper parts greyish-brown; feathers of the wings and tail greyish-black; tips of secondary coverts, edges of primary quills, and a large spot at the end of the three lateral tail-feathers, white; lower parts whitish, marked with triangular dusky spots, of which there is a distinct line from the base of the bill; throat, middle of the breast, abdomen, and lower tail-coverts, unspotted.

[88]

*Male*, 8; wing, 3  $\frac{9}{12}$ .

Rocky Mountains. Common. Migratory.

*Orpheus montanus*, Mountain Mocking-Bird, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 192.

Mountain Mocking Bird, *Turdus montanus*, AUD. Orn. Biog. v. iv. p. 487.

### 140. 3. *Orpheus carolinensis*, LINN. Black-capped Mocking-Bird.—Cat Bird.

PLATE CXXVIII. Male and Female.

Blackish-grey, lighter beneath; upper part of head black; lower tail-coverts deep red. Female with the tints duller. Lateral tail-feathers more or less banded with lighter, sometimes whitish tints.

*Male*, 9, 12.

From Texas to Massachusetts, inland to the Missouri. Accidental in the Fur Countries. Constant resident in the Southern States. Abundant.

Cat Bird, *Turdus lividus*, WILS. Amer. Orn. v. ii. p. 90.

*Turdus felivox*, BONAP. Syn. p. 75.

*Orpheus felivox*, Cat Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 192.

Cat Bird, *Turdus felivox*, NUTT. Man. v. ii. p. 332.

Cat Bird, *Turdus felivox*, AUD. Orn. Biog. v. ii. p. 171; v. v. p. 440.

### 141. 4. *Orpheus rufus*, LINN. Ferruginous Mocking-Bird.—Thrushes. Brown

## Thrush.

Bill and tail more elongated than in the other species, wings shorter. Upper parts light brownish-red; inner webs of quills dusky. Wings crossed by two white bars margined anteriorly with black, being on the tips of the first row of small and secondary coverts; lower parts yellowish-white, the breast and sides marked with triangular dark brown spots. Female smaller.

*Male*, 11  $\frac{1}{2}$ , 13.

From Texas eastward, and to the Fur Countries, breeding everywhere. Abundant, and resident in the Southern and Western States.

Ferruginous Thrush, *Turdus rufus*, WILS. Amer. Orn. v. ii. p. 83.

*Turdus rufus*, BONAP. Syn. p. 75.

*Orpheus rufus*, Fox-coloured Mocking-Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 189.

Ferruginous Thrush or Thrasher, *Turdus rufus*, NUTT. Man. v. i. p. 328.

Ferruginous Thrush, *Turdus rufus*, AUD. Orn. Biog. v. ii. p. 102; v. v. p. 441.

## GENUS IV. TURDUS, LINN. THRUSH.

Bill of moderate length or shortish, rather stout, straight, broader than high at the base, compressed toward the end, acute; upper mandible with the ridge rather narrow, the sides convex toward the end, the notches small, the tip narrow; lower mandible with the angle of moderate length, the dorsal line ascending, slightly convex, the sides rounded, the tip narrow. Nostrils oblong, partially concealed by the feathers. Head of ordinary size, ovate; neck rather short; body rather full. Feet longish, rather strong; tarsus as long as the middle toe and claw; hind toe rather stout; lateral toes equal; claws arched, compressed, acute. Plumage soft and rather blended. Wings of moderate length, rounded, the first quill very small, the third and fourth longest. Tail rather long, nearly even. [89]

### 142. 1. *Turdus migratorius*, LINN. Migratory Thrush.—Robin.

PLATE CXXXI. Male, Female, and Young.

Male with the bill yellow, the upper part and sides of the head black; upper parts dark grey with an olivaceous tinge; quills blackish-brown, margined with light grey; tail brownish-black, the outer two feathers tipped with white; three white spots about the eye, throat white, densely streaked with black; lower part of fore neck, breast, sides, axillars, and lower wing-coverts reddish-orange; abdomen white; lower tail-coverts dusky, tipped with white. Female with the tints paler. Young with the fore neck, breast, and sides, pale-reddish, spotted with dusky, the upper parts darker than in the adult. Bill at first dusky, ultimately pure yellow.

*Male*, 10, 14. *Female*, 9, 13.

From Texas eastward and northward, to the Fur Countries. Throughout the interior. Winters in abundance in all the southern States. Columbia River. Abundant.

Robin, *Turdus migratorius*, WILS. Amer. Orn. v. i. p. 35.

*Turdus migratorius*, BONAP. Syn. p. 75.

*Merula migratoria*, Red-breasted Thrush, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 176.

American Robin or Migratory Thrush, *Turdus migratorius*, NUTT. Man. v. i. p. 338.

American Robin or Migratory Thrush, *Turdus migratorius*, AUD. Orn. Biog. v. ii. p. 190; v. v. p. 442.

### 143. 2. *Turdus naevius*, GMEL. Varied Thrush.

PLATE CCCLXIX. Fig. 2, 3. Male. PLATE CCCCXXXIII. Fig. 6. Female.

Male with the bill black, the upper parts deep leaden-grey, the head darker; quills and tail-feathers dusky, the outer webs of the latter tinged with grey, and their tips white; lore dusky; a band of reddish-orange from over the fore part of the eye down the side of the neck; two conspicuous bands of the same crossing the wing obliquely, being formed by the tips of the first row of small coverts, and those of the secondary coverts; outer webs of primary coverts about the middle, a band on the primaries near the base, part of their outer webs towards the end, and the tips of the secondaries pale reddish-orange; lower parts light reddish-orange, paler behind; a band of greyish-black passing down the side of the neck, and a belt of the same crossing its lower part; feathers of the sides tipped with bluish-grey; those of the middle of the abdomen white; lower tail-coverts tipped with white; axillar feathers white, tipped with grey, smaller coverts grey, tipped with reddish-white; primary coverts grey, secondary nearly white. Female similar, [90]

with the upper parts tinged with olive-brown, the reddish-orange bands much paler, the tail-feathers margined with dull reddish-brown; a band on the lore down the sides of the neck and across it light greyish-brown; the orange tints of the lower parts much paler.

*Male*, 10  $\frac{1}{2}$  , wing, 5  $\frac{3}{4}$  . *Female*, 10, wing, 5  $\frac{1}{2}$  .

Columbia River, North California, and Fur Countries. Abundant. Migratory.

Orpheus meruloides, Thrush-like Mock-Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 187.

Varied Thrush, Turdus nævius, AUD. Orn. Biog. v. iv. p. 489; v. v. p. 284.

### 144. 3. *Turdus mustelinus*, GMEL. Wood-Thrush.

PLATE LXXIII. Male and Female.

Upper parts light yellowish-brown, the head and hind neck of a tint approaching to reddish-orange; the rump and tail-coverts duller and of an olivaceous tint; quills and tail-coverts light olive-brown, the outer webs of the coverts and quills like the back; eyes margined with a whitish circle; lower parts white, anteriorly tinged with yellow, the sides and lower part of the neck, the fore part of the breast, and the sides of the body marked with large roundish or broadly ovato-triangular decided brownish-black spots.

*Male*, 8, 13.

From Texas to Nova Scotia, and throughout the interior. Many spend the winter in Louisiana, Florida, and Texas. Abundant.

Wood Thrush, Turdus melodus, WILS. Amer. Orn. v. i. p. 35.

Turdus mustelinus, BONAP. Syn. p. 75.

Wood Thrush, Turdus mustelinus, NUTT. Man. v. i. p. 343.

Wood Thrush, Turdus mustelinus, AUD. Orn. Biog. v. i. p. 372; v. v. p. 446.

### 145. 4. *Turdus Wilsoni*, BONAP. Tawny Thrush.

PLATE CLXVI. Male.

Wings with the third quill largest, the fourth scarcely shorter, and slightly exceeding the second. Upper parts uniform light reddish-brown, a little deeper on the head; quill and tail-coverts light olive-brown, the outer webs of the former like the back; lower parts greyish-white, the sides and lower part of the neck, and a small portion of the breast tinged with pale yellowish-brown, and marked with small faint and undecided triangular brown spots. Female an inch less in length than the male, but otherwise similar. [91]

*Male*, 7  $\frac{1}{2}$  , 12.

From Texas to the Fur Countries, as well as in the interior. Resident in winter in the Floridas, though the greater number remove beyond the United States. Rather abundant.

Tawny Thrush, Turdus mustelinus, WILS. Amer. Orn. v. v. p. 98.

Turdus Wilsonii, BONAP. Syn. p. 76.

Merula minor (Swainson), Little Tawny Thrush, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 179, Plate 36. The description and figure clearly refer to the present species.

Wilson's Thrush or Veery, Turdus Wilsonii, NUTT. Man. v. i. p. 349.

Tawny Thrush, Turdus Wilsonii, AUD. Orn. Biog. v. ii. p. 362; v. v. p. 446.

### 146. 5. *Turdus solitarius*, WILS. Hermit Thrush.

PLATE LVIII. Male and Female.

Wings with the fourth quill longest, the third and fifth equal and slightly shorter, the second nearly equal to the sixth. Upper parts light olivaceous brown, the rump and upper tail-coverts brownish-red, as is the tail; quills dusky brown, margined with reddish-brown; a whitish ring round the eye; lower parts white, the sides tinged with greyish-olive, the fore part of the neck very slightly with yellowish-brown, and marked with rather decided ovato-triangular dusky brown spots of moderate size. The female is smaller, but otherwise similar.

*Male*, 7, 10  $\frac{1}{2}$  .

From Texas to the Fur Countries. Resident in winter from the Carolinas southward. Rather common.

Hermit Thrush, *Turdus solitarius*, WILS. Amer. Orn. v. v. p. 95.

*Turdus minor*, BONAP. Syn. p. 75.

Little or Hermit Thrush, *Turdus minor*, NUTT. Man. v. i. p. 346.

*Merula solitaria*, Hermit Thrush, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 184.

Hermit Thrush, *Turdus minor*, AUD. Orn. Biog. v. i. p. 303; v. v. p. 445.

#### 147. 6. *Turdus nanus*, AUD. Dwarf Thrush.

PLATE CCCCXIX. Fig. 1. Male.

Wings with the fourth quill longest, the third and fifth equal and slightly shorter, the second shorter than the sixth. Upper parts light olivaceous-brown, the rump and upper tail-coverts brownish-red, as is the tail; quills dusky brown, margined with light brownish-red; a whitish ring round the eye; lower parts greyish-white, the sides tinged with greyish-brown, the neck and breast tinged with yellowish-red, and marked with broad triangular blackish-brown spots, becoming fainter on the hind part of the breast and sides. [92]

Although this species closely resembles the last in its colours, and the proportions of the quills, it is yet so much inferior in size, and its bill, tarsi, and toes are so much shorter, that it cannot be considered otherwise than as distinct.

*Male* 6, 9  $\frac{1}{2}$ .

Columbia River. Accidental in the Middle Atlantic districts. Migratory.

*Turdus nanus*, Dwarf Thrush, AUD. Orn. Biog. v. v. p. 201.

### FAMILY XIII. MOTACILLINÆ. WAGTAILS.

Bill of moderate length, straight, slender, a little broader than high at the base, compressed toward the end; upper mandible with the dorsal line sloping, a little convex toward the end, the nostrils slight, the tip acute; lower mandible with the angle rather long and narrow, the dorsal line ascending and scarcely convex, the edges somewhat involute, the tip acute. General form slender; head ovato-oblong; neck short. Feet of ordinary length, slender; toes very slender, the lateral equal, the outer adherent at the base, the hind toe rather large; claws rather long, arched, compressed, acute, that of the hind toe generally very long. Plumage soft and blended. Bristles small. Wings long and pointed, one of the minor secondaries often much elongated and tapering. Tongue sagittate, slender, with the tip slit; œsophagus uniform; stomach a very muscular gizzard, roundish, with large tendons, and thin rugous epithelium; intestine of moderate length; cœca very small. Trachea simple, with four pairs of inferior laryngeal muscles.

This family is connected with the Turdinæ by *Seiurus*, and with the Alandinæ by *Anthus*, which are the only two American genera.

### GENUS I. SEIURUS, SWAINS. WOOD-WAGTAILS.

Bill rather short, straight, slightly broader than deep at the base, compressed toward the end, the edges a little inflected, the dorsal lines of both mandibles slightly convex, the notches very slight, the tip acute. Nostrils basal elliptical. General form slender; head ovato-oblong. Feet of ordinary length; tarsus slender, compressed, covered anteriorly with a long undivided piece and three inferior scutella; toes of moderate length, slender; the first a little stouter than the third, the inner slightly shorter than the outer, which is adherent at the base; claws of moderate length, very slender, much compressed, moderately arched, acute. Plumage soft, blended. Bristles very small. Wings of moderate length; the first or outer quill little shorter than the third, which is longest. Tail of moderate length, even. [93]

#### 148. 1. *Seiurus aurocapillus*, LATH. Golden-crowned Wood-Wagtail.

PLATE CXLIII. Male and Female.

Upper parts yellowish-olive, the crown brownish-orange, with two lateral bands of brownish-black spots; lower parts white, the throat with two lateral lines of brownish-black, the lower neck, fore part of breast, and sides, marked with triangular spots of the same. Female similar to the male. Young without the orange crown.

*Male*, 6, 9.

From Texas eastward. Fur Countries. Not seen in Labrador. Throughout the interior. Resident in Florida, Louisiana, and Texas. Abundant.

Golden-crowned Thrush, *Turdus aurocapillus*, WILS. Amer. Orn. v. ii. p. 88.

*Sylvia aurocapilla*, BONAP. Syn. p. 77.

*Seiurus aurocapillus*, Golden-crowned accentor, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 227.

Golden-crowned Thrush or Oven Bird, *Turdus aurocapillus*, NUTT. Man. v. i. p. 355.

Golden-crowned Thrush, *Turdus aurocapillus*, AUD. Orn. Biog. v. ii. p. 253; v. v. p. 447.

## 149. 2. *Seiurus Novæboracensis*, GMEL. Aquatic Wood-Wagtail.

PLATE XIX. PLATE CCCCXXXIII. Fig. 7.

Upper parts dull greenish-brown, wings and tail dark chocolate-brown, lower parts pale yellow; a streak of the latter from the bill over the eye; loreal space, and a streak behind the eye dusky; cheeks yellowish-grey, streaked with brown; the whole fore part and sides of the neck, the breast, and sides, marked with triangular blackish-brown spots, which are more elongated on the sides; abdomen and lower tail-coverts unspotted; bill dusky; feet flesh-coloured and transparent. Individuals vary, the throat sometimes without spots, the lower parts pale or yellowish-white, the feet dusky tinged with purple. [94]

*Male*, 6  $\frac{7}{12}$ , 9  $\frac{1}{2}$ . *Female*, 5  $\frac{8}{12}$ , 8  $\frac{7}{12}$ .

In winter resident from Texas to Florida, including Louisiana. In summer migrates as far as the Fur Countries. Not Abundant.

Water Thrush, *Turdus aquaticus*, WILS. Amer. Orn. v. iii. p. 66.

*Sylvia novæboracensis*, BONAP. Syn. p. 77.

*Seiurus aquaticus*, Aquatic Accentor, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 229.

New York or Aquatic Thrush, *Turdus novæboracensis*, NUTT. Man. v. i. p. 353.

Louisiana Water Thrush, *Turdus ludovicianus*, AUD. Orn. Biog. v. i. p. 99.

Common Water Thrush, *Turdus aquaticus*, AUD. Orn. Biog. v. v. p. 284.

## GENUS II. ANTHUS, BECHST. PIPIT.

Bill of moderate length, straight, very slender, as broad as high at the base, compressed toward the end; upper mandible with the ridge narrow at the base, the notches slight, the tip a little deflected; lower mandible with the dorsal line straight, the edges involute, the tip acute. General form very slender. Tarsus of moderate length, much compressed; toes slender; claws arched, extremely compressed, acute, that of the hind toe much elongated. Plumage soft and blended. Wings long; the outer three quills about equal and longest; inner secondaries tapering, one of them nearly as long as the outer primaries when the wing is closed. Tail rather long, emarginate.

### 150. 1. *Anthus Ludovicianus*, LICHTENSTEIN. American Pipit.

PLATE X. Male and Female. PLATE LXXX. Young.

Hind claw longer than the toe, slightly arched, and very slender. Male, in winter plumage, with the bill dusky, the legs and claws deep greenish-brown; upper parts greyish-olive, tinged with green, and obscurely streaked with dusky; a whitish band over the eye, cheeks brown; lower parts brownish-white, the throat white, the sides and lower part of the neck, fore part of breast, and sides of body marked with elongated, distinct, blackish-brown spots; quills and tail-feathers dusky, margined with greenish-grey, the lateral tail-feathers half white, the next obliquely white at the end. Female similar. Male in summer with the bill black, the upper parts olive-brown, tinged with grey; a greyish-white line over the eye, cheeks greyish-brown; lower parts light yellowish-grey, the fore neck and breast often deeply tinged with red, and marked with short, slender, brownish-black spots, the sides streaked; quills and tail-feathers as in winter with the pale margins less distinct. Young more tinged with green above, the bill paler, with a great part of the lower mandible yellowish-red, the lower parts pale yellowish-grey, with an obscure lunule of brownish-black on the fore neck, the lower part of which and the sides are streaked with dark brown, and tinged with reddish-brown. [95]

*Male*, 6  $\frac{1}{2}$ , 10  $\frac{1}{2}$ .

Throughout the Western and Southern Districts during autumn and winter. Breeds in Labrador and the Fur Countries. Abundant.

Brown Lark, *Alauda rufa*, WILS. Amer. Orn. v. v. p. 89.

*Anthus spinoletta*, BONAP. Syn. p. 90.

Brown Titlark, AUD. Orn. Biog. v. i. p. 49. Adult.

Prairie Titlark, *Anthus pipiens*, AUD. Orn. Biog. v. i. p. 408, Young. Brown Titlark and Prairie Titlark, v. v. p. 449.

This species is nearly allied to *Anthus aquaticus* and *A. pratensis*, more especially to the latter, from which it is distinguished by having the bill much stouter, the tarsus longer, the hind claws stouter, more curved, and much shorter, the colour of the feet much darker, in being always much more rufous beneath, and in sometimes, when the summer is advanced, being almost entirely unspotted there. From *A. aquaticus* it is at once distinguished by the whitish band over the eye, and the white on the outer tail-feathers. It indeed seems wonderful that any ornithologist should have mistaken it for that species.

## FAMILY XIV. ALAUDINÆ. LARKS.

Bill rather short, or of moderate length, somewhat conical, compressed toward the end; upper mandible with its dorsal line sloping and slightly convex, the edges sharp and overlapping, the notches generally obsolete; the tip narrow and a little deflected; lower mandible with the angle of moderate length and narrow, the dorsal line ascending and nearly straight, the edges slightly inflected, the tip acute; gape-line straight. Nostrils elliptical or oblong, basal. Head oblong, of moderate size; neck rather short; body ovate. Feet of moderate length, or rather long; tarsus compressed, with eight anterior scutella; toes slender, compressed; the hind toe elongated, second and fourth about equal, third much longer. Claws rather long, arched, slender, much compressed, laterally grooved, acute, that of the hind toe very long, straightish, tapering. Plumage generally soft and blended. Wings rather long, broad, the inner secondaries tapering, and one so elongated as nearly to equal the longest primary, when the wing is closed. Tail of twelve feathers, generally emarginate. Roof of the upper mandible concave, generally with three prominent lines; tongue slender, thin, flat, tapering to a slit and bristly tip; œsophagus of uniform width; stomach a very strong muscular gizzard of a roundish form and compressed, its lateral muscles very large, its epithelium dense and rugous; intestines short, of moderate width; cœca very small, cylindrical. Nest on the ground. Eggs five or six, oval, spotted.

[96]

## GENUS I. ALAUDA, LINN. LARK.

Bill rather short, stout, somewhat conical, compressed, straightish, acute; upper mandible with the dorsal line slightly arched, the edges without notch, the tip acute; lower mandible with the dorsal line ascending, slightly convex, the edges a little inflected, the tip acute. Head rather large; neck short; body ovate. Legs of ordinary length, anteriorly scutellate; lateral toes nearly equal, hind toe of moderate size, with a very long, tapering, acute, and nearly straight claw. Plumage rather dense and compact. Wings of moderate length, the second and third quills longest; inner secondaries much elongated. Tail of moderate length, emarginate.

### 151. 1. *Alauda alpestris*, LINN. Shore Lark.—Horned Lark.

Male with two erectile pointed tufts of feathers on the anterior lateral parts of the head. In winter the upper parts dusky brown, the feathers paler on the edges; on the forehead a recurved crescentic band of brownish-black; another curved downwards, proceeding on each side from the base of the upper mandible; a band of yellowish-white over the eye and forehead; throat pale-yellow, with a broad dusky patch on the lower neck, the rest of the lower parts brownish-white; quills dusky, tail-feathers blackish, excepting the two middle, which are reddish-brown, like the upper tail-coverts. In summer, the brownish-black bands on the head and neck become deep black, the throat and frontal band white, and the upper parts light brownish-red. Female dusky brown above, dull white beneath; the wings and tail as in the male, but the black bands on the head and neck wanting. Young from the nest with the upper parts deep brown, mottled with pale reddish-brown, lower parts pale yellowish-grey.

[97]

*Male*, 7  $\frac{1}{2}$ , 14.

Breeds in Labrador and northwards. Migrates in autumn southward, as far as the Texas. Not uncommon in the Western Country at that season.

Shore Lark, *Alauda cornuta*, WILS. Amer. Orn. v. i. p. 85.

*Alauda alpestris*, BONAP. Syn. p. 102.

Horned or Shore Lark, *Alauda cornuta*. SWAINS. & RICH. F. Bor. Amer. v. ii. p. 245.

Shore Lark, NUTT. Man. v. i. p.

Shore Lark, *Alauda alpestris*, AUD. Orn. Biog. v. ii. p. 570; v. v. p. 488.

## FAMILY XV. FRINGILLINÆ. FINCHES.

Bill short, stout, conical, acute; upper mandible generally with its dorsal line more or less convex, the sides rounded, the edges inflected or direct, the tip acute; lower mandible with the dorsal line ascending and slightly convex, the edges involute. Gape-line ascending for more than a fourth of its length, then direct. Nostrils basal, roundish, partly concealed by the feathers. Head of moderate size, or rather large, ovate or roundish; neck short; body compact; tarsus generally shorter than the middle toe with its claw, compressed, with seven or eight anterior scutella; hind toe stout; outer toe adherent at the base, lateral about equal. Claws long or moderate, compressed, laterally grooved, acute. Plumage soft and blended, but firm. Wings various, acute, or rounded. Tail of twelve feathers. Roof of upper mandible concave, with three prominent lines, of which the middle is sometimes elevated into an oblong hard prominence. Tongue much compressed, pointed; œsophagus rather wide, with a dilatation or crop on the right side; stomach roundish or oblong, muscular, with the epithelium thin, dense, and longitudinally rugous; intestine short, rather wide; cœca very small, cylindrical. Trachea simple, with four pairs of inferior laryngeal muscles. The Fringillinæ pass into the Icterinæ on the one hand, and the Alaudinæ on the other. The Buntings scarcely differ from the Finches in any other character than the knob on the palate, which is common to them with the Icterinæ.

[98]

## GENUS I. PLECTROPHANES, MEYER. LARK-BUNTING.

Bill very short, robust, tapering, somewhat compressed; upper mandible considerably narrower than the lower, its dorsal outline very slightly convex, the sides rounded, the edges inflected, the marginal outline slightly angulate; lower mandible with the dorsal line ascending and slightly convex, the edges involute. Nostrils basal, roundish, partly concealed by the feathers. Head of moderate size, ovate; neck short; body compact, tarsus shorter than the middle toe with its claw, compressed, with seven anterior scutella; hind toe stout; claws long, rather stout, little arched, acute, that of the hind toe much elongated. Plumage soft and blended. Wings long, pointed; the first quill longest. Tail rather long, emarginate.

### 152. 1. *Plectrophanes Lapponica*, LINN. Lapland Lark-Bunting.

PLATE CCCLXV. Male and Female.

Male, in summer, with the head and fore part of the neck black; a white band over the eye, passing along the neck, and margining the black; a brownish-red crescent on the hind neck; the feathers on the rest of the upper parts black, broadly margined with yellowish-red; first row of small coverts tipped with white; lower parts white, the sides streaked with black. Male, in winter, with the upper part of the head black, the feathers edged with brownish-red, cheeks and band over the eye greyish-yellow; feathers of the fore neck black, broadly tipped with white; dark streaks on the sides not apparent. Female with the upper parts reddish-grey, spotted with black; a greyish-white band over the eye; the cheeks greyish-brown; lower parts greyish-white, the sides streaked with dusky.

*Male*, 6  $\frac{3}{8}$ ; wing, 3  $1\frac{1}{2}$ .

Fur Countries in summer. In winter, as far westward as Kentucky. Abundant. Migratory.

[99]

Lapland Longspur, *Emberiza lapponica*, BONAP. Amer. Orn. v. i. p. 53.

*Emberiza lapponica*, BONAP. Syn. p. 440.

*Emberiza* (*Plectrophanes*) *lapponica*, Lapland Bunting, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 248.

Lapland Longspur, NUTT. Man. v. i. p. 463.

Lapland Longspur, AUD. Orn. Biog. v. iv. p. 473.

### 153. 2. *Plectrophanes pictus*, SWAINS. Painted Lark-Bunting.

PLATE CCCC. Fig. 5. Male.

Male with the upper part and sides of the head deep black, with three bands of white on each side, one from the base of the upper mandible over the eye and along the neck, another under the eye and over the ear, the third bordering the throat; upper parts brownish-yellow spotted with black; a band of white on the smaller wing-coverts; lower parts, and a band across the fore part of the back, buffy orange.

*Male*, 6  $\frac{3}{4}$ ; wing, 3  $\frac{1}{4}$ .

Fur Countries. Accidental, in winter, on the banks of the Mississippi. Migratory.

*Emberiza* (*Plectrophanes*) *picta*, Painted Bunting, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 250.

Painted Bunting, NUTT. Man. v. ii. p. 589.

Painted Bunting, *Emberiza picta*, AUD. Orn. Biog. v. v. p. 91.

### 154. 3. *Plectrophanes ornatus*, TOWNS. Chestnut-collared Lark-Bunting.

PLATE CCCXCIV. Fig. 1. Male.

Male, in summer, with the upper part of the head, a streak, and some spots behind the ear, and the breast black; a broad band over the eye, the throat and sides of the neck, the abdomen, lower tail-coverts, and three lateral tail-feathers, white; a transverse belt of yellowish-red on the hind neck; upper parts yellowish-grey, spotted with dusky.

*Male*, 5  $\frac{1}{4}$  ; wing, 3  $\frac{7}{12}$  .

Rocky Mountains.

*Plectrophanes ornata*, Chestnut-collared Lark-Finch, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 189.

Chestnut-collared Lark-Bunting, *Emberiza ornata*, AUD. Orn. Biog. v. v. p. 44.

### 155. 4. *Plectrophanes nivalis*, LINN. Snow Lark-Bunting.

PLATE CLXXXIX. Male and Female in winter.

Male, in winter, with the head, neck, lower parts, a great portion of the wings, including the smaller coverts, secondary coverts, several secondary quills, the bases of the primaries and their coverts, and the greater part of the outer tail-feathers on each side, white; the head and hind neck more or less tinged with brownish-red, the upper parts reddish-grey or yellowish-red, mottled with black, the concealed part of the plumage being of the latter colour, the bill brownish-yellow. Female, in winter, with the white less extended. Young, at this season, like the female, but more brown. Male, in summer, with the back, scapulars, inner secondaries, terminal portion of primaries, and four middle tail-feathers, deep black, all the other parts pure white, the bill black. Female with the black parts tinged with brown, and more or less reddish-brown on the head and rump.

[100]

*Male*, 7, 13.

In winter, from Nova Scotia to Kentucky. Abundant. Much rarer along the Atlantic coast. Some breed in Vermont and Massachusetts. Fur Countries in summer.

Snow-Bunting, *Emberiza nivalis*, WILS. Amer. Orn. v. iii. p. 86.

*Emberiza nivalis*, BONAP. Syn. p. 103.

*Emberiza* (*Plectrophanes*) *nivalis*, Snow Bunting, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 247.

Snow Bunting, *Emberiza nivalis*, NUTT. Man. v. i. p. 458.

Snow Bunting, *Emberiza nivalis*, AUD. Orn. Biog. v. ii. p. 515; v. v. p. 496.

## GENUS II. EMBERIZA, LINN. BUNTING.

Bill short, robust, tapering, somewhat compressed; upper mandible with its dorsal line declinate and slightly convex, the ridge indistinct, the sides convex, the edges a little inflected, ascending to beneath the nostrils, then descending or direct, with a slight notch close to the narrow tip; lower mandible with the angle short and wide, the dorsal line ascending, and very slightly convex, the ridge broad at the base, the sides convex, the edges inclinate, their outline ascending for a third or more of its length, then direct, the tip narrow. Nostrils basal, roundish. Head large, ovate; neck very short; body rather stout. Feet of moderate length, rather strong; tarsus of ordinary length, compressed, with seven anterior scutella; toes rather large; the hind toe strong, and longer than the lateral, which are equal, the third much longer, and united to the fourth at the base. Claws long, arched, much compressed, acute. Plumage soft and blended, but firm. Bristles feeble. Wings of moderate length, rather acute; the first three quills longest. Tail of moderate length, emarginate.

[101]

\* Wings rather long, with the second and third quills longest.

### 156. 1. *Emberiza Americana*, GMEL. Black-throated Bunting.

PLATE CCCLXXXIV. Male and Female.

Bill very stout; tail-feathers acute. Male with the upper part of the head, the cheeks, and the hind neck dark ash-grey, faintly streaked with dusky; loreal space whitish, a band over the eye, and a patch below the cheek, yellow; the fore part of the back greyish-brown, with longitudinal streaks of brownish-black, the hind part brownish-grey; the smaller wing-coverts bright chestnut; chin white, throat black; the lower neck and part of the breast, yellow, the rest of the breast and abdomen, white. Female similar to the male, but paler, and without the black patch on the throat.



*Male*, 6  $\frac{1}{2}$ , 10  $\frac{3}{8}$ .

Breeds abundantly in Texas and all the Western Prairies; less so from Virginia to Massachusetts. Rare in Ohio and Kentucky. Migratory.

Black-throated Bunting, *Emberiza Americana*, WILS. Amer. Orn. v. i. p. 411.

*Fringilla Americana*, BONAP. Syn. p. 107.

Black-throated Bunting, NUTT. Man. v. i. p. 461.

Black-throated Bunting, *Emberiza Americana*, AUD. Orn. Biog. v. iv. p. 599.

### 157. 2. *Emberiza Townsendii*, AUD. Townsend's Bunting.

PLATE CCCC. Fig. 4. Male.

Bill very stout, with the upper outline considerably convex. Head, cheeks, hind neck, sides of the neck, fore part of the breast, and sides of the body, deep bluish-grey, the head streaked with black; back yellowish-brown, streaked with dusky, the feathers edged with grey, rump yellowish-grey; quills and tail-feathers wood-brown, slightly edged with paler; a narrow white line over the eye; throat white, with a narrow band of black on each side; abdomen and middle part of breast greyish-white.

*Male*, 5  $\frac{3}{4}$ , 9.

One specimen (in my possession) procured in Pennsylvania.

Townsend's Bunting, *Emberiza Townsendii*, AUD. Orn. Biog. v. ii. p. 183; v. v. p. 90.

### 158. 3. *Emberiza Grammaca*, SAY. Lark Bunting.

PLATE CCCXC. Fig. 1. Male.

Second and third quills longest, first and fourth about equal; tail rather long, rounded. Male with three longitudinal bands of white on the head, separated by two bands of bright chestnut-red, the anterior part of which is black; upper parts light greyish-brown, longitudinally streaked with dusky, the central part of each feather being of the latter colour, the hind part of the back and the rump without streaks; two faint bands of yellowish-white on the wings, formed by the tips of the first row of small coverts, and those of the secondary coverts, and a patch of the same formed by the bases of the outer primaries; quills dusky brown, primaries margined with whitish, secondaries more broadly with light red; tail darker, all the feathers except the middle, terminated by white, which, on the outer, occupies more than a third of its length, and extends nearly to the base of the outer web; below the eye a white streak, cheeks bright chestnut, with an anterior black spot, under them a broad white band from the lower mandible, curving upwards, separated from the throat, which is white, by a short line of black on each side; lower parts white, the lower part of the neck greyish, the sides tinged with greyish-white. Female similar to the male, but with the head simply coloured like the back, and the sides streaked with brown.

[102]

*Male*, 6  $\frac{1}{2}$ , 8  $\frac{1}{4}$ .

Upper Missouri, and eastern declivities of the Rocky Mountains. Common. Migratory.

*Fringilla grammaca*, BONAP. Amer. Orn. v. i. p. 47.

Lark Finch, NUTT. Man. v. i. p. 480.

Lark Finch, *Fringilla grammaca*, AUD. Orn. Biog. v. v. p. 17.

### 159. 4. *Emberiza graminea*, GMEL. Grass or Bay-winged Bunting.

PLATE XC. Male.

Second, third, and fourth quills longest, first and fourth nearly equal; tail rather long, slightly emarginate. Upper parts light greyish-brown, streaked with dusky; smaller wing coverts yellowish-red or bay; quills and larger coverts dusky brown, margined with greyish-white; two whitish bands on the wing, formed by the tips of the first row of small coverts, and the secondary coverts; tail dusky brown, the greater part of the outer feather, and the terminal portion of the outer web of the next white; a narrow circle of white round the eye; lower parts dull white, the throat, fore part of neck, and sides streaked with dark brown.

*Male*, 5  $\frac{3}{4}$ , 10.

From Texas to the Columbia River and Fur Countries. Breeds from Maryland eastward and northward. Resident in winter from Carolina southward and westward. Extremely abundant.

Bay-winged Bunting, *Emberiza graminea*, WILS. Amer. Orn. v. iv. p. 51.

*Fringilla graminea*, BONAP. Syn. p. 108.

Fringilla (Zonotrichia) graminea, Bay-winged Finch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 254.

Bay-winged or Grass Finch, Fringilla graminea, NUTT. Man. v. i. p. 482.

[103]

Grass Finch or Bay-winged Bunting, Fringilla graminea, AUD. Orn. Biog. v. i. p. 473; v. v. p. 502.

### 160. 5. *Emberiza Savanna*, BON. **Savannah Bunting.**

PLATE CIX. Male and Female.

Outer four quills almost equal; tail emarginate, with the feathers pointed. Upper parts light greyish-brown, streaked with dusky; smaller wing-coverts like the back; a faint yellow band over the eye, and a faint whitish band in the middle of the crown; two whitish bands on the wing, formed by the tips of the first row of small coverts and the secondary coverts, the latter very inconspicuous, quills and tail-feathers dusky brown, edged with paler, the lateral tail-feathers merely of a lighter tint; cheeks dull yellow, streaked with brown; lower part white, the throat and sides streaked with dusky.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

From Texas to the Columbia River, and along the whole Atlantic coast to Nova Scotia. Extremely abundant during winter in all the Southern States. Breeds from Maryland eastward.

Savannah Finch, Fringilla savanna, WILS. Amer. Orn. v. iv. p. 72.

Fringilla savanna, BONAP. Syn. p. 109.

Savannah Sparrow, Fringilla savanna, NUTT. Man. v. i. p. 489.

Savannah Finch, Fringilla savanna, AUD. Orn. Biog. v. ii. p. 63; v. v. p. 516.

### 161. 6. *Emberiza pallida*, SWAINS. **Clay-coloured Bunting.**

PLATE CCCXCVIII. Fig. 2. Male.

Bill more slender and pointed than in the preceding species; wings more rounded, the second, third, and fourth quills being about equal, the first and fifth equal; tail long, emarginate, and a little rounded, upper parts light yellowish-brown, streaked with brownish-black, the streaks on the rump fainter; quills and tail-feathers greyish-brown, margined with brownish-white; over the eye a band of brownish-white; cheeks pale brown; sides of neck very light buff; the rest of the lower parts greyish-white, the sides tinged with greyish-brown. Female similar to the male, but with less yellow on the sides of the neck.

*Male*, 5  $\frac{1}{2}$ , wing 2  $\frac{7}{12}$ .

Platte River, Missouri Plains, and Fur Countries. Common. Migratory.

*Emberiza pallida*, Clay-coloured Bunting, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 251.

Clay-coloured Bunting, *Emberiza pallida*, AUD. Orn. Biog. v. v. p. 66.

### 162. 7. *Emberiza passerina*, WILS. **Yellow-winged Bunting.**

PLATE CXXX. Male.

Bill very short and stout; tail-feathers acute. Upper parts light greyish-brown, mixed on the neck with ash-grey, the central parts of all the feathers brownish-black, the margins of those of the back bright chestnut; upper part of the head brownish-black, with a longitudinal central line of yellowish-white, and a yellow line over each eye; secondary coverts dusky, margined with greyish-white; the edge of the wing at the flexure bright yellow; quills and tail-feathers dusky brown, margined with whitish; lower parts pale yellowish-grey, the fore neck and lower tail-coverts of a richer tint; the sides inclining to grey, and faintly streaked with dusky.

[104]

*Male*, 4  $\frac{9}{12}$ , 8.

Passes from Texas to Connecticut; breeds from Maryland to Connecticut. Columbia River. Rather Common. Migratory.

Yellow-winged Sparrow, Fringilla passerina, WILS. Amer. Orn. v. iii. p. 76.

Fringilla passerina, BONAP. Syn. p. 109.

Savannah Finch or Yellow shouldered Bunting, NUTT. Man. v. i. p. 494.

Yellow-crowned Sparrow, Fringilla passerina, AUD. Orn. Biog. v. ii. p. 180; v. v. p. 497.

### 163. 8. *Emberiza Henslowii*, AUD. **Henslow's Bunting.**

Bill very stout; wings short, convex, the first quill equal to the fourth, and scarcely shorter than the second and third; tail emarginate and rounded, with the feathers acute. Upper parts light yellowish-brown, streaked with brownish-black, the margins of the feathers on the back and scapulars light red; the edge of the wing pale yellow; quills dusky, primaries edged with brownish-yellow, secondaries with light red; tail-feathers dusky, the outer margined with yellowish-brown, the middle more broadly with light red; lower parts light brownish-yellow, the abdomen and throat paler, the sides of the neck and body, and the fore part of the breast streaked with black.

*Male*, 5.

Winters in Carolina, Georgia, Alabama, Louisiana, and Florida. Breeds from Maryland to New York. Abundant. Accidental in Ohio.

Henslow's Bunting, *Emberiza Henslowii*, NUTT. Man. App. v. ii. p.

Henslow's Bunting, *Emberiza Henslowii*, AUD. Orn. Biog. v. i. p. 360; v. v. p. 498.

\* Wings considerably rounded, with the third and fourth quills longest. Tail rather long, emarginate.

#### 164. 9. *Emberiza pusilla*, WILS. Field Bunting.—Field Sparrow.

PLATE CXXXIX. Male.

Bill light brownish-red; upper part of the head chestnut-red; anterior part of the back streaked with dusky, bright chestnut, and yellowish-grey; a faint ring on the neck, a band over the eyes, and the throat pale bluish-grey; rump yellowish-grey; quills and tail dusky brown, the former margined with light red, the latter with yellowish-grey, lower parts greyish-white, the sides of the neck and body, and the fore part of the breast, tinged with yellowish-brown.

[105]

*Male*, 6, 8.

From Texas to Maryland, in Kentucky and the intermediate parts, during winter. Breeds from Maryland to Maine. Abundant.

Field Sparrow, *Fringilla pusilla*, WILS. Amer. Orn. v. ii. p. 121.

*Fringilla pusilla*; BONAP. Syn. p. 110.

Field or Rush Sparrow, *Fringilla juncorum*, NUTT. Man. v. i. p. 499.

Field Sparrow, *Fringilla pusilla*, AUD. Orn. Biog. v. ii. p. 229.

#### 165. 10. *Emberiza socialis*, WILS. Chipping Bunting.—Chipping Sparrow.

PLATE CIV. Male.

Bill with the upper mandible blackish-brown; upper part of the head bright chestnut-red, part of forehead black; anterior part of the back streaked with dusky, bright chestnut, and yellowish-grey; a faint ring on the neck, a band over the eyes, the throat, and fore part of the breast, pale bluish-grey; rump bluish-grey, streaked with dusky; quills and tail dusky brown, the former margined with light red, the latter with yellowish-grey; two white bands on the wing; breast and sides pale grey, inclining to white. This species closely resembles the last in colour, but may be distinguished by the black on the forehead, and the dusky colour of the bill.

*Male*, 5  $\frac{1}{4}$ , 8.

Abundant throughout the United States. Winter resident in all the Southern States. Not seen in Texas, Nova Scotia, or Labrador.

Chipping Sparrow, *Fringilla socialis*, WILS. Amer. Orn. v. ii. p. 127.

*Fringilla socialis*, BONAP. Syn. p. 109.

Chipping Sparrow, *Fringilla socialis*, NUTT. Man. v. i. p. 497.

Chipping Sparrow, *Fringilla socialis*, AUD. Orn. Biog. v. ii. p. 21; v. v. p. 517.

#### 166. 11. *Emberiza Canadensis*, LATH. Canada Bunting.—Tree Sparrow.

PLATE CLXXXVIII. Male and Female.

Bill with the upper mandible blackish-brown above, yellowish-red beneath; upper part of the head bright chestnut-red; anterior part of the back streaked with dusky, bright chestnut, and yellowish-grey; a faint ring on the neck, a band over the eyes, the throat and fore part of the breast pale bluish-grey; rump pale yellowish-grey, faintly streaked with dusky; quills and tail dusky brown, the former margined with light red, the latter with greyish-white; two white bands

on the wing; breast and sides pale grey, inclining to white, the latter tinged with yellowish-brown.

This species is much larger than the last, wants the black spot on the forehead, and has the wing-bands more conspicuous. [106]

*Male*, 6  $\frac{1}{4}$ , 8  $\frac{3}{4}$ .

Rarely reaches the Carolinas during winter, or Louisville on the Ohio. Breeds from Maine northward to the Fur Countries. Abundant. Migratory.

Tree Sparrow, *Fringilla arborea*, WILS. Amer. Orn. v. ii. p. 12.

*Fringilla canadensis*, BONAP. Syn. p. 109.

*Emberiza canadensis*, Tree Bunting, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 252.

Tree Sparrow, *Fringilla canadensis*, NUTT. Man. v. i. p. 495.

Tree Sparrow, *Fringilla canadensis*, AUD. Orn. Biog. v. ii. p. 511; v. v. p. 504.

### GENUS III. NIPHÆA, AUD. SNOW-BIRD.

Bill short, rather small, conical, acute; upper mandible a little broader than the lower, its dorsal line straight, slightly declinate at the tip, the sides convex, the edges nearly straight, slightly inflected, but overlapping; lower mandible with the angle short and rounded, the dorsal line straight, the sides convex, the edges a little inflected, the tip acute. Nostrils basal, roundish, concealed by the feathers. Head broadly ovate; neck short; body full. Feet of moderate length; tarsus rather short, stout, with seven scutella; toes rather strong, the first stout, the lateral equal. Claws rather long, arched, compressed, laterally grooved, tapering to a fine point. Plumage very soft and blended. Wings rather short, curved, rounded, second, third, and fourth quills longest, first longer than fifth. Tail rather long, slightly emarginate. Roof of upper mandible concave, with thin ridges, and a small knob at the base; tongue narrow, deep, grooved above, tapering to a horny point; œsophagus dilated about the middle; stomach rather small, roundish, muscular; intestine rather short; cœca very small. Name from [Greek: Niphos], snow.

#### 167. 1. *Niphæa hyemalis*, LINN. Common Snow-Bird.

PLATE XIII. Male and Female.

Male with the head, hind neck, fore part of the breast, back, wings, and upper parts of the sides, greyish-black, deeper on the head and throat; quills margined with whitish; tail with the two lateral feathers on each side, and a patch on the inner web of the next white, as are the breast and abdomen. Female lighter grey, on the back tinged with brown. [107]

*Male*, 6  $\frac{1}{4}$ , 9.

Distributed, in winter, over the Southern, Western, and Middle Districts, as far as the base of the Rocky Mountains, and in the Fur Countries. Breeds from Maryland eastward, on the mountains. Very abundant.

Snow Bird, *Fringilla nivalis*, WILS. Amer. Orn. v. ii. p. 129.

*Fringilla hyemalis*, BONAP. Syn. p. 109.

*Fringilla hyemalis*, Black Finch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 505.

Common Snow-Bird, *Fringilla Hudsonia*, NUTT. Man. v. i. p. 491.

Snow-Bird, *Fringilla hyemalis*, AUD. Orn. Biog. v. i. p. 72; v. v. p. 505.

#### 168. 2. *Niphæa Oregona*, TOWNS. Oregon Snow-Bird.

PLATE CCCXCVIII. Fig. 3. Male. Fig. 4. Female.

Male with the head, neck all round, and a portion of the breast black; the rest of the lower parts white, excepting the sides, which are tinged with brown; fore part of back reddish-brown, rump dull grey; quills dusky, the primaries edged with grey, the secondaries with reddish-brown; tail dusky, with the outer two feathers on each side white. Female with the head and neck blackish-grey, the back and wing-coverts dull brownish-red, the other parts as in the male.

*Male*, 6  $\frac{1}{4}$ ; wing, 3  $\frac{1}{2}$ .

Columbia River. Common. Migratory.

*Fringilla oregona*, Oregon Snow-Finch, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 188.

Oregon Snow-Finch, *Fringilla oregona*, AUD. Orn. Biog. v. v. p. 68.

## GENUS IV. SPIZA, BONAP. PAINTED-BUNTING.

Bill short, moderately stout, conical, acute; upper mandible rather narrower, with the dorsal line somewhat convex, the ridge narrow, the sides sloping and a little convex, the edges inclining upwards for a third of their length, then direct, with a slight notch close to the narrow declinate tip; lower mandible with the angle short and rounded, the dorsal line very slightly convex, the sides rounded, the edges involute, the tip acute. Nostrils basal, roundish, partly concealed by the feathers. Head broadly ovate; neck short; body rather full. Feet of moderate length; tarsus much compressed, with seven scutella; toes of moderate size, hind toe large, lateral equal. Claws slender, compressed, well arched, acute. Plumage full, soft, and blended. Wings of moderate length, the second and third quills longest, the first about equal to the fourth. Tail of moderate length, emarginate. Palate anteriorly with their narrow ridges, forming a large oblong hard knob at their base; tongue higher than broad, deeply grooved above, pointed; œsophagus dilated into a crop; stomach elliptical, muscular; intestine of moderate length; cœca very small.

[108]

### 169. 1. *Spiza Ciris*, WILS. Blue-headed Painted-Bunting.—Painted-Bunting. Painted-Finch.

PLATE LIII. Male and Female.

Male with the head and hind neck ultramarine-blue, eyelids vermilion; fore part of back and scapulars yellowish-green; rump purplish-red; smaller wing-coverts purplish-blue, secondary coverts green; quills and tail-feathers dusky; lower parts bright vermilion. Female yellowish-green above, greenish-yellow beneath. Young like the female. In the second year, the male with the upper parts olive-green, the lower dull orange, paler behind, head as in the adult; in the third year, with the back mottled with yellow and light green, the secondary coverts green, the rest as in the adult.

*Male*, 5  $\frac{1}{4}$ , 7  $\frac{1}{2}$ .

From Texas to North Carolina, and up the Mississippi to Natchez. Abundant. Migratory.

Painted Bunting, *Emberiza Ciris*, WILS. Amer. Orn. v. iii. p. 68.

*Fringilla Ciris*, BONAP. Syn. p. 107.

Painted Bunting, NUTT. Man. v. i. p. 477.

Painted Finch, *Fringilla Ciris*, AUD. Orn. Biog. v. i. p. 279; v. v. p. 517.

### 170. 2. *Spiza cyanea*, WILS. Indigo Painted-Bunting.—Indigo Bird.

PLATE LXXIV. Male and Female.

Male blue, tinged with verdigris-green, on the head approaching to ultramarine; quills and tail-feathers dusky, edged with greenish-blue. Female yellowish-brown above, paler beneath. Young like the female. Male, in the first autumn, of a lighter and duller blue than in the adult, the feathers of the upper parts tipped with brown, of the lower with yellowish, in the second year nearly as in the adult, but with the smaller coverts dull brown.

*Male*, 5  $\frac{1}{4}$ , 7  $\frac{1}{2}$ .

[109]

Distributed throughout the United States during summer. Abundant. Migratory.

Indigo Bird, *Fringilla cyanea*, WILS. Amer. Orn. v. i. p. 100.

*Fringilla cyanea*, BONAP. Syn. p. 107.

Indigo Bird, NUTT. Man. v. i. p. 473.

Indigo Bird, *Fringilla cyanea*, AUD. Orn. Biog. v. i. p. 377; v. v. p. 503.

### 171. 3. *Spiza amoena*, SAY. Lazuli Painted-Bunting.—Lazuli Finch.

PLATE CCCXCVIII. Fig. 1. Male. PLATE CCCXXIV. Fig. 1. Female.

Male with the head, neck, and upper parts, light greenish-blue, the fore part of the back duller; loreal space black; wings and tail dusky, the feathers margined with blue; two white bands on the wing; on the fore part of the breast a broad band of yellowish-red, the rest of the lower parts white. Female with the upper parts light yellowish-brown, the rump greenish-blue; fore parts pale yellowish-red, fading behind into white.

*Male*, 5  $\frac{1}{2}$ ; wing, 3  $\frac{1}{2}$ .

From the Arkansas to the Columbia River. Never seen near the Atlantic coast. Plentiful. Migratory.

*Emberiza amoena*, SAY, Long's Exped.

Lazuli Finch, *Fringilla amœna*, BONAP. Amer. Orn. v. i. p. 61.

*Fringilla amœna*, BONAP. Syn. p. 106.

Lazuli Finch, NUTT. Man. v. i. p. 478.

Lazuli Finch, *Fringilla amœna*, AUD. Orn. Biog. v. v. p. 64, and p. 230.

## GENUS V. AMMODRAMUS, SWAINS. SHORE-FINCH.

Bill rather long, being little shorter than the head, rather slender, straight, considerably compressed, acute; upper mandible with the dorsal line considerably convex, the ridge narrow, the sides convex, the edges inflected, with a slight festoon about the middle, and a faint notch, close to the tip, which is deflected and acute; lower mandible with the angle short and rounded, the dorsal line ascending and straight, the ridge rounded, the sides convex, the edges involute, the tip acute. Nostrils small, elliptical, basal, partially concealed by the plumage. Head ovate; neck short; body slender. Tarsus rather short, stoutish, compressed, with seven scutella; toes rather long, hind toe large, outer shorter than inner, and adherent at the base. Claws long, slender, little arched, much compressed, laterally grooved, tapering to a fine point. Plumage soft and blended, with the filaments stiffish and disunited. No bristles. Wings short, convex, rounded, the second, third, and fourth quills longest, the first considerably shorter. Tail of moderate length, graduated, slender, of twelve narrow, acuminate feathers. No difference in the colours of the sexes.

[110]

### 172. 1. *Ammodramus maritimus*, WILS. Grey Shore-Finch.—Sea-side Finch.

PLATE XCIII. Male and Female.

Third and fourth quills longest, first and eighth equal; tail graduated; upper parts brownish-grey, tinged with olivaceous, two faint longitudinal bands of darker on the head; the feathers on the fore part of the back brown in the centre; margin of the wing at the flexure light yellow, smaller wing-coverts and outer webs of secondary coverts dull reddish-brown; quills and tail-feathers dusky brown, edged with pale brownish-grey; a yellow band from the base of the upper mandible over the eye, fainter behind; throat greyish-white, with a longitudinal bluish-grey band on each side; lower part of neck, fore part of breast, and sides, light bluish-grey, streaked with light olivaceous-brown; middle of breast pale grey, abdomen white, lower tail-coverts pale yellowish-brown, with a central dusky streak.

*Male*, 8, 11.

From Texas to Massachusetts along the shores of the Atlantic. Resident in the Southern States. Abundant.

Sea-side Finch, *Fringilla maritima*, WILS. Amer. Orn. v. iv. p. 68.

*Fringilla maritima*, BONAP. Syn. p. 110.

Sea-side Finch, *Fringilla maritima*, NUTT. Man. v. i. p. 505.

Sea-side Finch, *Fringilla maritima*, AUD. Orn. Biog. v. i. p. 471.

### 173. 2. *Ammodramus Macgillivrayi*, AUD. Macgillivray's Shore-Finch.

PLATE CCCLV. Male and Female.

Second, third, and fourth quills longest, first and seventh equal; tail rounded. Upper parts dull olivaceous-grey, streaked with blackish-brown, the central parts of all the feathers being of the latter colour; margin of the wing at the flexure yellowish-white; all the feathers of the wings dusky brown, margined with pale olivaceous; tail-feathers blackish-brown, margined with olivaceous; a yellowish-brown streak from the base of the upper mandible over the eye; throat and fore neck greyish-white, with an indistinct dusky streak on each side; breast and sides pale dull yellowish-grey marked with brownish-black streaks; middle of the breast and abdomen greyish-white, tinged with yellowish-brown; lower tail-coverts pale yellowish-brown, with a central dusky streak.

[111]

*Male*, 5  $\frac{1}{2}$ , 7  $\frac{3}{4}$ .

Abundant in Texas and along the Gulf of Mexico. Rather rare in South Carolina, from which it migrates in autumn.

Macgillivray's Finch, AUD. Orn. Biog. v. ii. p. 285; v. iv. p. 394; v. v. p. 499.

### 174. 3. *Ammodramus caudacutus*, LATH. Buff-breasted Shore-Finch.—Sharp-tailed Finch.

PLATE CXLIX. Male and Female.

Second, third, and fourth quills longest, first and fifth equal; tail graduated. Upper part of the head with a central bluish-grey streak, deep brown at the sides with the feathers black in the centre; hind neck dull grey, tinged with brown; back brown, tinged with grey, some of the feathers marked with black and edged with greyish-white; quills dusky brown, edged with reddish-brown, the secondary and smaller coverts with their outer webs chiefly of the latter colour; tail-feathers dusky brown, margined with greyish-olive; a broad band of light yellowish-red from the base of the upper mandible over the eye, and extending beyond the middle of the neck, where it is broader; ear-coverts grey; a broad band of yellowish-red from the lower mandible down the neck; throat whitish, with a line of dusky streaks on each side; the lower part of the neck, a portion of the breast, the lower tail-coverts, and the sides, pale yellowish-red, streaked with dusky; the rest of the lower parts white.

*Male*, 5, 7  $\frac{1}{4}$ .

Breeds from Texas along the coast to Massachusetts. Never in the interior. Resident in the Southern States. Very abundant.

Sharp-tailed Finch, *Fringilla caudacuta*, WILS. Amer. Orn. v. iv. p. 70.

*Fringilla caudacuta*, BONAP. Syn. p. 110.

Shore Finch, *Fringilla littoralis*, NUTT. Man, v. i. p. 504.

Sharp-tailed Finch, *Fringilla caudacuta*, AUD. Orn. Biog. v. ii. p. 281; v. v. p. 499.

#### **175. 4. *Ammodramus palustris*, WILS. Marsh Shore-Finch. Swamp Sparrow.**

PLATE LXIV. Male.

Bill shorter than in the other species; tail-feathers less acuminate; upper part of head deep chestnut-red, streaked with black; hind part and sides of the neck light bluish-grey, cheeks dusky brown; a greyish-yellow streak over the eye; upper parts of body yellowish-brown, streaked with brownish-black; wing-coverts and secondaries broadly edged with yellowish-red, primaries with duller red; tail similar; throat greyish-white, with two small dusky streaks, the rest of the fore neck and part of the breast pale bluish-grey, the abdomen whitish, the sides yellowish-brown, streaked with dusky. [112]

*Male*, 5  $\frac{1}{2}$ , 7  $\frac{1}{2}$ .

From Texas to North Carolina in winter. Spreads in spring and summer to the Missouri westward, and to Labrador eastward. Abundant.

Swamp Swallow, *Fringilla palustris*, WILS. Amer. Orn. v. iii. p. 49.

*Fringilla palustris*, BONAP. Syn. p. 110.

Swamp Sparrow, *Fringilla Georgiana*, NUTT. Man. v. i. p. 502.

Swamp Sparrow, *Fringilla palustris*, AUD. Orn. Biog. v. i. p. 331; v. v. p. 508.

### **GENUS VI. PEUCÆA, AUD. PINEWOOD-FINCH.**

Bill of moderate length, rather stout, straight, considerably compressed, acute; upper mandible with the dorsal line somewhat convex, the ridge rather narrow, the sides convex, the edges inflected, with the notches obsolete, the tip acute; lower mandible with the angle short and rounded, the dorsal line ascending and slightly convex, the ridge rounded, the sides convex, the edges involute, the tip acute. Nostrils small, roundish, partially concealed by the plumage. Head ovate; neck short; body moderately stout. Tarsus rather short, compressed, with seven scutella; toes moderate, very slender, hind toe rather large, lateral toes about equal, outer adherent at the base. Claws of moderate length, very slender, extremely compressed, arched, tapering to a fine point. Plumage very soft, blended. Wings very short, convex, rounded, the third and fourth quills longest, the first and seventh about equal. Tail rather long, graduated, of twelve narrow rounded feathers. No difference in the colours of the sexes. Name from [Greek: Peuchê], a pine.

#### **176. 1. *Peucaea Bachmanii*, AUD. Bachman's Pinewood-Finch.**

PLATE CLXV. Male.

Feathers of the upper parts brownish-red margined with bluish-grey, those on the fore part of the back darker; quills dusky brown, primaries margined with yellowish-grey, secondaries with brownish-red; tail-feathers dusky brown margined with grey; a band of ochre-yellow from the base of the upper mandible over the eye; throat pale yellowish-grey, with a short dusky streak on each side; lower parts light yellowish-grey, the fore part of the breast and the sides tinged with brown. [113]

*Male*, 6, 7  $\frac{1}{2}$ .

Georgia and South Carolina. Rather rare. Migratory.

Bachman's Finch, *Fringilla Bachmanii*, AUD. Orn. Biog. v. ii. p. 366.

### 177. 2. *Peucaea Lincolni*, AUD. Lincoln's Pinewood-Finch.

PLATE CXCI. Male and Female.

Bill shorter and more slender. Upper parts yellowish, streaked with brownish-black: on the head a thin greyish-blue longitudinal band; quills dusky brown, margined with yellowish-brown; tail-feathers broadly margined with yellowish-brown; cheeks greyish-brown, with an inferior band of ochreous; throat white, streaked with dusky, and having a line of dusky spots on each side; fore part of breast and sides pale greyish-yellow, streaked with dusky; the rest of the lower parts greyish-white.

*Male*,  $5\frac{3}{4}$ ,  $8\frac{1}{2}$ .

New York and Labrador. Rather rare. Migratory.

Lincoln's Finch, *Fringilla Lincolni*, AUD. Orn. Biog. v. ii. p. 539.

## GENUS VII. LINARIA, RAY. LINNET.

Bill short, conical, moderately stout, higher than broad at the base, compressed toward the end, acuminate; upper mandible with the dorsal line straight, the nasal sinus very short and broad, the ridge distinct and narrow, the sides convex, the edges ascending at first, afterwards direct, the tip very narrow, without notches; lower mandible with the angle short and semicircular, the dorsal line straight or very slightly concave, the sides convex, the tip acuminate. Nostrils basal, roundish, concealed by the feathers. Head of moderate size, roundish; neck short; body moderate. Feet of moderate length; tarsus short, compressed, with seven scutella; toes rather stout, the first large. Claws long, moderately arched, much compressed, very acute. Plumage soft and blended. Wings rather long, the first three quills nearly equal, the second generally longest, the first longer than the third. Tail rather long, deeply emarginate or forked, with the feathers pointed. Roof of upper mandible concave, with two ridges; tongue deeper than broad, concave above toward the point, which is acute; œsophagus enlarged about the middle; stomach roundish, muscular; intestine of moderate length, slender; cœca very small.

[114]

### 178. 1. *Linaria borealis*, TEMM. Mealy Redpoll Linnet.

PLATE CCCC. Fig. 2. Male.

Male with the upper part of the head crimson, the cheeks, sides of the body, and hind part of the rump pale carmine; a band edging the forehead, the loreal space, and the throat black; upper parts dusky, streaked with brownish-white, the fore part of the rump nearly white; feathers of the wings and tail dusky, margined with greyish-white, of which there are two transverse bands on the wings, formed by the tips of the secondary coverts and first row of small coverts; lower parts greyish-white, the sides streaked with dusky. Female somewhat less, with the black on the forehead and throat tinged with brown, the crimson patch on the head of less extent, the sides and rump destitute of red.

*Male*,  $5\frac{1}{4}$ , 9.

Accidental in New Jersey and New York. More common from Maine northward. Labrador and Fur Countries. Columbia River.

Grosbec boreal, *Fringilla borealis*, TEMM. Man. d'Orn. v. iii. p. 264.

Mealy Redpoll, *Fringilla borealis*, AUD. Orn. Biog. v. v. p. 87.

### 179. 2. *Linaria minor*, RAY. Lesser Redpoll Linnet.

PLATE CCCLXXV. Male and Female.

Male with the upper part of the head crimson; the sides of the neck, its fore part, the breast, and flanks, rich carmine; a band edging the forehead, the loreal space, and the throat, brownish-black; the hind part of the head, the neck, the fore part of the back, and the scapulars deep-brown, streaked with pale yellowish-brown; the feathers on the rump margined with whitish, and tipped with carmine; feathers of the wings and tail brown, edged with yellowish-brown, of which there are two bands on the wings formed by the tips of the secondary coverts and first row of small coverts; middle of the breast, abdomen, and lower tail-coverts white, tinged with rose-colours; the sides longitudinally streaked with dusky. Female somewhat less, with the back of the forehead and throat more brown, less red on the head, and little or none on the rump or lower parts, which are white, the breast and flanks streaked with dusky. Young with the feathers of the upper parts blackish-brown, edged with yellowish-brown, the rump yellowish-grey, the lower parts dull white, streaked with blackish-brown; no red on any part.

[115]



*Male*, 5, 8  $\frac{3}{4}$ .

From Pennsylvania and New Jersey to Maine, in winter; inland, to Kentucky. Breeds in Maine, Nova Scotia, Newfoundland, Labrador, and the Fur Countries. Abundant. Migratory.

Lesser Redpoll, *Fringilla linaria*, WILS. Amer. Orn. v. iv. p. 42.

*Fringilla linaria*, BONAP. Syn. p. 112.

*Linaria minor*, Lesser Redpoll, SWAINS. & RICH. F. Bor. Amer. v. i. p. 267.

Lesser Redpoll, NUTT. Man. v. i. p. 512.

Lesser Redpoll, *Fringilla Linaria*, AUD. Orn. Biog. v. iv. p. 533.

### **180. 3. *Linaria pinus*, WILS. Pine Linnet.**

PLATE CLXXX. Male and Female.

Upper parts yellowish-grey, streaked with dark brown; feathers of the wings dusky, the primaries margined with yellow, of which there is a patch formed by the bases of all the quills, except the outer three, and a few of the inner; tips of first row of small coverts, secondary coverts and outer edges of secondary quills dull white; tail-feathers dusky, their bases and outer edges yellow; lower parts greyish-white, streaked with brown, the fore neck tinged with reddish.

*Male*, 4  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

Wanders during winter to South Carolina, Louisiana, and Kentucky. Breeds north of the United States, in New Brunswick, Nova Scotia, and Labrador. Columbia River. Plentiful.

Pine Finch, *Fringilla pinus*, WILS. Amer. Orn. v. ii. p. 133.

*Fringilla pinus*, BONAP. Syn. p. 111.

Pine Finch, *Fringilla pinus*, NUTT. Man. v. i. p. 511.

Pine Finch, *Fringilla pinus*, AUD. Orn. Biog. v. ii. p. 455; v. v. p. 509.

## **GENUS VIII. CARDUELIS, Cuv. GOLDFINCH.**

Bill short, or of moderate length, conical, very stout at the base, compressed toward the end, and tapering to a fine point; upper mandible a little broader, with the nasal sinus very broad, the dorsal outline very slightly convex, the ridge narrowed toward the end, the sides convex, the edges a little inflected and overlapping, the edges slightly ascending at the base, the notches obsolete, the tip very acute; lower mandible with the angle short and rounded, the dorsal line straight, the sides convex, the tip very acute. Nostrils basal, roundish, concealed by the feathers. Head roundish-ovate; neck short; body rather full. Legs rather short; tarsus short, compressed, slender, with seven scutella; toes moderate, the first large, the lateral nearly equal. Claws long, compressed, moderately curved, very acute. Plumage very soft and blended. Wings rather long, pointed, the first, second, and third quills about equal and longest. Tail rather short, deeply emarginate. Roof of upper mandible deeply concave; tongue grooved above, pointed; œsophagus dilated about the middle; stomach small, broadly elliptical, moderately muscular; intestine short; cœca very small.

[116]

### **181. 1. *Carduelis tristis*, Linn. American Goldfinch.**

PLATE XXXIII. Male and Female.

Bill rather slender, second and third quills longest. Male rich lemon-yellow, fading behind into yellowish-white; upper part of head, wings, and tail black; smaller coverts yellow, quills margined, and secondary coverts tipped with yellowish-white; inner webs of tail-feathers in their terminal half white. Female brownish-olive above, without black on the head; fore neck and breast greyish-yellow, the rest of the lower parts greyish-white. Young like the female, as is the male in winter.

*Male*, 4  $\frac{1}{2}$ , 8.

Abundant in the Middle and Western Districts, during summer. Accidental in the Southern States during winter. Columbia River and Fur Countries. Abundant. Migratory.

American Goldfinch, *Fringilla tristis*, WILS. Amer. Orn. v. i. p. 20.

*Fringilla tristis*, BONAP. Syn. p. 111.

*Carduelis Americana* (Edwards), American Goldfinch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 268.

Yellow Bird or American Goldfinch, NUTT. Man. v. i. p. 507.

**182. 2. *Carduelis magellanicus*, VIEILL. Black-headed Goldfinch.**

PLATE CCCXCIV. Fig. 2. Male.

Bill moderately stout; first and second quills equal and longest. Male with the head and throat black, back yellowish-green, rump and lower parts greenish-yellow; wings black, with two bands of yellowish-green, terminating the first row of small coverts, and the secondary coverts; a conspicuous band of yellow on the basal portion of all the quills, most of which are margined with the same toward the end; tail yellow, with the terminal half black.

*Male*,  $4\frac{3}{4}$ , wing  $2\frac{10}{12}$ .

Five seen in winter at Henderson in Kentucky, of which I procured two.

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Black-headed Siskin, *Fringilla magellanica*, AUD. Orn. Biog. v. v. p. 46.

**183. 3. *Carduelis psaltria*, SAY. Arkansaw Goldfinch.**

PLATE CCCC. Fig. 1. Male.

Bill moderately stout; second quill longest, third scarcely shorter. Male with the upper part of the head black; hind neck, back, and scapulars yellowish-green, spotted with greenish-brown; rump greenish-yellow; upper tail-coverts dusky, margined with yellow, as on the smaller wing-coverts; the other coverts and quills black; secondary coverts broadly tipped with pale yellow, forming a conspicuous band; quills margined with yellowish-white, all except the outer three and the inner secondaries, white toward the base; tail-feathers brownish-black, narrowly edged with whitish, and all, except the middle and lateral with a whitish space at the base, running out along the outer margin so as to form a conspicuous patch. Female similar, but without the black on the head.

*Male*,  $4\frac{1}{2}$ , 8.

Eastern bases of Rocky Mountains, and Western Plains. Accidental in Lower Louisiana. Common. Migratory.

Arkansaw Siskin, *Fringilla psaltria*, SAY, Long's Exped. v. ii. p. 40.

*Fringilla psaltria*, BONAP. Syn. p. 111.

Arkansas Siskin, NUTT. Man. v. i. p. 510.

Arkansaw Siskin, *Fringilla psaltria*, AUD. Orn. Biog. v. v. p. 85.

**184. 4. *Carduelis yarrellii*, AUD. Yarrell's Goldfinch.**

PLATE CCCXXXIII. Fig. 4. Male. Fig. 5. Female.

Bill very thick; second quill longest, third slightly longer than first. Male with the upper part of the head black, the back and scapulars yellowish-green, the hind neck and rump yellow; the wings and tail brownish-black; the former, when extended, crossed by two bands, one greenish-yellow, tipping the first row of small coverts, the other bright yellow and broad, on the base of the primary and secondary quills; tail also yellow in its basal half; lower parts bright yellow. Female with the upper parts yellowish-green, the lower dull greenish-yellow. This species, which has the bill thicker than any other here described, although it is otherwise inferior in size, not having been found by me any where noticed, I propose to honour with the name of my excellent friend Mr Yarrell. In my ornithological biography it is described as the Mexican Goldfinch, but that species has the back black, and the bases of the quills and tail-feathers white.

*Male*, 4, wing,  $2\frac{1}{2}$ .

Upper California.

Mexican Goldfinch, *Fringilla mexicana*, AUD. Orn. Biog. v. v. p. 282.

**185. 5. *Carduelis stanleyi*, AUD. Stanley Goldfinch.**

[118]

Not figured.

Bill thick; second and third quills equal, first little shorter. Male with the upper part of the head black, the back and scapulars yellowish-green, faintly streaked with dusky, the rump inclining to greenish-yellow; the wings and tail black; the former, when extended, crossed by two bands, one greenish-yellow, tipping the first row of small coverts, the other bright yellow and broad at the base of the primary and secondary quills; tail also yellow in its basal third, except on the middle feather; lower parts greenish-yellow, feeding into white on the abdomen; feathers on the throat black at the base; lower tail-coverts yellow, tipped with white, and having a central dusky streak. Female dull yellowish-green above, faintly streaked with dusky, paler beneath.

In this species, which I have named in honour of the illustrious Earl of Derby, the bill is so thick and short as to approach in form to that of the European Greenfinch.

*Male*, 4  $\frac{9}{12}$ , wing, 2  $\frac{10}{12}$ .

Upper California.

## GENUS IX. FRINGILLA, LINN. FINCH.

Bill short, stout, conical, somewhat compressed, pointed; upper mandible of the same breadth as the lower, with its dorsal line straight, the ridge indistinct, the sides rounded, the edges ascending at the base, the notches obsolete, the tip scarcely deflected; lower mandible with the angle very short and rounded, the dorsal line straight, the sides convex, the edges inflected, the tip acute. Nostrils basal, roundish, concealed by the feathers. Head rather large, ovate; neck short; body compact. Legs of moderate length; tarsus rather short, compressed, with seven scutella; toes moderate; hind toe stout, lateral equal. Claws rather long, arched, compressed, acute. Plumage rather compact, but blended. Wings of moderate length, with the second, third, and fourth quills longest. Tail of moderate length, slightly emarginate. Roof of upper mandible moderately concave, with three longitudinal ridges; tongue compressed, channelled above, horny, rather obtuse and concave at the end; œsophagus dilated about the middle; stomach roundish, muscular; intestine rather short; cœca small.

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\* Wings rather short, claws long, little arched.

### 186. 1. *Fringilla iliaca*, MERREM. Fox-coloured Finch.

PLATE CVIII. Male and Female.

Upper parts light red, claws long, hind toe and its claws of equal length, tail lighter, the head and neck intermixed with light bluish-grey; inner webs of quills brown, secondary coverts slightly tipped with whitish; lower parts white, and, except the abdomen, spotted with light red, the spots on the breast smaller and inclining to black; a patch of dusky on its fore part, produced by the inner webs of several of the feathers.

*Male*, 7  $\frac{1}{2}$ , 10  $\frac{1}{2}$ . *Female*, 7  $\frac{1}{2}$ .

Dispersed in winter throughout the Southern and Western Districts. Breeds from Nova Scotia to Labrador and the Fur Countries. Rather common.

Fox-coloured Sparrow, *Fringilla rufa*, WILS. Amer. Orn. v. iii. p. 53.

*Fringilla iliaca*, BONAP. Syn. p. 112.

*Fringilla* (*Zonotrichia*) *iliaca*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 257.

Ferruginous Finch, *Fringilla iliaca*, NUTT. Man. v. i. p. 514.

Fox-coloured Sparrow, *Fringilla iliaca*, AUD. Orn. Biog. v. ii. p. 58; v. v. p. 512.

### 187. 2. *Fringilla Townsendi*, AUD. Townsend's Finch.

PLATE CCCCXXIV. Fig. 7. Female.

Claws very long, hind toe much shorter than its claw; upper parts very dark olivaceous-brown, with a slight tinge of red, which is more conspicuous on the rump and outer webs of the tail-feathers, and margins of the wings and quills; sides of the neck and body and feathers of legs similar, the rest white with dark brown triangular spots, lower tail-coverts brown, broadly margined with pale dull yellow.

*Female*, 7, 10  $\frac{1}{2}$ .

Colorado of the West. Rocky Mountains.

Townsend's Finch, *Fringilla Townsendi*, AUD. Orn. Biog. v. v. p. 236.

### 188. 3. *Fringilla cinerea*, GMEL. Brown Finch.

PLATE CCCXC. Fig. 4. Male.

Hind claw and toe of equal length; upper parts brownish-grey tinged with olivaceous, streaked with dark reddish-brown; three longitudinal bands of bluish-grey on the head; secondaries and their coverts broadly margined with dull chestnut; tail-feathers with a fainter tint of the same; on the cheek a whitish line, and beneath it a dusky brown band; throat and fore part of the neck white, with longitudinal dark reddish-brown streaks; the middle of the breast yellowish-white, the sides dark yellowish-brown, streaked with dark reddish-brown; lower tail-coverts brown, broadly margined with pale yellowish-grey.

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*Male*, 6, 8.

Platte River, North California, and Columbia River. Common. Migratory.

*Fringilla cinerea*, GMEL. Syst. Nat. v. i. p. 922.

Cinereous Finch, Arct. Zool. v. ii. N. 260.

Brown Song Sparrow, *Fringilla cinerea*, AUD. Orn. Biog. v. v. p. 22.

#### **189. 4. *Fringilla melodia*, WILS. Song Finch.**

PLATE XXV. Male and Female.

Hind toe and claw of equal length; upper parts yellowish-grey, streaked with brownish-black and brownish-red; on the head three greyish-blue longitudinal bands; quills dusky brown, margined with brownish-red, tail-feathers dull light brown, edged with lighter; sides of the head yellowish-grey, with two bands of dusky brown; throat white, with a broad band of dusky brown on each side; lower parts white, the fore neck and sides tinged with reddish, and streaked with dusky brown. Bill stouter than in the preceding species.

*Male*, 6, 8  $\frac{1}{2}$ .

Breeds from Texas to Nova Scotia. Not observed in Kentucky. Winter resident in the Southern States. Very abundant.

*Fringilla melodia*, WILS. Amer. Orn. v. ii. p. 125.

*Fringilla melodia*, BONAP. Syn. p. 108.

Common Song Sparrow, *Fringilla melodia*, NUTT. Man. v. i. p. 486.

Song Sparrow, *Fringilla melodia*, AUD. Orn. Biog. v. i. p. 126; v. v. p. 507.

#### **190. 5. *Fringilla Mortoni*, AUD. Morton's Finch.**

Not figured.

Wings of moderate length, the first quill two-twelfths of an inch shorter than the second, which is almost equal to the third; tail of moderate length, nearly even; bill dusky; feet and claws yellowish-brown; upper part of head ash-grey, with a longitudinal band of black on each side, externally of which is a greyish-white band; loreal space, cheek-feathers, and auriculars dusky, the feathers under the eye tipped with white; throat white, surrounded with a black band; a light chestnut-red band surrounding the neck unless for a short space in front; fore-part of back and scapulars light dull yellowish-red, streaked with brownish-black, the hind part, rump, and upper tail-coverts yellowish-grey; the smaller wing-coverts yellowish-grey, the first row brownish-black toward the end with the tip white, the secondary coverts and inner secondary quills brownish-black, broadly margined with light yellowish-red, the former tipped with white, the rest of the quills dusky brown, edged with yellowish-red fading on the outer whitish; tail-feathers blackish-brown, narrowly edged with pale yellowish-grey, the lateral of a lighter tint; lower parts dull brownish-white, sides light greyish-brown, lower wing-coverts yellowish-white.

[121]

*Male*, 5  $\frac{1}{2}$ , wing, 2  $1\frac{1}{2}$ .

North California.

Morton's Finch, *Fringilla Mortoni*, AUD. Orn. Biog. v. v. p. 312.

\* Claws shorter and more curved.

#### **191. 6. *Fringilla Pennsylvanica*, LATH. White-throated Finch.**

PLATE VIII. Male and Female.

Male with the bill dusky; the upper part of the head black, with a central white band; a bright yellow band from the nostril to the eye continued into a white band passing over and behind it, and margined beneath with black; fore part of back bright bay, streaked with dusky and reddish-yellow; rump yellowish-grey; edge of wing light yellow; quills brownish-black, primaries edged with yellowish-grey, secondaries and their coverts with light red; two narrow bands of white on the wings, formed by the tips of the secondary coverts and first row of small coverts; tail-feathers brown, edged with rufous; throat white; cheeks, sides, and fore part of neck, and a portion of breast, ash-grey, the rest of the lower parts greyish-white, the sides tinged with yellowish-grey. Female similar, but with the colours duller.

*Male*, 6  $\frac{1}{2}$ , 9. *Female*, 6  $\frac{1}{4}$ , 8  $\frac{1}{2}$ .

Winter resident from Louisiana to Maryland, and inland as far as Kentucky. Breeds from Maine to the Fur Countries. Abundant.

White-throated Sparrow, *Fringilla albicollis*, WILS. Amer. Orn. v. iii. p. 51.

*Fringilla Pennsylvanica*, BONAP. Syn. p. 108.

*Fringilla* (*Zonotrichia*) *Pennsylvanica*, White-throated Finch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 256.

White-throated Sparrow, *Fringilla Pennsylvanica*, NUTT. Man. v. i. p. 481.

White-throated Sparrow, *Fringilla Pennsylvanica*, AUD. Orn. Biog. v. i. p. 42; v. v. p. 497.

## 192. 7. *Fringilla leucophrys*, GMEL. White-crowned Finch.—White-crowned Sparrow.

PLATE CXIV. Adult Male and Female in second plumage.

Male with the bill yellowish-red, tipped with brown; upper part of the head with four longitudinal black, and three white bands; fore part of the back streaked with reddish-brown and yellowish-grey; rump light yellowish-brown; quills dark brown, primaries edged with yellowish-grey, secondaries and their coverts with yellowish-red; edge of wing whitish; two bands of white on the wing, formed by the tips of the secondary coverts and first row of small coverts; tail-feathers brown, edged with yellowish-brown; throat greyish-white; cheeks, sides, and fore part of the neck, and a portion of the breast, ash-grey; abdomen white, sides, and lower tail-coverts yellowish-brown. Female similar to the male. Young in first plumage with the back, wings, and tail as in the adult, but duller, and the bands inconspicuous; on the head three greyish-white bands, streaked with dusky, and four dull greyish-brown bands similarly streaked; cheeks, sides, and fore part of the neck, with a portion of the breast dull greyish-white, streaked with dusky, the rest of the lower parts dull yellowish-white. At the second moult the colours approximate to those of the old bird, but the central band on the head is dull yellowish-brown, the lateral bands brownish-red; while the lower parts are of much duller tints. [122]

*Male*, 7  $\frac{1}{2}$ , 10  $\frac{1}{2}$ .

Breeds from Newfoundland and Labrador northward. Abundant. Migratory. Passes southward in autumn beyond the Texas.

White-crowned Bunting, *Emberiza leucophrys*, WILS. Amer. Orn. v. iv. p. 49.

*Fringilla leucophrys*, BONAP. Syn. p. 479.

*Fringilla* (*Zonotrichia*) *leucophrys*, White-crowned Finch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 255.

White-crowned Bunting or Finch, NUTT. Man. v. i. p. 479.

White-crowned Sparrow, *Fringilla leucophrys*, AUD. Orn. Biog. v. ii. p. 88; v. v. p. 515.

## 193. 8. *Fringilla atricapilla*, GMEL. Black-and-yellow-crowned Finch.

PLATE CCCXCIV. Fig. 3. Male.

Bill dusky above, reddish-brown beneath; upper part of head black, with a median longitudinal band of yellow, changing behind to grey; upper parts yellowish-brown, tinged with grey; the feathers of the fore part of the back, scapulars, and wing-coverts, with a central dusky spot; quills and larger coverts dark brown, bordered with reddish-brown, paler on the primaries; the tips of the secondary coverts and first row of small coverts white, forming two bands across the wing; tail-feathers brown, edged with yellowish-grey; sides of the head, throat, fore part and sides of the neck, and breast, light grey, the sides and lower tail-coverts pale yellowish-brown, the abdomen brownish-white. Young with the upper parts dull yellowish-grey, streaked with dusky; wings and tail dusky brown, the primaries and tail-feathers edged with yellowish-green; the lower parts greyish-white, streaked with dusky, the throat white, with a dusky band on each side, the sides and lower tail-coverts tinged with light yellowish-brown.

*Male*, 8, wing 3  $\frac{5}{12}$ .

Rocky Mountains and Columbia River. Rare. Migratory.

*Emberiza atricapilla*, GMEL. Syst. Nat. v. i. p. 875.

Black-and-yellow-crowned Finch, *Emberiza atricapilla*, AUD. Orn. Biog. v. v. p. 47.

## GENUS X. PIPILO, VIEILL. GROUND-FINCH.

Bill short, stout, narrower than the head, conical, somewhat compressed, acute; upper mandible with the dorsal line slightly convex, the ridge narrow and distinct, the sides convex, the edges somewhat inflected, ascending for more than a third, then direct, with a slight festoon; [123]

notches very slight, tip declinate, narrow; lower mandible with the angle very short and broad, the dorsal line slightly convex, the sides rounded, the edges involute, the point acute. Nostrils basal, roundish, partially concealed by the feathers. Tarsus of moderate length, compressed, with seven scutella; toes rather large, scutellate above, the first stronger, the lateral nearly equal. Claws rather long, moderately arched, slender, compressed, laterally grooved, acute. Small bristles at the base of the upper mandible. Plumage full, soft, and blended. Wings of ordinary length, much rounded, the fourth quill longest; tail long, rounded. Roof of upper mandible rather flat, with a narrow median and two broad lateral flattened ridges, tongue compressed, convex above, with a median groove, horny at the end, and pointed; oesophagus slightly dilated about the middle; stomach a strong muscular gizzard; intestine short; cæca small.

#### **194. 1. *Pipilo arcticus*, SWAINS. Arctic Ground-Finch.**

PLATE CCCXCIV. Fig. 4. Male. Fig. 5. Female.

Head, neck all round, a part of the breast, and upper parts in general, black; sides and lower tail-coverts orange-red, the latter paler; central part of the breast and abdomen white; feathers of the tibia dusky, margined with whitish; an elongated patch on the outer web of all the scapulars, a small terminal spot on the first row of small coverts, and on the secondary coverts, and a large patch at the end of the inner web of the outer three tail-feathers on each side, white. Female smaller, differing only in having the parts which are black in the male dull brownish-black.

*Male*, 8  $\frac{1}{2}$ ; wing, 3  $\frac{1}{2}$ . *Female*, 8; wing, 3  $\frac{1}{4}$ .

Columbia River, and northward to the Fur Countries. Abundant. Migratory.

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Pyrgita (*Pipilo*) arctica, Arctic Ground-Finch, SWAINS. & RICH. F. BOR. Amer. v. ii. p. 260.

Arctic Ground-Finch, NUTT. Man. v. ii. p. 589.

Arctic Ground-Finch, *Fringilla arctica*, AUD. Orn. Biog. v. v. p. 49.

#### **195. 2. *Pipilo erythrophthalmus*, LINN. Towhe Ground-Finch.—Towhe Bunting. Ground Robin. Swamp Robin.**

PLATE XXIX. Male and Female.

Head, neck all round, a portion of the breast, and upper parts in general, black; sides and lower tail-coverts orange-red, the latter paler; central part of the breast and abdomen white; feathers of the tibia dusky, margined with whitish (no white spots on the scapulars or wing-coverts); a white patch on the wing, formed by the bases of the outer webs of six or seven of the primaries; outer three tail-feathers with a white patch toward the end on their inner webs chiefly (much more extended than in the last species). Female smaller, differing from the male only in having the parts which in him are deep black, dusky reddish-brown. Young in first plumage with the upper parts dull reddish-brown, streaked with brownish-black; the wings and tail as in the adult, the lower parts pale yellowish-grey, marked with short longitudinal streaks of dusky.

*Male*, 8  $\frac{1}{2}$ , 12.

Breeds from Texas along the Atlantic districts, as well as in the interior, northward to Labrador. Abundant. Migratory.

Towhe Bunting, *Emberiza erythrophthalma*, WILS. Amer. Orn. v. ii. p. 35.

*Fringilla erythrophthalma*, BONAP. Syn. p. 112.

Ground Robin or Towhe Finch, *Fringilla erythrophthalma*, NUTT. Man. v. i. p. 515.

Towhe Bunting, *Fringilla erythrophthalma*, AUD. Orn. Biog. v. i. p. 151; v. v. p. 511.

### **GENUS XI. ERYTHROSPIZA, BONAP. PURPLE-FINCH.**

Bill rather short, robust, bulging, conical, pointed; upper mandible a little broader, with the nasal sinus very short and broad, the dorsal line a little convex, the ridge indistinct, the sides rounded, the edges a little inflected, ascending at the base, afterwards direct, the notches faint, the tip slightly deflected, rather acute; lower mandible with the angle short and rounded, the dorsal line ascending, straight, the back and sides rounded, the edges involute, the tip acute. Nostrils roundish, partially concealed by the short reflexed bristly feathers. Head large, roundish-ovate; neck short, body moderate. Tarsus short, slender, compressed, with seven scutella; toes rather small, first stout, lateral nearly equal. Claws slender, much compressed, well arched, acute. Plumage soft and rather blended; feathers of the hind head somewhat elongated and pointed. Wings of moderate length, rather pointed, the outer four quills longest. Tail of moderate length, deeply emarginate. Upper mandible concave beneath, with two prominent lines, of which the lateral are much larger; tongue higher than broad, channelled above, the tip somewhat rounded and concave; oesophagus dilated about the middle; stomach roundish, muscular;

[125]

intestine short; cœca very small.

### 196. 1. *Erythropsiza purpurea*, Gmel. Crested Purple-Finch.—Purple Finch.

PLATE IV. Male and Female.

Second quill longest, first shorter than third. Male with the head, neck, breast, back, and upper tail-coverts, crimson, paler behind; fore part of the back spotted with brown; quills, larger coverts, and tail, deep brown, margined with dull red. Female with the upper parts yellowish-olive, streaked with brown; a whitish band over the eye; lower parts greyish-white, streaked with brown. Young like the female.

*Male*, 6, 9.

During winter, from Texas to the Carolinas, and northward to Kentucky. In summer, from St Louis to the Columbia, and in the Fur Countries. Abundant.

Purple Finch, *Fringilla purpurea*, WILS. Amer. Orn. v. i. p. 119.

Purple Finch, BONAP. Syn. p. 114.

*Fringilla purpurea* Wilson, Crested Purple Finch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 264.

Purple Finch, *Fringilla purpurea*, AUD. Orn. Biog. v. i. p. 24; v. v. p. 200.

### 197. 2. *Erythropsiza frontalis*, Say. Crimson-fronted Purple-Finch.

PLATE CCCCXXIV. Fig. 2. Male.

Third quill longest, second and fourth equal; tail long, slightly emarginate, and a little rounded. Male with the forehead and a band over the eye, proceeding down the neck, crimson; throat, fore part of breast and sides, with the rump, rich carmine, the latter paler; upper parts greyish-brown, the head, hind neck, and fore part of back, tinged with crimson; feathers of wings and tail dusky, edged with brownish-grey; hind part of breast, abdomen, and lower tail-coverts yellowish-white, streaked with dusky. Female with the feathers of the upper parts brown, edged with brownish-white; the lower parts brownish-white, streaked with brown. [126]

*Male*, 6  $\frac{1}{4}$ , wing, 3  $\frac{1}{2}$ .

Bases of Rocky Mountains. Rare. Migratory.

*Fringilla frontalis*, SAY, Long's Exped. v. ii. p. 40.

Crimson-necked Bullfinch, *Pyrrhula frontalis*, BONAP. Amer. Orn. v. i. pl. 1.

Crimson-fronted Bullfinch, *Pyrrhula frontalis*, NUTT. Man. v. i. p. 534.

Crimson-necked Finch, *Fringilla frontalis*, AUD. Orn. Biog. v. v. p. 230.

### 198. 3. *Erythropsiza tephrocotis*, Swains. Grey-crowned Purple-Finch.

PLATE CCCCXXIV. Fig. 3. Male.

Male dark umber-brown; upper part of head ash-grey, anteriorly spotted with black; first row of small wing-coverts, rump, and upper tail-coverts broadly edged and tipped with rose-red, as are the feathers of the sides, and the lower tail-coverts, feathers of wings and tail dusky brown, margined with brownish-white, the secondary coverts with dull red.

*Male*, 6; wing, 4.

Saskatchewan River. Very rare. Migratory.

*Linaria* (*Leucosticte*) *tephrocotis*, Swainson's Grey-crowned Linnet, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 265.

Grey-crowned Linnet, *Fringilla tephrocotis*, AUD. Orn. Biog. v. v. p. 232.

## GENUS XII. CORYTHUS, Cuv. PINE-FINCH.

Bill short, robust, bulging at the base, conical, acute; upper mandible of the same breadth as the lower, with its dorsal line very convex, the nasal sinus semicircular, the sides convex, the edges sharp, overlapping, gently ascending at the base, then arched, with a slight festoon, the notches obsolete, the tip declinate, acute; lower mandible with the angle semicircular, the dorsal line slightly convex, the back rounded at the base, the sides convex, the edges somewhat inflected, the tip obtuse. Nostrils basal, round, concealed by bristly feathers. Head large, roundish-ovate; neck short; body moderately stout; feet short; tarsus short, compressed, with seven scutella; toes stout, the first proportionally large, the lateral nearly equal, the outer adherent at the base. Claws long, moderately arched, compressed, acute, that of the third toe [127]

longer than that of the first. Plumage soft, full, rather blended; two tufts of bristly feathers at the base of the upper mandible directed forwards. Wings of moderate length, pointed, the first, second, and third, nearly equal. Tail rather long, deeply emarginate. Roof of the mouth concave, with five prominent ridges; tongue deeper than broad, in its distal half oblong, concave, obtuse, and horny; œsophagus dilated about the middle; stomach large, muscular, with the lateral muscles distinct, and the epithelium rugous, intestine long, and rather slender; cœca very small; cloaca oblong.

### 199. 1. *Corythus Eucleator*, LINN. Common Pine-finch.—Pine Grosbeak.

PLATE CCCLVIII. Male, Female, and Young.

Male bright carmine, tinged with vermilion; the feathers on the fore part of the back and the scapulars greyish-brown in the centre; bristly feathers at the base of the bill blackish-brown; middle of the breast, abdomen, and lower tail-coverts, light grey, the latter with a central dusky streak; wings blackish-brown; primaries edged with reddish-white, secondaries more broadly with white; secondary coverts and first row of small coverts tipped with reddish-white; smaller coverts edged with red. Female with the upper part of the head and hind neck yellowish-brown, the rump brownish-yellow, the rest of the upper parts light brownish-grey, wings and tail as in the male, but the white edgings and tips tinged with grey; cheeks and throat greyish-white, or yellowish; lower parts ash-grey, anteriorly tinged with brownish-yellow. The young resemble the female. Young males yellow and red, like those of *Loxia curvirostra*.

*Male*, 8  $\frac{1}{2}$ , 14. *Female*, 8  $\frac{1}{4}$ , 13  $\frac{1}{2}$ .

From Pennsylvania and New Jersey, in winter, eastward to Newfoundland. Breeds from Maine northward. Common. Migratory.

Pine Grosbeak, *Loxia Eucleator*, WILS. Amer. Orn. v. i. p. 80.

*Pyrrhula Eucleator*, BONAP. Syn. p. 119.

*Pyrrhula* (*Corythus*) *Eucleator*, Pine Bullfinch, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 262.

Pine Grosbeak or Bullfinch, NUTT. Man. v. i. p. 535.

Pine Grosbeak, *Pyrrhula Eucleator*, AUD. Orn. Biog. v. iv. p. 414.

## GENUS XIII. LOXIA, LINN. CROSSBILL.

Bill rather long, stout at the base, where it is much higher than broad, extremely compressed toward the end, the mandibles towards their extremity deflected to opposite sides, so as to cross each other; upper mandible with the dorsal line convex and deflected, the sides slightly convex, the edges sharp, and towards the end united, the tip excessively compressed and decurved; lower mandible with its angle semicircular, the dorsal line ascending and convex, the edges sharp, inflected, and approximated at the tip, which is extremely acute. Nostrils small, basal, round, covered by the short bristly feathers. Head large, broadly ovate; neck short; body compact. Feet rather short and strong; tarsus short, compressed, with seven scutella; toes of moderate size, the first strong, the lateral nearly equal. Claws long, arched, very slender, much compressed, tapering to a fine point, that of the middle toe nearly as long as that of the first. Plumage soft, full, and blended. Two tufts of bristly feathers at the base of the upper mandible directed forwards. Wings of moderate length, pointed, the outer three primaries longest, the first generally exceeding the rest. Tail short, distinctly emarginate. Roof of the mouth concave, with three ridges, of which the median is much smaller; tongue deeper than broad, at the end oblong, obtuse, concave above, and horny; œsophagus dilated into a very large crop; stomach roundish, muscular, with the epithelium rugous; intestine of moderate length; cœca very small.

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### 200. 1. *Loxia curvirostra*, LINN. Common Crossbill.

PLATE CXCVII. Male, Female, and Young.

Male dull light red, inclining to vermilion; the wings and tail blackish-brown, the feathers narrowly margined with dull red. Female with the upper parts greyish-brown, tinged with green, the rump dull greenish-yellow, the sides of the head and neck of the same colour as the back, the lower parts pale greyish-yellow, brighter on the fore part of the breast, wings and tail as in the male, but the feathers edged with dull yellowish. Young with the central part of the feathers greyish-brown, the edges yellowish-grey, the upper parts thus appearing spotted, the lower streaked with dusky. Young males vary in the tints of the plumage from yellowish-green to orange and vermilion.

[129]

*Male*, 7, 10.

From Maryland eastward and northward, to lat. 52. Breeds in Pennsylvania, New York, and the north-eastern States to Nova Scotia. Common. Migratory.



American Crossbill, *Curvirostra americana*, WILS. Amer. Orn. v. iv. p. 44.

*Loxia curvirostra*, BONAP. Syn. p. 117.

Common Crossbill, NUTT. Man. v. i. p. 583.

Common Crossbill, *Loxia curvirostra*, AUD. Orn. Biog. v. ii. p. 559; v. v. p. 511.

## 201. 2. *Loxia leucoptera*, GMEL. White-winged Crossbill.

PLATE CCCLXIV. Male, Female, and Young.

Bill excessively compressed, with the mandibles less curved. Male rich carmine, inclining to crimson; the feathers on the fore part and middle of the back dusky, excepting the tips; the scapulars, wings, upper tail-coverts, and tail black; two broad bands of white on the wings, the anterior formed by the first row of small coverts, and several of those adjoining, the other by the secondary coverts, of which the basal half only is black. Female with the feathers of the upper parts dusky, edged with greyish-yellow, the rump wax-yellow; the wings and tail as in the male, but with the white bands of less breadth; lower parts yellowish-grey, streaked with dusky, the fore part of the breast wax-yellow. Young similar to the female, but with the lower parts dull yellowish-grey, spotted and streaked with dark brown.

*Male*, 6  $\frac{1}{2}$ , 10  $\frac{5}{8}$ . *Female*, 6  $\frac{1}{4}$ , 10.

During winter, as far south as Maryland. Not uncommon in New Jersey and Pennsylvania, where a few breed. Common in Maine, Nova Scotia, Labrador, and the Fur Countries. Migratory.

White-winged Crossbill, *Loxia leucoptera*, WILS. Amer. Orn. v. iv. p. 48.

*Loxia leucoptera*, BONAP. Syn. p. 117.

White-winged Crossbill, *Loxia leucoptera*, BONAP. Amer. Orn. v. ii. p.

*Loxia leucoptera*, White-winged Crossbill, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 263.

White-winged Crossbill, *Loxia leucoptera*, NUTT. Man. v. i. p. 540.

White-winged Crossbill, *Loxia leucoptera*, AUD. Orn. Biog. v. iv. p. 467.

## GENUS XIV. CORYDALINA, AUD. LARK-FINCH.

Bill of the same form as in the *Guiraca*, but smaller, and approaching to that of *Dolichonyx*, being short, robust, conical, a little compressed; upper mandible a little narrower, with the dorsal line very slightly convex, the ridge indistinct, the nasal sinus very broad and short, the sides convex, the edges ascending for a third of their length, then direct, the notches almost obsolete, the tip narrow; lower mandible with the angle short and very broad, the dorsal line ascending and slightly convex, the back broad, the sides rounded, the edges inflected, the tip pointed. Nostrils basal, roundish. Head large, ovate; neck short; body full. Feet of moderate length, stout; tarsus of ordinary length, compressed, with seven scutella; toes rather large, the first stouter, the lateral equal, the third very long. Claws rather long, arched, much compressed, laterally grooved, tapering to a very acute point. Plumage soft and blended. Bristles at the base of upper mandible feeble. Wings of moderate length, the outer three quills nearly equal, the second longest, the fourth slightly shorter than the third; outer secondaries broadly rounded and emarginate; inner tapering to a rounded point, one of them, when the wing is closed, little shorter than the outer primaries. Tail of moderate length, a little rounded. Name from [Greek: *Korydalos*], a lark.

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## 202. 1. *Corydalina bicolor*, TOWNS. Prairie Lark-Finch.

PLATE CCCXC. Fig. 2. Male. Fig. 3. Female.

Male black, slightly tinged with grey; a large patch of white on the wing, including some of the smaller coverts, the tips of the first row, and their secondary coverts; primaries and outer secondaries narrowly, inner secondaries broadly margined with white; tail-feathers narrowly edged with white, and having a narrow speck of the same at the end of the inner web. Female smaller, with the upper parts greyish-brown, streaked with dusky brown; the lower white, with oblong spots of brownish-black, the abdomen nearly pure white, their sides tinged with reddish-brown; quills dark brown, edged and tipped with reddish-white; the patch on the wing of the same tint; tail-feathers dark brown, the outer externally edged, and all tipped with white on the inner web.

*Male*, 7, wing 3  $\frac{5}{12}$ .

Plains of the Platte River. Plentiful. Migratory.

*Fringilla bicolor*, Prairie Finch, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 189.

Prairie Finch, *Fringilla bicolor*, AUD. Orn. Biog. v. v. p. 19.

Bill rather short, very robust, much higher than broad, tapering to a point; upper mandible considerably smaller than the lower, with the dorsal line convex, the ridge indistinct, the nasal sinus very wide, the sides convex, the edges ascending rapidly for a third of their length, then direct, with a slight festoon, slightly inflected, the notches faint, the tip a little deflected and narrow; lower mandible with the angle semicircular, the dorsal line straight, the sides at the base inflected, toward the end convex, the edges involute, the tip acute. Nostrils basal, round, concealed by the feathers. Plumage soft and blended, feathers of the head elongated and erectile; distinct bristles at the base of the upper mandible. Wings of moderate length, much rounded, the fourth and fifth quills longest, the first and eighth about equal. Tail long, rounded. Tarsus short, compressed, with seven scutella; toes moderate, hind toe stout, broad beneath, outer toe slightly longer than inner, and adherent at the base. Claws moderate, arched, compressed, acute. Upper mandible concave beneath, with three longitudinal ridges; tongue as high as broad, convex above, tapering to a point. Œsophagus nearly uniform, stomach pretty large, roundish, its lateral muscles strong.

**203. 1. *Pitylus Cardinalis*, LINN. Common Cardinal Grosbeak.—Cardinal Bird. Red Bird. Virginian Nightingale.**

PLATE CLIX. Male and Female.

Male with the bill coral-red; plumage vermilion, duller on the upper parts; anterior part of forehead, lores, and throat black, inner webs of quills brown. Female with the bill paler, the upper parts yellowish-grey, the lower greyish-yellow, capistrum dusky; some of the crest-feathers, the wings and tail, as in the male, but of a fainter tint.

*Male*, 8 ½, 11 ½.

Breeds abundantly from Texas to New York. Very rare in Massachusetts. Valleys of the Mississippi and Missouri, Kentucky and Ohio. Resident from Maryland southward.

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Cardinal Grosbeak, *Loxia cardinalis*, WILS. Amer. Orn. v. ii. p. 38.

*Fringilla cardinalis*, BONAP. Syn. p. 113.

Cardinal Grosbeak or Red Bird, *Fringilla cardinalis*, NUTT. Man. v. i. p. 519.

Cardinal Grosbeak, *Fringilla cardinalis*, AUD. Orn. Biog. v. ii. p. 336; v. v. p. 514.

**GENUS XVI. COCCOBORUS, SWAINS. SONG-GROSBEAK.**

Bill rather short, extremely robust, almost as broad as the head and somewhat compressed, tapering to a point; upper mandible considerably smaller than the lower, with the dorsal line convex, the ridge indistinct, the nasal sinus very wide, the sides convex, the edges ascending for a third of their length, then direct, with a slight festoon, and inflected, the notches faint, the tip a little deflected, and narrow; lower mandible with the angle short and semicircular, the dorsal line straight, the sides at the base inflected, toward the end convex, the edges involute, the tip acute. Nostrils basal, round. Plumage somewhat compact, blended; distinct bristles at the base of the upper mandible. Wings of moderate length, pointed, the outer three quills nearly equal, the second longest. Tail of moderate length, slightly emarginate. Tarsus short, compressed, with seven scutella; toes moderate, hind toe stout, broad beneath, outer toe slightly longer than inner, and adherent at the base. Claws moderate, arched, compressed, acute. Upper mandible concave beneath, with three longitudinal ridges; tongue as high as broad, convex above, tapering to a point; œsophagus rather wide, dilated about the middle; stomach rather small, roundish, compressed, with its muscles distinct and of moderate thickness, the epithelium longitudinally rugous; intestine short, and of moderate width; cœca very small.

**204. 1. *Coccororus cœruleus*, LINN. Blue Song-Grosbeak.**

PLATE CXXII. Male, Female, and Young.

Male blue; with the lores, chin, and a line round the base of the mandibles black; wings and tail brownish-black, the latter and the primaries edged with blue, the first row of small coverts and the secondary coverts tipped with reddish-brown. Female with the head and hind part of the back blue; the fore part of the back brown, the wings and tail as in the male, the lower parts light greyish-brown, the sides, and fore part of the neck and the breast tinged with blue. Young yellowish-brown, lighter beneath; the upper part of the head, the back, smaller wing-coverts, and upper tail-coverts tinged with dusky.

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*Male*, 7 ½, 11.

From Texas to New Jersey, and up the Mississippi to Memphis. Rocky Mountains. Rather rare. Migratory.

Blue Grosbeak, *Loxia cœrulea*, WILS. Amer. Orn. v. iii. p. 78.

*Fringilla cœrulea*, BONAP. Syn. p. 114.

Blue Grosbeak, *Fringilla cœrulea*, NUTT. Man. v. i. p. 529.

Blue Grosbeak, *Fringilla cœrulea*, AUD. Orn. Biog. v. ii. p. 140; v. v. p. 508.

## 205. 2. *Coccyborus ludovicianus*, LINN. Rose-breasted Song-Grosbeak.

PLATE CXXVII. Male, Female, and Young.

Male with the head, neck, fore part of back, wings, and tail, black; lower part of the fore neck, a portion of the breast, axillars, and lower wing-coverts, rich carmine; hind part of the back, two bands on the wings, bases of primary quills, tips of secondaries, and terminal half of inner webs of outer three tail-feathers, white. Female with the upper parts light yellowish-brown, streaked with darker, the lower yellowish-white, the sides of the neck, fore part of breast, and sides streaked with yellowish-brown; three white bands on the head; white wing-bands narrower than in the male; axillars and lower wing-coverts light buff. Young like the female.

*Male*, 7  $\frac{3}{4}$ , 13.

Passes from Texas northward and eastward in great numbers. Breeds on the Missouri, in the Middle States, Newfoundland, and Labrador. Rather common. Migratory.

Rose-breasted Grosbeak, *Loxia rosea*, WILS. Amer. Orn. v. ii. p. 135.

*Fringilla ludoviciana*, BONAP. Syn. p. 113.

*Coccybora ludoviciana*, Rose-breasted Grosbeak, F. Bor. Amer. v. i. p. 271.

Rose-breasted Grosbeak, *Fringilla ludoviciana*, NUTT. Man. v. i. p. 527.

Rose-breasted Grosbeak, *Fringilla ludoviciana*, AUD. Orn. Biog. v. ii. p. 166; v. ii. p. 513.

## 206. 3. *Coccyborus melanocephalus*, SWAINS. Black-headed Song-Grosbeak.

PLATE CCCLXXIII. Male and Female.

Male with the head, cheeks, a small portion of the throat, wings, and tail, black; a band on the hind neck, the fore part and sides of the neck, a portion of the breast, and the sides, dull reddish-orange; the middle of the breast, axillars, and lower wing-coverts, light yellow; back black, streaked with yellowish-red; rump of the latter colour; two bands on the wings, the base and outer margins of the primaries, the tips of the secondaries, and a terminal patch on the inner webs of the outer three tail-feathers, white. Female with the upper parts light yellowish-brown, streaked with darker, the lower light yellowish-brown; the axillars and lower wing-coverts light yellow; white wing-bands narrower than in the male.

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*Male*, 8  $\frac{1}{2}$ , wing 4  $\frac{1}{4}$ .

Central Table-land of Rocky Mountains. Common. Migratory.

Black-headed Grosbeak, *Fringilla melanocephala*, AUD. Orn. Biog. v. iv. p. 519.

## GENUS XVII. COCCOTHAUSTES, BRISS. GROSBEAK.

Bill of moderate length, extremely robust, almost as broad as the head, not compressed, conical, pointed; upper mandible rather broader than the lower, with the dorsal line slightly convex, the ridge indistinct, the nasal sinus extremely wide and short, the sides rounded, the edges simply arched and a little inflected, the notches almost obsolete, the tip a little deflected; lower mandible with the angle extremely short and wide, forming the fourth of a circle, the dorsal line straight, the sides at the base and in their whole length convex, the edges involute, the tip acute; nostrils basal, round. Plumage blended. Wings of moderate length, pointed, the outer three quills nearly equal, the second longest. Tail of moderate length, emarginate. Tarsus short, compressed, with seven scutella; toes moderate, hind toe stout, broad beneath; outer toe a little longer than the inner, and adherent at the base. Claws moderate, or rather stout, arched, compressed, acute. Upper mandible concave beneath, with three prominent lines.

## 207. 1. *Coccybora vespertina*, COOPER. Evening Grosbeak.

PLATE CCCLXXIII. Fig. 1. Male.

PLATE CCCXXIV. Fig 5. Female. Fig. 6. Young Male.

Male with the upper part of the head and hind neck black, bounded anteriorly by a broadish band of bright yellow passing over the eyes; a narrow line of black margining the base of the bill; cheeks, lower part of hind neck, and throat, dark yellowish-olive, this colour gradually

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brightening on the body, until, on the outer edges of the scapulars, the rump, the axillars, lower wing-coverts, abdomen, and lower tail-coverts, it becomes pure yellow; smaller wing-coverts, alula, primary coverts, primaries, outer three secondaries, outer web of the next, and the bases of the inner secondaries black, as is the tail; six inner secondaries, and their coverts, the basal part excepted, black. Female with the upper parts brownish-grey, the head and cheeks darker, the lower parts pale grey, the throat white, with two longitudinal black bands; a band of greenish-yellow across the fore part of the back, axillars and lower wing-coverts light yellow; wings and tail, with their coverts, brownish-black, secondary coverts, and quills edged with yellowish-white, bases of some of the primaries, tips of the tail-coverts, and inner webs of all the tail-feathers at the end, white. Young male similar to the female, but without the black bands on the throat.

*Male*, 8, wing  $4\frac{3}{4}$ . *Female*,  $7\frac{1}{2}$ , wing  $4\frac{1}{4}$ .

Michigan. Columbia River. Saskatchewan. Common. Migratory.

*Fringilla vespertina*, COOPER, Ann. Lyc. New York, v. i. p. 220.

Evening Grosbeak, *Fringilla vespertina*, BONAP. Syn. p. 113.

Evening Grosbeak, *Fringilla vespertina*, BONAP. Amer. Orn. v. ii. pl. 14.

*Coccothraustes vespertina*, Evening Grosbeak, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 269.

Evening Grosbeak, NUTT. Man. v. i. p. 594.

*Coccothraustes Bonapartii*, LESSON, Young Male.

Evening Grosbeak, *Fringilla vespertina*, AUD. Orn. Biog. v. iv. p. 515; v. v. p. 235.

## GENUS XVIII. PYRANGA, VIEILL. RED-BIRD.

Bill of moderate length, robust, tapering, compressed toward the end, acute; upper mandible with its dorsal line declinate and considerably convex, the ridge rather narrow, nasal sinus very short and wide, the sides convex, the edges sharp, slightly arched, with a festoon about the middle, the notches distinct, the tip very slender, declinate; lower mandible strong, with the angle short and rounded, the dorsal line straight, the sides convex, the edges direct, the tip acute. Nostrils basal, round. Head ovate; neck short; body compact. Tarsus short, with seven scutella; toes rather small, the first moderate, the outer slightly longer than the inner, and adherent at the base. Claws moderate, well arched, much compressed, laterally grooved, acute, those of the first and third toes equal. Plumage soft and blended; distinct bristles at the base of upper mandible. Wings rather long, with the second and third quills longest, the first a little shorter. Tail of moderate length, emarginate. Upper mandible concave, with three longitudinal ridges; tongue somewhat triangular, convex above, with the point thin-edged and lacerated; oesophagus dilated about the middle; stomach broadly elliptical, small, its lateral muscles rather small; epithelium thin, longitudinally rugous; intestine short; cœca extremely small. Inferior laryngeal muscles four on each side, but very small. [136]

### 208. 1. *Pyrranga æstiva*, GMEL. Summer Red-bird.

PLATE XLIV. Male and Female.

Male vermilion, brighter beneath; inner webs of quills brown. Female greenish-yellow above. Young like the female; young males variegated according to age; old females sometimes like the males, but duller.

*Male*,  $7\frac{1}{2}$ , 11.

From Texas to Massachusetts. In the interior to Canada. Abundant. Migratory.

Summer Red Bird, *Tanagra æstiva*, WILS. Amer. Orn. v. i. p. 95.

*Tanagra æstiva*, BONAP. Syn. p. 105.

Summer Red Bird, *Tanagra æstiva*, NUTT. Man. v. i. p. 469.

Summer Red Bird, *Tanagra æstiva*, AUD. Orn. Biog. v. i. p. 232; v. v. p. 518.

### 209. 2. *Pyrranga rubra*, LINN. Scarlet Red-bird.—Scarlet Tanager.

PLATE CCCLIV. Fig. 3. Male. Fig. 4. Female.

Male scarlet, with the wings and tail black. Female yellowish-green above, greenish-yellow beneath, wings and tail dusky, the feathers margined with yellowish-green. Males have been met with, having a scarlet band on the wing, formed by the first row of small coverts. Young like the female.

*Male*, 7, 11  $\frac{3}{4}$ . *Female*, 6  $\frac{1}{2}$ , 10  $\frac{3}{4}$ .

From Texas to Lake Huron. Throughout the Valley of the Mississippi, Kentucky, and Ohio. Common. Migratory.

Scarlet Tanager, *Tanagra rubra*, WILS. Amer. Orn. v. ii. p. 42.

*Tanagra rubra*, BONAP. Syn. p. 105.

Scarlet Tanager or Black-winged Summer Red Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 273.

Scarlet Tanager, *Tanagra rubra*, NUTT. Man. v. i. p. 465.

Scarlet Tanager, *Tanagra rubra*, AUD. Orn. Biog. v. iv. p. 388.

### **210. 3. *Pyrrhuloxia ludoviciana*, WILS. Louisiana Red-bird.—Louisiana Tanager.**

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PLATE CCCLIV. Fig. 1, 2. Male. PLATE CCCC. Fig. 4. Female.

Male with the head and throat rich carmine; lower parts, neck, rump, and a broad band on the wing, rich yellow; middle of the back, wings, and tail black; secondary coverts and inner secondaries tipped with yellowish-white. Female with the upper parts yellowish-green, the fore part of the back greyish-olive; lower parts greenish-yellow; two bands on the wings, the anterior pale yellow, the other whitish.

*Male*, 7  $\frac{1}{4}$ , wing, 3  $\frac{9}{16}$ .

Platte River. Columbia River. Common. Migratory.

Louisiana Tanager, *Tanagra ludoviciana*, WILS. Amer. Orn. v. iii. p. 27.

*Tanagra ludoviciana*, BONAP. Syn. p. 105.

Louisiana Tanager, NUTT. Man. v. i. p. 471.

Louisiana Tanager, *Tanagra ludoviciana*, AUD. Orn. Biog. v. iv. p. 385; v. v. p. 90.

## **FAMILY XVI. AGELAINÆ. MARSH-BLACKBIRDS.**

Bill of moderate length, sometimes short, seldom longer than the head, stout, straight, conical, compressed, tapering, pointed; upper mandible with the dorsal line nearly straight, the nasal sinus short and very wide, the ridge thus appearing to encroach on the forehead, the sides rounded, the edges without notch; lower mandible with the angle short and rounded, the dorsal line straight, the edges involute. Nostrils basal, roundish or oblong. Head rather large, ovate; neck short; body moderately full. Legs of moderate length, stout, rather slender; tarsus compressed, with eight anterior scutella; hind toe large, lateral toes equal, the outer adherent at the base. Claws generally long, arched, compressed, acute. Plumage soft, blended, in the males usually glossy. Wings of moderate length, with the outer three or four quills longest, the first being very little shorter than the second, or sometimes even exceeding it; tail of twelve feathers, of moderate length, or elongated. The roof of the upper mandible concave, with three longitudinal ridges, of which the middle is larger, and at the base forms a hard prominence; tongue sagittate and papillate at the base, narrow, deep, pointed. (Esophagus wide, dilated about the middle; proventriculus oblong; stomach roundish or elliptical, with the lateral muscles distinct and well developed; the epithelium dense and longitudinally rugous; intestine short and rather wide; cœca very small, cylindrical; cloaca oblong. Trachea simple, with four pairs of inferior laryngeal muscles. Female much smaller. Nest various, on trees or bushes, or on the ground, generally elaborate. Eggs about five, ovate, spotted and streaked.

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## **GENUS I. DOLICHONYX, SWAINS. RICE-BIRD.**

Bill rather short, very stout, moderately compressed, conical; upper mandible with the dorsal line straight, a little convex at the base, and very slightly deflected at the end, its ridge rather broad, indistinct, sides rounded, edges direct, overlapping, tip rather acute; lower mandible with the angle of moderate length, very broad, dorsal outline ascending, slightly convex at the base, sides erect and convex, tip acute; gape-line ascending for a fourth of its length, then direct. Nostrils small, elliptical, operculate. Plumage blended, but firm, with little gloss. Wings rather long, pointed, the first quill longest. Tail of moderate length, the feathers narrow and acuminate. Toes large; claws very long, little arched, slender, tapering to a fine point.

### **211. 1. *Dolichonyx oryzivora*, LINN. Wandering Rice-bird.—Bob-o-link. Maybird. Ortolan.**

PLATE LIV. Male and Female.

Male with the head, cheeks, lower parts, wings, and tail, black; a band of brownish-yellow across the hind neck; the back anteriorly black, the feathers with yellowish edges, posteriorly light grey, passing into white, of which colour are the scapulars. Female with the upper parts light yellowish-brown, longitudinally streaked with blackish-brown; the lower parts light greyish-yellow, the sides streaked with dusky. In autumn, the males assume the plumage of the female.

*Male*, 7, 11.

Passes from Texas eastward and northward. Breeds from the Middle Districts northward. Extremely abundant. Migratory.

Rice-Bunting, *Emberiza oryzivora*, WILS. Amer. Orn. v. ii. p. 48.

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*Icterus agripennis*, BONAP. Syn. p. 53.

*Dolichonyx oryzivorus*, Sharp-Tailed Rice-Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 278.

Rice-Bird, or Bob-o-link, NUTT. Man. v. i. p. 185.

Rice-Bird, *Icterus agripennis*, AUD. Orn. Biog. v. i. p. 283; v. v. p. 486.

## GENUS II. MOLOTHRUS, SWAINS. COW-BIRD.

Bill rather short, very stout, moderately compressed, conical; upper mandible with the dorsal line slightly convex, its ridge flattened for half its length, afterwards narrow, sides convex, edges direct, tip rather acute; lower mandible with the angle short and wide, the dorsal outline ascending, straight, sides erect and convex, edges involute, tip acute; gape-line gently ascending for a third of its length, afterwards direct. Nostrils small, elliptical. Plumage blended, glossy. Wings rather long, pointed, the second quill longest, the first almost equal. Tail of moderate length, the feathers broad and rounded.

### 212. 1. *Molothrus pecoris*, GMEL. Common Cow-bird.

PLATE XCIX. Male and Female. PLATE CCCCXXIV. Fig. 4. Young.

Male with the head and neck sooty-brown, the body black, glossed with green, the fore part of the back with blue. Female considerably smaller, greyish-brown, the lower parts lighter. Young with the upper parts greyish-brown, the quills and tail darker; wing-coverts and secondary quills narrowly edged with light brown, primaries with whitish; lower parts dull yellowish-white, the sides marked with a series of dark brown pointed spots.

*Male*, 7, 11  $\frac{1}{2}$ .

Dispersed from Texas northward to Lat. 68°, and throughout the United States. Great numbers winter in the Southern States.

Cow Bunting, *Emberiza pecoris*, WILS. Amer. Orn. v. ii. p. 145.

*Icterus pecoris*, BONAP. Syn. p. 53.

*Molothrus pecoris*, Cow-pen or Cuckoo Bunt, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 277.

Cow Troopial, or Cow Blackbird, *Icterus pecoris*, NUTT. Man. v. i. p. 178.

Cow-pen Bird, *Icterus pecoris*, AUD. Orn. Biog. v. i. p. 493; v. v. p. 233, 490.

## GENUS III. AGELAIUS, SWAINS. MARSH-BLACKBIRD.

Bill shorter than the head, stout, straight, conical, tapering to an acute point; upper mandible with the dorsal line straight, slightly convex at the base, the ridge flattened toward the base, where it forms a short tapering process on the forehead, the sides rounded, the edges inflected, the tip a little depressed; lower mandible with the angle short and wide, the sides convex at the base, toward the end rounded, the edges involute, the tip acute; the gape-line ascending at the base, afterwards direct. Nostrils basal, oval, with a small operculum. Head ovate, of moderate size; neck short; body moderately stout. Feet of ordinary length, rather stout; tarsus compressed, with seven anterior scutella; toes rather large, the first much stronger, the outer a little shorter than the inner, and adherent at the base. Claws long, little arched, compressed, laterally grooved, very acute. Plumage soft and blended, glossy in the males. Wings of moderate length, with the outer four quills nearly equal. Tail rather long, rounded. Roof of the upper mandible with three longitudinal ridges; tongue tapering to a horny, flattened, slightly emarginate tip; oesophagus wide, considerably dilated about the middle; stomach roundish, muscular; intestine short and of moderate width; cæca very small, cloaca oblong.

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### 213. 1. *Agelaius xanthocephalus*, BONAP. Saffron-headed Marsh-Blackbird.

Male with the head, upper part of hind neck, sides of the neck, its fore part, and a portion of the breast, orange-yellow, the throat paler; feathers along the base of the bill, loreal space, a band below the eye, and a narrower one above it, black; the rest of the plumage glossy black, excepting two bands on the outer part of the wing, formed by some of the smaller coverts, and the primary coverts, which are white. Female much smaller, of a uniform chocolate-brown, with the edges of the feathers paler, the feathers at the base of the upper mandible, a band over the eye, and the fore part of the neck light yellow, the throat dull white, and the feathers on the middle of the breast margined with white toward the end. Young similar to the female, but without yellow on the fore neck.

*Male*, 9; wing,  $5\frac{1}{2}$ .

Western Plains, California, and Fur Countries. Abundant. Migratory.

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Yellow-headed Troopial, *Icterus icterocephalus*, BONAP. Amer. Orn. v. i. p. 27.

*Icterus xanthocephalus*, BONAP. Syn. p. 52.

*Agelaius xanthocephalus*, Saffron-headed Maize-Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 281.

Yellow-headed Troopial, NUTT. Man. v. i. p. 176.

Yellow-headed Troopial, *Icterus xanthocephalus*, AUD. Orn. Biog. v. v. p. 6.

#### 214. 2. *Agelaius tricolor*, AUD. Red-and-white-shouldered Marsh-Blackbird.

PLATE CCCLXXXVIII. Fig. 1. Male.

Tail almost even. Male with the plumage glossy bluish-black; the smaller wing-coverts deep carmine, their first or posterior row white. Bill considerably longer than in the two following species.

*Male*, 9; wing, 5.

North California. Abundant. Migratory.

Red-and-white-winged Troopial, *Icterus tricolor*, AUD. Orn. Biog. v. v. p. 1.

#### 215. 3. *Agelaius Gubernator*, WAGLER. Red-and-black-shouldered Marsh-Blackbird.

PLATE CCCCXX. Male and Female.

Tail slightly rounded. Male with the plumage glossy bluish-black; the smaller wing-coverts carmine scarlet, their first or posterior row tinged with yellow, and broadly tipped with black. Female much smaller, with the upper parts dark brown, the feathers edged with light brown; some of the smaller wing-coverts edged with dull scarlet, the first row with brownish-white; the larger coverts, quills, and tail-feathers, blackish-brown, edged with dull reddish-brown; lower parts longitudinally streaked with dusky and whitish, the fore neck strongly tinged with dull carmine.

*Male*, 9; wing,  $5\frac{7}{12}$ .

California.

*Psarocolius Gubernator*, WAGLER, Syst. Avium.

Crimson-winged Troopial, *Icterus Gubernator*, AUD. Orn. Biog. v. v. p. 211.

#### 216. 4. *Agelaius phoeniceus*, LINN. Red-and-yellow-shouldered Marsh-Blackbird.—Red-winged Starling.

PLATE LXVII. Male, Female, and Young.

Tail considerably rounded. Male with the plumage glossy black, the smaller wing-coverts scarlet, their first or posterior row buff-coloured, at the tip whitish. Female much smaller, with the upper parts dark brown, the feathers edged with light brown; some of the smaller wing-coverts tinged with red; wings and tail blackish-brown, the feathers margined with brownish-red, the first row of small coverts and secondary coverts narrowly tipped with whitish; a yellowish-brown band over the eye; lower parts longitudinally streaked with dusky and whitish, the fore neck strongly tinged with dull carmine. Young similar to the female, but without red on the small wing-coverts or throat, the latter part with the sides of the head being pale yellowish-brown.

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*Male*, 9, 14. *Female*,  $7\frac{1}{2}$ .

Breeds from Texas throughout the United States, and northward to the Saskatchewan. Vast

numbers spend the winter in the Southern and Western States.

Red-winged Starling, *Sturnus prædatorius*, WILS. Amer. Orn. v. iv. p. 30.

*Icterus phœniceus*, BONAP. Syn. p. 52.

*Agelaius phœniceus*, Red-winged Maize-bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 280.

Red-winged Blackbird, *Icterus phœniceus*, NUTT. Man. v. i. p. 169.

Red-winged Starling or Marsh-Blackbird, AUD. Orn. Biog. v. i. p. 348; v. v. p. 487.

## GENUS IV. ICTERUS, BRISS. HANGNEST.

Bill a little shorter than the head, conical, very slightly decurved, compressed, tapering to a very attenuated point; upper mandible with the dorsal line almost straight, being very slightly convex, the ridge indistinct, narrowed at the base; the sides convex, the edges overlapping, the tip extremely sharp; gape-line ascending at the base, afterwards direct; lower mandible with the angle long and of moderate width, the dorsal line and that of the crura slightly concave, the sides erect at the base, convex towards the end, the edges slightly inflected, the tip extremely slender. Nostrils basal, elliptical, with a small operculum. Head ovate, of moderate size; neck short; body rather slender. Feet of moderate length, rather stout; tarsus much compressed, with seven anterior scutella; toes of moderate size, the hind toe much stronger, the lateral about equal, the third and fourth united at the base. Claws rather long, moderately arched, much compressed, laterally grooved, very acute. Plumage soft and blended. Wings of moderate length, with the outer four quills nearly equal. Tail of moderate length, rounded and slightly emarginate. Roof of the upper mandible with a broad median ridge, somewhat prominent at the base; tongue tapering to a deeply slit point; œsophagus wide, considerably dilated about the middle; stomach elliptical; intestine short, and of moderate width; cœca very small; cloaca globular.

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### 217. 1. *Icterus Baltimore*, LINN. *Baltimore Hangnest*.—*Golden Robin*.

PLATE XII. Adult and Young Male. PLATE CCCCXXIII. Fig. 3. Female.

Second and third quills longest, fourth longer than first; tail slightly rounded. Male with the head, throat, sides, and hind part of the neck, with the fore part of the back, black; lower parts, rump, upper tail-coverts, and smaller wing-coverts rich orange, passing into orange-red on the breast; wings black, the secondary coverts largely tipped, and the quills margined with white; tail black, all the feathers tipped with rich yellow, the outer for half their length, the middle on a very small space. Female considerably smaller, with the upper part of the head, hind neck, sides of the neck at the middle, and anterior half of the back, brownish-black, the feathers edged with dull yellowish-green; hind part of the back light brownish-yellow, purer on the rump; tail yellowish-brown, the middle feathers darker; wing-coverts blackish-brown, quills dark brown, all margined with whitish; first row of small coverts and secondary coverts largely tipped with white; loreal space, a band over the eye, and another beneath it, dull yellow; below the latter the cheeks spotted with dusky; lower parts yellowish-orange, duller than in the male, paler behind; some dusky streaks on the throat. Young similar to the female, but with the upper parts brownish-yellow, the head and back faintly spotted with dusky.

*Male*, 7  $\frac{3}{4}$ , 12. *Female*, 7, 11.

In summer dispersed over the United States, to Nova Scotia. Columbia River. Texas. Abundant. Migratory.

*Baltimore Oriole*, *Oriolus Baltimore*, WILS. Amer. Orn. v. i. p. 23.

*Icterus Baltimore*, BONAP. Syn. p. 51.

*Baltimore Oriole* or *Golden Robin*, *Icterus Baltimore*, NUTT. Man. v. i. p. 152.

*Baltimore Oriole*, *Icterus Baltimore*, AUD. Orn. Biog. v. i. p. 66; v. v. p. 278.

### 218. 2. *Icterus Bullockii*, SWAINS. *Bullock's Hangnest*.

PLATE CCCLXXXVIII. Fig. 5. Male.

PLATE CCCCXXXIII. Fig. 1. Young Male. Fig. 2. Female.

First quill longer than fifth, the intermediate quills almost equal. Male with the upper part of the head, the hind neck, and the anterior portion of the back, with the loreal space, some feathers at the base of the lower mandible, and a rather narrow longitudinal band on the fore neck, deep black; anterior part of the forehead, a band over the eye, the cheeks, sides of the neck, and the breast, rich orange-yellow, the rest of the lower parts paler; lower wing-coverts and anterior edge of the wing pale yellow; hind parts of the back and upper tail-coverts yellow tinged with green; wings brownish-black, with a large patch of white formed by the outer small coverts and the edges of the secondary coverts; quills edged with white; four middle tail-feathers black, the

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rest orange-yellow, with a dusky patch near the end. Female smaller, with the upper parts greyish-olive, lighter on the rump; on the head and upper tail-coverts tinged with yellow; loreal space somewhat dusky; anterior part of the forehead, a band over the eye, the cheeks, and sides of the neck, with the fore part of the breast, light greenish-yellow; throat dull white, the rest of the lower parts greyish-white, slightly tinged with yellow; wings dark brown, the larger small coverts tipped with greyish-white; secondary coverts and quills edged with the same; tail dull olivaceous-yellow. Young like the female.

*Male*,  $7 \frac{1}{4}$ , wing,  $4 \frac{1}{2}$ .

Rocky Mountains, Columbia River, and California. Common. Migratory.

*Xanthornus Bullockii*, SWAINS. Syn. of Mex. Birds, Phil. Mag. 1827, p. 436.

Bullock's Troopial, *Icterus Bullockii*, AUD. Orn. Biog. v. v. p. 9.

### 219. 3. *Icterus spurius*, GMEL. Orchard Hangnest.—Orchard Oriole.

PLATE XLII. Male, Female, and Young.

Tail much rounded. Male with the head, neck, and fore part of the back, black; the rest of the body chestnut-red; quills and larger coverts black, the former margined, the latter tipped with greyish-white; tail-feathers black, tipped with dull white. Female with the head and upper parts dull yellowish-green, the fore part of the back tinged with brown; lower parts pale yellow; wings and tail greyish-brown, the feathers of the former margined with greyish-white, of the latter with yellowish-green. Young, like the female. Young males in various stages variously coloured.

*Male*,  $6 \frac{1}{2}$ , 9.

From Texas to Connecticut, over the valley of the Mississippi, Kentucky, and Ohio. Abundant. Rare in Massachusetts and Maine. Missouri to the bases of the Rocky Mountains. Migratory.

Orchard Oriole, *Oriolus mutatus*, WILS. Amer. Orn. v. i. p. 64.

*Icterus spurius*, BONAP. Syn. p. 51.

Spurious or Orchard Oriole, *Icterus spurius*, NUTT. Man. v. i. p. 165.

Orchard Oriole, *Icterus spurius*, AUD. Orn. Biog. v. i. p. 221; v. v. p. 485.

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## GENUS V. QUISCALUS, VIEILL. CROW-BLACKBIRD.

Bill as long as the head or somewhat longer, nearly straight, strong, tapering, compressed from the base; upper mandible with its outline slightly declinate, a little convex, the ridge narrow at the base and encroaching a little on the forehead, afterwards broad, rounded, and indistinct, the sides convex, the edges sharp and direct, or slightly inflected, with a faint festoon anterior to the nostrils, the tip deflected, acute; lower mandible with the angle short and rounded, the dorsal line straight, slightly deflected at the end, the ridge convex, the sides rounded, the edges inflected, the tip very acute. Nostrils basal, oval, half-closed by a membrane. Head of moderate size, ovate, flattened above; neck of moderate length; body rather slender. Feet of moderate length; tarsus as long as the middle toe and claw, compressed, with eight anterior scutella; toes rather long, with large scutella, the hind toe stronger, the lateral toes nearly equal, the middle toe much longer. Claws rather long, slightly arched, compressed, not laterally grooved, acute. Plumage blended, highly glossed. Wings of moderate length, the second and third quills longest, the first and fourth little shorter. Tail long, graduated or rounded, the feathers flat or slightly concave, slightly emarginate, with the inner webs longer than the outer. Roof of the upper mandible concave with three longitudinal ridges, of which the middle is enlarged at the base and prominent; tongue slender, sagittate, concave above, tapering to a thin lacerated point; oesophagus rather wide, considerably dilated about the middle; stomach of moderate size, elliptical or roundish, moderately muscular, the lateral muscles distinct, the epithelium dense, horny, slightly rugous, with two roundish grinding surfaces; intestine of moderate length, rather wide; cæca very small; cloaca oblong.

### 220. 1. *Quiscalus major*, VIEILL. Great Crow-Blackbird.—Boat-tailed Grakle.

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PLATE CLXXXVII. Male and Female.

Tail very long, graduated, with the feathers slightly concave above. Male with the plumage silky, splendid, the head and neck deep purplish-blue, the back, breast, and sides deep blue, passing into green behind, the rump bronzed black; the wings and tail black, glossed with green, the abdomen, lower tail-coverts, and tibial feathers, plain black. Female much smaller, with the tail shorter, the plumage unglossed beneath, and but slightly glossy above, the upper parts dusky, with slight tints of green and blue; the head and neck dull brown; the lower parts light yellowish-brown, the tibial feathers and lower tail-coverts dusky.

*Male*,  $15 \frac{7}{8}$ ,  $23 \frac{3}{4}$ . *Female*,  $12 \frac{5}{8}$ , 18.

Abundant from Texas to North Carolina along the coast. Up the Mississippi about 200 miles. Constantly resident.

*Quiscalus major*, BONAP. Syn. p. 54.

Great Crow Blackbird, *Quiscalus major*, BONAP. Amer. Orn. v. i. p. 35.

Great Crow Blackbird, *Quiscalus major*, NUTT. Man. v. i. p. 192.

Boat-tailed Grakle or Great Crow Blackbird, *Quiscalus major*, AUD. Orn. Biog. v. ii. p. 504; v. v. p. 480.

## 221. 2. *Quiscalus versicolor*, VIEILL. Common or Purple Crow-Blackbird.—Purple Grakle.

PLATE VII. Male and Female.

Tail long, much rounded, with the feathers flat. Male with the plumage silky and splendid, the head, neck, and anterior part of the breast blackish, with vivid reflections of violet, steel-blue, and green; general colour of the body dusky, glossed with purple, green, and blue, these colours arranged in three terminal zones, on each feather; rump violet-purple; wings and tail black, glossed with green and blue. Female considerably smaller, with the body more brown, the reflections much less brilliant. Young brown.

*Male*, 13, 19. *Female*, 11, 16.

Breeds from Texas to the Fur Countries. Resident in the Southern States. Extremely abundant.

Purple Grakle, *Gracula quiscalia*, WILS. Amer. Orn. v. iii. p. 44.

Purple Grakle, *Gracula quiscalia*, BONAP. Amer. Orn. v. i. p. 42.

*Gracula quiscalia*, BONAP. Syn. p. 54.

Common Crow Blackbird, *Quiscalus versicolor*, NUTT. Man. v. i. p. 194; v. v. p. 481.

*Quiscalus versicolor*, Common Purple Boat-tail, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 485.

Purple Grakle or Common Crow Blackbird, *Quiscalus versicolor*, AUD. Orn. Biog. v. i. p. 35; v. v. p. 481.

## 222. 3. *Quiscalus ferrugineus*, LATH. Rusty Crow-Blackbird.—Rusty Grakle.

PLATE CXLVII. Male, Female, and Young.

Tail of moderate length, slightly rounded. Male with the plumage glossy black, with green and bluish reflections, the feathers, when new, slightly margined with reddish. Female with the plumage somewhat duller, a reddish band over, and another under, the eye. Young with the head and neck light brown, the rest of the upper parts brownish-black, the feathers edged with light reddish-brown, the rump tinged with grey; a band over the eye, and the fore part and sides of the neck and body pale yellowish-brown; abdomen dusky, lower tail-coverts dusky brown. [147]

*Male*, 9  $\frac{1}{2}$ , 14  $\frac{1}{4}$ .

From Texas to Maryland, and along the Mississippi and Ohio to Kentucky, during winter. Migrates northward to the Fur Countries, and to the Columbia River, in summer. Common.

Rusty Grakle, *Gracula ferruginea*, WILS. Amer. Orn. v. iii. p. 41.

*Quiscalus ferrugineus*, BONAP. Syn. p. 55.

*Scolecophagus ferrugineus*, Rusty Maggot-eater, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 286.

Rusty Blackbird, *Quiscalus ferrugineus*, NUTT. Man. v. i. p. 199.

Rusty Grakle, *Quiscalus ferrugineus*, AUD. Orn. Biog. v. ii. p. 325; v. v. p. 483.

## FAMILY XVII. STURNINÆ. STARLINGS.

Bill nearly as long as the head, moderately stout, or rather slender, nearly straight, compressed toward the end; upper mandible with its outline straight, slightly convex toward the tip, the ridge somewhat flattened, the sides sloping and convex, the edges sharp and overlapping, with a very slight or obsolete notch, close to the depressed tip; lower mandible with the angle long and rather acute, the crura rather broad and flat at the base, the dorsal line straight, the edges sharp, the tip slender; gape-line ascending gently at the base, then direct. Head ovate or oblong, flattened above; neck of moderate length; body rather full. Feet moderately stout; tarsus rather short, compressed, with seven anterior scutella; toes moderate, or rather long, the first

stouter, the lateral toes equal, the outer adherent at the base. Claws rather long, moderately arched, compressed, acute. Plumage rather compact. Wings of moderate length, with the first quill very small, the third and fourth longest. Tail short or of moderate length, rounded, and generally emarginate. Roof of upper mandible with a median ridge; tongue slender, thin-edged, with the tip slit and lacerated; œsophagus without dilatation; stomach roundish, its muscular coat rather thin, the epithelium dense, and longitudinally rugous; intestine of moderate length and width; cœca very small, cylindrical; cloaca ovate or oblong. Trachea simple, with four pairs of inferior laryngeal muscles. Nest on the ground, or in cavities; eggs about five.

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## GENUS I. STURNELLA, VIEILL. MEADOW-STARLING.

Bill rather long, almost straight, conico-subulate, depressed toward the end; upper mandible with the ridge somewhat flattened, the edges sharp and overlapping; the tip narrow, but rounded; lower mandible with the outline straight, the ridge convex, the sides ascending; the tip slightly rounded. Nostrils oval, with an arched membrane above. Head of ordinary size, depressed; neck of moderate length; body rather full. Feet of moderate length, strong; tarsus distinctly scutellate; lateral toes nearly equal, hind toe stout. Claws arched, compressed, acute, that of the hind toe large. Plumage rather compact. Upper eyelid margined with strong bristles. Wings of moderate length, broad; the second, third, and fourth quills longest; one of the inner secondaries nearly as long when the wing is closed. Tail short, much rounded, of twelve acute feathers.

### 223. 1. *Sturnella ludoviciana*, LINN. Crescent Meadow-Starling.—Meadow Lark.

PLATE CXXXVI. Male and Female.

Upper parts variegated with dark brown, bay, and dull yellowish, the latter bordering the feathers; those of the hind parts of the back barred, as are the secondary quills and their coverts; primary quills dark brown, margined, the outer with whitish, the rest with pale yellowish; edge of the wing yellow; three outer tail-feathers white, with a dash of black on the outer web near the end, the next feather also more or less white, and barred on the outer web; on the upper part of the head a central and two lateral bands of brownish-yellow, the lateral band sometimes white, anteriorly tinged with yellow; sides of the head and neck greyish-white, flanks and lower tail-coverts reddish-white, streaked with black; fore neck and breast rich yellow, the former with a large crescent of black. Female smaller, but otherwise similar.

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*Male*, 11  $\frac{3}{4}$ , 16  $\frac{1}{2}$ .

Breeds from Texas to the Columbia River, and along the Atlantic coast to Nova Scotia and the Fur Countries. Resident in the Southern and Western States. Abundant.

Meadow Lark, *Alauda magna*, WILS. Amer. Orn. v. iii. p. 20.

*Sturnus ludovicianus*, BONAP. Syn.

*Sturnus ludovicianus*, Crescent Starlet, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 282.

American Starling or Meadow Lark, NUTT. Man. v. i. p. 147.

Meadow Lark or American Starling, AUD. Orn. Biog. v. ii. p. 216; v. v. p. 492.

## FAMILY XVIII. CORVINÆ. CROWS.

Bill about the length of the head, robust, nearly straight, compressed; upper mandible with the dorsal line more or less arched, its tip slightly deflected, the edges sharp, with a slight notch or sinus. Nostrils basal, roundish, concealed by reversed slender stiff feathers. Head rather large, ovate; neck of moderate length, body compact. Feet of ordinary length, rather stout; tarsus compressed, with about eight large scutella; toes four, first stronger, but about the same length as the second and fourth, which latter is adherent at the base. Claws rather large, arched, compressed, acute. Plumage various; wings long or of moderate length, much rounded, the first quill about half the length of the fourth or fifth, which are longest; tail of twelve broad feathers. Upper mandible concave, with several longitudinal ridges; tongue oblong, flat above, horny, thin edged, with the tip slit and lacerated; œsophagus of moderate width, without dilatation; proventriculus bulbiform; stomach, a gizzard of moderate power, with a rugous dense epithelium; intestine of moderate length and width; cœca small, cylindrical, adnate. Trachea with four pairs of inferior laryngeal muscles. Nest in high places, or in cavities, rudely constructed; eggs from four to six, ovate or oblong.

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## GENUS I. CORVUS, LINN. CROW.

Bill rather long, stout, considerably compressed; upper mandible with the dorsal line declinate and arched, the sides somewhat convex, the edges nearly straight, and overlapping, the notches faint, the tip declinate, rather sharp; lower mandible with the angle rather long, and of moderate width, the dorsal line ascending, and slightly convex, the edges direct, the tip narrow. Nostrils basal, lateral, round, covered by narrow stiff feathers directed forwards. Head large, ovate; neck rather short; body robust. Legs of moderate length, strong; tarsus stout, compressed, with eight scutella; toes of moderate length, stout, first and second nearly equal, fourth longer, and slightly adherent at the base. Claws strong, arched, compressed, acute. Plumage compact, glossed. Wings long, with the first quill short, the fourth longest. Tail of moderate length, rounded. Roof of upper mandible concave, with five ridges; tongue emargined and papillate at the base, horny toward the end, thin-edged, with the point slit.

## 224. 1. *Corvus Corax*, LINN. Raven.

PLATE CI. Male.

Feathers of the fore neck lanceolate and elongated; tail much rounded; plumage deep black, glossed with blue and purplish-blue, the lower parts with green. Young with the feathers of the throat oblong, the upper parts less glossy, the lower dull greyish-black.

*Male*, 26, 50.

From the Highlands of South Carolina, northward to the Polar Seas. Missouri, Kentucky, Ohio, Canada. Rocky Mountains and Columbia River. Rather common in some parts.

Raven, *Corvus Corax*, WILS. Amer. Orn. v. ix. p. 136.

*Corvus Corax*, BONAP. Syn. p. 56.

*Corvus Corax*, Raven, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 290.

Raven, *Corvus Corax*, NUTT. Man. v. i. p. 202.

Raven, *Corvus Corax*, AUD. Orn. Biog. v. ii. p. 1; v. v. p. 476.

## 225. 2. *Corvus Americanus*, AUD. American Crow.

PLATE CLVI. Male.

Feathers of the head and neck oval and blended; fourth quill longest; general colour black, with purplish-blue reflections; the hind parts of the neck tinged with purplish-brown; the lower parts less glossy. Young of a rather dull brownish-black, with the blue and purple reflections much less brilliant. [151]

*Male*, 18, 38.

Generally distributed from the Gulf of Mexico to Columbia River; throughout the interior, and along the coast, northward to Lat. 55°. Congregates in immense numbers in the Southern and Western States during winter.

Crow, *Corvus Corone*, WILS. Amer. Orn. v. iv. p. 79.

*Corvus Corone*, BONAP. Syn. p. 56.

*Corvus Corone*, Crow, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 291.

Crow, *Corvus Corone*, NUTT. Man. v. i. p. 209.

American Crow, *Corvus Americanus*, AUD. Orn. Biog. v. ii. p. 317; v. v. p. 477.

## 226. 3. *Corvus ossifragus*, WILS. Fish-Crow.

PLATE CXLVI. Male and Female.

Feathers of the head and neck oval and blended; third quill longest; tail considerably rounded, a small space at the base of the lower mandible on each side bare; general colour black, with blue and purple reflections above, blue and greenish beneath. Young brownish-black, with the blue and purple reflections less brilliant.

*Male*, 16, 33, *Female*, 15, 31.

From the mouths of the Mississippi upwards to Natchez, and along the Atlantic to New York. Common. Resident in the Southern States. Columbia River.

Fish Crow, *Corvus ossifragus*, WILS. Amer. Orn. v. v. p. 27.

*Corvus ossifragus*, BONAP. Syn. p. 57.

Fish Crow, *Corvus ossifragus*, NUTT. Man. v. i. p. 216.

Fish Crow, *Corvus ossifragus*, AUD. Orn. Biog. v. ii. p. 268; v. v. p. 479.

## GENUS II. PICA, BRISS. MAGPIE.

Bill of moderate length, stout, considerably compressed; upper mandible with the dorsal line declinate and arched, the sides convex, the ridge narrow, the edges nearly straight and overlapping, the notches faint, the tip declinate, and rather sharp; lower mandible with the angle rather long and wide, the dorsal line ascending and slightly convex, the edges inclinate, the tip narrow. Nostrils basal, lateral, roundish, covered by narrow stiff feathers directed forwards. Head large, ovate; neck rather short; body compact. Legs of moderate length, strong; tarsus stout, compressed, with eight scutella; toes of moderate length, stout, first large, stronger; lateral nearly equal, third considerably longer. Claws strong, arched, compressed, acute. Plumage full, soft, blended. Wings of moderate length, much rounded, the first quill very short, extremely narrow and falciform, fourth and fifth longest. Tail very long, graduated. Digestive organs as in *Corvus*.

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### 227. 1. *Pica melanoleuca*, VIEILL. Common Magpie.

PLATE CCCLVII. Male and Female.

Bill black; head, neck, fore part of breast and back black, glossed with green and blue; middle of the back greyish-white; scapulars white; smaller wing-coverts black, secondary coverts, alula and primary coverts splendid with green and blue; primaries black, glossed with green, their inner webs white, except at the end, and for some way along their margin; secondaries bright blue, changing to green, their inner webs greenish-black; tail splendid with bright green, changing to greenish-yellow, purplish-red, bluish-purple, and dark green at the end; breast and sides pure white; legs, abdomen, lower tail-coverts, and lower wing-coverts, black.

*Male*, 18  $\frac{1}{2}$ , 22  $\frac{1}{2}$ .

Interior of Texas, West Louisiana, Arkansas, Missouri, Rocky Mountains, and Saskatchewan. Common. Resident.

*Corvus Pica*, LINN. Syst. Nat. v. i. p. 157.

Magpie, *Corvus Pica*, WILS. Amer. Orn.

*Corvus Pica*, BONAP. Syn. p. 57.

Magpie, NUTT. Man. v. i. p. 219.

Common Magpie, *Corvus Pica*, AUD. Orn. Biog. v. iv. p. 408.

### 228. 2. *Pica Nuttallii*, AUD. Yellow-billed Magpie.

PLATE CCCLXII. Fig. 1. Male.

Bill and bare space beneath the eyes yellow; in form, proportion, and size, similar to the last; the feathers of the tail narrower; the colours similar, but the top of the head glossed with green, and the black of the back and fore neck tinged with brown.

*Male*, 18; wing, 7  $\frac{3}{4}$ .

Upper California. Common. Resident.

*Corvus Nuttali*, Yellow-billed Magpie, AUD. Orn. Biog. v. iv. p. 450.

### 229. 3. *Pica Bullockii*, WAGLER. Columbia Magpie.—Columbia Jay.

PLATE XCVI. Adult.

Feathers of the head long and recurvate; tail extremely elongated; general colour blue; cheeks, fore neck, and anterior part of the breast black, the rest of the lower parts, with the tips of the outer four tail-feathers on each side, white.

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*Male*, 31, 26.

Woody portions of North California.

Columbia Jay, *Garrulus Bullockii*, NUTT. Man. v. i. p. 220.

Columbia Jay, *Corvus Bullockii*, AUD. Orn. Biog. v. i. p. 483.

## GENUS III. GARRULUS, BRISS. JAY.

Bill of moderate length, strong, straight, compressed, rather pointed; upper mandible with the dorsal line slightly arched, the ridge scarcely distinct, the sides sloping, the edges nearly straight, sharp, and overlapping, the notches slight, the tip slightly depressed; lower mandible with the angle of moderate length, rather wide, the dorsal line ascending, slightly convex, the

sides sloping outwards, the edges direct, the tip acute. Nostrils basal, elliptical, covered by reversed stiffish feathers. Head rather large; neck short; body stout. Feet of moderate length, rather stout; tarsus of ordinary length, compressed, with eight scutella; toes moderate, the first large, the outer considerably longer than the inner; claws well-arched, rather long, compressed, acute. Plumage blended; small bristles at the base of the upper mandible; feathers of the head generally elongated; wings rather short, first quill very short, fourth and fifth longest; tail rather long, much rounded. Roof of upper mandible concave, with three ridges; digestive organs as in *Corvus*.

### 230. 1. *Garrulus Stelleri*, GMEL. **Steller's Jay.**

PLATE CCCLXII. Fig. 2. Male.

Occipital crest of linear-oblong, slightly recurved feathers; tail long, moderately rounded; head, neck, and fore part of back brownish-black, feathers of the forehead tipped with light blue; hind part of back, rump, upper tail-coverts and lower parts light blue; wings blue, secondary quills and their coverts rich ultramarine, narrowly barred with black, outer webs of primaries paler, their inner webs dusky; tail blue, with numerous narrow inconspicuous dusky bars.

*Male*, 13, wing  $5\frac{1}{2}$ .

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Rocky Mountains, Columbia River, and north-west coast. Common. Migratory.

*Corvus Stelleri*, GMEL. LINN. Syst. Nat. v. i. p. 370.

*Corvus Stelleri*, BONAP. Syn. p. 433.

Steller's Jay, *Corvus Stelleri*, BONAP. Amer. Orn. v. ii. p. 44.

*Garrulus Stelleri*, Steller's Jay, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 294.

Steller's Jay, NUTT. Man. v. ii. p. 229.

Steller's Jay, *Corvus Stelleri*, AUD. Orn. Biog. v. iv. p. 453.

### 231. 2. *Garrulus cristatus*, LINN. **Blue Jay.**

PLATE CII. Male and Female.

Feathers of the head elongated, oblong; tail much rounded. Upper parts light purplish-blue; wings and tail ultramarine, secondaries, their coverts, and tail-feathers barred with black, and tipped with white; a narrow band margining the forehead, loreal space, and a band round the neck, black; throat and cheeks bluish-white; lower parts greyish-white tinged with brown.

*Male*, 12, 14.

Breeds from Texas eastward and northward to the Fur Countries, and as far as the bases of the Rocky Mountains. Abundant. Resident in the Middle, Interior, and Southern States.

Blue Jay, *Corvus cristatus*, WILS. Amer. Orn. v. i. p. 2.

*Corvus cristatus*, BONAP. Syn. p. 58.

*Garrulus cristatus*, Blue Jay, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 293.

Blue Jay, *Corvus cristatus*, AUD. Orn. Biog. v. ii. p. 11; v. v. p. 475.

### 232. 3. *Garrulus ultramarinus*, BONAP. **Ultramarine Jay.**

PLATE CCCLXII. Fig. 3. Male.

Feathers of the head short; tail much rounded; upper part of head, sides, and hind part of neck, wings and tail, with its coverts, light blue; back light greyish-brown; a faint band over the eye, formed by the tips of the feathers; cheeks dusky; fore neck greyish-white, faintly streaked with dusky, and banded below by a narrow semilunar band of light blue, continuous with that of the neck; lower parts pale grey passing into white.

*Male*, 12, wing  $5\frac{3}{4}$ .

Columbia River, and Upper California. Common. Migratory.

Ultramarine Jay, *Corvus ultramarinus*, AUD. Orn. Biog. v. iv. p. 456.

### 233. 4. *Garrulus Floridanus*, BARTRAM. **Florida Jay.**

Feathers of the head short; tail much rounded; upper part of head, sides, and hind part of neck, wings and tail, with its coverts, light blue; back very light greyish-brown; a bluish-white band over the forehead and eyes; cheeks dusky; fore neck greyish-white, with the shafts of the feathers dusky, and bordered below by a rather broad band of light blue, continuous with that of the neck; lower parts pale purplish-grey.

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Intimately allied in colour to the Ultramarine Jay, but distinguishable by its smaller size, and more rounded tail, and by its having a band of whitish across the forehead, and extended over the eye, where it is not in dots as in that species.

*Male*, 11  $\frac{1}{4}$ , 14.

Confined to the Floridas. Not very common. Resident.

*Corvus floridanus*, BONAP. Syn. p. 58.

Florida Jay, *Garrulus floridanus*, BONAP. Amer. Orn. v. ii. p.

Florida Jay, NUTT. Man. v. i. p. 230.

Florida Jay, *Corvus floridanus*, AUD. Orn. Biog. v. i. p. 444.

### **234. 5. *Garrulus Canadensis*, LINN. Canada Jay.**

PLATE CVII. Male and Female. PLATE CCCCXXX. Fig. 3. Young.

Upper parts dull leaden-grey; lower dull yellowish-white; forehead yellowish-white; hind part of the head and neck greyish-black; throat and band passing round the neck, greyish-white; secondary quills and tail-feathers narrowly tipped with white. Young very dull slate-colour, paler on the abdomen, on the head blackish, wings and tail as in the adult, their tips of a duller white.

*Male*, 11, 15.

Rare, and only in winter, from Pennsylvania to New York. More abundant in Massachusetts. Common from Maine northward to the Fur Countries. Columbia River.

Canada Jay, *Corvus canadensis*, WILS. Amer. Ornith. v. iii. p. 33.

*Corvus canadensis*, BONAP. Syn. p. 58.

*Garrulus canadensis*, Whisky Jack, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 295.

*Garrulus brachyurus*, Short-billed Jay, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 296.  
Young.

*Garrulus canadensis*, Canada Jay, NUTT. Man. v. i. p. 232.

Short-billed Jay. NUTT. Man. v. ii. p. 599.

Canada Jay, *Corvus canadensis*. AUD. Orn. Biog. v. ii. p. 58; v. v. p. 208.

## **GENUS IV. NUCIFRAGA, BRISS. NUTCRACKER.**

Bill as long as the head, moderately stout, conical, compressed, at the tip rather depressed; upper mandible with its dorsal line slightly arcuato-declinate, the ridge convex, the sides rounded, the edges sharp and overlapping, without notch, the tip flattened and obtuse; lower mandible with the angle short and rounded, the dorsal line straight, the sides convex, the edges sharpened a little involute, the tip flattened and rather obtuse. Nostrils basal, lateral, roundish, covered by bristly feathers, which are directed forwards. Head large, broadly ovate, neck rather short; body moderately stout. Tarsus rather short, compressed, with eight scutella; toes stout, the first very large, the inner a little shorter than the outer, which is adherent at the base. Claws large, arched, much compressed, acute. Plumage soft and blended; no distinct bristles at the base of the upper mandible, wings long, much rounded, the first quill very short, the fourth longest; tail of moderate length, rounded.

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### **235. 1. *Nucifraga Columbiana*, WILS. Columbian Nutcracker.—Clark's Crow.**

PLATE CCCLXII. Fig. 4. Male. Fig. 5. Female.

Light brownish-grey; forehead, throat, fore part of cheeks, and space round the eye yellowish-white; wings glossy bluish-black, seven of the secondaries largely tipped with white; upper tail-coverts greyish-black; tail pure white, except the two middle feathers, and the greater part of the inner webs of the next pair, which are bluish-black.

*Male*, 12, wing 7  $\frac{1}{2}$ .

Rocky Mountains.

Clarke's Crow, *Corvus columbianus*, WILS. Amer. Orn. v. iii. p. 29.

*Corvus columbianus*, BONAP. Syn. p. 57.

Columbian Crow, NUTT. Man. v. i. p. 218.

Clarke's Nutcracker, *Nucifraga columbiana*, AUD. Orn. Biog. v. iv. p. 459.

## FAMILY XIX. LANIINÆ. SHRIKES.

Bill short, or of moderate length, stout, broader than high at the base, compressed toward the end; the gape-line slightly arched, the ridge narrow, the notch and dentiform process large, the tip narrow and decurved. Head large, roundish, ovate; neck short; body compact. Legs of moderate length; tarsus compressed, with seven anterior scutella; toes moderate, compressed; hind toe rather stout, lateral about equal, the outer adherent at the base. Claws arched, compressed, acute. Plumage soft and blended. Bristles rather strong. Wings and tail various. Roof of upper mandible narrow, with a median ridge; tongue slender, concave above, horny toward the end, with the margins lacerated, and the tip slit; œsophagus wide, uniform; proventriculus elliptical; stomach broadly elliptical or roundish; its muscular coat thin, the epithelium dense and longitudinally rugous; intestine of moderate length; cœca very small; cloaca oblong or globular. Trachea simple; four pairs of inferior laryngeal muscles. [157]

### GENUS I. LANIUS, LINN. SHRIKE, or BUTCHER-BIRD.

Bill of moderate length, strong, compressed; upper mandible with the dorsal line a little arched, towards the end decurved, the sides convex, the edges direct, with a large prominence succeeded by a deep notch, the tip decurved and acute; lower mandible with the angle short and wide, the dorsal line convex, the sides convex, the edges inflected, the tip ascending, acute. Nostrils basal, lateral, oval, concealed by the bristly feathers. Head large, broadly ovate; neck short; body robust. Tarsus rather short, compressed, slender, with eight scutella; toes small, the first stout, the lateral nearly equal. Claws rather large, arched, compressed, extremely acute. Plumage soft and blended. Bristles stiff. Wings of ordinary length, first quill very short, fourth longest. Tail long, graduated, or rounded.

#### 236. 1. *Lanius borealis*, VIEILL. Great American Shrike.

PLATE CXCII. Male and Female.

Fourth quill longest, third little shorter, second shorter than sixth, first half the length of second; tail long, graduated; bill brownish-black at the end, paler towards the base; upper parts light ash-grey, the ends of the scapulars and the upper tail-coverts grayish-white; a streak of whitish over the eye; loreal space and a patch behind the eye brownish-black; first row of smaller wing-coverts, larger coverts, and quills, brownish-black; secondary quills and coverts edged and tipped with whitish; base of primaries white, forming a conspicuous patch, when the wing is extended; tail-feathers brownish-black, outer web of lateral feathers, and more than a third of its inner web from the tip, white; the extremities of all the rest, excepting the middle two, also white, gradually occupying less extent on the inner feathers; lower parts greyish-white, the fore part of the breast tinged with brown, and faintly marked with transverse undulating lines of dark grey, as are the sides. Female similar, but with the head and neck slightly tinged with brown, and the lower parts more banded. [158]

*Lanius Excubitor* differs in being considerably smaller, and in having the white on the wings and tail more extended, the bases and a great portion of the inner webs of the secondaries, except the inner three, being of that colour, as well as the bases of the primaries, and forming a conspicuous spot when the wing is closed, and the outer tail-feathers being often white in their whole length.

*Male*, 10  $\frac{1}{2}$ , 14  $\frac{1}{2}$ .

Breeds from Pennsylvania northward. During winter, migrates westward to the Mississippi, and as far south as Natchez. Not uncommon.

Great American Shrike or Butcher Bird, *Lanius Excubitor*, WILS. Amer. Orn. v. i. p. 74.

*Lanius septentrionalis*, BONAP. Syn. p. 72.

*Lanius borealis*, Greater Northern Shrike, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 111.

Great American Shrike, NUTT. Man. v. i. p. 258.

Great American Shrike, *Lanius Excubitor*, AUD. Orn. Biog. v. ii. p. 534; v. v. p. 434.

#### 237. 2. *Lanius Ludovicianus*, LINN. Loggerheaded Shrike.

PLATE LVII. Male and Female.

Third quill longest, fourth scarcely shorter, second and sixth equal; tail rather long, graduated; bill black, upper parts deep leaden-grey, lower greyish-white, the sides bluish-grey; a streak of whitish over the eye, and margining the forehead; loreal space, and a patch behind the eye, black; posterior scapulars almost entirely white; quills and coverts black, secondaries narrowly tipped with white; bases of primaries white, forming a conspicuous patch on the extended wing; tail-feathers black, all except the middle pair white at the end, that colour



occupying nearly two-thirds of the outer, and gradually diminishing on the rest. Female with the plumage somewhat darker. Young brownish-white beneath, the breast and sides transversely barred with dark grey.

*Male*, 8  $\frac{1}{2}$ , 13.

From Louisiana to Carolina, laterally to the Columbia River, and northward to the Fur Countries. Abundant. Resident in the south. Migratory in the north.

Loggerhead Shrike, *Lanius Carolinensis*, WILS. Amer. Orn. v. iii. p. 57.

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*Lanius ludovicianus*, BONAP. Syn. p. 72.

*Lanius Excubitorides*, American Grey Shrike, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 115.

Loggerhead Shrike, NUTT. Man. v. i. p. 261.

Loggerhead Shrike, *Lanius Ludovicianus*, AUD. Orn. Biog. v. i. p. 300; v. v. p. 300.

## FAMILY XX. VIREONINÆ. GREENLETS.

Bill of moderate length, straight, rather stout, compressed toward the end; gape-line slightly arched, notches distinct, tip very small, declinate. Head rather large, ovate; neck short; body rather slender. Feet of moderate length; tarsus compressed, slender, with seven anterior scutella; toes rather small, hind toe rather stout, lateral equal. Claws moderate, arched, compressed, acute. Plumage soft and blended. Wings of moderate length, rather pointed. Tail of moderate length, even or emarginate. Roof of upper mandible concave, with a median ridge; tongue narrow, flat above, with the point slit; œsophagus of moderate length, without dilatation; stomach, roundish, muscular, with a dense rugous epithelium; intestine short, and rather wide; cœca very small. Trachea simple, with four pairs of inferior laryngeal muscles.

### GENUS I. VIREO, VIEILL. GREENLET.

Bill rather short or of moderate length, rather strong, straight, broader than high at the base, compressed toward the end; upper mandible with the dorsal line slightly convex, the ridge narrow, the sides sloping and towards the end somewhat convex, the edges straight, the notches distinct, the tip small, decurved, acute; lower mandible with the angle of moderate length and rather narrow, the dorsal line ascending and rather convex, the sides convex, the edges inclinate, the tip acute and ascending. Nostrils basal, oblong. Head rather large, ovate; neck short; body rather stout. Tarsus rather short, slender, compressed, with seven scutella; toes small, first large, inner considerably shorter than outer, which is adnate at the base. Plumage soft and blended; bristles small. Wings rather long, with the second and third quills longest, the first not much shorter. Tail of moderate length, nearly even.

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#### 238. 1. *Vireo flavifrons*, VIEILL. Yellow-throated Greenlet.

PLATE CXIX. Male.

Upper parts light green, the rump, scapulars, and smaller wing-coverts bluish-grey; quills and coverts brownish-black; two bands of white on the wing, formed by the tips of the secondary coverts and first row of small coverts; primaries narrower, edged with yellowish-green, secondaries broadly with white; tail-feathers brownish-black, the outer edged with white; sides of the neck yellowish-green; a line over the eye, throat, and breast yellow, the rest of the lower parts white.

*Male*, 5  $\frac{3}{4}$ , 9  $\frac{1}{2}$ .

From Texas to Nova Scotia. Rare in the interior, more abundant in the middle Atlantic districts. Migratory.

Yellow-throated Flycatcher, *Muscicapa sylvicola*, WILS. Amer. Orn. v. ii. p. 117.

*Vireo flavifrons*, BONAP. Syn. p. 70.

Yellow-throated Vireo, NUTT. Man. v. i. p. 302.

Yellow-throated Flycatcher or Vireo, *Vireo flavifrons*, AUD. Orn. Biog. v. ii. p. 119; v. v. p. 428.

#### 239. 2. *Vireo solitarius*, VIEILL. Solitary Greenlet.

PLATE XXVIII. Male and Female.

Upper parts light olive-green, head greyish-blue; lower white, the sides greenish-yellow; eyelids and a band of white from the bill over the eye; a dusky spot before the eye; quills and

coverts brownish-black; two bands of white on the wing, formed by the tips of the secondary coverts and first row of small coverts; primaries narrowly edged with yellowish-green, secondaries broadly with white; tail-feathers brownish-black, the outer edged with white; head and sides of neck inclining to greyish-blue.

*Male*, 5  $\frac{1}{2}$ , 8  $\frac{1}{2}$ .

From Texas to Nova Scotia, rather abundant. Rare in the interior. Columbia River. Migratory.

Solitary Flycatcher, *Muscicapa solitaria*, WILS. Amer. Orn. v. ii. p. 143.

*Vireo solitarius*, BONAP. Syn. p. 79.

Solitary Vireo or Flycatcher, *Vireo solitarius*, NUTT. Man. v. ii. p. 305.

Solitary Flycatcher or Vireo, *Vireo solitarius*, AUD. Orn. Biog. v. i. p. 147; v. v. p. 432.

### 240. 3. *Vireo noveboracensis*, GMEL. White-eyed Greenlet.

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PLATE LXIII. Male.

Upper parts light green, inclining to olivaceous, forehead tinged with yellow; lower parts greyish-white, the sides yellow; eyelids and a band from the bill over the eye yellow; quills and coverts brown; two bands of yellowish-white on the wing formed by the tips of the secondary coverts, and first row of small coverts; primaries narrowly margined with yellowish-green, secondaries broadly with white; tail-feathers brown, without white edgings; iris white.

*Male*, 5, 7.

Throughout the United States and Nova Scotia. Columbia River. Migratory, but great numbers spend the winter in the Southern States.

White-eyed Flycatcher, *Muscicapa cantatrix*, WILS. Amer. Orn. v. ii. p. 266.

*Vireo noveboracensis*, BONAP. Syn. p. 70.

White-eyed Vireo or Flycatcher, *Vireo noveboracensis*, NUTT. Man. v. i. p. 806.

White-eyed Flycatcher or Vireo, *Vireo noveboracensis*, AUD. Orn. Biog. v. i. p. 328; v. v. p. 431, 433.

### 241. 4. *Vireo gilvus*, VIEILL. Warbling Greenlet.

PLATE CXVIII. Male and Female.

Upper parts light greenish-olive, the head and hind neck greyish-brown; a white band over the eye; wings and tail brown, quills edged with green; lower parts dull yellowish-white, the sides tinged with yellow.

*Male*, 5  $\frac{1}{4}$ , 8  $\frac{1}{2}$ .

From Texas to Maine, and in the interior to Columbia River. Abundant. Migratory.

Warbling Flycatcher, *Muscicapa melodia*, WILS. Amer. Orn. v. v. p. 85.

*Vireo gilvus*, BONAP. Syn. p. 70.

Warbling Vireo, NUTT. Man. v. i. p. 309.

Warbling Flycatcher or Vireo, *Vireo gilvus*, AUD. Orn. Biog. v. ii. p. 114; v. v. p. 433.

### 242. 5. *Vireo bartrami*, SWAINS. Bartram's Greenlet.

PLATE CCCCXXXIV. Fig. 4. Male.

Wings of moderate length, with the second and third quills longest and about equal, the fourth scarcely shorter, the first considerably shorter than the fifth. Upper parts light yellowish-olive, the crown of the head deep grey, bordered on each side by a blackish line, below which is a band of yellowish-white from the nostril over the eye; loreal space dusky; quills and tail-feathers brown, margined with greenish-yellow; lower parts greyish-white, the sides greenish-yellow.

*Male*, 4  $\frac{7}{8}$ , 7  $\frac{3}{4}$ .

From Texas to New York. Not met with in the interior. Rather rare. Migratory.

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*Vireo bartramii*, Swains. Bartram's Greenlet, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 235.

Bartram's Vireo, *Vireo bartramii*, AUD. Orn. Biog. v. v. p. 296.

### 243. 6. *Vireo olivaceus*, LINN. Red-eyed Greenlet.

Wings long, with the second quill longest, the third slightly shorter, the first considerably longer than the fourth, upper parts light yellowish-olive, crown of the head deep grey, bordered on each side by a blackish line, below which is a band of white; quills and tail-feathers brown, margined with greenish-yellow; lower parts greyish-white, the sides greenish-yellow; iris red.

*Male*, 5 ½, 9.

From Texas to Nova Scotia, and through the interior. Accidental in the Fur Countries. Abundant. Migratory.

Red-eyed Flycatcher, *Muscicapa olivacea*, WILS. Amer. Orn. v. ii. p. 55.

*Vireo olivaceus*, BONAP. Syn. p. 71.

*Vireo olivaceus*, Red-eyed Greenlet, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 233.

Red-eyed Vireo, *Vireo olivaceus*, AUD. Orn. Biog. v. ii. p. 287; v. v. p. 430.

## FAMILY XXI. PIPRINÆ. MANAKINS.

Bill short, stout, straight, depressed, being much broader than high at the base, with the dorsal line arched, the ridge narrow, the sides sloping, the gape-line straightish or slightly arched, the notches rather large, the tip very small and declinate. Head rather large, broadly ovate; neck short; body compact. Tarsus of moderate length, compressed, with seven anterior scutella; toes small, the hind one not much stouter, the lateral equal. Claws moderate, arched, compressed, acute. Plumage soft, full, and blended. Wings of moderate length, broad, and rounded. Tail short or of moderate length, generally rounded. Roof of upper mandible concave, with a prominent median line; tongue triangular, horny, thin-edged, rather obtuse, bristly at the end; œsophagus wide, without dilatation; stomach rather small, roundish, moderately muscular, with a dense rugous epithelium; intestine short, of moderate width; cœca very small.

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### GENUS I. ICTERIA. VIEILL. CHAT.

Bill of moderate length, stout, slightly arched, broad at the base, compressed toward the end; upper mandible with the sides convex, the edges sharp, destitute of notch, the tip acute and a little declinate; lower mandible with the dorsal line nearly straight, the edge-line slightly arched and inflected. Nostrils roundish, half covered by a vaulted membrane. General form rather robust; head ovate, neck short, body moderate. Legs of moderate length, slender; tarsus compressed, anteriorly covered with eight scutella, of which the upper are blended; two lateral toes nearly equal, the hind one not much stouter. Claws moderate, arch much compressed, laterally grooved, very acute. Plumage soft and blended. Bristles very small. Wings of moderate length, rounded, third and fourth primaries longest, second little shorter, first longer than sixth. Tail rather long, rounded.

#### 244. 1. *Icteria viridis*, GMEL. Yellow-breasted Chat.

PLATE CXXXVII. Male and Female.

Upper parts deep olive-green; fore part of neck and breast bright yellow; abdomen and lower tail-coverts white; eyelids, a band over the eye, and a shorter one from the base of lower mandible, white; loreal space black.

*Male*, 7, 9.

From Texas to Connecticut. Inland as far as Kentucky. Abundant. Migratory.

Yellow-breasted Chat, *Pipra polyglotta*, WILS. Amer. Orn. v. i. p. 90.

*Icteria viridis*, BONAP. Syn. p. 69.

Yellow-breasted Chat, *Icteria viridis*, NUTT. Man. v. i. p. 299.

Yellow-breasted Chat, *Icteria viridis*, AUD. Orn. Biog. v. ii. p. 223; v. v. p. 433.

## FAMILY XXII. AMPELINÆ. CHATTERERS.

Bill short, depressed, rather weak, triangular when viewed from above, compressed at the end, its upper outline arched, the gape-line nearly straight, the notches very small, the tip very small and declinate. Nostrils elliptical, partially concealed by reversed bristly feathers. Head ovate; neck short; body moderate or full. Feet short; tarsus short, rather stout, compressed; toes rather small. Claws rather long, arched, much compressed, acute. Plumage generally blended

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and glossy. Wings of moderate length, broad. Tail short or of moderate length. Roof of upper mandible rather concave, with three longitudinal ridges; tongue horny, deeply slit; œsophagus very wide, dilated about the middle; stomach small, elliptical, moderately muscular; intestine of moderate length and very wide; cœca very small. Trachea simple, with four pairs of very small inferior laryngeal muscles.

## GENUS I. BOMBYCILLA, BRISS. WAXWING.

Bill short, rather stout, straightish, broader than high at the base, compressed towards the end; upper mandible with its dorsal line convex and declinate towards the tip, which is deflected, narrow, and rather acute, its sides convex, the edges sharp and overlapping, the notches distinct; lower mandible with the angle short and wide, the dorsal line convex and ascending, the edges sharp and inflected, the tip very small, acute, ascending, with a small sinus behind; gape-line nearly straight. Nostrils oval, partially concealed by the reversed stiffish feathers. Head of ordinary size, ovate; neck short; body full. Feet rather short; tarsus short, rather stout, compressed, with six scutella; toes of moderate size, first stout, broad beneath, outer slightly adherent at the base; inner a little shorter. Claws rather long, arched, much compressed, very acute. Plumage blended, very soft, somewhat silky, but with little gloss; head tufted; no bristles. Wings rather long, broad, and pointed, the first quill longest. Tail of moderate length, even. This genus is remarkable for the oblong bright red horny appendages to the tips of the wings and tail-feathers, which, however, are not seen in all the species. Roof of upper mandible slightly concave, with three ridges; tongue triangular, concave, horny, deep slit, with two slender points; œsophagus very wide, much dilated about the middle; stomach rather small, elliptical, muscular; intestine short and extremely wide; cœca very small.

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### 245. 1. *Bombycilla garrula*, VIEILL. Black-throated Waxwing.—Bohemian Chatterer.

PLATE CCCLXIII. Male and Female.

General colour light greyish-brown, passing behind in ash-grey, before into brownish-orange, of which colour are the forehead, a patch on each side of the throat near the base of the bill, and the feathers under the tail; a band of deep black from the nasal membrane over the eye to the top of the head, where it is concealed by the crest; feathers at the base of the lower mandible and a narrow streak below the eye, white; upper part of throat deep black; feathers of the wings greyish-black; primary coverts largely tipped with white; primary quills with a bright yellow, secondary with a white elongated spot at the end of the outer web, and tipped with oblong wax-red appendages; tail light grey at the base, gradually shaded into deep black, with a broad band of bright yellow. Female similar to the male, but somewhat smaller. Oblong waxen appendages to the secondary quills, varying from seven to three, sometimes wanting, especially in young birds; males with the shafts of the tail-feathers very slightly enlarged at the end, and bright red. Carefully compared with European specimens.

*Male*,  $9\frac{3}{4}$ ,  $16\frac{1}{4}$ .

From New York, eastward and northward, to the Fur Countries.

*Bombycilla garrula*, European Chatterer, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 237.

*Bombycilla garrula*, BONAP. Syn. p. 438.

*Bombycilla garrula*, BONAP. Amer. Orn. v. iii. pl. 16.

European Waxen Chatterer, NUTT. Man. v. ii. p. 579.

Bohemian Chatterer, *Bombycilla garrula*, AUD. Orn. Biog. v. iv. p. 462.

### 246. 2. *Bombycilla Carolinensis*, BRISS. Cedar Waxwing.—Cedar Bird.

PLATE XLIII. Male and Female.

General colour light greyish-brown, passing behind into ash-grey, before into pale brownish-red, of which colour is the upper part of the head; a black band on the forehead passing backwards over the eye to the occiput, and margined above and below by a narrow white band; feathers in the angle of the lower mandible black; abdomen pale yellow; lower tail-coverts white; wings and tail dull leaden-blue, darker toward the end; primaries with a very small pale yellow spot at the tip, secondaries tipped with an oblong wax-red appendage, as are the tail-feathers, of which the extremity is bright yellow. Female similar to the male but somewhat smaller. The oblong appendages to the wings vary from nine to three. Young with the upper parts of a uniform dull greenish-brown, lower parts of the same colour, the throat pale buff, abdomen and lower tail-coverts yellowish-white.

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*Male*,  $6\frac{3}{4}$ , 11.

From Texas northward to the Fur Countries. Westward to the Columbia River. Extremely abundant in Louisiana during winter.

Bombycilla carolinensis, BRISS. v. ii. p. 337.

Cedar Bird, Ampelis americana, WILS. Amer. Orn. v. i. p. 107.

Bombycilla carolinensis, BONAP. Syn. p. 59.

Cedar Bird or Cherry Bird, NUTT. Man. v. i.

Cedar Bird, Bombycilla carolinensis, AUD. Orn. Biog. v. i. p. 227; v. v. p. 494.

## FAMILY XXIII. SITTINÆ. NUTHATCHES.

Bill of moderate length or rather long, straight, rather slender, conico-subulate, somewhat compressed, with the tips acute, or cuneate. Head ovate; neck short; body full. Tarsi rather short, or of moderate length, slender, compressed, with seven or eight scutella; toes long, very slender; hind toe extremely long; anterior little spreading; claws long, little arched, slender, much compressed, acute. Plumage soft and full. Wings of moderate length, broad, rounded. Tail short, broad, of twelve feathers. Roof of upper mandible very narrow, slightly concave, with three ridges; tongue very slender, with the tip abrupt and bristly; œsophagus without dilatation; stomach roundish, moderately muscular; intestine short and wide; cœca very small. Trachea simple; with a single pair of large inferior laryngeal muscles. Allied to the Titmice on the one hand, and the Woodpeckers on the other.

### GENUS I. SITTA, LINN. NUTHATCH.

Bill rather long, or of moderate length, straight, conico-subulate, a little compressed, rather obtuse; upper mandible with the dorsal outline very slightly arched, the ridge rather narrow, the sides sloping, the edges sharp without notches, the tip rather blunt; lower mandible with the angle of moderate length and narrow, the dorsal line ascending and very slightly convex, the sides slightly convex, the tip narrow. Nostrils basal, round operculate, partially concealed by the reversed bristly feathers. Head ovate; neck short; body short. Tarsi rather short, stout, compressed, with eight scutella; toes long, much compressed; first very long, second much shorter than fourth; anterior toes adherent at the base. Claws long, arched, much compressed, laterally grooved, acute. Plumage very soft and blended. Small bristles at the base of the upper mandible. Wings rather long, first quill extremely small, third and fourth longest. Tail short, of twelve feathers broad, nearly even. Upper mandible slightly concave with three ridges; tongue slender, very thin, with the point abrupt and terminated by strong bristles; œsophagus without dilatation; stomach rather large, roundish, moderately muscular; intestine rather short and wide; cœca very small.

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#### 247. 1. *Sitta Carolinensis*, LINN. White-breasted Nuthatch.

PLATE CLII. Male and Female.

Upper part of head and hind neck deep black; back light greyish-blue; quills black, edged with light greyish-blue; middle tail-feathers of the same colour, the rest black, with a broad band of white near the end; sides of the head and lower parts white; lower tail-coverts with the inner webs brownish-red. Young without black on the head.

*Male*, 5  $\frac{1}{4}$ , 11.

Common from Texas to Maine. Throughout the interior to the Columbia. Resident.

White-breasted American Nuthatch, *Sitta carolinensis*, WILS. Amer. Orn. v. i. p. 10.

*Sitta carolinensis*, BONAP. Syn. p. 96.

White-breasted American Nuthatch, NUTT. Man. v. i. p. 581.

White-breasted Nuthatch, *Sitta carolinensis*, AUD. Orn. Biog. v. ii. p. 299; v. v. p. 473.

#### 248. 2. *Sitta Canadensis*, LINN. Red-bellied Nuthatch.

PLATE CV. Male and Female.

Upper parts of head and hind neck deep black; back light greyish-blue; quills brownish-black, edged with light greyish-blue; middle tail-feathers of the same colour, the rest black, the outer two with a white band near the end; lower parts yellowish-red. Female with the head paler.

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*Male*, 4  $\frac{1}{2}$ , 8.

From Maryland to Nova Scotia. Common. One seen in Labrador. Columbia River. Resident.

Red-bellied Nuthatch, *Sitta canadensis*, WILS. Amer. Orn. v. i. p. 40.

*Sitta canadensis*, BONAP. Syn. p. 96.

Red-bellied Nuthatch, NUTT. Man. v. i. p. 583.

Red-bellied Nuthatch, *Sitta canadensis*, AUD. Orn. Biog. v. ii. p. 24; v. v. p. 474.

### 249. 3. *Sitta pusilla*, LATH. Brown-headed Nuthatch.

PLATE CXXV. Male and Female.

Upper part of head and hind neck light reddish-brown, the latter with a white spot; back light greyish-blue; quills brownish-black, edged with light greyish-blue; middle tail-feathers of the same colours, the rest black, the outer three with a broad band of white near the end; lower parts yellowish-white, the sides greyish-blue.

*Male*, 4, 8.

From Texas to Maryland. In the interior to Mississippi. Extremely abundant. Louisiana, Georgia, Alabama, Florida, and the Carolinas. Resident.

Brown-headed Nuthatch, *Sitta pusilla*, WILS. Amer. Orn. v. ii. p. 105.

*Sitta pusilla*, BONAP. Syn. p. 97.

Brown-headed Nuthatch, NUTT. Man. v. i. p. 584.

Brown-headed Nuthatch, *Sitta pusilla*, AUD. Orn. Biog. v. ii. p. 151.

### 250. 4. *Sitta pygmæa*, VIGORS. Californian Nuthatch.

PLATE CCCCXV. Figs. 3, 4. Adult.

Upper part of head and hind neck dull greyish-brown; back dull leaden-grey; quills and tail-feathers dusky, margined with light grey, the lateral two feathers on each side with a white band toward the base; lower parts brownish-white.

*Adult*, 3  $10\frac{1}{2}$ , wing, 3  $5\frac{1}{2}$ .

California.

Californian Nuthatch, *Sitta pygmæa*, AUD. Orn. Biog. v. v. p. 163.

## FAMILY XXIV. TROCHILINÆ. HUMMINGBIRDS.

Bill long, very slender, straight or arched, somewhat depressed at the base, subcylindrical, flexible, acute. Head rather large; neck of moderate length; body moderately robust. Feet very short, rather stout; tarsus extremely short; toes of moderate size; the anterior coherent at the base, and nearly of equal length, the hind toe articulated high on the tarsus; claws rather long, arched, much compressed, very acute. Plumage compact above, soft and blended beneath, often with metallic lustre; wings very long, extremely narrow, falciform, with the first quill longest, the other primaries rapidly diminishing; secondaries extremely short. Tail various, of ten feathers. Tongue very long, slender, with two flat, thin-edged terminal filaments, and extensile by means of the elongation of the hyoid bones, which curve over the head to the fore part of the forehead, and with their muscles slide in a groove, like those of the Woodpeckers. Œsophagus narrow, considerably enlarged about the middle; stomach extremely small, roundish, moderately muscular, its epithelium dense and longitudinally rugous; intestine very short and of moderate width; no cœca; cloaca globular. Trachea simple, but divided very high up on the neck, so that the bronchi are of excessive length, with a large pair of inferior laryngeal muscles.

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## GENUS I. TROCHILUS, LINN. HUMMINGBIRD.

Bill long, subulate, depressed at the base, cylindrical, straight, or slightly arched, flexible; upper mandible with the ridge narrow at the base, convex in the rest of its extent, the sides sloping, the edges soft; lower mandible with the angle extremely acute and elongated, the sides erect, the tip acute. Nostrils linear, with a membranous flap above. Head small; neck short; body moderately stout. Feet very short; middle toe scarcely longer than the rest. Plumage rather blended and glossy above. Wings very long, extremely narrow; tail rather long, broad, nearly even. The other characters as above.

### 251. 1. *Trochilus Mango*, LINN. Mango Hummingbird.

PLATE CLXXXIV. Male and Female.

Male with the head, hind neck, and back green, splendent with bronze and golden reflections; wings dusky, changing to purplish-brown; middle tail-feathers black, glossed with green and blue, the rest deep crimson-purple, tipped and partially margined with steel-blue; fore part of neck, and middle of breast velvet-black, margined on each side with emerald-green, the sides

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yellowish-green, with a tuft of white downy feathers; lower tail-coverts dark purple. Female with the upper parts similar, the tail-feathers more broadly and extensively margined with blue, and tipped with white; fore neck and centre of the breast white, with a central longitudinal band of black, and an emerald-green margin along the sides of the neck and body; lower tail-coverts green.

*Male*, 4  $\frac{3}{4}$ , 8.

Florida Keys. Rare. Migratory.

Trochilus Mango, LINN. Syst. Nat. v. i. p. 191.

Mango Humming Bird, Trochilus Mango, AUD. Orn. Biog. v. ii. p. 480.

## 252. 2. *Trochilus Anna*, LESS. **Anna Hummingbird.**

PLATE CCCCXXV. Male and Female.

Bill almost straight, acuminate; tail of moderate length, emarginate and rounded. Head, cheeks, and throat blood-red, changing to gold, and having a tinge of blue; upper parts light gold-green; quills and tail-feathers dusky brown; lower parts brownish-white. Female with merely a patch of red on the throat, upper part of head and cheeks greenish-grey; upper parts glossy green as in the male; wings dusky, middle tail-feathers green, the rest greenish-grey at the base, black toward the end, with the tips white; lower parts dull grey, sides tinged with brown.

*Male*, 3  $1\frac{1}{2}$ , wing, 2  $\frac{1}{2}$ .

Rocky Mountains towards California. Common. Migratory.

Oiseau-mouche Anna, Ornismya Anna, LESS. Traite d'Ornith. p. 281.

Anna Humming Bird, Trochilus Anna, AUD. Orn. Biog. v. v. p. 238.

## 253. 3. *Trochilus Colubris*, LINN. **Ruby-throated Hummingbird.**

PLATE XLVII. Male, Female, and Young.

Bill straight, acute; tail of moderate length, even. Upper parts light green with golden reflections; quills and tail purplish-brown, the two middle feathers like the back; throat, sides of the head, and fore neck carmine-purple, spotted with black, varying to crimson, orange, and deep black; sides light green, the rest of the lower parts greyish-white mixed with green. Female differs in wanting the brilliant patch on the throat, which is white, as are the lower parts generally, and having the three lateral tail-feathers tipped with the same colour. Young with the lower parts brownish-white, the tail tipped with white, the upper parts light green.

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*Male*, 3  $\frac{1}{4}$ , 4  $\frac{1}{2}$ .

In summer, from Texas to Lat. 57°, and in all intermediate districts, east of the Rocky Mountains. Common. Migratory.

Humming Bird, Trochilus Colubris, WILS. Amer. Orn. v. ii. p. 26.

Trochilus Colubris, BONAP. Syn. p. 98.

Trochilus Colubris, Northern Humming Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 323.

Ruby-throated Humming Bird, NUTT. Man. v. i. p. 588.

Ruby-throated Humming Bird, Trochilus colubris, AUD. Orn. Biog. v. i. p. 248; v. v. p. 544.

## GENUS II. SELASPHORUS, SWAINS. RUFFED-HUMMINGBIRD.

Bill long, straight, subulate, extremely slender, somewhat depressed at the base, acute; upper mandible with the dorsal line straight, the ridge narrow at the base, broad and convex toward the end, the sides convex, the edges overlapping, the tip acuminate; lower mandible with the angle very long and extremely narrow, the dorsal line straightish, the edges erect, the tip acuminate. Nostrils basal, linear. Head of ordinary size, oblong; neck short; body short and ovate. Feet very small; tarsus very short, feathered more than half-way; toes small, the lateral equal, the third not much longer, the first a little shorter than the lateral; claws rather long, arched, compressed, very acute. Plumage soft and blended; elongated feathers on the sides of the neck in the males. Wings rather short, falcate, pointed, the second primary longest. Tail rather long, broad, graduated.

## 254. 1. *Selasphorus rufus*, GMEL. **Rufous Ruffed-Hummingbird.—Nootka**

## Hummingbird.

PLATE CCCLXXIX. Male and Female.

Male with the upper parts bright cinnamon or reddish-orange, the head bronzed green, the wings dusky purple, their coverts glossed with green; each of the tail-feathers with a narrow, longitudinal, lanceolate, median streak toward the end; loreal space, a narrow band over the eye, another beneath it, and auricular, orange-red; scale-like feathers of the throat and sides of the neck splendid, fire-red, changing to purplish-red, yellowish-red, greenish-yellow, or yellowish-green; behind them on the fore neck a broad band of reddish-white; the rest of the lower parts like the upper, the abdomen inclining to white. Female with the upper parts gold-green, the head inclining to brown; wings as in the male; tail-feathers orange-red at the base, brownish-black toward the end, the tip white; lower parts white, tinged with rufous, especially the sides; throat with roundish spots of metallic greenish-red.

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*Male*, 3  $\frac{7}{12}$ , wing, 1  $\frac{7}{12}$ .

From California along the north-west coast to Nootka Sound. Abundant. Migratory.

*Trochilus rufus*, GMEL. Syst. Nat. v. i. p. 497.

*Trochilus (Selasphorus) rufus*, Cinnamon or Nootka Humming Bird, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 324.

Ruffed-necked Humming Bird, *Trochilus rufus*, AUD. Orn. Biog. v. iv. p. 555.

## FAMILY XXV. ALCEDINÆ. KINGFISHERS.

Bill long, straight, stout, broader than high at the base, much compressed, tapering to a rather acute point, and gape-line commencing beneath the middle of the eyes. Head large, ovato-oblong; neck short; body stout. Tarsus extremely short; anteriorly scaly; anterior toes united for more than half their length, outer longer than inner, hind toe small. Claws stout, compressed, arched, very acute. Plumage rather compact. Wings rather long, pointed. Tail various, of twelve feathers. Tongue very short, fleshy, with the sides parallel, the tip tapering to a bluntish point. Roof of upper mandible moderately concave, with a median ridge and oblique lateral grooves. Œsophagus very wide, without crop; stomach very large, round, with its muscular coat very thin; the epithelium dense, very thin, with tortuous rugæ; intestine very long, extremely slender; no cœca; cloaca very large, globular. Trachea with three pairs of inferior laryngeal muscles.

### GENUS I. ALCEDO, LINN. KINGFISHER.

Bill long, straight, rather stout, broader than high at the base, but suddenly much compressed, and tapering to an acute point; upper mandible with the dorsal line almost straight, the ridge distinct, but somewhat flattened, the edges nearly straight, without notch, the tip acute; lower mandible with the angle of moderate length and narrow, the dorsal line ascending and nearly straight; gape-line commencing beneath the middle of the eye; nostrils basal, near the ridge, linear, obliquely ascending, half closed by a bare membrane. Head large, oblong; neck short; body robust. Feet very short; tarsus extremely short, roundish, anteriorly faintly scaly; anterior toes cohered for a great part of the length, outer longer than inner, first small. Claws rather short, stout, arched, acute. Plumage rather compact, more blended above. Wings long, pointed, with the second and third quills longest. Tail short, even, of twelve rounded feathers.

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#### 255. 1. *Alcedo Alcyon*, LINN. Belted Kingfisher.

PLATE LXXVII. Male and Female.

Crested, with the upper parts, cheeks, and a broad belt across the fore part of the breast, light blue, the shaft of each feather darker; lower parts, with a small spot before the eye, and another on the lower eyelid, white; many of the feathers on the sides light blue, banded with white; quills black; the primaries barred with white at the base, and having the inner web of that colour for half its length; the secondaries broadly edged with light blue, dotted and tipped with white, and having the inner web barred with the same; tail-feathers dusky, edged with blue, barred and tipped with white. Female similar to the male, with the tints duller, and the sides with a band across the middle of the breast light red.

*Male*, 12  $\frac{1}{2}$ , 20.

Breeds from Texas all over the United States, to the Fur Countries, Missouri, Rocky Mountains, and Columbia River. Common. Resident.

Belted Kingfisher, *Alcedo Alcyon*, WILS. Amer. Orn. v. iii. p. 59.

*Alcedo Alcyon*, BONAP. Syn. p. 48.

*Alcedo Alcyon*, Belted Kingfisher, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 339.



## FAMILY XXVI. PICINÆ. WOODPECKERS.

Bill long or of moderate length, straight, stout, angulate, tapering, compressed toward the tip, which is generally wedge-shaped and abrupt; mandibles nearly equal, outline of the upper slightly convex, the ridge narrow, sides sloping, with a lateral ridge, edges straight; lower with the angle short and narrow, the dorsal line nearly straight, the ridge narrow, the sides with a faint ridge. Nostrils basal, elliptical or oblong, concealed by reversed bristly feathers. Head of moderate size, oblong; neck of moderate length; body stout. Legs short; tarsus short, moderately stout, anteriorly scutellate, scaly behind; toes usually four, first short, rudimentary, or sometimes wanting, fourth very long and reversed, equalling or exceeding the third. Claws large, strong, much curved, much compressed, very acute. Plumage soft, blended, rather compact on the back; wings of moderate length or long; with the first quill very small, the third, fourth, and fifth longest. Tail of moderate length, much rounded or cuneate, of twelve feathers, of which the lateral are extremely small, and placed above the next, the rest, but especially the three middle pairs, with the shafts exceedingly large and strong, the webs narrowed toward the end, with their filaments deflected and stiff, the tip pointed or emarginate from being worn. Tongue slender, with the tip horny and furnished with reversed prickles or bristles, capable of being protruded to a great length by the elongation of the hyoid bones, which curve over the head to between the right eye and nostril, or even extend round a great part of that eye. Œsophagus of uniform width; proventriculus extremely large; stomach of moderate size, or rather small, broadly elliptical or roundish, moderately muscular; epithelium thin, dense, and longitudinally rugous; intestine of moderate length, rather wide; no cœca; cloaca very large, globular, or elliptical. Trachea simple, with a single pair of inferior laryngeal muscles. Nest a cavity dug in a tree; eggs from four to six, elliptical, white.

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The groups present characters which are so undecided, and exhibit such gradual approximations, that I think it better here to consider all our Woodpeckers as of one genus.

### GENUS I. PICUS, LINN. WOODPECKER.

Character as above.

\* Bill straight, with the angles prominent.

#### 256. 1. *Picus imperialis*, GOULD. Imperial Woodpecker.

Not figured.

Glossy greenish-black; the elongated occipital crest scarlet; a triangular spot on the fore part of the back; the secondary quills, and the inner webs of most of the primaries, white; bill yellowish-white. Female similar, but without red on the head. GOULD.

*Male*, 24, wing 12.

Rocky Mountains and North California.

*Picus imperialis*, GOULD. Proceed. of Com. Sc. and Corresp. of Zool. Soc. of Lond. part ii. p. 140.

Imperial Woodpecker, *Picus Imperialis*, AUD. Orn. Biog. v. v. p. 313.

#### 257. 2. *Picus principalis*, LINN. Ivory-billed Woodpecker.

PLATE LXVI. Male and Female.

Toes very long, fourth longer than third. An occipital crest of elongated linear feathers; general colour glossy black, with blue reflections on the upper, green on the lower parts; crest rich carmine; bristly feathers covering the nostrils, and a short band at the base of the upper mandible, a band on each side of the neck, from the cheek to the end of the scapulars, secondary quills, their bases excepted, and terminal portion of four inner secondaries, with the axillars and lower wing-coverts, white; bill yellowish-white. Female similar, but with the crest black, and the lateral tail-feathers, with two patches of white at the tip.

*Male*, 21, 30. *Female*, 19  $\frac{1}{2}$ , wing 10.

Common in Texas, Louisiana, and along the Mississippi, to the Ohio. Rare on the latter, to Henderson. From Florida to North Carolina. Resident.

Ivory-billed Woodpecker, *Picus principalis*, WILS. Amer. Orn. v. iv. p. 20.

*Picus principalis*, BONAP. Syn. p. 44.

Ivory-billed Woodpecker, *Picus principalis*, NUTT. Man. v. i. p. 564.

Ivory-billed Woodpecker, *Picus principalis*, AUD. Orn. Biog. v. i. p. 341; v. v. p. 525.

### 258. 3. *Picus pileatus*, LINN. Pileated Woodpecker.—Log-cock.

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PLATE XIII. Male and Female.

Fourth toe longer, considerably shorter than third; an occipital crest of elongated linear feathers; general colour black glossed with blue, upper part of head, and a band from the lower mandible, deep carmine; loral space and a broad band from the eye to the occiput, greyish-black; a narrow band from the eye margining the red of the crest, a band from the base of the upper mandible, down to the side of the neck, the throat, axillars, lower wing-coverts, and bases of the quills, white. Female similar, with the fore part of the head dusky, and the red on the cheek substituted by blackish-brown.

*Male*, 18, 28.

From Texas to the Columbia River, and along the Atlantic coast, as well as in the interior, to the Fur Countries. More abundant in the south. Resident everywhere.

Pileated Woodpecker, *Picus pileatus*, WILS. Amer. Orn. v. iv. p. 27.

*Picus pileatus*, BONAP. Syn. p. 44.

*Picus* (*Dryotomus*) *pileatus*, Pileated Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 304.

Pileated Woodpecker or Log-cock, NUTT. Man. v. i. p. 567.

Pileated Woodpecker, *Picus pileatus*, AUD. Orn. Biog. v. ii. p. 74; v. v. p. 533.

### 259. 4. *Picus lineatus*, LINN. Lineated Woodpecker.

Not figured.

Third and fourth toes about equal, hind toe very small; an occipital crest of elongated near feathers; upper part of the head carmine, inclining to scarlet; a narrow dusky line from the nostril to the eye; a patch, including the eyelids and ear-coverts, leaden-grey; a narrow band down the hind part of the neck, gradually enlarging, the back, wings, and tail, deep black; a band from the nostrils descending obliquely over the side of the head, passing backwards and behind the ear, then much enlarged, and running down the side of the neck to the shoulders, a large oblique patch at the commencement of the wing, including the outer scapulars, the small feathers on the edge of the wing under the alula, the lower wing-coverts, and the inner webs of the quills for about half the length, pure white; an elongated crimson patch at the base of the lower jaw; chin yellowish-white, longitudinally streaked with dusky; the rest of the fore neck and part of the breast black; the lower parts and sides brownish-white, transversely barred with black.

*Male*, 15, wing,  $7\frac{1}{2}$ .

Columbia River.

*Picus lineatus*, LINN. Syst. Nat. v. i. p. 174.

Lineated Woodpecker, *Picus lineatus*, AUD. Orn. Biog. v. v. p. 315.

### 260. 5. *Picus Canadensis*, GMEL. Canadian Woodpecker.

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PLATE CCCCXVII. Fig. 7. Male.

Fourth toe considerably longer than third; fourth quill longest, fifth longer than second; bristly feathers over the nostrils dull yellow; upper part of head and hind neck glossy black; over the eye a band of white, continuous with a transverse band of scarlet on the occiput, usually interrupted in the middle; a black band from near the bill to the eye, continued behind it over the auriculars, and joining the back of the hind neck; beneath this a white band from the angle of the mouth, curving backwards below the middle of the neck, so as to meet the other behind; then a narrow band of black from the base of the lower mandible and continuous with the black of the shoulders; upper part of the body, wings, and tail, black, feathers along the middle of the back tipped with white; wing-coverts, the anterior excepted, and quills spotted with the same, there being on the four longest primaries seven spots on the outer, and five on the inner webs, on most of the secondaries five on each web, but on the outer quill only one patch on each web, and on the second three spots on the outer, and four on the inner web; four middle tail-feathers glossy black, the rest black towards the base, that colour gradually diminishing, so that the outermost is almost entirely white; lower parts white.

Extremely similar to *Picus villosus*, but always much larger.

*Male*,  $10\frac{1}{2}$ ,  $17\frac{3}{4}$ .

From the northern parts of New York to the Fur Countries. Common. Migratory in winter to New York.

*Picus canadensis*, GMEL. Syst. Nat. v. i. p. 437.

*Picus* (*Dendrocopus*) *villosus*, Hairy Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 305.

Canadian Woodpecker, *Picus canadensis*, AUD. Orn. Biog. v. v. p. 188.

### 261. 6. *Picus Phillipsii*, AUD. Phillips's Woodpecker.

PLATE CCCCXVII. Figs. 5, 6. Male.

Fourth toe a little longer than third; fourth quill longest; bristly feathers over the nostrils yellowish-white; fore part of the head, to a little beyond the top, orange-yellow; occiput and hind neck glossy black; over the eye a band of white passing to behind the auriculars; a black band from above the angle of the mouth to the eye, and behind it, including the auriculars; below this a white band from the angle of the mouth joining that over the eye; then a narrower black band from the lower mandible; upper parts black, tinged with brown behind; feathers along the middle of the back tipped with white; some of the wing-coverts also tipped with white, and the quills spotted with the same, there being on the four largest primaries seven spots on the outer, and five on the inner web; the four middle tail-feathers glossy black, the rest black at the base, that colour gradually diminishing, so that the outermost is entirely white; lower parts white.

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*Male*, 10  $\frac{1}{2}$ ; wing, 5.

Massachusetts. Very rare.

Phillips's Woodpecker, *Picus Phillipsii*, AUD. Orn. Biog. v. v. p. 186.

### 262. 7. *Picus Martinæ*, AUD. Maria's Woodpecker.

PLATE CCCCXVII. Fig. 1. Male. Fig. 2. Female.

Fourth toe slightly longer than third; fourth quill longest, third longer than fifth; tufts of bristly feathers over the nostrils dull yellow; upper part of head scarlet; forehead and occiput black; a band of white over the eye; a black band from the bill to the eye, continued behind it over the auriculars, and joining the black of the hind neck; beneath this a band of white from the angle of the mouth, curving backwards below the middle of the neck, so as almost to meet its fellow behind; then a band of black from the base of the lower mandible, and continuous with the black of the shoulders; upper parts black; feathers along the middle of the back tipped with white; wing-coverts and quills spotted with the same, there being on the four longest primaries seven spots on the outer, and four on the inner web, on most of the secondaries five on each web, but on the outer quill only one patch on each web, and on the second four spots on the outer, and three on the inner web; four middle tail-feathers glossy black, the next black on the inner web, and on the greater part of the outer toward the base, the rest black only at the base, the two outer being almost entirely white; lower parts white, tinged with grey, and a little red, the sides faintly mottled with dusky grey.

*Male*, 9  $\frac{2}{12}$ ; wing, 4  $\frac{10\frac{1}{2}}{12}$ .

A pair found at Toronto, Upper Canada.

Maria's Woodpecker, *Picus Martinæ*, AUD. Orn. Biog. v. v. p. 181.

### 263. 8. *Picus Harrisii*, AUD. Harris's Woodpecker.

PLATE CCCCXVII. Fig. 8. Male. Fig. 9. Female.

Fourth toe considerably longer than third; fourth quill longest, fifth longer than second; bristly feathers over the nostrils dull yellow, with the tips black; upper part of the head and hind neck glossy black; over the eye a band of white, continuous with a transverse scarlet band on the occiput; a black band in the loreal space continued behind the eye over the auriculars, and joining the black of the hind neck; beneath is a band of white, from the angle of the mouth, curving backward below the middle of the neck, but without meeting the other; then a band of black from the base of the lower mandible, and continuous with the black of the hind neck and shoulders; upper parts black, the quills tinged with brown; feather along the middle of the back largely tipped with white; quills, excepting the inner three, marked with small roundish spots, of which there are five on the outer and four on the inner web of the four longest quills, while on the outer there is only an elongated spot on the inner web, and on the next one spot on the outer and three on the inner; four middle tail-feathers black, the next black, with a small part of the inner web, and a large portion of the outer toward the end, white; the rest white, with the base black; the outermost small feathers almost entirely white; lower parts brownish-white. Female wants the red occipital band. This species is distinguishable from all the other spotted species, by having no white spots on the wing-coverts.

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*Male*, 9; wing, 5  $\frac{1}{2}$ .

Columbia River. Rare.

Harris's Woodpecker, *Picus Harrisii*, AUD. Orn. Biog. v. v. p. 191.

## 264. 9. *Picus villosus*, LINN. Hairy Woodpecker.

PLATE CCCCXVI. Fig. 1. Male. Fig. 2. Female.

Bill as long as the head; fourth toe considerably longer than third; fourth and fifth quills longest and equal; bristly feathers over the nostrils dull yellow, tipped with black; upper part of head and hind neck glossy black; over the eye a band of white, continuous with a transverse band of scarlet on the occiput, usually divided in the middle; a black band from the bill to the eye, continued behind it over the auriculars, and joining the black of the hind neck; beneath this, a band of white from the angle of the mouth, curving backwards below the middle of the neck, so as to meet its fellow behind; then a black band from the base of the lower mandible; upper parts black, tinged with brown behind; feathers along the middle of the back, tipped with white; wing-coverts, the anterior excepted, and quills spotted with white, there being on the four longest primaries seven on the outer and five on the inner web, on most of the secondaries five on each web, but on the outer quill only one patch on each web, and on the second, two spots on the outer and three on the inner; four middle tail-feathers glossy black, the rest black only towards the base; lower parts white, tinged with dull green on the fore neck and breast, the sides with blackish-grey. Female without red on the head.

*Male*, 8  $\frac{3}{4}$ , 14  $\frac{1}{2}$ . *Female*, 8  $\frac{1}{2}$ , 15.

Breeds from Texas to New Hampshire, Kentucky, and Valley of the Mississippi. Common. Resident.

Hairy Woodpecker, *Picus villosus*, WILS. Amer. Orn. v. i. p. 150.

*Picus villosus*, BONAP. Syn. p. 46.

Hairy Woodpecker, NUTT. Man. v. i. p. 575.

Hairy Woodpecker, *Picus villosus*, AUD. Orn. Biog. v. v. p. 164.

## 265. 10. *Picus pubescens*, LINN. Downy Woodpecker.

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PLATE CXII. Male and Female.

Bill much shorter than the head, slender; fourth toe considerably longer than third; fourth quill longest; upper bristles over the nostrils yellowish, tipped with black; upper part of the head glossy black; a band of white over the eye ending in a scarlet occipital band; then a band of black from the eye to the hind neck, succeeded by one of white from the angle of the mouth, curving so as nearly to meet its fellow on the hind neck, and a black band from the lower mandible down the side of the neck. Upper parts black; feathers along the middle of the back tipped with white; coverts and quills spotted with white, there being six spots on the outer, and five on the inner webs of the four longest primaries, the outermost quill with one patch of white on the inner web, and the next with four spots on each web; outer small tail-feathers white, with a single black spot, next two white, with two terminal black bands, the rest variegated, except the two middle, which are black. Female without red.

*Male*, 6  $\frac{3}{4}$ , 12.

Breeds from Texas to Labrador, and northward to Lat. 58°. Common throughout the interior to the eastern bases of the Rocky Mountains. In every district, a constant resident.

Downy Woodpecker, *Picus pubescens*, WILS. Amer. Orn. v. i. p. 153.

*Picus pubescens*, BONAP. Syn. p. 46.

*Picus* (*Dendrocopus*) *pubescens*, Downy Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 307.

Downy Woodpecker, NUTT. Man. v. i. p. 576.

Downy Woodpecker, *Picus pubescens*, AUD. Orn. Biog. v. ii. p. 81; v. v. p. 539.

## 266. 11. *Picus Gairdnerii*, AUD. Gairdner's Woodpecker.

Not figured.

Bill shorter than the head, slender; fourth toe considerably longer than third, fifth quill longest; black above, with a scarlet occipital band, brownish-white beneath; spotted with white, and in all respects as to colour like the last species, only the spots on the wings are much smaller, and the patch of red brocade; the toes and bill larger.

Length,  $6\frac{1}{2}$ ; wing,  $3\frac{1}{2}$ .

Columbia River.

Gairdner's Woodpecker, *Picus Gairdnerii*, AUD. Orn. Biog. v. v. p. 317.

## 267. 12. *Picus querulus*, WILS. Red-cockaded Woodpecker.

PLATE CCCLXXXIX.

Upper part of the head, hind neck, and a band on each side of the neck, glossy black; a large patch on the side of the head and neck white; back black, barred with white; wings brownish-black, spotted with white, there being eight spots on the outer, and six on the inner webs of the longest quills; middle tail-feathers black, outer four on each side white, with black bars; lower parts white, sides of the neck and body with oblong black spots. Male with a small carmine line behind the eye.

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*Male*,  $8\frac{1}{2}$ ,  $14\frac{1}{2}$ . *Female*,  $7\frac{3}{8}$ ,  $13\frac{1}{4}$ .

From Texas to New Jersey, along the Atlantic districts. Common. In the interior to Lower Mississippi. Resident.

Red-cockaded Woodpecker, *Picus querulus*, WILS. Amer. Orn. v. ii. p. 103.

*Picus querulus*, BONAP. Syn. p. 46.

Red-cockaded Woodpecker, NUTT. Man. v. i. p. 577.

Red-cockaded Woodpecker, *Picus querulus*, AUD. Orn. Biog. v. v. p. 12.

## 268. 13. *Picus Auduboni*, TRUDEAU. Audubon's Woodpecker.

PLATE CCCCXVII. Adult.

Bill about the length of the head, with the outlines considerably arched, the tips acute, and not laterally worn; upper parts black, lower white, with a tinge of brown, the sides very faintly barred with dusky; tufts covering the nostrils white; on the anterior part of the top of the head some feathers largely tipped with yellow; a band of white over the eye; loreal space and a broad band behind the eye black; feathers along the middle of the back tipped with white; wings spotted with white; six spots on the outer, and four on the inner webs of the longer primaries; four middle tail-feathers black, the next with the tip obliquely white, that colour enlarging on the rest, so as to include almost the whole of the outer feathers.

*Adult*, 7,  $13\frac{1}{2}$ .

Louisiana.

*Picus Auduboni*, Audubon's Woodpecker, TRUDEAU, Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 404.

Audubon's Woodpecker, *Picus Auduboni*, AUD. Orn. Biog. v. v. p. 194.

## 269. 14. *Picus ruber*. GMEL. Red-breasted Woodpecker.

PLATE CCCCXVI. Fig. 9. Male. Fig. 10. Female.

Head, neck, and fore part of breast, deep carmine; upper parts black, variegated with white, lower pale yellow, with the sides undulated with dusky; middle tail-feathers with the inner web white, obliquely banded with black.

*Male*, 8, 14. *Female*, 8; wing,  $5\frac{1}{2}$ .

Upper California. Columbia River. Nootka. Common. Migratory.

Red-breasted Woodpecker, *Picus ruber*, AUD. Orn. Biog. v. v. p. 179.

## 270. 15. *Picus varius*, LINN. Yellow-bellied Woodpecker.

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Male with the crown of the head and throat bright carmine; a semicircular patch of black on the lower fore neck, and a semilunar band on the occiput; upper parts bluish-black, variegated with white and yellow, lower yellow, with the sides undulated with dusky; middle tail-feathers with the inner web white, obliquely banded with black. Female similar, but with the throat white, and the yellow of the lower parts less pure. Young without red on the head or throat, the former dusky, streaked with faint brown, the latter greyish-white, the upper parts as in the adult, but duller, the tail variegated with white, the lower parts dull yellowish-grey, undulated with dusky, the abdomen dull yellowish.

*Male*,  $8\frac{1}{2}$ , 15.

Breeds from Maryland northward to the Saskatchewan. Rather rare in the interior in summer. Many spend the winter in the Southern and Western Districts.

Yellow-bellied Woodpecker, *Picus varius*, WILS. Amer. Orn. v. i. p. 147.

*Picus varius*, BONAP. Syn. p. 45.

*Picus* (*Dendrocopus*) *varius*, Yellow-bellied Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 309.

Yellow-bellied Woodpecker, NUTT. Man. v. i. p. 574.

Yellow-bellied Woodpecker, *Picus varius*. AUD. Amer. Orn. v. i. p. 519; v. v. p. 537.

\*\* Hind toe wanting. Genus *Apternus* of authors.

## 271. 16. *Picus arcticus*, SWAINS. Arctic Three-toed Woodpecker.

PLATE CXXXII. Male and Female.

Three-toed, with the upper parts glossy bluish-black, the lower white, the sides and lower wing-coverts transversely barred with black; tufts of bristly feathers black; crown of the head saffron-yellow; a white line from behind the eye, a band of the same from the base of the upper mandible to beneath the ear-coverts, succeeded by a black band; inner webs of all the quills and outer webs of the primaries spotted with white, there being seven spots on the outer, and five on the inner webs of the three longest; four middle tail-feathers black, the next with an oblique band of white, the rest black only at the base, except the outermost, of which nearly all the inner web is of that colour. Female without yellow on the head.

*Male*, 10  $\frac{1}{2}$ , 16.

From the northern parts of New York to the Fur Countries, as well as along the eastern declivities of the Rocky Mountains. Rather common. Partially migratory.

*Picus tridactylus*, BONAP. Syn. p. 46.

Northern Three-toed Woodpecker, *Picus tridactylus*, BONAP. Amer. Orn. v. ii. p. 14.

*Picus* (*apternus*) *arcticus*, Arctic Three-toed Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 313.

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Northern Three-toed Woodpecker, NUTT. Man. v. i. p. 578.

Three-toed Woodpecker, *Picus tridactylus*, AUD. Orn. Biog. v. ii. p. 198.

## 272. 17. *Picus hirsutus*, VIEILL. Banded Three-toed Woodpecker.

PLATE CCCCXVII. Fig. 3. Male. Fig. 4. Female.

Three-toed, with the upper parts deep glossy-black, the head with blue reflections, the back and wings tinged with brown; tufts over nostrils dull yellow; anterior part of head pale yellow, spotted with white; a band of white, with small dusky lines, from the angle of the mouth to the occiput; the back transversely banded with white; inner webs of all the quills and outer webs of the primaries spotted with white, there being seven spots on the outer, and five on the inner, webs of the three longest quills; four middle tail-feathers black, the next white at the end, the rest white, unless at the base, but the outermost banded with black. Female with the head black, streaked with white.

*Male*, 9; wing, 4  $\frac{5}{12}$ .

From Lake Superior to the Arctic Sea. Abundant. Resident.

*Picus hirsutus*, VIEILL. Ois. de l'Amer. v. ii. p. 124.

*Picus* (*Apternus*) *tridactylus*, Common Three-toed Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 311.

Common Three-toed Woodpecker, *Picus hirsutus*, AUD. Orn. Biog. v. v. p. 184.

\*\*\* Bill straight, with the angles obsolete, and the upper outline somewhat arched.

## 273. 18. *Picus Carolinus*, LINN. Red-bellied Woodpecker.

PLATE CCCCXV. Fig. 3. Male. Fig. 4. Female.

Male with the upper part of the head and hind neck bright carmine; the back and scapulars transversely banded with black and white; the rump and tail-coverts with the white predominating; primaries black, with a band of white; tail black, with the inner webs of the middle, and both webs of the outer barred with white; lower parts yellowish-white, abdomen red; lower wing and tail-coverts white, spotted with dusky. Female similar, but with the top of the

head ash-grey and with less red on the abdomen.

*Male*, 7  $\frac{3}{4}$ , 15  $\frac{3}{4}$ . *Female*, 8, 14  $\frac{1}{2}$ .

Breeds from Kentucky in the West, and from Maryland to Nova Scotia and Canada. Abundant in winter in all the Southern States, from Carolina to Texas, and especially in the Floridas.

Red-bellied Woodpecker, *Picus carolinus*, WILS. Amer. Orn. v. i. p. 113.

*Picus carolinus*, BONAP. Syn. p. 45.

Red-bellied Woodpecker, NUTT. Man. v. i. p. 572.

Red-bellied Woodpecker, *Picus carolinus*, AUD. Orn. Biog. v. v. p. 169.

## 274. 19. *Picus erythrocephalus*, LINN. Red-headed Woodpecker.

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PLATE XXVII. Male and Female.

Head and neck bright crimson, that colour descending on the fore neck, and margined with a semilunar band of black; back wings and tail glossy bluish-black; inner secondaries, rump, and lower parts, pure white. Young with the head and neck brownish-grey, streaked with dusky; feathers of back and wing-coverts dusky, edged with grey; secondary quills yellowish-white barred with black; lower parts greyish-white, the sides streaked with dusky.

*Male*, 9, 17. *Female*, 8  $\frac{1}{2}$ .

Breeds from Texas to Nova Scotia, and throughout the interior to the head waters of the Missouri; thence to Lake Huron. Extremely common. Great numbers spend the winter in Louisiana.

Red-headed Woodpecker, *Picus erythrocephalus*, WILS. Amer. Orn. v. i. p. 142.

*Picus erythrocephalus*, BONAP. Syn. p. 45.

*Melanerpes erythrocephalus*, Red-headed Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 316.

Red-headed Woodpecker, *Picus erythrocephalus*, AUD. Orn. Biog. v. i. p. 141; v. v. p. 536.

## 275. 20. *Picus torquatus*, WILS. Lewis's Woodpecker.

PLATE CCCCXVI. Fig. 7. Male. Fig. 8. Female.

Upper parts black, highly glossed with dark green; a band across the forehead, the chin, and a broad patch on the side of the head, surrounding the eye, deep carmine, or blood-red; beyond this, the throat and part of the sides of the neck black; a band of dull white across the hind neck, continuous anteriorly with a large patch of yellowish-white, occupying the fore neck and part of the breast; the rest of the breast and the sides bright red; lower wing-coverts, abdomen, and lower tail-coverts black. Young with the red on the head scarcely apparent, that on the lower parts mixed with greyish-white, the fore part of the neck dull grey, and the white ring on the hind neck wanting; many of the feathers there with one or two white spots near the end.

*Male*, 11, wing, 7  $\frac{1}{2}$ .

Rocky Mountains, and Columbia River. Abundant. Migratory.

Lewis's Woodpecker, *Picus torquatus*, WILS. Amer. Orn. v. iii. p. 31.

*Picus torquatus*, BONAP. Syn. p. 46.

Lewis's Woodpecker, NUTT. Man. v. i. p. 577.

Lewis's Woodpecker, *Picus torquatus*, AUD. Orn. Biog. v. v. p. 176.

\*\*\*\* Bill comparatively slender, slightly arched, acute, with the lateral angles obsolete. Genus *Colaptes* of authors.

## 276. 21. *Picus auratus*, LINN. Golden-winged Woodpecker.—Flicker. Tucker. High-holder.

PLATE XXXVII. Male and Female.

Male with the upper part of the head and neck ash-grey; a transverse band of carmine on the hind neck; back, scapulars, and secondaries light greenish-brown, transversely spotted with black, rump white; tail-coverts white, with black markings; primaries and tail-feathers blackish-brown, the shafts yellow; sides of the head and fore neck light pale purplish-red, inclining to lilac; a black streak on each side of the throat, and a semilunar patch of the same on the fore part of the breast; lower parts reddish-white, tinged with yellow, and spotted with black; lower wing-

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coverts and inner edges of quills clear buff, lower surface of quills and tail-feathers yellow, the latter black toward the end. Female similar, but without the black bands on the throat.

*Male*, 12  $\frac{1}{2}$ , 16.

Breeds from Texas to Nova Scotia, and the Fur Countries. Generally distributed in the United States. Eastern bases of Rocky Mountains. Extremely common. Resident in the Southern States.

Gold-winged Woodpecker, *Picus auratus*, WILS. Amer. Orn. v. ii. p. 45.

*Picus auratus*, BONAP. Syn. p. 44.

*Colaptes auratus*, Golden-shafted Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 314.

Flicker or Golden-winged Woodpecker, NUTT. Man. v. i. p. 561.

Golden-winged Woodpecker, *Picus auratus*, AUD. Orn. Biog. v. i. p. 191; v. v. p. 540.

## 277. 22. *Picus Mexicanus*, SWAINS. Red-shafted Woodpecker.

PLATE CCCCXVI. Fig. 5. Male. Fig. 6. Female.

Male with the upper part of the head and hind neck light greyish-brown; forehead and a band over the eye dull red; sides and fore part of neck ash-grey, with an oblong patch of bright carmine on each side of the throat; back, scapulars, and secondaries light reddish-brown, transversely spotted with black; rump white; upper tail-coverts black, barred with white; primaries blackish-brown, tail-feathers black, their shafts vermilion; lower parts reddish-white, spotted with black, of which there is a semilunar patch on the fore part of the breast; lower wing-coverts, and inner webs of quills of roseate tints; lower surface of quills and tail-feathers orange-red, inclining to vermilion, the tail black toward the end.

*Male*, 13  $\frac{1}{2}$ , wing, 6  $1\frac{1}{2}$ . *Female*, 13.

Rocky Mountains, Columbia River, and northward to the Saskatchewan. Abundant. Migratory.

*Colaptes mexicanus*, SWAINS. Synop. Birds of Mex. Phil. Mag. N. 84.

*Colaptes mexicanus*, Red-shafted Woodpecker, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 315.

Red-shafted Woodpecker, NUTT. Man. v. ii. p. 603.

Red-shafted Woodpecker, *Picus mexicanus*, AUD. Orn. Biog. v. ii. p. 314.

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## FAMILY XXVII. CUCULINÆ. CUCKOOS.

Bill long or of moderate length, broader than high at the base, compressed toward the end, straight or somewhat arched; upper mandible with the dorsal line convex or arched, the ridge indistinct, the sides convex, the edges arched, sharp, without notch, the tip decurved; lower mandible with the angle rather short, the dorsal line straight or decurved, the ridge thin, the sides erect or convex, the tip slightly decurved, acute. Nostrils basal, oblong, generally marginate. Head of moderate size; neck of ordinary length; body rather slender. Feet of moderate length; tarsus with broad scutella; toes long, slender, flat beneath, outer directed outwards or backwards. Claws long or of moderate length, arched, compressed, acute. Plumage blended; wings generally long, with the first quill short, the third and fourth longest. Tail long, of ten feathers; upper mandible very narrow beneath, with three longitudinal ridges; tongue slender, emarginate, and papillate at the base, the tip horny, thin, lacerated, and slit; œsophagus rather wide, without dilatation; stomach large, round, with the muscular coat very thin, the epithelium soft, rugous; intestine of moderate length and width; cœca long, oblong, narrowed at the base. Trachea simple, with a single very slender pair of inferior laryngeal muscles.

## GENUS I. COCCYZUS, VIEILL. AMERICAN CUCKOO.

Bill of moderate length, rather slender, somewhat arched, much compressed, acute; upper mandible with the dorsal line arched, the ridge rounded, the sides erect toward the end, the edges thin, direct, the tip narrow, decurved; lower mandible with the angle of moderate length, rather wider, the dorsal line decurved toward the end, the sides nearly erect, the edges decurved, the tip narrow; the nostrils small, oblong, operculate. Eyelids bare, except at the margin. Head rather small; neck of moderate length; body slender. Feet rather short; tarsus compressed, rather stout, with seven very broad scutella; toes slender, compressed, anterior united at the base, first small. Claws moderate, arched, compressed, laterally grooved, acute. Plumage soft and blended, somewhat compact on the back. Wings of moderate length, with the first quill very short, the third and fourth longest. Tail very long, cuneate or graduated.

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**278. 1. Coccyzus Americanus, LINN. Yellow-billed American Cuckoo.—Rain Crow. Cow-bird.**

PLATE II. Male and Female.

Bill brownish-black above, with the margin of the upper, and nearly the whole of the lower mandible yellow; margin of the eye yellow; upper parts light greenish-brown, with a tinge of grey on the head; lower parts silvery white; quills with the inner webs brownish-orange; middle tail-feathers like the back, glossed with green, the rest brownish-black, all tipped with white, that colour gradually enlarging to the outer, which, besides, has nearly the whole outer web white.

*Male*, 12  $\frac{1}{2}$ , 16. *Female*, 11  $\frac{3}{4}$ , 15  $\frac{1}{2}$ .

Breeds from Texas to Nova Scotia, and throughout the interior, to the eastern bar of the Rocky Mountains. Common. Many spend the winter in the Floridas.

Yellow-billed Cuckoo, *Cuculus carolinensis*, WILS. Amer. Orn. v. iv. p. 13.

*Coccyzus americanus*, BONAP. Syn. p. 42.

Yellow-billed Cuckoo, *Coccyzus americanus*, NUTT. Man. v. i. p. 551.

Yellow-billed Cuckoo, *Coccyzus americanus*, AUD. Orn. Biog. v. i. p. 18; v. v. p. 520.

**279. 2. Coccyzus erythrophthalmus, WILS. Black-billed American Cuckoo.—Rain-Crow. Cuckoo-Bird.**

PLATE XXXII. Male and Female.

Bill black; margin of the eye blue, before and behind bright red; upper parts light greenish-brown; lower parts silvery-white, the breast and sides faintly tinged with yellow; quills with the inner webs pale buff toward the base; tail-feathers like the back, tipped with white.

*Male*, 11  $\frac{1}{2}$ , 15.

From Texas to Nova Scotia, and in the interior to Kentucky. Rather common. Migratory.

Black-billed Cuckoo, *Cuculus erythrophthalmus*, WILS. Amer. Orn. v. iv. p. 15.

*Coccyzus erythrophthalmus*, BONAP. Syn. p. 42.

St. Domingo Cuckoo, *Coccyzus dominicus*, NUTT. Man. v. i. p. 556.

Black-billed Cuckoo, *Coccyzus erythrophthalmus*, AUD. Orn. Biog. v. i. p. 170; v. v. p. 523.

**280. 3. Coccyzus Seniculus, LATH. Mangrove American Cuckoo.**

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PLATE CLXIX. Male.

Upper mandible, and the tip and edges of the lower black, the rest yellow; upper parts light greenish-brown, with a tinge of grey on the head; lower parts brownish-orange; inner webs of quills uniform with the rest; middle tail-feathers like the back, the rest brownish-black, tipped with white, that colour gradually enlarging to the outer.

*Male*, 12, 15.

Florida Keys. Common. Migratory.

Mangrove Cuckoo, *Coccyzus Seniculus*, NUTT. Man. v. i. p. 558.

Mangrove Cuckoo, *Coccyzus Seniculus*, AUD. Orn. Biog. v. ii. p. 390.

**FAMILY XXVIII. PSITTACINÆ. PARROTS.**

Bill short, bulging, very strong, deeper than broad, convex above and below; upper mandible cerate at the base, its outline decurved, the sides convex, the edges sharp, with an angular process, the tip trigonal, decurved, elongated, acute; lower mandible with the angle short and wide, the tip thin-edged, rounded, or abrupt. Nostrils basal, round, open, in the cere. Head very large; neck of moderate length; body compact. Feet short and robust; tarsus short, scaly; toes stout, the outer directed backwards, the third and fourth coherent at the base. Claws stout, curved, acute. Plumage generally blended, but firm. Wings and tail various. Tongue short, fleshy, rounded, or emarginate; œsophagus wide, with a large crop; stomach small, muscular; intestine of moderate length; cœca small; cloaca globular.

**GENUS I. CENTURUS, KUHL. PARRAKEET.**

Bill short, very strong, bulging; upper mandible with the dorsal line decurved, the sides convex, the edges ascending at the base, then direct, with a deep notch, the tip decurved, acute; lower mandible very deep at the base, with the dorsal line convex and ascending, the tip sharp-edged and truncate. The nostrils basal, round. Feet short, stout; tarsus very short; toes of moderate length, stout; claws strong, curved, acute. Plumage blended, compact on the wings, which are long and pointed, with the second quill longest. Tail long, cuneate.

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### **281. 1. Centurus Carolinensis, LINN. Carolina Parakeet.**

PLATE XXVI. Male, Female, and Young.

Fore part of the head and cheeks bright carmine, that colour extending over and behind the eyes, the rest of the head and neck pure bright yellow; upper parts emerald-green, with light blue reflections, lower parts lighter; edge of wing yellow, primary coverts deep bluish-green, secondary coverts yellowish-green; quills with the inner webs dusky, the outer yellow at the base, blue toward the end; tail green; tibial feathers yellow, the lowest bright red. Young with the head green.

*Male*, 14, 22.

South Carolina, Georgia, Florida, Alabama, Louisiana, and up the Mississippi to Kentucky. Abundant. Resident.

*Psittacus carolinensis*, LINN. Syst. Nat. v. i. p. 141.

Carolina Parrot, *Psittacus carolinensis*, WILS. Amer. Orn. v. iii. p. 89.

*Psittacus carolinensis*, BONAP. Syn. p. 41.

Carolina Parrot, *Psittacus carolinensis*, NUTT. Man. v. i. p. 545.

Carolina Parrot, *Psittacus carolinensis*, AUD. Orn. Biog. v. i. p. 135.

## **FAMILY XXIX. COLUMBINÆ. PIGEONS.**

Bill short, soft for half its length, horny toward the end; upper mandible with a tumid fleshy covering at the base, its dorsal line straight, toward the end convex and deflected, the tip narrow, but obtuse; lower mandible at its base wider than the upper, its sides elastic and slender, the angle long and obtuse, the dorsal line short and convex, the tip obtuse. Nostrils linear in the lower and fore part of the nasal membrane. Head small, oblong; neck of moderate length; body rather full. Feet short; tarsus partially feathered, scutellate, or scaly; toes four, on the same level, broad beneath, marginate; the first short, the lateral nearly equal, all scutellate above. Claws moderate, arched, compressed, rather blunt. Plumage generally compact, the feathers with thick spongy shaft, and destitute of plumule. Wings and tail various. Tongue rather broad at the base, toward the end narrow, horny, induplicate, pointed; œsophagus very wide, enlarged into an enormous crop; stomach a very large and strong gizzard, placed obliquely, its lateral muscles exceedingly thick, the lower prominent, the tendons very large, the epithelium dense, with longitudinal broad rugæ, and two opposite grinding surfaces; intestine long, of moderate width; cœca very small; cloaca oblong. Trachea simple, flattened, with a single pair of inferior laryngeal muscles. Nest flat, rudely constructed. Eggs two, elliptical, white.

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### **GENUS I. COLUMBA, LINN. DOVE.**

Bill straight, rather short, slender, compressed; upper mandible with the dorsal line straight at the base, convex toward the end, the nostrils linear, oblique, covered with a fleshy bare membrane, the edges sharp toward the end, with a distinct notch, the tip narrow, sharp-edged, rounded; lower mandible with the angle long and pointed, the sides erect, the base sloping outwards toward the end, the edges sharp, the tip narrow, but blunt. Head small, oblong, compressed; neck of moderate length; body full. Feet short, strong; tarsus very short, roundish, with a single row of scutella above, and two anterior rows of large hexagonal scales; toes beneath rather slender, broad and flat beneath, marginate, with large scutella; hind toe smallest, lateral about equal. Claws of moderate size, arched, compressed, acute. Plumage rather compact above, blended beneath; wings long, pointed, the second and third quills longest. Tail of moderate length, rounded, of twelve broad rounded feathers.

### **282. 1. Columba fasciata, SAY. Band-tailed Dove.**

PLATE CCCLXVII. Male and Female.

Wings long, the second quill longest, the first with the outer web narrower at the base than beyond the middle; tail of moderate length, rounded. Head, fore neck, and breast, light reddish-purple, that colour fading on the abdomen and lower tail-coverts into whitish; a narrow half-ring of white on the hind neck, the lower part of which is of a metallic greenish-brown tint; upper parts greyish-blue, tinted with brown; rump and sides of the body blue; quills brownish-black, very narrowly margined with brownish-white; tail greyish-blue at the base, much paler, and

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tinged with yellow toward the end, these colours being separated at the distance of two inches from the tip by a band of black. Female with the black band on the tail less decided, the middle feathers being but slightly marked with it.

*Male*, 16, wing, 9. *Female*, 15  $\frac{1}{2}$ .

From the eastern spurs of the Rocky Mountains, and across them to the Columbia River. Common. Migratory.

*Columba fasciata*. SAY, Long's Exped. v. ii. p. 10.

*Columba fasciata*, BONAP. Syn. p. 119.

Band-tailed Pigeon, *Columba fasciata*, BONAP. Amer. Orn. v. i. p. 77.

Band-tailed Pigeon, NUTT. Man. v. i. p. 624.

Band-tailed Pigeon, *Columba fasciata*, AUD. Orn. Biog. v. iv. p. 479.

### **283. 2. *Columba leucocephala*, LINN. White-headed Dove.**

PLATE CLXXVII. Male and Female.

Upper parts dusky greyish-blue, lower paler; quills and tail-feathers darker; upper part of head white, hind neck dark purplish-brown, lower part and sides green, changing gold-colour, each feather margined with deep black.

*Male*, 14  $\frac{1}{4}$ , 23  $\frac{1}{2}$ . *Female*, 14.

Florida Keys. Common during summer only.

*Columba leucocephala*, BONAP. Syn. p. 119.

White-headed Pigeon, *Columba leucocephala*, BONAP. Amer. Orn. v. ii. p. 15.

White-crowned Pigeon, NUTT. Man. v. i. p. 625.

White-headed Pigeon, *Columba leucocephala*, AUD. Orn. Biog. v. ii. p. 443; v. v. p. 557.

### **284. 3. *Columba Zenaida*, BONAP. Zenaida Dove.**

PLATE CLXII. Male and Female.

Wings of moderate length, with the second quill longest; tail rounded, upper parts light yellowish-brown; quills brownish-black, narrowly margined with whitish, seven of the secondaries broadly tipped with white, the inner secondaries and the coverts with a broad black spot on the inner web toward the end; middle tail-feathers like the back, the rest greyish-blue, with broad black band toward the end, the extremity bluish-white; lower parts light brownish-red, paler on the throat, and passing into greyish-blue on the sides; lower wing-coverts light blue; a small spot of deep blue immediately behind the eye, a large one of brilliant rich blue a little below, on the side of the neck; and a band of splendid purple over the back and sides of the neck. [192]

*Male*, 11  $\frac{1}{2}$ , 18  $\frac{1}{8}$ . *Female*, 10  $\frac{1}{2}$ .

Florida Keys during summer only. Common.

*Columba Zenaida*, BONAP. Syn. p. 119.

Zenaida Dove, *Columba Zenaida*, BONAP. Amer. Orn. v. ii. p.

Zenaida Dove, NUTT. Man. v. i. p. 625.

Zenaida Dove, *Columba Zenaida*, AUD. Orn. Biog. v. ii. p. 354; v. v. p. 558.

### **285. 4. *Columba montana*, LINN. Key-West Dove.**

PLATE CLXVII. Male and Female.

Wings of moderate length, with the third quill longest, the outer webs of the outer five quills narrowed in the middle; tail rounded. Upper part brownish-red; upper part of head and hind neck shining with purplish and light green reflections; sides of the neck cream-coloured, changing to lilac, with green, blue, and purple tints behind; back and scapulars also splendid with purplish-red; a broad band from the lower mandible beneath the eye, and the throat white; fore neck and breast pale purple, the rest cream-coloured.

*Male*, 11  $\frac{3}{4}$ , 17  $\frac{1}{2}$ .

Key West only during summer. Not rare.

*Columba montana*, LINN. Syst. Nat. v. i. p. 281.

**286. 5. *Columba passerina*, LINN. Passerine Dove.—Ground Dove.**

PLATE CLXXXII. Male, Female, and Young.

Wings of moderate length, with the third quill longest, the first having the outer web narrow at the base, the next four with a contraction toward the end; tail rounded. Male with the forehead, sides of the head, anterior and lateral parts of the neck, breast, and sides, light purplish-red, the central part of the neck-feathers dusky; hind head and neck pale blue, the feathers edged with dark grey; back brownish-grey; primaries and their coverts deep chestnut-red, margined externally, and tipped with dusky; secondary quills and their coverts pale grey, tinged with red; smaller inner secondaries, with their coverts and some of the smaller coverts, with oblong glossy blue spots; lower wing-coverts deep chestnut-red; tail-feathers, except the middle two, blue at the base, bluish-black toward the end. Female paler; the forehead and wing-coverts but slightly tinged with red, the hind neck less blue, and the spots on the wings of smaller extent, and more purple. Young resemble the female, with a tinge of yellow beneath.

*Male*, 6  $\frac{3}{4}$ , 11. *Female*, 6  $\frac{1}{4}$ .

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Throughout the Floridas and their Keys, as well as from Louisiana to North Carolina, including Alabama and Georgia. Pretty abundant. Resident.

*Columba passerina*, LINN. Syst. Nat. v. i. p. 285.

Ground Dove, *Columba passerina*, WILS. Amer. Orn. v. iv. p. 15.

*Columba passerina*, BONAP. Syn. p. 120.

Ground Dove, *Columba passerina*, AUD. Amer. Ornith. v. ii. p. 471; v. v. p. 558.

**GENUS II. STARNÆNAS, BONAP. GROUND-DOVE.**

Bill of moderate length, slender, compressed toward the end; upper mandible with a tumid fleshy covering at the base, the tip convex, declinate, obtuse. Nostrils oblique, linear. Head small, compressed; neck of moderate length; body full, robust. Legs stout; tarsus longer than the hind toe, covered anteriorly and laterally with subhexagonal scales; toes of moderate length. Claws rather small, arched, compressed, obtuse. Plumage compact. Wings short, rounded; third, fourth, and fifth quills longest, and almost equal; second, third, fourth, fifth, and sixth, cut out on the outer web. Tail of moderate length, slightly rounded, of twelve broad, rounded feathers. Tongue and digestive organs as in the preceding genus.

**287. 1. *Starnænas cyanocephala*, LINN. Blue-headed Ground-Dove.**

PLATE CLXXII. Male and Female.

Upper parts rich chocolate, slightly tinged with olive; lower parts brownish-red, anteriorly tinged with purplish-red, lighter on the middle of the breast, the sides and lower tail-coverts approaching to the colour of the back; upper part of head bright blue, encircled by a band of deep black, broader on the occiput, and very narrow in front; a band of white, under the eye, meeting its fellow on the chin; a broad patch of black on the fore neck, margined with white beneath, and on the sides having a patch of light blue.

*Male*, 12  $\frac{1}{4}$ , 17  $\frac{1}{2}$ .

Accidental on the southernmost Florida Keys in summer only.

*Columba cyanocephala*, LINN. Syst. Nat. v. i. p. 282.

Blue-headed Pigeon, *Columba cyanocephala*, AUD. Orn. Biog. v. ii. p. 411; v. v. p. 557.

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**GENUS III. ECTOPISTES, SWAINS. LONG-TAILED-DOVE.**

Bill straight, of ordinary length, rather slender, broader than high at the base, with a tumid fleshy covering, compressed toward the end. Head small, oblong; neck of moderate length; body rather slender. Feet short; tarsus as short as the hind toe and claw, anteriorly scutellate; outer toe slightly shorter than inner; claws rather short, stout, arched, obtuse. Plumage compact above; blended, but firm beneath. Wings long; first and second quills longest, and about equal. Tail long, cuneate, pointed. Digestive organs as in the preceding genus.

**288. 1. *Ectopistes migratoria*, LINN. Wandering Long-tailed-Dove.—Passenger Pigeon.**

PLATE LXII. Male and Female.

Twelve tail-feathers. Male with the upper part and sides of the head light blue; throat, fore neck, and breast, light brownish-red, sides and lower wing-coverts light blue, abdomen and lower tail-coverts white; upper parts greyish-blue; lower part of neck behind and along the sides changing to gold, emerald-green, and rich crimson; some of the wing-coverts with a black spot; quills and larger coverts blackish-brown; primaries edged with blue at the base, with reddish-white toward the end; middle tail-feathers bluish-black, the rest pale blue at the base, with a patch of red and a band of black on the inner web, white in the rest of their extent. Female with the tints much duller, the upper parts inclining to yellowish-brown, the dark spots on the wings more numerous, the lower parts pale greyish, anteriorly tinged with yellowish-brown. In a female examined, the anterior part of the tarsus has two rows of scales, while in a male that part is broadly scutellate.

*Male*, 16  $\frac{1}{4}$ , 25. *Female*, 15, 23.

Wanders continually in search of food throughout all parts of North America. Wonderfully abundant at times in particular districts.

*Columba migratoria*, LINN. Syst. Nat. v. i. p. 285.

Passenger Pigeon, *Columba migratoria*, WILS. Amer. Orn. v. i. p. 102.

*Columba migratoria*, BONAP. Syn. p. 120.

*Columba (Ectopistes) migratoria*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 363.

Passenger Pigeon, NUTT. Man. v. i. p. 629.

Passenger Pigeon, *Columba migratoria*, AUD. Orn. Biog. v. i. p. 319; v. v. p. 561.

## 289. 2. *Ectopistes Carolinensis*, LINN. Carolina Long-tailed-Dove.

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PLATE XVII. Male and Female.

Fourteen tail-feathers. Male with the crown of the head and hind part of the neck light blue; fore neck and breast light purplish-red, sides and lower wing-coverts light blue, abdomen and lower tail-coverts pale yellow; upper parts light yellowish-brown; lower part of neck behind and along the sides changing to gold and purplish-red; some of the wing-coverts with a black spot; quills and larger coverts greyish-brown, inclining to greyish-blue at the base, and very narrowly edged with whitish; middle tail-feathers like the back, the rest blue at the base, bluish-white toward the end, with a black band intervening between the two colours. Female smaller, with the tints duller, the upper part of the head scarcely tinged with blue.

*Male*, 12, 17. *Female*, 11, 15  $\frac{1}{2}$ .

Breeds from Texas to Massachusetts, and throughout the interior to the eastern bases of the Rocky Mountains, and again on the Columbia River. Common. Resident in all the Southern Districts.

*Columba carolinensis*, LINN. Syst. Nat. v. i. p. 286.

Carolina Pigeon or Turtle-Dove, *Columba carolinensis*, WILS. Amer. Orn. v. v. p. 91.

*Columba carolinensis*, BONAP. Syn. p. 119.

Carolina Pigeon or Turtle-Dove, NUTT. Man. v. i. p. 626.

Carolina Turtle-Dove, *Columba carolinensis*, AUD. Orn. Biog. v. i. p. 91; v. v. p. 555.

## FAMILY XXX. PAVONINÆ. PAVONINE BIRDS.

Bill rather short, moderately stout, broader than high at the base, somewhat compressed toward the end; upper mandible with its extremity arched, thin-edged, and obtuse; lower narrowed and blunt. Head partially denuded, rather small, oblong; neck long; body very large. Feet stout, rather long; tarsus anteriorly scutellate; hind toe elevated, anterior toes webbed at the base. Claws rather denuded, obtuse. Plumage full, the feathers with a very large plumule and short tube; those of the hind part of the back much developed. Wings of moderate length, convex, rounded. Tail very large, of more than twelve feathers. Tongue triangular, pointed; œsophagus dilated into an enormous crop; stomach a very powerful gizzard, roundish, or transversely elliptical, with very large muscles, and dense epithelium, having two concave grinding surfaces; intestines long, and rather wide; cœca very large, oblong, internally with elevated reticulated ridges. Trachea cylindrical, without inferior laryngeal muscles. Nest on the ground, rudely constructed. Eggs numerous. Young covered with stiffish down.

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## GENUS I. MELEAGRIS, LINN. TURKEY.

Bill rather short, moderately stout, nearly straight, broader than high at the base, somewhat

compressed toward the end; upper mandible with the dorsal line sloping and straight, toward the end decurved, nasal membrane large and bare, ridge and sides rounded, edges sharp, without notch, tip thin-edged, rounded; lower mandible with the angle very long, and rather wide, the dorsal line slightly convex, the edges sharp toward the end, decurved, the tip thin-edged and obtuse. Nostrils linear, with a large horny operculum. Head bare, with a long fleshy wattle at the base of the bill; neck bare, carunculate, slightly feathered behind. Head small, oblong; neck rather long; body very full. Feet large and strong; tarsus rather long, stout, compressed, with two rows of scutella in front, and the same behind, where there is also a conical slightly recurved spur, about a third from the lower extremity; toes of moderate length, stout, scutella; first small and elevated; lateral about equal, third much longer; anterior webbed at the base. Claws of moderate length, stout, arched, somewhat compressed, obtuse. Plumage compact, glossy; feathers very broad and truncate; those of the rump elongated. Wings of moderate length, concave, much rounded, with the fourth and fifth quills longest; secondaries very long and broad. Tail rather long, very broad, much rounded, of fourteen or eighteen very broad, broadly rounded feathers. Œsophagus dilated into a very large crop; stomach transversely elliptical, extremely muscular; intestines long and wide; cœca very large, oblong.

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## 290. 1. *Meleagris Gallopavo*, LINN. Common Turkey.

PLATE I. Male. PLATE VI. Female and Young.

Tail with eighteen feathers. Male with a long tuft of bristles pendent from the lower part of the neck in front; frontal wattle blue and red, skin of the neck and head of various tints of blue and purple, caruncles bright red, changing to blue, legs purplish-red; upper parts brownish-yellow, with metallic lustre, changing to deep purple, fire-red, and bronzed green, the truncated tips of the feathers margined with velvet-black; on the hind parts, the black bands much broader; upper tail-coverts deep chestnut, glossed; wing-coverts like the back, excepting the primary coverts, which, with the quills, are dusky, transversely banded with white, the inner minutely mottled with dusky, on a light brownish-red ground; tail-feathers chestnut-red, narrowly barred and minutely dotted with black, a subternal broad band of black, the tips plain chestnut; lower parts like the upper, the tuft of bristles black. Female considerably inferior in size, with the wattles much smaller, the tuft on the breast comparatively small, and only in old birds; the colours of the plumage duller, there being little of the refulgent hues of the male; the lower parts brownish-black. Young before being fledged, are pale brownish-yellow above, pale yellowish-grey beneath, the top of the head brighter, marked in the middle with a longitudinal pale brown band; the back and wings spotted with brownish-black, excepting the smaller wing-coverts, which are uniformly dull brown.

*Male*, 49, 68. *Female*, 37, 54.

Breeds from Texas to Massachusetts and Vermont. In the interior to the Missouri, and thence northward to Michigan. Common. Resident, though removing to considerable distances in autumn, in quest of food.

*Meleagris Gallopavo*, BONAP. Syn. p. 122.

Wild Turkey, *Meleagris Gallopavo*, BONAP. Amer. Orn. v. i. p. 79.

Wild Turkey, *Meleagris Gallopavo*, NUTT. Man. v. i. p. 630.

Wild Turkey, *Meleagris Gallopavo*, AUD. Orn. Biog. v. i. p. 1, 33; v. v. p. 559.

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## FAMILY XXXI. PERDICINÆ. PARTRIDGES.

Bill very short, stout, broader than high at the base, with the upper mandible convex, thin-edged, obtuse, the lower with the dorsal line convex, the tip rounded. Head small, oblong; neck of moderate length, or rather short; body very bulky. Feet rather of moderate length, stout; tarsus bare, anteriorly scutellate; hind toe rather small, third long, lateral nearly equal, all scutellate, anterior webbed at the base. Claws moderate, arched, compressed, obtuse. Plumage full and strong; feathers with the plumule much developed. Wings rather short, convex, rounded. Tail generally short and rounded, of more than twelve feathers. Tongue triangular, pointed; Œsophagus with a very large crop; stomach a very strong muscular gizzard, with the lateral muscles highly developed, the epithelium dense, with two concave grinding surfaces; intestine long, and of moderate width; cœca very large, oblong, internally with reticulate ridges. Trachea without inferior laryngeal muscles. Nest on the ground, rudely constructed. Eggs numerous. Young covered with stiffish down.

## GENUS I. ORTYX, STEPH. AMERICAN PARTRIDGE.

Bill very short, robust, rather obtuse; upper mandible with the outline decurved from the base, the ridge narrow at the base, on account of the breadth of the nasal membrane, somewhat distinct in its whole length, with the sides convex, the gape-line arched, the edges thin, without notch, the tip decurved, thin-edged, obtuse; lower mandible with the angle short and rounded, the dorsal line slightly convex, the sides rounded, the edges involute, the tip rounded. Nostrils

basal, linear, operculate, nearly concealed. Head of ordinary size, ovato-oblong; neck rather short; body full. Feet of moderate length; tarsus shorter than the middle toe, with two anterior series of large scales; first toe small and elevated; third very long, second shorter than third, scutellate, connected at the base by webs of a considerable extent. Claws rather stout, arched, compressed, rather acute. Plumage dense, rather compact; wings short, concave, rounded. Tail short, rounded, of twelve feathers. A bare space behind the eyes. Tongue triangular, fleshy; oesophagus with an ovate oblique crop on the fore part of the neck; stomach a very large and strong gizzard, broader than long, placed obliquely, with concave grinding surfaces; intestine long and wide; cæca large.

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### 291. 1. *Ortyx Virginiana*, LINN. Common American Partridge.

PLATE LXXVI. Male, Female, and Young.

Male with a short broad crest; the forehead, a broad band over the eye, and the throat, white; loreal space, a band below the eye, and a broad semilunar band on the fore neck, black; upper part of the head, hind and lower part of the neck all round, brownish-red; upper parts variegated with chestnut-red, black, grey, and yellowish; lower yellowish-white, undulatingly barred with black, the sides streaked with red. Female similar, but without a black band on the fore neck, its place being merely spotted, and with the throat and a band over the eye brownish-yellow. Young with the feathers having a central yellowish line, the lower parts dull yellowish-brown, without black bands.

*Male*, 10, 15. *Female*, 9  $\frac{1}{2}$ , 14.

Breeds abundantly from Texas to Massachusetts; in the interior, high on the Missouri, and in all intermediate districts.

Quail or Partridge, *Perdix virginiana*, WILS. Amer. Orn. v. vi. p. 21.

*Perdix virginiana*, BONAP. Syn. p. 124.

American Partridge or Quail, NUTT. Man. v. i. p. 647.

Virginian Partridge, *Perdix virginiana*, AUD. Orn. Biog. v. i. p. 388; v. v. p. 564.

### 292. 2. *Ortyx Californica*, LATH. Californian Partridge.

PLATE CCCCXIII. Fig. 10. Male and Female.

On the top of the head an elegant crest of six elongated, recurved, clavate feathers, of which the webs are deflected. Male with the forehead dull yellow, the crest black; upper part of head dark brown, margined with a band of white; throat deep black, margined with a semilunar band of white, curving up to the eyes; hind part and sides of neck light ash-grey, beautifully marked with black, each feather having a marginal band and central line of that colour; lower half of neck anteriorly, and a part of the breast, greyish-blue, the rest of the breast light yellowish, its central part chestnut, with semilunar black bands; sides olive-brown, each feather with a central white streak; the rest of the lower parts light yellowish-brown, faintly barred with dusky, the lower tail-coverts with a central dark brown streak; back and wings greyish-brown, tinged with olive, outer secondaries margined externally, inner internally, with light red; tail bluish-grey, edged with olivaceous. Female with the tuft shorter, the colours duller; the upper part of the head dull brown, throat and cheeks brownish-white, streaked with dusky; hind part and sides of neck greyish-brown, each feather with a medial and marginal band of black, as in the male, but fainter; lower part of neck and part of breast brownish-grey; the rest of the upper and lower parts as in the male.

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*Male*, 9  $\frac{1}{4}$ , wing 4  $\frac{7}{12}$ . *Female*, 9, wing 4  $\frac{7}{12}$ .

Upper California. Abundant. Resident.

Californian Partridge, *Perdix californica*, AUD. Orn. Biog. v. v. p. 152.

### 293. 3. *Ortyx plumifera*, GOULD. Plumed Partridge.

PLATE CCCCXXII. Fig. 1. Male. Fig. 2. Female.

On the top of the head two linear-lanceolate decurved feathers, having their webs deflected; upper part of head, hind neck, fore part of back, lower part of fore neck, and a part of the breast, greyish-blue; feathers along the base of the bill, and a band from the eye down the side of the neck, white; elongated feathers on the head black; throat deep chestnut, margined on each side with a black line; back and rump reddish-brown; quills and tail-feathers wood-brown, margined with reddish-brown; inner secondaries broadly margined internally with white; middle of breast chestnut, as are the upper hypochondrial feathers, which are margined on their inner web toward the end with a narrow black and a broad white band, the intervening space on the sides broadly banded with white, black, and chestnut. Female somewhat less, similar to the male, but less brightly coloured.

*Male*, 11, wing  $5\frac{3}{4}$ . *Female*, 10, wing  $5\frac{1}{2}$ .

Columbia River, and Upper California. Rather rare. Migratory.

Plumed Partridge, *Perdix plumifera*, AUD. Orn. Biog. v. v. p. 226.

#### **294. 4. Ortyx neoxenus, VIGORS. Welcome Partridge.**

PLATE CCCCXXIII. Fig. 3. Young.

Crest short, straight, directed backwards, of about half a dozen elongated feathers; upper parts olive-brown, a rufous streak behind the eye; wing-coverts dark brown, with light margins; quills dusky brown, some of them slightly marked on the edges with paler spots; tail dusky, with about eight wavy irregular lines of pale brown; lower parts dark brown, copiously marked with roundish white spots. [201]

Length  $7\frac{1}{2}$ , wing  $4\frac{3}{8}$ .

California.

Welcome Quail, *Ortyx neoxenus*, VIG. Gard. and Menag. of Zool. Soc. v. ii. p. 311.

Welcome Partridge, *Perdix neoxenus*, AUD. Orn. Biog. v. v. p. 228.

### **FAMILY XXXII. TETRAONINÆ. GROUSE.**

Bill short, stout, with the upper mandible convex, thin edged, without notches, its tip thin edged, obtuse, the lower mandible with the dorsal line slightly convex, the edges thin, the tip rounded. Head small, oblong; neck of moderate length; body very bulky. Feet short, stout; tarsus partially or entirely feathered; hind toe small, third long, lateral nearly equal, all scutellate, anterior webbed at the base. Claws moderate or long, arched, rather depressed, blunt. Plumage full and soft; feathers with the plumule much developed. Wings rather short, convex, rounded. Tail various, of more than twelve feathers. A bare coloured space on each side of the neck, usually concealed by the feathers; but in some species capable of being distended so as to protrude. A bare red membrane over the eye, more developed in the males. Tongue triangular, pointed; œsophagus with an enormous crop; stomach a very powerful gizzard, having the lateral muscles extremely developed, the epithelium dense, with two concave grinding surfaces; the intestine long and wide; cœca excessively elongated, cylindrical, with internal longitudinal ridges. Nest on the ground, rudely constructed. Eggs numerous, spotted. Young covered with stiffish down.

### **GENUS I. TETRAO, LINN. GROUSE.**

Bill short, robust; upper mandible with the dorsal line decurved, the ridge convex, narrowed at the base, the sides convex, the edges sharp and overlapping, the tip thin-edged and rounded; lower mandible with the angle long and wide, the dorsal line convex, the sides rounded, the edges inflected, the tip rounded. Nostrils roundish, in the fore part of the large and feathered nasal depression. Head small, ovate; neck of ordinary length; body large and full. Feet stout, of moderate length; tarsus short, feathered, at the lower part sometimes bare, and scutellate; toes bare, scutellate, with a marginal fringe of pectinate scales. Claws rather large, arched, compressed, obtuse. Plumage full, soft, rather blended. Wings rather short, convex, much rounded, the third and fourth quills longest. Tail rounded, of more than twelve feathers. [202]

\* Tarsus partially bare.

#### **295. 1. Tetrao Umbellus, LINN. Ruffed Grouse.—Partridge Pheasant.**

PLATE XLI. Male and Female.

Male with the feathers of the head narrow and elongated into a decurved tuft; an erectile ruff of broad, abrupt, glossy feathers, in two tufts; tail of eighteen feathers, rounded. Upper part of head and hind part of neck bright yellowish-red, variegated with dusky; back chestnut, marked with oblong white spots, margined with black; quills brown, their outer webs pale yellowish-red, spotted with dusky; upper tail-coverts banded or spotted with black; tail reddish-yellow, narrowly barred and minutely mottled with black, and terminated by a broad band of the latter, between two narrow bands of greyish-white; a yellowish-white band from the bill to the eye, beyond which it is prolonged; throat and fore neck light brownish-yellow; lower ruff-feathers of the same colour, barred with reddish-brown, upper black, glossed with blue; lower parts yellowish-white, with broad transverse spots of dusky or brown. Female with the crest and ruff less developed, the latter of a duller black; the tints of the plumage duller than in the male. In the northern parts the plumage is generally less red, but otherwise similar.

*Male*, 18, 24.



Common from Maryland to Labrador, and in the interior, from the mountainous districts to Canada and the Saskatchewan. Columbia River. Resident.

Ruffed Grouse, *Tetrao umbellus*, WILS. Amer. Orn. v. vi. p. 46.

*Tetrao umbellus*, BONAP. Syn. p. 126.

*Tetrao umbellus*, Ruffed Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 342.

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Ruffed Grouse, NUTT. Man. v. i. p. 657.

Ruffed Grouse, *Tetrao Umbellus*, AUD. Orn. Biog. v. i. p. 211; v. v. p. 560.

\*\* Tarsus feathered to the toes. Tail rather long, broad, rounded.

## 296. 2. *Tetrao Canadensis*, LINN. Canada Grouse.—Spotted Grouse.

PLATE CLXXVI. Male and Female.

Tail of sixteen feathers, rounded. Male with the upper parts transversely banded with brownish-black and light grey; wings variegated with dusky and greyish-yellow; quills brown, the outer webs of the primaries mottled with yellowish; tail blackish-brown, tipped with a band of reddish-yellow; lower parts black; the feathers on the throat with a white spot near the end; a band of white spots behind the eye; on the breast, the feathers with a broad subterminal spot; and the lower tail-coverts largely tipped with white. Female with the upper parts as in the male, but more broadly barred; head, sides of neck, fore neck, and anterior part of breast, yellowish-red, barred with brownish-black; lower parts greyish-black, barred with reddish-white; tail minutely mottled, and tipped with reddish-brown.

*Male*, 15  $\frac{3}{4}$ , 21  $\frac{3}{4}$ . *Female*, 15  $\frac{1}{2}$ , 21.

Plentiful from the northern parts of New York to Labrador, as well as from Canada to the Arctic Sea. Columbia River. Partially migratory in winter.

Spotted Grouse, *Tetrao canadensis*, BONAP. Amer. Orn. v. iii. pl. 20.

*Tetrao canadensis*, BONAP. Syn. p. 127.

*Tetrao canadensis*, Spotted Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 346.

*Tetrao Franklinii*, Franklin's Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 348.

Spotted Grouse, NUTT. Man. v. i. p. 667.

Spotted or Canada Grouse, *Tetrao canadensis*, AUD. Orn. Biog. v. ii. p. 437; v. v. p. 563.

## 297. 3. *Tetrao obscurus*, SAY. Dusky Grouse.

PLATE CCCLXI. Male and Female.

A slender crest of narrow feathers; tail of twenty feathers; rounded. Male with the upper parts blackish-brown, the wings lighter; elongated feathers on the head greyish-brown; hind neck minutely undulated with bluish-grey; scapulars, inner secondaries, and smaller wing-coverts also minutely undulated with grey and brownish-red; rump and upper tail-coverts and quills clove-brown, secondaries bordered and tipped with yellowish-grey, primaries mottled with grey on their outer webs, tail black; sides of head, fore part and sides of neck, and fore part of breast, greyish-black; loreal space and throat barred with white; lower parts generally blackish-grey, the feathers of the sides with a median streak and terminal patch of white, and more or less barred with dusky, as are the lower tail-coverts; axillary feathers and inner wing-coverts white; tarsal feathers brownish-grey. Female considerably smaller, with the upper parts greyish-brown, barred with dusky, and minutely undulated; the fore neck banded with brown and pale sienna, the rest of the lower parts as in the male, but paler.

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*Male*, 22, wing 9  $\frac{1}{2}$ . *Female*, 19  $\frac{1}{2}$ , wing 9.

From the eastern spurs of the Rocky Mountains, to the Columbia River, and northward to Hudson's Bay. Abundant. Resident.

*Tetrao obscurus*, SAY, Long's Exped.

*Tetrao obscurus*, BONAP. Syn. p. 127.

Dusky Grouse, *Tetrao obscurus*, BONAP. Amer. Orn. v. iii. pl. 18.

*Tetrao obscurus*, Dusky Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 344.

Dusky Grouse, NUTT. Man. v. i. p. 666.

Dusky Grouse, *Tetrao obscurus*, AUD. Orn. Biog. v. iv. p. 446.

\*\*\* Tail very short, transversely arched, much rounded.

#### 298. 4. **Tetrao Cupido, LINN. Pinnated Grouse.**

Feathers of the crown elongated; two tufts of lanceolate elongated feathers on the sides of the neck, under which is an oblong bare orange-coloured space on either side, capable of being inflated; tail very short, much rounded, of eighteen feathers. Male with the upper parts blackish-brown, transversely marked with broad undulating bands of light yellowish-red; wing-coverts and secondaries of a lighter brown, tinged with grey, and barred with pale red: primary quills greyish-brown, with black shafts, and spots of pale reddish on the outer webs, tail dark brown, narrowly tipped with dull white, the two middle feathers mottled with brownish-red; loreal space, a band from the lower mandible over the cheek, and the throat, pale yellowish-red; a band of blackish-brown under the eye; extending to the ear-coverts, and another on the side of the throat; cervical tufts, with the feathers dark brown on the outer webs, pale yellowish-red and margined with dusky on the inner; lower parts greyish-white, tinged with yellow on the sides, with large transverse curved bands of greyish-brown; lower tail-coverts arranged in three series, dusky at the base, white at the end; tibial and tarsal feathers grey, obscurely and minutely banded with yellowish-brown. Female considerably smaller, without the crest, cervical tufts, or air-bags, but otherwise similar to the male.

*Male*, 18, 27  $\frac{1}{2}$ .

Abundant from Texas throughout all the western prairies, to very high up the Missouri, Kentucky, Illinois, and Ohio. Almost extirpated in the Middle and Eastern Districts. Resident.

Pinnated Grouse, *Tetrao Cupido*, WILS. Amer. Orn. v. iii. p. 104.

*Tetrao Cupido*, BONAP. Syn. p. 126.

Pinnated Grouse, NUTT. Man. v. i. p. 662.

Pinnated Grouse, *Tetrao Cupido*, AUD. Orn. Biog. v. ii. p. 490; v. v. p. 559.

\*\*\*\* Toes partially feathered. Tail graduated.

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#### 299. 5. **Tetrao Urophasianus, BONAP. Pheasant-tailed Grouse.—Cock of the Plains.**

PLATE CCCLXXI. Male and Female.

Male with bristle-feathers on the sides of the neck, on its lower part small, scale-like feathers; a large bare yellow space on each side, capable of being inflated; tail long, graduated, of twenty, stiffish, acuminate feathers. Upper parts light yellowish-brown, variegated with brownish-black, and yellowish-white; primary quills chocolate-brown, thin outer webs, and part of their inner margins mottled with yellowish-white; tail with about ten bands of yellowish-white on the outer webs, which are otherwise variegated like the back, the inner webs nearly plain brown; throat and fore part of neck whitish, longitudinally spotted with brownish-black; a narrow white band across the throat; sides of the neck, and fore part of breast pure white; sides variegated like the back; axillars and lower wing-coverts white; and part of breast and abdomen black; lower tail-coverts brownish-black, largely tipped with white; tibial and tarsal feathers brownish-grey, faintly barred with brown. Female much smaller, and differing in being destitute of the bare skin on the neck, the plumage entirely of ordinary texture, the tail less elongated, with the feathers less narrow; upper parts variegated as in the male, lower dull yellowish-grey, undulated and streaked with dusky; middle of breast brownish-black, lower tail-coverts tipped with white.

*Male*, 30, 36. *Female*, 22.

Rocky Mountains and Columbia River, northward. Once seen on the Missouri. Abundant. Partially migratory from high to low grounds in autumn and winter.

*Tetrao urophasianus*, BONAP. Amer. Orn. v. iii. pl. 21.

*Tetrao* (*Centrocercus*) *urophasianus*. Cock of the Plains, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 358.

Cock of the Plains, NUTT. Man. v. i. p. 666.

Cock of the Plains, *Tetrao urophasianellus*, AUD. Orn. Biog. v. iv. p. 503.

#### 300. 6. **Tetrao Phasianellus, LINN. Sharp-tailed Grouse.**

PLATE CCCLXXXII. Male and Female.

A decurved crest of narrow feathers; a bare space on each side of the neck capable of being inflated; tail short, much graduated, of sixteen feathers, all of which are more or less concave, excepting the two middle ones along the inner edge, obliquely and abruptly terminated, the two middle projecting an inch beyond the next. Upper parts variegated with light yellowish-red, brownish-black, and white, the latter in terminal triangular, or guttiform spots on the scapulars and wing-coverts; quills greyish-brown, primaries with white spots on the outer web, secondaries

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tipped and barred with white; tail white, at the base variegated, the two middle feathers like the back; loreal space, and a band behind the eye yellowish-white, a dusky streak under the eye; throat reddish-white, with dusky spots; fore parts and sides of neck barred with dusky and reddish-white; on the breast the dusky spots become first curved, and then arrow-shaped; and so continue narrowing on the hind part of the breast and part of the sides, of which the upper portion is barred; abdomen, lower tail-coverts, and axillars, white; tarsal feathers light brownish-grey, faintly barred with whitish. Female smaller, but similar to the male, with the tints duller.

*Male*, 17  $\frac{1}{2}$ , 23.

Missouri, Lat. 41°, to Slave Lake, Lat. 61°. Rocky Mountains. Abundant on the Saskatchewan Plains. Accidental in the northern parts of Illinois. Resident.

Tetrao Phasianellus, BONAP. Amer. Orn. v. iii. p. 37.

Tetrao Phasianellus, BONAP. Syn. p. 127.

Tetrao (Centrocercus) Phasianellus, Sharp-tailed Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 361.

Sharp-tailed Grouse. NUTT. Man. v. i. p. 669.

Sharp-tailed Grouse, Tetrao Phasianellus, AUD. Orn. Biog. v. iv. p. 569.

## GENUS II. LAGOPUS. PTARMIGAN.

Bill short, robust; upper mandible with its dorsal outline decurved, the ridge indistinct and rounded, the sides convex, the edges overlapping, the tip declinate, thin-edged, rounded; lower mandible, with the angle of moderate length and rounded, the dorsal line convex, the sides rounded, the edges a little inclinate, the tip rounded; nasal sinuses large and covered with feathers, leaving the ridge narrow between them. Nostrils basal, roundish, concealed by the feathers. Head small, ovate; neck rather long; body bulky. Feet rather short, stout; tarsus feathered, as are the toes, which have two or three terminal scutella; hind toe extremely short, lateral toes equal. Claws slightly arched, depressed, thin-edged, rounded. Plumage full and compact, the feathers rounded. Wings short, convex, the primaries strong, narrow, tapering, the third longest, the fourth and second little shorter. Tail short, nearly even, of more than twelve broad feathers.

### 301. 1. *Lagopus albus*, GMEL. Willow Ptarmigan.—Willow-Grouse.

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PLATE CXCI. Male, Female, and Young.

Bill very thick, convex, with a strong ridge on each side of the lower mandible; claws (when entire) elongated, arched with the sides sloping, edges thin and nearly parallel, the tip rounded; tail short, slightly rounded, of fourteen feathers, independently of the long incumbent coverts. Bill black, claws dusky at the base, yellowish-grey on the edges and tip. In winter, the plumage white, excepting the shafts of the primaries, which are brown, and the tail-feathers, which are black, narrowly tipped with white, and with the base of the same colour. In summer, the male with the head and neck bright chestnut, more or less variegated with dusky; the upper parts and sides having the feathers brownish-black, transversely barred with reddish-yellow, and narrowly tipped with white; the quills and larger coverts, with most of the smaller, middle of breast, abdomen, and feet, white; tail as in winter, the middle incumbent feather like the back. Female similar, with the markings larger, the breast and abdomen coloured like the sides, the head and neck without chestnut. Young, when in down, of a yellowish tint, variegated above with large streaks of dark brown, the top of the head with a longitudinal patch of brown, edged with black. When fledged, the young resemble the female.

*Male*, 17, 26  $\frac{1}{2}$ . *Female*, 16, 26.

In Maine, New Brunswick, and Nova Scotia, during winter. Breeds plentifully in Newfoundland, Labrador, and the Fur Countries. Rocky Mountains.

Tetrao (*Lagopus*) *saliceti*, Willow Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 351.

Willow Grouse or Large Ptarmigan. NUTT. Man. v. i. p. 674.

Willow Grouse, Tetrao *saliceti*, AUD. Orn. Biog. v. ii. p. 528.

### 302. 2. *Lagopus Americanus*, AUD. American Ptarmigan.

Not figured.

Bill much narrower, with the ridge on each side of the lower mandible obsolete; claws (when entire) elongated, arched, with the sides sloping, the edges thin and nearly parallel, the tip round; tail short, even, of fourteen feathers, independently of the long incumbent coverts. In winter, the plumage white, excepting the shafts of the primaries, which are brown, and the tail-feathers, which are black, narrowly tipped with white; male with a black loreal band, extending

beyond the eye. In summer, the general colour of the upper parts, fore neck, and sides, reddish-yellow, finely undulated transversely with blackish-brown, and greyish-white; the bars on the head and neck larger; the two long incumbent tail-feathers similar to those of the back; the rest brownish-black, tipped with white; little white on the lower parts, and only in patches, some greyish-white undulations occasionally seen, tend to approximate the colouring to that of some specimens of *Lagopus mutus* of Scotland, but the prevailing tint is not grey, as in that species, but brownish-yellow. Young similar to the adult, with the bands larger; the fore part of the wings, the primaries, secondary coverts, and abdomen, white.

*Male*, 14  $\frac{3}{4}$ , wing, 8  $\frac{1}{4}$ .

Melville Island. Churchill River.

Tetrao lagopus, SABINE, RICHARDSON, & C.

Tetrao (Lagopus) mutus, Ptarmigan, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 350.

Common Ptarmigan, Tetrao mutus, AUD. Orn. Biog. v. v. p. 196.

### 303. 3. *Lagopus rupestris*, GMEL. Rock Ptarmigan.

PLATE CCCLXVIII. Male and Female. PLATE CCCCXVIII. Fig. 1.

Bill very short, thick, convex (stronger than that of *L. americanus*), with the ridges on the lower mandible faint; claws elongated, arched, with the sides sloping, the edges thin and nearly parallel, the tip narrowed, (broader than in *L. albus*). Tail short, slightly rounded, of fourteen feathers, independently of the long incumbent coverts. Bill black, claws dusky, with the edges and tip inclining to yellowish-grey. In winter, the plumage white, excepting the shafts of the primaries, which are brownish-black, and the tail-feathers, which are black, narrowly tipped with white, and with the base of the same colour. In summer, the plumage variegated with black, reddish-yellow, and white; the feathers being chiefly of the first colour, transversely and irregularly banded with reddish-yellow, and terminally margined with white; lower parts more broadly and regularly barred with brownish-black and light reddish-yellow; edge of wing, alula, primary coverts, nearly all the secondary coverts, primaries, and outer secondaries white, as are the lower surface of the wing, the axillars, and some of the feathers on the abdomen, as well as those on the feet, the latter tinged with yellowish; shafts of primaries brownish-black; tail as in winter, but with the lateral feather white on a great part of the outer web. Female similar, with the bands broader.

*Male*, 13  $\frac{1}{2}$ , wing, 7  $\frac{1}{2}$ .

Breeds from Labrador to the Arctic Seas. Rocky Mountains. Abundant. Migratory.

Tetrao (Lagopus) rupestris, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 354.

Rock Grouse, NUTT. Man. v. i. p. 610.

Rock Grouse, Tetrao rupestris, AUD. Orn. Biog. v. iv. p. 483.

### 304. 4. *Lagopus leucurus*, SWAINS. White-tailed Ptarmigan.

PLATE CCCCXVIII. Adult in winter.

Claws slightly arched, depressed, broad, thin-edged, rather pointed; tail rather short, slightly rounded, of fourteen feathers. Plumage in winter entirely pure white. In summer, the head and neck barred with blackish-brown and brownish-white; upper parts blackish-brown, barred with reddish-yellow; breast, belly, and sides pale reddish-yellow, broadly barred with blackish-brown; tail white.

Tetrao (Lagopus) leucurus, White-tailed Grouse, SWAINS. & RICH. F. Bor. Amer. v. ii, p. 356.

White-tailed Grouse, NUTT. Man. v. ii. p. 612.

White-tailed Grouse, Tetrao leucurus, AUD. Orn. Biog. v. v. p. 200.

## FAMILY XXXIII. RALLINÆ. RAILS.

Bill moderately stout, or slender, short or elongated, compressed, with the point narrow, but obtuse. Head small, oblong, compressed; neck of moderate length; body large, much compressed. Feet large; tibia bare at the lower part; tarsus stout, compressed, with very broad anterior scutella; toes very long, scutellate, marginate; hind toe rather short. Claws long, little arched, compressed, acute. Plumage blended, but stiffish. Wings short, convex, rounded, tail very short, rounded. Tongue slender, channelled above, tapering to a bristly point; œsophagus long, rather narrow; proventriculus bulbiform; stomach roundish, compressed, very muscular, with the lateral and inferior muscles prominent, the epithelium dense, with two flattish grinding surfaces; intestine long, of moderate width; cœca long, narrowed toward the base; cloaca globular.

Trachea simple, flattened, with a pair of slender inferior laryngeal muscles. Nest bulky, and rudely constructed, on the ground, or supported by grass, or on trees. Eggs numerous, oblong. Young covered with stiffish black down.

## GENUS I. GALLINULA, BRISS. GALLINULE.

Bill as long as the head, nearly straight, stout, deep, compressed, tapering; upper mandible with a soft ovate or oblong tumid plate at the base, extending over the forehead, the dorsal line beyond this slightly declinate, toward the tip arcuate, the ridge gradually narrowed to the middle, then slightly enlarged, the sides nearly erect, the edges sharp, the notches obsolete, the tip rather obtuse; nasal sinus extending nearly to the middle; lower mandible with the angle rather long and narrow, the dorsal line ascending, nearly straight, the sides nearly erect, the tip narrow. Nostrils submedial, lateral, oblong, direct. Head small, oblong, compressed; neck of moderate length; body large, much compressed. Feet large; tibia bare at the lower part; tarsus stout, of moderate length, compressed, with very broad anterior scutella; hind toe rather small and slender; anterior toes very long, fourth longer than second, third considerably longer, all scutellate. Claws very long, slender, slightly arched, much compressed, tapering to a very acute point. Plumage blended, form and wings of moderate length, broad, convex, with the second and third quills longest; tail very short, much rounded, of twelve weak feathers; lower coverts almost as long. [210]

### 305. 1. *Gallinula Martinica*, LINN. Purple Gallinule.

PLATE CCCV. Male.

Frontal plate blue; bill carmine, tipped with yellow; head, fore part of neck, and breast, purplish-blue; abdomen and tibial feathers dusky; sides and lower wing-coverts green; lower tail-coverts white; upper parts olivaceous green; sides of neck, and outer part of wings greenish-blue.

*Male*, 13  $\frac{1}{2}$ , 21  $\frac{1}{2}$ .

Breeds and resides from Texas to South Carolina. Stragglers seen as far as Massachusetts. Up the Mississippi to Memphis. Rather common in Louisiana and Florida.

Purple Gallinule, *Gallinula Porphyrio*, WILS. Amer. Orn. v. ix. p. 67.

*Gallinula martinica*, BONAP. Syn. p. 336.

Purple Gallinule, NUTT. Man. v. ii. p. 221.

Purple Gallinule, *Gallinula martinica*, AUD. Orn. Biog. v. iv. p. 37.

### 306. 2. *Gallinula Chloropus*, LINN. Common Gallinule.

PLATE CCXLIV.

Frontal plate, eyes, ring on tibiae, and bill carmine, the latter tipped with yellow; head, neck, and lower parts, greyish-black; abdomen greyish-yellow; lower tail-coverts and some streaks on the sides, with the edge of the wing, and the outer web of the first quill white; upper parts brownish-olive; quills and tail dusky. Female similar, with the frontal plate small. Young similar, but with the bill dull green, and the breast faintly barred with whitish. [211]

*Male*, 14, 22.

From Texas to South Carolina, common, and resident. Stragglers are seen as far as Massachusetts. Abundant in Louisiana and Florida. Up the Mississippi to Natchez. Fresh water.

*Gallinula galeata*, BONAP. Amer. Orn. v. iv. p. 128.

Florida Gallinule, *Gallinula galeata*, NUTT. Man. v. ii. p. 223.

Common Gallinule, *Gallinula Chloropus*, AUD. Orn. Biog. v. iii. p. 330.

## GENUS II. FULICA, LINN. COOT.

Bill as long as the head, nearly straight, stout, deep, compressed, tapering; upper mandible with a soft ovate or oblong tumid plate at the base, extending over the forehead, the dorsal line declinate, toward the tip arcuate, the ridge narrowed to the middle, then slightly enlarged, the sides nearly erect, the edges sharp, the notches obsolete, the tip rather obtuse; nasal sinus extending nearly to the middle; lower mandible with the angle rather long and narrow, the dorsal line ascending, nearly straight, the sides nearly erect, the tip narrow. Nostrils submedial, lateral, linear, direct. Head small, oblong, compressed; neck of moderate length, slender; body full, compressed. Feet large; tibia bare at the lower part; tarsus stout, of moderate length, compressed, with very broad anterior scutella; hind toe rather small and slender; anterior toes very long, their margins dilated into flat lobes, the hind toe with a single inferior lobe. Claws of

moderate length, slightly arched, much compressed, acute. Plumage, blended, soft. Wings short, broad, convex, with the second quill longest. Tail very short, much rounded, of twelve weak feathers; lower coverts nearly as long. Gizzard extremely muscular; cœca very long, being a fifth part of the length of the intestine.

### 307. 1. *Fulica Americana*, GMEL. American Coot.—Mud-Hen.

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PLATE CCXXXIX.

Frontal plate and bill white, the latter dusky toward the end; head and neck greyish-black, upper parts deep bluish-grey, with an olivaceous tinge on the scapulars and inner secondaries; quills greyish-brown, tail brownish-black; breast and abdomen dull bluish-grey, lighter behind; edge of wing, outer margin of first quill, tips of outer secondaries, and lower tail-coverts white. Female of a lighter tint, with the frontal plate smaller.

*Male*, 13  $\frac{10}{12}$ , 25.

From Texas to the northern parts of Maine. Exceedingly abundant in Louisiana and the Floridas, during winter and spring, where some remain to breed. The greater number breed in Maine and New Brunswick, as well as along the Great Lakes. Rare in the Middle Atlantic districts. Columbia River.

Common Coot, *Fulica atra*, WILS. Amer. Orn. v. ix. p. 61.

*Fulica americana*, BONAP. Syn. p. 338.

Cinereous Coot, NUTT. Man. v. ii. p. 229.

American Coot, *Fulica americana*, AUD. Orn. Biog. v. iii. p. 291; v. v. p. 568.

## GENUS III. ORTYGOMETRA, LEACH. CRAKE-GALLINULE.

Bill shorter than the head, rather stout, deep, compressed, tapering; upper mandible with the dorsal line nearly straight, being slightly convex toward the end, the ridge flattish for a short space at the base, very slightly extended on the forehead, narrow in the rest of its extent, the sides nearly erect, the edges sharp, with a slight sinus close to the rather obtuse tip; nasal groove broad and extending to two-thirds; lower mandible with the angle long and narrow, the dorsal line ascending, nearly straight, the sides erect, the tip narrowed. Nostrils linear, lateral, submedial. Head rather small, oblong, compressed; neck of moderate length; body rather slender, much compressed. Feet of moderate length, rather stout; tibia bare below; tarsus of ordinary length, compressed, with broad anterior scutella; hind toe short and slender, anterior toes very long, compressed, scutella, the outer slightly longer than the inner. Claws of moderate length, slender, extremely compressed, tapering to a fine point. Plumage rather stiff, but blended; feathers of the forehead with the shaft enlarged. Wings short and broad, somewhat convex, the second quill longest. Tail extremely short, much rounded, of twelve weak feathers. Digestive organs as in *Gallinula*.

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### 308. 1. *Ortygometra Carolinus*, LINN. Carolina Crake-Gallinule.—Sora Rail.

PLATE CCXXXIII. Male, Female, and Young.

Upper parts olive-brown, the feathers brownish-black in the centre, those on the back with two marginal lines of white; a broad band surrounding the base of the bill, the central part of the crown, the chin, and the middle of the fore neck in its whole length, brownish-black; a band over the eye, cheeks, and sides of neck ash-grey; middle of breast and abdomen greyish-white; sides olivaceous, barred with brownish-black and white; lower tail-coverts chiefly white, the feathers over them reddish-yellow. Female similar, but duller. Young like the female, but without black on the head or throat.

*Male*, 9  $\frac{3}{4}$ , 14.

Passes across the United States, both by the interior and along the coast. Some breed in New Jersey. Rarely seen east of Massachusetts. Extremely abundant in autumn on the Delaware, and other streams or lakes furnished with wild oats. A few reside in Florida and Louisiana in winter.

Rail, *Rallus carolinus*, WILS. Amer. Orn. v. vi. p. 24.

*Rallus carolinus*, BONAP. Syn. p. 334.

Carolina Rail, NUTT. Man. v. ii. p. 208.

Sora Rail, *Rallus carolinus*, AUD. Orn. Biog. v. iii. p. 251; v. v. p. 572.

### 309. 2. *Ortygometra Noveboracensis*, LATH. Yellow-breasted Crake-Gallinule.—Yellow-breasted Rail.

Upper parts and sides brownish-black, longitudinally streaked with yellow, and transversely

barred with white; a broad band of reddish-yellow over the eye; loreal space and a short band behind the eye blackish-brown, fore part of neck and breast light reddish-yellow, each feather terminally margined with brown; axillaries, lower wing-coverts, and middle of abdomen, white; lower tail-coverts brownish-red, with faint whitish dots.

*Male*, 7  $\frac{3}{4}$ , 12  $\frac{1}{4}$ .

Common in Lower Louisiana and Florida, where it breeds. Stragglers go as far as Hudson's Bay. Occasionally met with far in the interior. Prefers fresh water.

*Rallus noveboracensis*, BONAP. Syn. p. 335.

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*Rallus noveboracensis*, BONAP. Amer. Orn. v. iv. p. 136.

Yellow-breasted Rail, *Rallus noveboracensis*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 402.

Yellow-breasted Rail, NUTT. Man. v. ii. p. 402.

Yellow-breasted Rail, *Rallus noveboracensis*. AUD. Orn. Biog. v. iv. p. 25.

### 310. 3. *Ortygometra Jamaicensis*, BRISS. Least Crake-Gallinule.

PLATE CCCXLIX. Adult and Young.

Head and lower parts dark purplish-grey, approaching to black, the sides and lower wing-coverts and abdomen, barred with greyish-white; hind neck and fore part of back dark chestnut; the rest of the upper parts greyish-black tinged with brown, and transversely barred with white; the wings inclining to reddish-brown.

*Male*, 6, wing, 3  $\frac{7}{8}$ .

From Louisiana to New Jersey, in fresh-water meadows and marshes, difficult of access. Migratory.

*Rallus jamaicensis*, BRISS. Suppl. p. 140.

Least Water Rail, *Rallus jamaicensis*. AUD. Orn. Biog. v. iv. p. 359.

## GENUS IV. RALLUS, LINN. RAIL.

Bill much longer than the head, slender, compressed, very slightly decurved, high at the base; upper mandible with the dorsal line almost straight, until towards the end, where it is slightly curved, the ridge a little flattened at the base, and extending slightly on the forehead, convex toward the end, nasal sinus forming a groove extending to two-thirds, the sides nearly erect, the edges slightly inflected, the notches very slight, the tip rather obtuse; lower mandible with the angle very long and extremely narrow, the dorsal line almost straight, the sides erect and a little convex, the edges involute, the tip narrowed but obtuse. Nostrils lateral, subbasal, linear. Head, small, oblong, much compressed; neck long and slender; body slender, much compressed. Feet long; tibia, bare below; tarsus rather long, stout, compressed anteriorly covered with broad scutella; hind toe very small and tender, fourth little longer than second, anterior toes very long, scutellate, compressed. Claws of moderate length, arched, slender, much compressed, acute. Plumage rather stiff; feathers of the forehead with the shaft enlarged, and extended beyond the tip. Wings very short and broad; third quill longest. Tail very short, much rounded, of twelve feeble rounded feathers, scarcely longer than the coverts.

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### 311. 1. *Rallus elegans*, AUD. Great Red-breasted Rail.—Fresh-water Marsh-Hen.

PLATE CCIII. Male and Young.

Upper part of head and hind neck dull brown; a brownish-orange line over the eye; lower eyelid white; loreal space and band behind the eye dusky; upper parts of the body streaked with brownish-black and light olive-brown, the two sides of each feather being of the latter colour; wing-coverts dull chestnut; most of the irregularly tipped with white primaries deep olive-brown; secondaries and tail-feathers like the back; sides and fore part of neck, with the breast, bright orange-brown; sides of the body and lower wing-coverts undulated with deep brown and greyish-white; tibial feathers pale greyish-brown, faintly barred with darker, as is the hind part of the abdomen; lower tail-coverts white, each with a blackish-brown spot near the end, those in the middle barred with black and white. Female and young similar, but with the tints duller. Iris bright red.

*Male*, 19, 25. *Female*, 18, 24.

From Texas to New Jersey, more common from Louisiana to North Carolina. Inland swamps and marshes. Once met with in Kentucky.

Great Red-breasted Rail, *Rallus elegans*, AUD. Orn. Biog. v. iii. p. 27.

### 312. 2. *Rallus crepitans*, GMEL. Clapper Rail.—Salt-water Marsh-hen.

PLATE CCIV. Male and Female.

Upper part of head and hind neck olivaceous brown; a brownish-orange line from the bill to the eye; lower eyelid white; loreal space, cheeks, and part of the sides of the neck bluish-grey; upper parts of the body streaked with greenish-olive and light grey, the two sides of each feather being of the latter colour; wing-coverts dull olive, tinged with grey, some of them with slight irregular whitish markings; primaries olive-brown, secondaries and tail-feathers like the back; upper part of throat yellowish-white, edged on either side with pale yellowish-brown; sides and fore part of neck bluish-grey, tinged with pale yellowish-brown; the fore part of the breast of the latter colour; lower wing-coverts, sides, hind part of abdomen, and middle lower tail-coverts undulated with deep greyish-brown and greyish-white; lateral tail-coverts with the outer webs white; tibial feathers similarly barred, but paler; middle of abdomen greyish-white; iris pale yellow. Female with the tints duller.

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*Male*, 15, 20  $\frac{3}{4}$ . *Female*, 14, 19  $\frac{1}{4}$ .

Exceedingly abundant from Texas to New Jersey, breeding in all salt-water marshes. Few proceed eastward beyond Long Island. Constantly resident from the Carolinas southward. Not inland.

Clapper Rail, *Rallus crepitans*, WILS. Amer. Orn. v. vii. p. 112; but not the figure, which is that of *R. elegans*.

Clapper Rail, NUTT. Man. v. ii. p. 201.

Clapper Rail or Salt-water Marsh-Hen, *Rallus crepitans*, AUD. Orn. Biog. v. iii. p. 33; v. v. p. 570.

### 313. 3. *Rallus virginianus*, LINN. Virginian Rail.

PLATE CCV. Male, Female, and Young.

Upper parts deep brownish-black, streaked with live olive-brown; sides of the head dull bluish-grey, loreal space of a deeper tint; a brownish-orange line to the eye; quills and primary coverts blackish-brown; smaller coverts dark chestnut; throat reddish-white; fore neck and breast bright orange-brown, approaching to yellowish-red; sides, abdomen, and lower wing-coverts barred with brownish-black and white, the bands of the latter narrower; tibial feathers dusky anteriorly, light reddish behind; lower tail-coverts with a central brownish-black spot, their edges white, the tips pale reddish. Female and young similar, but with somewhat duller tints.

*Male*, 10  $\frac{1}{2}$ , 14  $\frac{1}{4}$ . *Female*, 9  $\frac{1}{4}$ .

Distributed through the country, and along the Atlantic shores, from Texas to New Brunswick and Nova Scotia; breeding in all the districts. Frequents fresh and salt water. Returns southward in autumn, when great numbers spend the winter from Carolina to Louisiana.

Virginian Rail, *Rallus virginianus*, WILS. Amer. Orn. v. vii. p. 109.

*Rallus virginianus*, BONAP. Syn. p. 334.

Lesser Clapper Rail, NUTT. Man. v. ii. p. 205.

Virginian Rail, *Rallus virginianus*, AUD. Orn. Biog. v. iii. p. 41; v. v. p. 573.

## GENUS V. ARAMUS, VIEILL. COURLAN.

Bill long, being double the length of the head, rather slender, but strong, much compressed, straight, its breadth less before the nostrils, than towards the point; upper mandible with the dorsal line straight until towards the end, then slightly arcuato-declinate, the ridge convex in its whole length, the sides nearly erect, more convex toward the extremity, the tip blunted, the edges broad and obtuse for half their length, sharp but thick in the rest of their extent; lower mandible slightly ascending at the base, then direct, much compressed toward the tip, which is acute, the angle long and very narrow, the dorsal line slightly convex, the edges obtuse, becoming sharp towards the end; nasal groove nearly half the length of the bill. Nostrils direct, linear, long. Head rather small, oblong, compressed; neck long and slender; body ovato-oblong, much compressed. Feet very long, rather stout; tibia bare in its lower half; tarsus long, compressed, anteriorly broadly scutellate; toes long, rather slender; hind toe small; fourth considerably longer than second; anterior toes divided to the base, scutellate. Claws of moderate length, very slightly arched, compressed, tapering to a point. Plumage rather compact above, blended beneath. Wings of moderate length, very broad, concave, rounded; first short, falciform, with the inner web broader toward the end; fourth quill longest; inner secondaries much elongated. Tail short, broad, convex, rounded, of twelve broad rounded feathers. Digestive organs as in the Rails and Gallinules.

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### 314. 1. *Aramus scolopaceus*, VIEILL. Scolopaceous Courlan.

PLATE CCCLXXVII. Male.

Bill greenish-yellow; feet leaden-grey; plumage chocolate-brown, the upper parts glossed, with purple and brown reflections; fore part of the head paler, inclining to grey, each feather with a greyish-white central line; sides of the head and throat still lighter, and a small portion of the throat whitish, these parts being streaked with greyish-brown and greyish-white; lower eyelid white; hind part and sides of neck marked with elliptical spots of white in regular series, there being one on each feather, some of them extending forwards to the posterior angle of the eye; some of the feathers on the middle of the breast and the lower wing-coverts similarly marked with lanceolate white spots; quills and tail glossy blackish-purple. Female somewhat less, but similar. Young, when fledged, of a much lighter tint; head and fore neck brownish-grey; excepting the quills, primary coverts, tail-feathers, and rump, all the plumage marked with spots of white; those on the neck elongated, on the back, wings, and breast lanceolate.

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*Male*, 25  $\frac{3}{4}$ , 41. *Female*, 25, 42. *Young*, 23.

Confined to the Everglades and central parts of Florida, where it is resident, but rather rare. Accidental on the Florida Keys.

*Aramus scolopaceus*, BONAP. Syn. p. 39.

Scolopaceous Courlan, *Aramus scolopaceus*, BONAP. Amer. Orn. v. iv. p. 111.

Scolopaceous Courlan, *Aramus scolopaceus*, NUTT. Man. v. ii. p. 68.

Scolopaceous Courlan, *Aramus scolopaceus*, AUD. Orn. Biog. v. iv. p. 543.

## FAMILY XXXIV. GRUINÆ. CRANES.

Bill about the length of the head, straight, depressed at the base, compressed toward the end, rather obtuse. Nostrils subbasal, lateral oblong. Head rather small, oblong; neck long; body large, compressed. Legs long and slender; tibia bare at the lower part; tarsus somewhat compressed, anteriorly scutellate; toes rather long, first short and somewhat elevated; claws obtuse. Plumage full and rather compact. Wings broad, convex, the inner secondaries elongated and decurved; tail short, rounded.

## GENUS I. GRUS, BRISS. CRANE.

Bill longer than the head, straight, rather slender, but strong, compressed, obtusely pointed; upper mandible with the dorsal line nearly straight, a little concave at the middle, slightly declinate toward the tip, the ridge flat and rather broad as far as the middle, the sides sloping, towards the end convex; the nasal sinus narrow, bare, and extending to nearly two-thirds, the edges direct, thick; lower mandible with the angle narrow and very long, the sides perpendicular at the base, the edges thick, the tip narrow and obtuse. Nostrils subbasal, lateral, oblong, large, pervious. Head small, compressed; neck very long and slender; body very large, but compressed. Feet very long; tibia bare to a great extent; tarsus long, stout, moderately compressed, anteriorly covered with broad decurved scutella; toes stout, scutellate, of moderate length, marginate, the first very small and elevated, the fourth webbed at the base. Claws of moderate size, strong, considerably curved, rather compressed, blunted. Plumage imbricated; upper part of head bare. Wings ample, the second, third, and fourth longest, inner secondaries and their coverts curved downwards. Tail short, rounded, of twelve broad, rounded feathers.

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### 315. 1. *Grus Americana*, FORSTER. Whooping Crane.—Sand-hill Crane. White Crane. Blue Crane. Brown Crane.

PLATE CCXXVI. Male. PLATE CCLXI. Young.

Adult with the bill dusky green, the feet black, the bare part of the head carmine, the plumage pure white, except the alula, primaries, and primary coverts, which are brownish-black. Young with the bill and feet brownish-black, the bare part of the head carmine, but less extended, the plumage bluish-grey, the feathers margined with yellowish-brown, chin and sides of head greyish-white, primary quills and coverts dark brown towards the end, with brownish-white shafts.

*Male*, 54, 92.

From Texas to North Carolina during autumn and winter, and across to the Rocky Mountains. Breeds from Upper California northward to the Arctic Regions, from which it removes southward early in autumn. Abundant in Georgia and Florida, and from thence to Texas.

Whooping Crane, *Ardea Americana*, WILS. Amer. Orn. v. vii. p. 20.

*Grus Americana*, BONAP. Syn. p. 302.

Grus Americana, Whooping Crane, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 372. Adult.

Grus canadensis, Brown Crane, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 273.

Whooping Crane, Grus Americana, NUTT. Man. v. ii. p. 34. Adult.

Brown Crane, Grus canadensis, NUTT. Man. v. ii. p. 38. Young.

Whooping Crane, Grus Americana, AUD. Orn. Biog. v. iii. p. 202, Adult; p. 441, Young.

## FAMILY XXXV. CHARADRIINÆ. PLOVERS.

Bill short, straight, subcylindrical, obtusely pointed; upper mandible, with its dorsal line straight for half its length, afterwards convex; nasal groove bare, extended along two-thirds of the length of the bill. Head of moderate size, rather compressed, rounded in front. Eyes large. Neck rather short; body ovate, rather full. Plumage soft, blended, somewhat compact above; wings long, pointed, with the first quill longest. Tail of moderate length, somewhat rounded, or with the middle feathers projecting, of twelve feathers. Œsophagus of moderate width; stomach roundish, compressed, very muscular, with the epithelium dense and rugous; intestine rather long, and of moderate width; with rather long cœca. A single pair of inferior laryngeal muscles. Nest on the ground, shallow; eggs generally four, large, pyriform, spotted. Young densely covered with down, and able to walk immediately after birth.

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### GENUS I. CHARADRIUS, LINN. PLOVER.

Bill short, or as long as the head, straight, rather stout, somewhat compressed, pointed; upper mandible with the dorsal line straight, and slightly declinate for at least half its length, then bulging a little, and arched to the tip, which is rather acute, the sides flat and sloping at the base, convex towards the end, where the edges are sharp and inclinate; nasal groove extended to half the length, and bare; lower mandible with the angle rather long and narrow, the sides at the base erect and nearly flat, the dorsal line ascending and slightly convex, the edges sharp and involute towards the tip, which is narrow and rather pointed. Nostrils subbasal, linear, open, and pervious. Eyes rather large. Head of moderate size, roundish, the forehead much rounded; neck rather short; body ovate, rather full. Feet rather long, slender; tibia bare for a considerable space; tarsus rather compressed, covered all round with reticulated hexagonal scales; toes of moderate length, slender, scutellate, second shorter than fourth, first wanting or rudimentary; anterior toes broadly marginate, webbed at the base. Claws small, compressed, slightly arched, rather acute. Plumage soft, blended, the feathers broad and rounded. Wings long and pointed, the primaries tapering, the first longest; inner secondaries tapering and elongated. Tail rather short, or of moderate length, rounded, of twelve rounded feathers. Tongue tapering, grooved above; œsophagus of moderate width; proventriculus oblong; stomach roundish, very muscular, its lateral and inferior muscles prominent, epithelium dense, longitudinally rugous; intestine rather long and of moderate width; cœca rather long.

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#### 316. 1. *Charadrius Helveticus*, LINN. Black-bellied Plover.—Bull-head. Ox-eye.

PLATE CCCXXXIV. Male and Young.

An extremely diminutive hind toe; bill and feet black. In summer, the upper parts variegated with black, yellowish-brown, and white, the feathers being tipped with the latter; forehead yellowish-white, the rest of the head and hind neck greyish-white, spotted with dusky; hind part of rump, upper tail-coverts and tail-feathers white, transversely barred with brownish-black, the tail tipped with white, and having four dark bars on the middle feathers, and seven or eight on the outer webs of the rest; primary quills and coverts brownish-black, the latter terminally margined with white; shafts of the primaries about the middle, and part of the inner webs toward the base, white; inner six with a white patch on the outer web toward the base, and margined with white externally; outer secondary feathers white at the base, and margined with the same; inner dusky, with marginal triangular white spots; a narrow ring round the eye, and a broad longitudinal band on each side of the neck, together with the abdomen and lower tail-coverts, white; loreal space, cheeks, fore part of neck, breast, and axillar feathers, black. In winter, the upper parts spotted with pale yellow, the lower greyish-white, the throat, neck, and sides streaked with dusky, the axillars black. Young pale brownish-yellow, mottled with dusky, rump whitish. After the second moult, the upper parts brownish-black, spotted with white, some of the spots yellow; fore part and sides of neck and body, greyish-white, mottled with brownish-grey, the rest of the lower parts white.

*Male*, 11  $\frac{3}{4}$ , 25.

From Texas along the coast to the northern extremity of the Continent. Breeds from Virginia northward. Not abundant.

*Tringa helvetica* and *Squatarola*, LINN. Syst. Nat p. 250, 252.

Black-bellied Plover, *Charadrius helveticus*, WILS. Amer. Orn. v. vii. p. 41. Summer.

Charadrius helveticus, BONAP. Syn. p. 298.

Grey Lapwing, Vanellus melanogaster, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 370.

Black-bellied or Swiss Plover, NUTT. Man. v. ii. p. 26.

Black-bellied Plover, Charadrius helveticus, AUD. Orn. Biog. v. iv. p. 280.

### 317. 2. Charadrius marmoratus, WAGLER. American Golden Plover.

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PLATE CCC. Adult in summer, winter, and spring.

Bill black, feet bluish-grey. In summer the upper part of head, fore part of back, and scapulars variegated with brownish-black and bright yellow, the latter in spots along the edges of the feathers; rump with smaller spots, two on each feather; quills and coverts dark greyish-brown, secondaries paler, the inner margined with yellowish-white spots, the smaller coverts spotted with the same; tail-feathers greyish-brown, faintly banded with paler, the two central with marginal yellowish spots; a broad band of white across the forehead and over the eyes, and extending along the side of the neck; the rest of the lower parts brownish-black, excepting the lower tail-coverts, which are chiefly white, the lateral banded or spotted with black, and the axillary and lower wing-coverts, which are light grey. In winter, the upper parts are blackish-brown, marked with small yellow spots, the lower parts pale grey, passing behind into greyish-white, the neck and breast streaked with greyish-brown. This species, which closely resembles *Charadrius pluvialis*, is distinguishable by having the tarsus slightly longer, the toes somewhat shorter, and the axillar feathers always light grey, they being white in that species, which very probably exists in North America, although I am not at present in possession of specimens, and cannot with certainty describe it as belonging to that country.

*Adult*, 10  $\frac{1}{2}$ , 22  $\frac{3}{8}$ .

Migrates southward in autumn and winter in vast flocks, from the northern regions, resting by the way, both in the interior and along the coast. Breeds on the Northern Barren Grounds, and islands of the Arctic Sea.

Charadrius marmoratus, WAGLER, Syst. Avium.

Golden Plover, Charadrius pluvialis, WILS. Amer. Orn. v. vii. p. 71. Winter.

Charadrius pluvialis, BONAP. Syn. p. 297.

Charadrius pluvialis, Golden Plover, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 623.

American Golden Plover, Charadrius marmoratus, AUD. Orn. Biog. v. v. p. 575.

### 318. 3. Charadrius vociferus, LINN. Kildeer Plover.

PLATE CCXXV. Male and Female.

Tail rather long, much rounded; bill black, feet light greyish-blue, hind part of tarsus pale flesh-colour; upper part of head, fore part of back, smaller wing-coverts, and inner secondary quills brownish-olive; rump orange-red; lower parts white; a brown band from the base of the bill, under the eye, to the occiput; over this a white band on the forehead, and extending behind the eye, where it is tinged with light red; surmounted by a brownish-black band between the eyes; on the neck two broad rings, the upper white, the lower black, succeeded by a band of white, and another of black in front; primaries brownish-black, each with a white mark, linear on the outer, enlarging on the inner quills; secondaries, excepting the inner, white, but most of them with a large patch of blackish-brown toward the end, their tips and most of those of the primaries white, as are those of the larger coverts. Tail-feathers white at the base, succeeded by orange, the four middle brown, all with a broad subterminal band of black, the tips white, those of the middle feathers pale reddish, the outer on each side white, with three bands of black on the inner web.

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*Male*, 10, 20.

Common. Breeds from Texas to the eastern base of the Rocky Mountains, and in all the central and Atlantic districts, to Massachusetts. Fur Countries.

Kildeer Plover, Charadrius vociferus, WILS. Amer. Orn. v. vii. p. 73.

Charadrius vociferus, BONAP. Syn. p. 297.

Charadrius vociferus, Kildeer Plover, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 368.

Kildeer Plover, NUTT. Man. v. ii. p. 22.

Kildeer Plover, Charadrius vociferus, AUD. Orn. Biog. v. iii. p. 191; v. v. p. 577.

### 319. 4. Charadrius montanus, TOWNSEND. Rocky-mountain Plover.

PLATE CCCL. Female. Male unknown.

Bill black, feet dull yellow. Forehead, a band over the eye, fore part of neck, and all the rest of

the lower surface, white; crown of the head and nape dark yellowish-brown, sides and hind part of the neck dull ochre-yellow, which is the prevailing colour on the upper parts, the feathers being broadly margined with it while their central portion is greyish-brown; wing-coverts lighter; primary coverts and quills dusky, their shafts and margins white, that colour becoming more extended on the inner and on some of the secondaries, so as to form a conspicuous patch on the wing; inner secondaries like the back; tail yellowish-brown, tipped with yellowish-white, the two outer feathers margined with the same.

*Female*, 8  $\frac{1}{4}$ , wing 6  $\frac{1}{8}$ .

Rocky Mountains.

*Charadrius montanus*, TOWNS. Journ. Acad. Nat. Sc. Philadelphia, v. vii. p. 192.

Rocky Mountain Plover, *Charadrius montanus*, AUD. Orn. Biog. v. iv. p. 362.

### 320. 5. *Charadrius Wilsonius*, ORD. Wilson's Plover.

PLATE CCLXXXIV. Male. PLATE CCIX. Female.

Bill very large, nearly as long as the head, black; feet flesh-coloured; upper parts light greyish-brown, lower white; lower part of forehead, a broad band over the eyes, throat, and a ring round the neck, white; a band between the eyes, and one on the fore neck, brownish-black; quills dusky brown, outer webs of inner primaries white toward the base, most of the quills tipped with white; tail brown, darker toward the end, the lateral feathers becoming white. Female similar, but without the black band on the forehead, and having that on the neck light brown.

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*Male*, 7  $\frac{3}{4}$ , 14  $\frac{1}{4}$ .

Common, and breeds from Texas along the coast to Long Island. Resident in the Southern States.

Wilson's Plover, *Charadrius Wilsonius*, ORD. Amer. Orn. v. ix. p. 77.

*Charadrius Wilsonius*, BONAP. Syn. p. 296.

Wilson's Plover, NUTT. Man. v. ii. p. 21.

Wilson's Plover, *Charadrius Wilsonius*, AUD. Orn. Biog. v. iii. p. 73; v. v. p. 577.

### 321. 6. *Charadrius semipalmatus*, BONAP. American Ring Plover.

PLATE CCCXXX. Male and Female.

Anterior toes connected by webs of considerable extent; bill small, half the length of the head, reddish-orange, tipped with black; upper parts greyish-brown tinged with olive, lower white; forehead, loreal space, a band passing below the eye, and a broad ring on the neck, black; a band between the eyes, throat, and a ring on the neck, white; quills dusky, darker towards the end, an elongated white spot on the inner primaries; tips of the secondary coverts, and two or three of the inner secondaries, with the tips of the rest white; tail-feathers brown, darker toward the end, tipped with white, enlarging toward the outer, which is entirely of that colour. Female similar, with the black bands lighter. Young with the upper parts paler, the feathers narrowly margined with dusky and dull yellow, the black bands on the head wanting, that on the fore neck brown.

*Male*, 7  $\frac{1}{4}$ , 14.

From Texas to the Arctic Regions, after passing through the interior, as well as along the Atlantic shores. Breeds in Labrador and the Fur Countries. Many spend the winter in the Floridas.

Ring Plover, *Tringa Hiaticula*, WILS. Amer. Orn. v. vii. p. 65.

*Charadrius semipalmatus*, BONAP. Syn. p. 296.

American Ring Plover, *Charadrius semipalmatus*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 367.

Semipalmated Ringed Plover, NUTT. Man. v. ii. p. 21.

American Ringed Plover, *Charadrius semipalmatus*, AUD. Orn. Biog. v. iv. p. 256; v. v. p. 579.

### 322. 7. *Charadrius melodus*, ORD. Piping Plover.

PLATE CCXX. Male and Female.

Bill scarcely half the length of the head, orange, with the end black; upper parts pale brownish-grey, lower part of forehead, sides of the face, and all the lower parts white; a black band across the upper part of the forehead, and a ring of the same on the lower part of the neck,

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broad on the sides, but narrow above and below, where it is formed merely by the tips of some of the feathers; above this is a white band on the hind neck; primaries dusky; a white band on the wing, narrow on the outer primaries, and enlarging so as to include the whole of some of the inner secondaries; secondary coverts also tipped with white; tail white, all the feathers, except the lateral, dusky toward the end. Young paler, the feathers of the upper parts edged with faint brown and yellowish; the black bands wanting.

*Male*, 7  $\frac{1}{2}$ , 15  $\frac{1}{2}$ .

From Texas, along the whole coast, to the Magdeleine Islands, Gulf of St Lawrence, breeding everywhere. Common. Great numbers spend the winter from South Carolina to the mouths of the Mississippi.

Ring Plover, Charadrius Hiaticula, WILS. Amer. Orn. v. v. p. 30.

Charadrius melodus, Ord., BONAP. Syn. p. 296.

Piping Ring Plover, NUTT. Man. v. ii. p. 18.

Piping Plover, Charadrius melodus, AUD. Orn. Biog. v. iii. p. 154; v. v. p. 578.

## GENUS II. APHRIZA, AUD. SURF-BIRD.

Bill a little shorter than the head, rather stout, compressed, tapering, straightish, being recurvate in a slight degree; upper mandible with the dorsal line straight, and a little declinate as far as the middle, then concave, and towards the end convex, the nasal grooves extending to near the end, the ridge rather broad and flattened, the tip compressed and bluntish; lower mandible with the angle rather long and narrow, the dorsal line ascending, and slightly convex, the sides grooved for half their length, convex toward the end, the tip narrowed, but blunt. Nostrils subbasal, linear, near the margin. Head rather small, ovate, rounded in front; neck of ordinary length; body rather full. Feet of moderate length, rather stout; tibia bare at the lower part, and reticulated; tarsus roundish, with small angular scales all round, those on the fore part larger; toes four, with numerous scutella, the first very small, and placed higher, the anterior toes free to the base, distinctly margined on both edges, flat beneath, the inner considerably shorter than the outer. Claws rather small, curved, compressed, blunted. Plumage full, soft, rather dense, on the neck and lower parts blended. Wings very long, narrow, and pointed; first primary longest, inner secondaries much elongated. Tail rather short, even, of twelve moderately broad feathers. Name from [Greek: Aphros], foam; and [Greek: xaô], to live.

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### 323. 1. *Aphriza Townsendii*, AUD. Townsend's Surf-Bird.

PLATE CCCCXXVIII. Female.

Bill dusky, toward the base orange, feet bluish-green; upper parts blackish-grey; quills greyish-black; a broad band of white on the wing, occupying the tips of the primary coverts; the terminal third of the secondary coverts, the bases, and more or less of the margins and tips of the quills, several of the inner secondaries having only a streak of dusky on the inner web; shafts of quills also white, as are some of the feathers of the rump, the upper tail-coverts, and the basal half of the tail, of which the rest is black, the feathers narrowly edged with white at the end; throat greyish-white; cheeks, sides, and fore part of neck, and anterior part of breast, dull grey, of a lighter tint than the back; the rest of the lower parts white, with small longitudinal oblong dark grey streaks; axillaries and lower wing-coverts white.

*Female*, 11; wing, 7  $\frac{1}{2}$ .

Cape Disappointment, Columbia River.

Townsend's Surf-Bird, *Aphriza Townsendi*, AUD. Orn. Biog. v. v. p. 249.

## GENUS III. STREPSILAS, ILLIGER. TURNSTONE.

Bill a little shorter than the head, rather stout, compressed, tapering, straightish, being recurvate in a slight degree; upper mandible with the dorsal line very slightly concave, the nasal groove extending to the middle, the sides beyond it sloping, the tip depressed and blunted; lower mandible with the angle short, the dorsal line ascending and slightly convex, the sides convex, the edges sharp, the tip depressed and blunted. Nostrils subbasal, linear-oblong, pervious. Head rather small, ovate; neck of ordinary length; body rather full. Feet of moderate length, rather stout; tibia bare at the lower part, and covered with reticulated scales; tarsus roundish, with numerous broad anterior scutella; toes four, the first very small and elevated, anterior toes free to the base, distinctly margined, the inner a little shorter than the outer. Claws rather small, arched, compressed, blunted. Plumage full, soft, rather dense, and glossy. Wings long, pointed, of moderate breadth, first quill longest, inner secondaries elongated. Tail rather short, slightly rounded, of twelve moderately broad feathers.

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### 324. 1. *Strepsilas Interpres*, LINN. Turnstone.

PLATE CCCIV. Summer and winter plumage.

Adult in summer with the bill black, feet deep orange; plumage varied with white, black, brown, and red; upper parts of the head and nape streaked with black and reddish-white; a broad band of white crossing the forehead, passing over the eyes, and down the sides of the neck, the hind part of which is reddish-white, faintly mottled with dusky; a frontal band of black curving downwards before the eye, enclosing a white patch on the lore, and meeting another black band glossed with blue, which proceeds down the neck, from the base of the lower mandible, enlarging behind the ear, covering the whole anterior part of the neck, and passing along the shoulders over the scapulars; the throat, hind part of the back, outer scapulars, upper tail-coverts, and under parts of body and wings, white; anterior smaller, wing-coverts dusky, the rest bright chestnut or brownish-orange, as are the outer webs of the inner tertiaries; alula, primary coverts, outer secondary coverts and quills blackish-brown, the inner webs becoming white towards the base; a broad band of white across the wing, including the bases of the primary quills, excepting the outer four, and the ends of the secondary coverts; shafts of primaries white; tail white, with a broad blackish-brown band towards the end, broader in the middle, the tips white; a dusky band crossing the rump. In winter, the throat, lower parts, middle of the back, upper tail-coverts, and band across the wing, white, as in summer; tail and quills also similarly coloured, but the inner secondaries destitute of red, of which there are no traces on the upper parts, they being of a dark greyish-brown colours, tipped or margined with paler; outer edges of outer scapulars, and some of the smaller wing-coverts, white; on the sides and fore part of the neck, the feathers blackish.

*Male*, 9, 18  $\frac{3}{4}$ .

Not uncommon along the shores of the Southern States during winter, though the greater number remove much farther south. Breeds in high northern latitudes, Hudson's Bay, and shores of Arctic Seas. Never in the interior.

Turnstone, *Tringa Interpres*, WILS. Amer. Orn. v. vii. p. 32.

*Strepsilas Interpres*, BONAP. Syn. p. 299.

*Strepsilas Interpres*, Turnstone, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 371.

Turnstone or Sea Dotterel, NUTT. Man. v. ii. p. 30.

Turnstone, *Strepsilas Interpres*, AUD. Orn. Biog. v. iv. p. 31.

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## GENUS IV. HÆMATOPUS. OYSTER-CATCHER.

Bill long, slender, straight, or slightly recurvate, higher than broad at the base, extremely compressed toward the end; upper mandible with the dorsal line straight and slightly sloping at the base, somewhat convex beyond the nostrils, then straight and sloping to the point, the ridge broad and flattened as far as the prominence, afterwards extremely narrow, the sides sloping at the base, perpendicular towards the end, the edges rather sharp, the tip abrupt and wedge shaped; nasal groove long, bare; lower mandible with the angle of moderate length, the dorsal line ascending and slightly convex, the sides erect, the edges thin, the tip abrupt and wedged. Nostrils subbasal, linear, near the margin. Head of moderate size, ovate, the forehead rounded; neck of moderate length; body compact. Feet of moderate length, rather stout; tibia bare for about a fourth of its length; tarsus slightly compressed, covered all round with hexagonal scales; toes of moderate length, stout, marginate, flat beneath, webbed at the base, the outer considerably longer than the inner, the first wanting. Claws rather small, arched, moderately compressed, obtuse. Plumage generally blended, on the back compact. Wings long, pointed, the first quill longest. Tail short, nearly even, of twelve feathers. Tongue short, triangular, fleshy; œsophagus dilated into a pretty large crop; stomach oblong, muscular, with the epithelium dense and longitudinally rugous; intestine long and rather slender; cœca long and nearly cylindrical; cloaca globular.

### 325. 1. *Hæmatopus palliatus*, TEMM. American Oyster-catcher.

PLATE CCXXIII. Male.

Bill vermilion, feet very pale flesh-colour; head and neck dull black tinged with bluish-grey; upper parts light greyish-brown, tinged with olive, and faintly glossed with reddish-purple; lower eyelid, edge of wing, tips of secondary coverts, secondary quills except the inner, pure white; as are the lower parts generally, the rump, and basal half of the tail; primaries and terminal part of tail brownish-black.

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*Male*, 18  $\frac{1}{2}$ , 32  $\frac{1}{2}$ , bill 3  $\frac{5}{8}$ . *Female*, 21, 36.

Breeds from Texas along the coast to New York, again from Maine to Labrador. Returns south in autumn, spending the winter from Maryland to West Florida. Rather common.

*Hæmatopus palliatus*, TEMM. Man. d'Orn. v. ii. p. 532.

Mantled Oyster-catcher, *Hæmatopus palliatus*, NUTT. Man. v. ii. p. 15.

American Oyster-catcher, *Hæmatopus palliatus*, AUD. Orn. Biog. v. iii. p. 181; v. v. p. 580.

### 326. 2. *Hæmatopus Bachmanii*, AUD. **Bachman's Oyster-catcher.**

PLATE CCCCXXVII. Fig. 1. Male.

Bill vermilion, fading to yellow on the worn parts towards the end; feet white, slightly tinged with flesh-colour; plumage chocolate-brown, darker and tinged with bluish-grey on the head and neck; the under surface of the quills lighter.

*Male*, 17  $\frac{1}{2}$ , wing 10; bill 2  $\frac{3}{4}$ .

North-west coast, Regent's Sound, and about the mouth of the Columbia River. Rather common. Migratory.

Bachman's Oyster-catcher, *Hæmatopus Bachmani*, AUD. Orn. Biog. v. v. p. 245.

### 327. 3. *Hæmatopus Townsendii*, AUD. **Townsend's Oyster-catcher.**

PLATE CCCCXXVII. Fig. 2. Female.

Bill vermilion, paler toward the end; feet blood-red; plumage chocolate-brown, darker and tinged with bluish-grey on the head, neck, and breast; under surface of quills light brownish-grey, with the shafts whitish; many of the wing-coverts narrowly tipped with brownish-white.

*Female*, 20; wing 11; bill 3  $\frac{1}{2}$ .

Coast of California, and along the shores of the North Pacific, southward and northward. Rather common. Migratory.

Townsend's Oyster-catcher, *Hæmatopus Townsendi*, AUD. Orn. Biog. v. v. p. 247.

## FAMILY XXXVI. SCOLOPACINÆ. SNIPES.

Bill longer than the head, subulate, slender, straight, or recurved, or decurved; upper mandible with the nasal groove very long, the edges flattened or rounded, the tip generally rather obtuse; lower mandible with the angle extremely long and narrow, the sides longitudinally grooved. Nostrils basal, linear, small. Head rather small, oblong, anteriorly rounded; neck of moderate length or long; body ovate, deep. Legs generally long, slender; tarsus long, compressed, scutellate; toes generally four, first small, sometimes wanting; anterior toes of moderate length, slender. Claws small, arched, compressed, rather acute. Wings long, pointed, with the first quill longest, and the inner secondaries tapering and much elongated; tail rather short, of twelve feathers. Tongue long, slender, trigonal, pointed; œsophagus of moderate width, stomach oblong or roundish, moderately muscular, with dense rugous epithelium; intestine long, of moderate width; cœca rather long, cylindrical, contracted at the base. Trachea flattened, with a single pair of inferior laryngeal muscles.

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## GENUS I. TRINGA, LINN. SANDPIPER.

Bill little longer than the head, slender, straight, compressed, tapering, with the tip a little enlarged and blunt; upper mandible with the dorsal line straight and slightly declinate, the ridge narrow and flattened until towards the end, when it becomes considerably broader, the sides sloping, the tip convex above and ending in a blunt point, the edges thick and flattened; nasal groove extending to near the tip; lower mandible with the angle long and very narrow, the dorsal line straight, the sides sloping outwards, with a long narrow groove, the tip a little broader, but tapering. Head rather small, oblong, compressed; neck of ordinary length; body rather full. Feet rather long, slender; tibia bare a third part of its length; tarsus anteriorly and posteriorly scutellate; hind toe very small, or wanting, the rest of moderate length, slender, the fourth slightly longer than the second, the third longest, all free, broadly marginate, with numerous scutella. Claws small, slightly arched, compressed, rather obtuse. Plumage soft, blended, on the back distinct. Wings very long, pointed; primaries tapering, obtuse, the first longest; one of the inner secondaries very long. Tail rather short, nearly even, of twelve feathers.

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### 328. 1. *Tringa Bartramia*, WILS. **Bartramian Sandpiper.—Highland Plover. Papabote.**

PLATE CCCIII. Male and Female.

Bill scarcely longer than the head, slender, slightly deflected at the end, yellowish-green, with the tip dusky; legs rather long, light greyish-yellow, toes greenish; upper part of head dark brown, with a median pale yellowish-brown line, of which colour are the margins of the feathers;

hind part and sides of the neck light yellowish-brown, streaked with dusky; fore part of neck and breast paler, with longitudinal pointed dusky streaks, becoming transverse on the breast and sides; throat and the rest of the lower parts yellowish-white, except the axillars and lower wing-coverts which are white, banded with brownish-black; on the upper parts the feathers dark brown glossed with green, their margins with alternate yellowish-brown and dusky spots; the hind part of the back darker, without spots; alula, primary coverts, and primary quills, blackish-brown, the inner webs crossed by white bands until about an inch from the end; the shaft of first quill brownish-white, of the rest brown; secondaries greyish-brown, the outer margins pale brown, with dusky spots, the inner darker; two middle feathers of tail dark olive, tinged with grey, transversely barred with black, the last bar arrow-shaped, the margins cream-coloured; the next feather on each side lighter, and tinged with yellowish-red, the rest gradually lighter, the outer white, all barred with black.

*Male*, 12  $\frac{1}{2}$ , 22. *Female*, 13, 22  $\frac{3}{4}$ .

From Texas along the coast to Nova Scotia. Breeds from Maryland northward to the Saskatchewan. In vast flocks in Louisiana, Opperousas, and the Western Prairies, in autumn and spring. Rare in Kentucky.

Bartram Sandpiper, *Tringa Bartramia*, WILS. Amer. Orn. v. vii. p. 63.

Totanus Bartramius, BONAP. Syn. p. 262.

Totanus Bartramius, Bartram Tatler, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 391.

Bartramian Tatler, NUTT. Man. v. ii. p. 169.

Bartramian Sandpiper, Totanus Bartramius, AUD. Orn. Biog. v. iv. p. 24.

### **329. 2. *Tringa Islandica*, LINN. Ash-coloured Sandpiper.—Knot. Grey-back, Red-breasted Sandpiper.**

PLATE CCCXV. Summer and winter plumage.

In summer, the bill and feet black, upper part of the head and hind neck light grey, tinged with buff, and longitudinally streaked or spotted with dusky; fore part of back and scapulars variegated with brownish-black and yellowish, and each feather with several spots of the latter, and tipped with whitish; hind part of the back, rump, and upper tail-coverts, barred with black; wing-coverts ash-grey, edged with paler; alula and primary coverts brownish-black, tipped with white; primaries similar, their shafts, and the outer margins of all, excepting the first three white, the inner webs toward the base light grey; secondaries and their coverts grey, margined with white; sides of head, fore part of neck, breast, and abdomen, rich brownish-orange; lower tail-coverts and feathers of legs white, each of the former with a central dusky arrow-shaped or elongated spot; axillaries white, barred with dusky; lower wing-coverts dusky with white margins. In winter the bill greenish-black, feet yellowish-green; upper parts deep ash-grey, each feather margined with whitish; feathers of rump greyish-white; upper tail-coverts white, barred with dusky; quills and tail as in summer; a band from the bill over the eye to the hind part of the head, white; loreal space, cheeks, and sides of neck pale grey, streaked with darker; throat and lower parts white; sides, axillar feathers, and lower wing-coverts, barred or spotted with dusky; lower tail-coverts as in summer. Young in autumn like the adult in winter, but each feather on the upper parts with a narrow margin of white, within which is a dusky line.

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*Male*, 10  $\frac{1}{4}$ , 21.

In autumn and spring ranges along the coast from Texas to Labrador. Breeds in the Fur Countries, to a very high latitude. Common.

Ash-coloured Sandpiper, *Tringa cinerea*, WILS. Amer. Orn. v. vii. p. 36. Winter.

Red-breasted Sandpiper, *Tringa rufa*, WILS. Amer. Orn. v. vii. p. 57. Summer.

*Tringa islandica*, BONAP. Syn. p. 350.

*Tringa cinerea*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 387.

Knot or Ash-coloured Sandpiper, NUTT. Man. v. ii. p. 125.

Knot or Ash-coloured Sandpiper, *Tringa islandica*, AUD. Orn. Biog. v. iv. p. 130.

### **330. 3. *Tringa pectoralis*, BONAP. Pectoral Sandpiper.**

PLATE CCXCIV. Male and Female.

Bill dull olive-green, dusky towards the point; feet dull yellowish-green; upper part of head reddish-brown, the central part of each feather brownish-black; a faint whitish line from the bill to a little beyond the eye; lores dusky; sides of head and anterior and lateral parts of neck, with a portion of the breast, light brownish-grey, with longitudinal dark brown lines; chin, breast, and abdomen white; feathers of the upper part brownish-black, edged with reddish-brown, those on the wings lighter; primary quills dusky, outer secondaries tinged with grey, and narrowly tipped



with white, inner like the back; tail-feathers light brownish-grey, slightly margined and tipped with white, the two central dark like the back.

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*Male*, 9  $\frac{1}{4}$ , 18.

From Nova Scotia to Maryland, along the coast. Rather common. Migratory. Breeds in the north.

*Tringa pectoralis*, Pectoral Sandpiper, BONAP. Amer. Orn. v. iv. p. 44.

*Tringa pectoralis*, BONAP. Syn. p. 318.

Pectoral Sandpiper, *Tringa pectoralis*, NUTT. Man. v. ii. p. 111.

Pectoral Sandpiper, *Tringa pectoralis*, AUD. Orn. Biog. v. iii. p. 601; v. v. p. 582.

### 331. 4. *Tringa maritima*, BRUNNICH. Purple Sandpiper.

PLATE CCLXXXIV. Fig. 1. Adult in summer. Fig. 2. In winter.

Bill deep orange, dusky toward the end; feet light orange. Head greyish-brown, tinged with purple, its sides and those of the neck deep purple; back and wings brownish-black, with purple gloss, the margins of the feathers white; quills brownish-black, their shafts, the tips of all the secondaries, and the greater part of the middle ones, white; middle tail-feathers brownish-black, tinged with purple, the lateral shaded with ash-grey; upper part of throat greyish-white, fore neck grey; breast, sides, and abdomen white. In winter, the lower parts are pale grey, the upper parts have the purplish tints much fainter, the white edgings substituted by dull grey.

*Male*, 9  $\frac{1}{2}$ , 14  $\frac{3}{4}$ .

Abundant from Maine to New York, in autumn and spring. Breeds in Hudson's Bay, and on Melville Island.

*Tringa maritima*, BONAP. Syn. p. 318.

*Tringa maritima*, Purple Sandpiper, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 382.

Purple Sandpiper, *Tringa maritima*, AUD. Orn. Biog. v. iii. p. 558.

### 332. 5. *Tringa rufescens*, VIEILL. Buff-breasted Sandpiper.

PLATE CCLXV. Male and Female.

Bill not longer than the head, dull olive-green, dusky toward the point; feet dull yellowish-green; upper parts greyish-yellow, each feather blackish-brown in the centre; wing-coverts lighter; quills and coverts light greyish-brown, greenish-black at the end, with the tip whitish, the inner webs whitish in the greater part of their breadth, and beautifully dotted with black, in undulating lines; the inner secondaries like the back; the two middle tail-feathers greyish-brown, at the end dark brown glossed with green, and slightly margined and tipped with white, the rest gradually paler to the outer, margined and tipped with white, within which are two lines of blackish-brown; sides of the head, fore neck, and sides light yellowish-red, the throat paler, the sides of the neck and body spotted with brownish-black, the rest of the lower parts paler and unspotted; lower wing-coverts white, those near the edge of the wing black in the centre, primary coverts dotted with black, and having a spot of the same near the end.

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*Male*, 8, 18.

Along the Atlantic shores from Maine to New York. Rare. Migratory. Breeds in high northern latitudes.

Buff-breasted Sandpiper, *Tringa rufescens*, NUTT. Man. v. ii. p. 113.

Buff-breasted Sandpiper, *Tringa rufescens*, AUD. Orn. Biog. v. iii. p. 451.

### 333. 6. *Tringa alpina*, LINN. Red-backed Sandpiper.

PLATE CCXC. Adult in summer and winter.

Bill one-third longer than the head, slender, slightly curved toward the end, and with the feet black. Upper part of the head, back, and scapulars, chestnut-red, each feather brownish-black in the centre, and the scapulars barred with the same colour; wing-coverts greyish-brown, as are the quills; the bases and tips of the secondaries, and part of the outer webs of the middle primaries white; tail light brownish-grey, the two middle feathers darker; forehead, sides of head, and hind neck, pale reddish-grey, streaked with dusky; fore neck and anterior part of breast greyish-white, streaked with dusky; on the breast a large patch of brownish-black; abdomen and lower tail-coverts white, the latter with dusky markings. In winter, the general colour of the upper parts brownish-grey; the wings and tail as in summer; throat greyish-white; sides of head and neck, and fore part of the latter, pale brownish-grey, faintly streaked with darker, as are the sides; the rest of the lower parts white, with a few streaks on the breast.

*Male*, 8  $\frac{1}{2}$ , 15.

From Nova Scotia to Texas, along all muddy or sandy shores, during autumn and spring. Common. Breeds in great numbers on the Arctic coasts.

*Tringa Cinclus* and *alpina*, LINN. Syst. Nat. v. i. p. 251, 429.

Red-backed Sandpiper, *Tringa alpina*, WILS. Amer. Orn. v. vii. p. 5.

*Tringa alpina*, BONAP. Syn. p. 317.

*Tringa alpina*, American Dunlin, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 383.

Dunlin or Ox-bird, NUTT. Man. v. ii. p. 106.

Red-backed Sandpiper, *Tringa alpina*, AUD. Orn. Biog. v. iii. p. 580.

### 334. 7. *Tringa subarquata*, TEMM. Curlew Sandpiper.

PLATE CCLXIII. Adult and Young.

Bill one-third longer than the head, slightly decurved, dark olive; feet light olive-green; head, neck, and breast, bright yellowish-red, sides whitish, lower tail-coverts white, with a brownish-black spot towards the end; on the upper part of the head the central parts of the feathers dark brown, and the hind neck and sides of the breast slightly streaked with the same; upper parts mottled with brownish-black and light red, the rump pale brownish-grey, as are the smaller wing-coverts; quills greyish-brown, primaries darker, outer secondaries light and tipped with white, inner darker, and glossed with green; upper tail-coverts white, spotted with brown and red; tail pale brownish-grey, glossed with green. In winter, the feathers of the upper parts dark brown, edged with darker, and margined with greyish-yellow; lore, cheeks, and sides of the neck and body greyish-yellow, with dusky lines; a broad band from mandible over the eye, the fore part of the neck, and the rest of the lower parts white; quills and tail as in winter, but lighter. Young in autumn like the adult in winter.

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Accidental on the Florida coast in winter, rare on those of the middle districts. Breeds in high latitudes. Migratory.

*Tringa subarquata*, BONAP. Syn. p. 317.

Cape Curlew or Sandpiper, NUTT. Man. v. ii. p. 104.

Curlew Sandpiper, *Tringa subarquata*, AUD. Orn. Biog. v. iii. p. 444.

### 335. 8. *Tringa himantopus*, BONAP. Long-legged Sandpiper.

PLATE CCCXLIV. Adult in spring and winter.

Bill a third longer than the head, slender, very slightly decurved; greenish-black; legs long, slender, yellowish-green. In summer, their upper parts brownish-black, the feathers margined with reddish-white, the edges of the scapulars with semiform markings of the same; rump and upper tail-coverts white, transversely barred with dusky; tail light grey, the feathers white at the base and along the middle; primary quills and coverts brownish-black, inner tinged with grey, the shaft of the outer primary white; secondaries brownish-grey, margined with reddish-white, the inner dusky; a broad whitish line over the eye; loral space dusky; auriculars pale brownish-red; fore part and sides of neck greyish-white tinged with red, and longitudinally streaked with dusky, the rest of the lower parts pale reddish, transversely barred with dusky, the middle of the breast and the abdomen without markings. In winter, the upper parts brownish-grey, the head narrowly streaked with dusky, the scapulars plainly margined with whitish; the rump and wings as in summer; the band over the eye lighter, the fore part and sides of neck greyish-white, longitudinally streaked with grey, the sides similar, and with the lower coverts barred with grey, the rest of the lower parts white.

*Male*, 7  $\frac{1}{2}$ -8  $\frac{3}{4}$ , 15  $\frac{1}{2}$ -17. *Female*, 8  $\frac{1}{2}$ -10  $\frac{1}{2}$ , 16  $\frac{1}{2}$ -18.

Abundant in Texas in spring. Rare in the Middle Districts. Breeds in the Fur Countries. Migratory.

*Tringa himantopus*, BONAP. Syn. p. 316.

*Tringa Douglassii*, Swains. Douglass' Sandpiper, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 379.

*Tringa himantopus*, Slender-shank Sandpiper, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 380.

Long-legged Sandpiper, Audubon's Stilt Sandpiper, Douglass' Stilt Sandpiper. NUTT. Man. v. ii. pp. 138, 140, 141.

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Long-legged Sandpiper, *Tringa himantopus*, AUD. Orn. Biog. v. iv. p. 332.

### 336. 9. *Tringa Schinzii*, BREHM. Schinz's Sandpiper.

PLATE CCLXXVIII. Male and Female.

Bill about the length of the head, straight, and with the feet greenish-dusky; general colour of upper parts brownish-black, each feather edged with yellowish-grey, the scapulars with light red; wing-coverts greyish-brown, the shaft black; primary and secondary coverts tipped with white; quills brownish-grey, darker toward the tips, inner primaries and outer secondaries more or less edged and tipped with white; tail-feathers white, with a dusky spot, excepting the central two, which are blackish, with a few greyish-white markings; tail-feathers light grey, the two middle brownish-black towards the end; sides of the head, fore neck, anterior part of breast and sides greyish-white, with small lanceolate central brownish-black spots; the rest of the lower parts white.

*Male*, 7  $\frac{1}{2}$ , 14  $\frac{3}{4}$ .

From Labrador to St Augustine in Florida, and Kentucky, during autumn. Missouri. Saskatchewan Plains. Not very rare. Migratory. Breeds in high northern latitudes.

*Tringa Schinzii*, BONAP. Syn. p. 249.

*Tringa Schinzii*, Schinz's Sandpiper, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 384.

Schinz's Sandpiper, NUTT. Man. v. ii. p. 109.

Schinz's Sandpiper, *Tringa Schinzii*, AUD. Orn. Biog. v. iii. p. 529.

### 337. 10. *Tringa semipalmata*, WILS. Semipalmated Sandpiper.

PLATE CCCCXV. Adult.

Bill as long as the head, greenish-dusky; feet dull yellowish-green; upper part of head, cheeks, hind part and sides of neck, ash-grey, streaked with dusky; on the rest of the upper parts the feathers dusky-brown, margined with pale grey, those on the rump and the upper tail-coverts blackish-brown; secondary coverts tipped with white; alula and primary coverts brownish-black, the latter tipped with white; primary quills greyish-black, with white shafts; secondary quills more grey; primaries externally edged with white towards the base, as are the outer secondaries in a fainter degree, as well as terminally, some of them also having the greater part of the inner web greyish-white; two middle tail-feathers greyish-black on the inner web, their outer web and all the other feathers ash-grey; anterior part of forehead, and a band over the eye greyish-white; lower parts white.

*Adult*, 6  $\frac{3}{4}$ , 12  $\frac{1}{2}$ .

Exceedingly abundant from Texas to Maine, in winter, spring, and autumn. Breeds from Labrador northward. Columbia River. Migratory. [237]

Semipalmated Sandpiper, *Tringa semipalmata*, WILS. Amer. Orn. v. vii. p. 131.

*Tringa semipalmata*. BONAP. Syn. p. 316.

Semipalmated Sandpiper, NUTT. Man. v. ii. p. 136.

Semipalmated Sandpiper, *Tringa semipalmata*, AUD. Orn. Biog. v. v. p. 111.

### 338. 11. *Tringa pusilla*, WILS. Little Sandpiper.

PLATE CCCXX. Male and Female.

Bill a little shorter than the head, straight, greenish-dusky, feet pale dull yellowish-green; feathers of the upper parts brownish-black, broadly margined with light brownish-red, some of the scapulars margined externally with white, and the larger glossed with green; alula, primary coverts, primary quills, and outer secondaries, greyish-black, all more or less narrowly tipped with greyish-white; secondary coverts largely tipped with the same; primaries externally edged with white toward the base, as are the outer secondaries in a fainter degree, the inner webs of some of the latter greyish-white toward the base, their shafts white; rump and upper tail-coverts black; two middle tail-feathers black, with pale brownish-red edges, the next feather on each side greyish-brown, edged with greyish-white, the outer four pale greyish-brown, very narrowly margined externally, more broadly internally, and along their points with greyish-white; lateral tail-coverts with the outer web white; from the forehead over the eye to the occiput, a band of dull greyish-white, faintly streaked with dusky; loreal band and ear-coverts brownish-dusky; cheeks dull greyish-white, faintly streaked with dusky; throat greyish-white; sides and fore part of neck of the same colour, faintly streaked with dusky; the rest of the lower parts, including the axillars, pure white; lower surface of wing pale brownish-grey. In autumn and winter the red edgings of the upper parts are substituted by light grey.

*Male*, 5  $\frac{5}{8}$ , 11  $\frac{3}{8}$ .

Distributed along the whole coast from Texas eastward, and throughout all intermediate

districts to the Columbia River. Breeds in Labrador and the Fur Countries. Found even along the lakes and ponds in the woods. Very abundant. Migratory.

Little Sandpiper, *Tringa pusilla*, WILS. Amer. Orn. v. v. p. 32.

*Tringa pusilla*, BONAP. Syn. p. 319.

Wilson's Sandpiper, *Tringa Wilsonii*, NUTT. Man. v. ii. p. 120.

Little Sandpiper, *Tringa pusilla*, AUD. Orn. Biog. v. iv. p. 180.

\* Third toe wanting.

### 339. 12. *Tringa arenaria*. Sanderling Sandpiper.

PLATE CCLXXXV. Summer. PLATE CCXXX. Male and Female in winter.

Bill about the length of the head, straight, and with the feet black; hind toe wanting. In winter the general colour of the plumage ash-grey, the lower parts pure white; alula and primaries brownish-black, the latter with more or less white on their outer webs, or along the shaft; secondaries white, the outer with a patch of black towards the end, the inner ash-grey; primary coverts greyish-black, tipped with white; middle tail-feathers greyish-brown, their shafts white, the rest of a paler tint on the outer webs, white on the inner, the lateral almost pure white. In summer the upper parts of the head, hind neck, lateral, and fore part of the neck, pale yellowish-red, streaked with brownish-black; the back similarly marked, with larger spots, and on the scapulars disposed in bars; the tips of most of the feathers greyish-white; the other parts as in winter.

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*Male*, 7  $\frac{1}{2}$ , 12  $\frac{1}{2}$ .

From Texas along the coast to Maine in autumn and spring, extremely abundant. Breeds from Lat. 55° northward.

Ruddy Plover, *Charadrius rubidus*, WILS. Amer. Orn. v. vii. p. 129. Summer.

Sanderling Plover, *Charadrius Calidris*, WILS. Amer. Orn. v. vii. p. 68. Winter.

*Calidris arenaria*, Sanderling, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 366.

Sanderling Plover, *Calidris arenaria*, NUTT. Man. v. ii. p. 4.

Sanderling, *Tringa arenaria*, AUD. Orn. Biog. v. iii. p. 231; v. v. p. 582.

## GENUS II. PHALAROPUS, BRISS. PHALAROPE.

Bill scarcely longer than the head, straight, slender, at the base somewhat cylindrical, toward the end broader and flattened, the tips narrowed; upper mandible with the dorsal line straight, excepting at the end, where it is a little decurved, the ridge convex, flattened at the broad part, the sides slightly sloping, the edges rounded, and near the tip inflected; nasal groove linear, extending to near the tip; lower mandible with the angle very long and narrow, the sides convex and sloping outwards, the tip narrowed. Nostrils basal, linear-elliptical. Head small, with the fore part high and rounded; neck of moderate length; body rather full. Feet rather short, slender; tibia bare a short way above the joint; tarsus much compressed, narrowed before and behind, covered anteriorly with numerous scutella; toes very slender, first extremely small, free, with a slight membrane beneath; second shorter than the fourth; third toe much longer, all scutellate above, the anterior margined on both sides with lobed and pectinated membranes, which are united at the base, so as to render the foot nearly half-webbed, the outer web much longer than the inner. Claws very small, compressed, arched, obtuse. Plumage soft and blended; wings long and pointed, first quill longest, secondary quills rather short, the inner much elongated. Tail of moderate length, much rounded, of twelve feathers, the lower tail-coverts as long.

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### 340. 1. *Phalaropus fulicarius*, BONAP. Red Phalarope.

PLATE CCLV. Male and Female in summer. Male in winter.

In summer, the bill greenish-yellow, black at the point; feet pale green; upper part of head black; loreal space and chin blackish-grey; sides of head, and a band round the occiput, white; sides and fore part of neck, breast, abdomen, and lower tail-coverts deep orange-red; fore part of back, scapulars, and inner secondaries, black, the feathers edged with whitish; wing-coverts deep ash-grey; quills dark greenish-brown, their shafts and basal parts white; the ends of the secondary and primary coverts, and the basal part of the outer webs of the primaries white, forming a band of that colour on the wing; upper tail-coverts orange-red; tail deep grey, darker towards the end, slightly tipped with reddish. Female in summer with the upper part variegated with light red and brownish-black, the central part of each feather being of the latter colour; the upper tail-coverts entirely of the former; tail deep grey, as in the male; lower parts of a less pure red, being paler, and tinged with grey. In winter the bill nearly black, upper and fore part of head, fore part and sides of neck, breast, abdomen, lower and lateral upper tail-coverts, with a

band across the wing, white; a brownish-black line from the eye to the occiput, which is of the same colour, as well as in the middle of the hind neck; back, scapulars, and inner secondaries, ash-grey.

*Adult*, 7  $\frac{1}{2}$ , 13.

Occasionally in flocks in Kentucky, on the Ohio, during autumn often at sea on the Grand Banks of Newfoundland. Breeds in high northern latitudes, as far as Melville Peninsula. Stragglers at times reach as far south as New Jersey, but the route of this species toward warmer regions, is along the Pacific coast.

Red Phalarope, *Phalaropus hyperboreus*, WILS. Amer. Orn. v. ix. p. 75.

*Phalaropus fulicarius*, BONAP. Syn. p. 341.

*Phalaropus fulicarius*, Flat-billed Phalarope, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 407.

Red Phalarope, NUTT. Man. v. ii. p. 236.

Red Phalarope, *Phalaropus fulicarius*, AUD. Orn. Biog. v. iii. p. 404.

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### GENUS III. LOBIPES, CUV. LOBEFOOT.

Bill at least as long as the head, extremely slender, straight, nearly cylindrical, towards the end tapering; upper mandible with the dorsal line straight, unless at the end, where it is a little decurved, the ridge broad and depressed, the sides slightly sloping, the edges rounded, and inflected towards the narrow acute tip; nasal groove long, linear; lower mandible with the angle very long and narrow, the sides convex, the tip narrowed. Head small, with the fore part high and rounded; neck of moderate length; body rather slender. Feet moderate, slender; tibia bare at the lower part; tarsus extremely compressed, narrowed before and behind, covered anteriorly with numerous scutella; toes slender, first extremely small, free, with a slight membrane beneath, second slightly shorter than fourth; toes all scutellate above, the anterior webbed at the base, and margined on both sides with a lobed or sinuated membrane. Claws very small, arched, compressed, acute. Plumage soft, and blended. Wings long and pointed, the first quill longest; inner secondaries very long and tapering; tail of twelve feathers rounded or nearly even. Tongue extremely slender, grooved above, tapering to a horny point; œsophagus narrow, uniform; stomach rounded, muscular, with the epithelium dense and longitudinally rugous; intestine of moderate length and width; cœca rather long. Trachea much flattened, with a single pair of inferior laryngeal muscles.

#### 341. 1. *Lobipes hyperboreus*, LATH. Hyperborean Lobefoot.

PLATE CCXV. Male and Female.

Bill about the same length as the head, membranes of the toes scolloped, tail much rounded; upper parts greyish-black, the head lighter and more tinged with grey, the scapulars and some of the feathers of the back edged with yellowish-red, of which colour are the sides of the head and neck; throat and sides of the upper part of the neck white; wing-coverts and quills brownish-black, tinged with grey, the shafts of the quills, margins, and tips of secondaries, and a broad bar on the tip of the secondary coverts white; tail light grey, the feathers margined with white, the two middle dark brownish-grey, lateral upper tail-coverts white, barred with dusky; breast and abdomen white. Young similar, but with the colours paler.

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*Male*, 6, 13  $\frac{1}{2}$ ; wing 5  $\frac{3}{4}$ .

Rarely seen south of New York. Plentiful at some periods from Massachusetts to Maine. Abundant in the Bay of Fundy during spring and autumn. Breeds in Labrador and along all the Arctic coast. Migratory.

*Phalaropus hyperboreus*. BONAP. Syn. p. 342.

Hyperborean Phalarope, NUTT. Man. v. ii. p. 239.

Hyperborean Phalarope, *Phalaropus hyperboreus*, AUD. Orn. Biog. v. iii. p. 118; v. v. p. 595.

#### 342. 2. *Lobipes Wilsonii*, SABINE. Wilson's Lobefoot.

PLATE CCLIV. Male and Young.

Bill half as long again as the head; membranes of the toes merely sinuous, tail nearly even; general colour of upper parts brownish-grey, hind neck and rump greyish-white, crown of head ash-grey; a white line over the eye; a band of black on the lore, under the eye, and down the side of the neck, where it enlarges, and changes into chestnut-red, extending down the back; another chestnut band crosses the wing, and includes part of the inner secondaries; quills greyish-brown, outer primaries and their coverts much darker, the shaft of the first white, tail-feathers pale

brownish-grey on the outer, white more or less mottled on the inner webs; throat and cheeks white; fore neck orange-brown, fading below, and extending paler over the sides of the body; breast, abdomen, and lower wing-coverts white.

*Adult*, 10, 17  $\frac{1}{2}$  .

Procured in Kentucky, New Jersey, and Boston. Breeds abundantly on the Rocky Mountains. Saskatchewan River. Winters in Mexico.

Grey Phalarope, *Phalaropus lobatus*, WILS. Amer. Orn. v. ix. p. 72.

*Phalaropus Wilsonii*, BONAP. Syn. p. 342.

Wilson's Phalarope, *Phalaropus Wilsonii*, BONAP. Amer. Orn. v. iv. p. 59.

*Phalaropus Wilsonii*, Wilson's Phalarope, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 405.

American Phalarope, NUTT. Man. v. ii. p. 245.

Wilson's Phalarope, *Phalaropus Wilsonii*, AUD. Orn. Biog. v. iii. p. 400.

## GENUS IV. TOTANUS, BECHST. TATLER.

Bill much longer than the head, very slender, subcylindrical, straight, flexible, compressed at the base, the point rather depressed and obtuse; upper mandible with the dorsal line straight, the ridge convex, as are the sides, the edges thick, the tip slightly deflected; lower mandible with the angle very long and narrow, the dorsal line straight, the sides convex, with a slight groove in their basal half, the edges grooved longitudinally, as are those of the upper, the tip narrow. Nostrils basal, linear. Head of moderate size, oblong; neck rather long and slender; body slender. Feet very long and slender; tibia bare for half its length; tarsus compressed, scutellate before and behind; hind toe very small, anterior of moderate length, connected by webs at the base, all scutellate above. Claws small, slightly arched, rather obtuse. Plumage soft and blended; wings long, narrow, pointed; first quill longest, inner secondaries long; tail short, of twelve rounded feathers.

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### 343. 1. *Totanus macularius*, WILS. Spotted Tatler.—Spotted Sandpiper. Peet-weet.

PLATE CCCX. Male and Female.

Bill a little longer than the head, very slender, flexible, greenish above, yellow beneath, legs rather long and slender, pale flesh-colour; upper parts glossy greenish-olive, with bronze reflections, the head longitudinally streaked, the back transversely undulated with dusky; lower parts white, marked with numerous brownish-black spots, smaller on the throat, largest and roundish on the breast and sides. Young with the upper feathers of the upper parts terminally margined with dusky, the wing-coverts barred, the lower parts pure white.

*Male*, 8, 13  $\frac{3}{4}$  .

Breeds from the Texas along the shores to Maine, the islands of the Gulf of St. Lawrence, and Labrador. Inland all over the country. Very common. Resident in the Southern States. Columbia River.

Spotted Sandpiper, *Tringa macularia*, WILS. Amer. Orn. v. vii. p. 60.

*Totanus macularius*, BONAP. Syn. p. 325.

Spotted Tatler or Peet-weet, NUTT. Man. v. ii. p. 162.

Spotted Sandpiper, *Totanus macularius*, AUD. Orn. Biog. v. iv. p. 81.

### 344. 2. *Totanus solitarius*, WILS. Solitary Tatler.—Solitary Sandpiper.

PLATE CCLXXXIX. Male and Female.

Bill a little longer than the head, very slender, greenish-black; feet greenish-grey, long; upper part of head, lores, cheeks, hind part and sides of neck greyish-brown, streaked with brownish-white; a dull white line from the bill to the eye; upper part of throat greyish-white; fore neck of the same colour, streaked with greyish-brown; the rest of the lower parts white; the axillars and wing-coverts broadly barred with dusky; back and scapulars deep greenish-brown, the feathers edged with a few small spots of white and dusky, those of the inner secondaries more numerous; larger wing-coverts similar; smaller coverts, primary coverts, and primaries, deep brownish-black, secondaries greyish-brown; tail feathers and coverts broadly banded with white and brownish-black, except the two middle, which are merely spotted with white on the edges.

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*Male*, 8  $\frac{1}{2}$  , 16  $\frac{1}{2}$  .

Distributed from Texas over the United States, breeding in deep woody situations, in the Fur

Countries on the bare sand. Columbia River. Partially migratory.

Solitary Sandpiper, *Tringa solitaria*, WILS. Amer. Orn. v. vii. p. 53.

*Totanus chloropygius*, BONAP. Syn. p. 325.

*Totanus chloropygius*, Green rump Tatler, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 393.

Green-rump Tatler, *Totanus chloropygius*, AUD. Orn. Biog. v. iii. p. 576; v. v. p. 583.

### 345. 3. *Totanus flavipes*, LATH. Yellowshanks Tatler.—Yellowshanks Snipe.

PLATE CCLXXXVIII. Male.

Bill a fourth longer than the head, black; feet long, bright yellow; upper part of the head, lores, cheeks, hind part and sides of the neck deep brownish-grey, streaked with greyish-white; a white line from the bill to the eye; fore neck greyish-white, streaked with greyish-brown, as are the sides; the rest of the lower parts white; the lower tail-coverts slightly marked with grey, the axillars and loral wing-coverts banded or spotted with the same; back and scapulars olivaceous brown, tinged with grey, the feathers edged with small dusky and white spots; wing-coverts and inner secondary quills similar, the marginal spots on the latter forming bands; primary quills blackish-brown, the shaft of the outer brownish-white, of the rest dark brown, the edges of the inner, and of the middle secondaries white; hind part of back brownish-grey; rump white, upper tail-coverts and tail barred with greyish-brown and white.

*Male*, 10  $\frac{3}{4}$  , 20.

From Texas to Maine, in autumn and spring. Very abundant at the same seasons throughout the interior. Breeds in the Fur Countries, up to the highest northern latitudes.

Yellowshanks Snipe, *Scolopax flavipes*, WILS. Amer. Orn. v. vii. p. 55.

*Totanus flavipes*, BONAP. Syn. p. 324.

*Totanus flavipes*, Yellowshanks Tatler, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 390.

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Yellowshanks Tatler, NUTT. Man. v. ii. p. 152.

Yellowshank, *Totanus flavipes*, AUD. Orn. Biog. v. iii. p. 573; v. v. p. 586.

### 346. 4. *Totanus vociferus*, WILS. Tell-tale Tatler.—Tell-tale Godwit or Snipe. Greater Yellowshanks. Long-shanks. Humility. Clou-Clou.

PLATE CCCVIII. Male and Female in winter.

Bill about half longer than the head, black, at the base bluish-grey; legs long, bright yellow. Upper part of head, lores, cheeks, and neck all round, excepting the throat, streaked with brownish-black, on a white ground, tinged with grey on the head and hind neck; breast, and abdomen, white; almost entirely spotted and barred with brownish-black, as are the sides and tail-coverts, together with the axillar feathers and lower wing-coverts; the lower surface of the primaries light grey, their shafts white; upper parts black, glossed with green, and variegated with white, each feather being margined with triangular spots of that colour; hind part of rump and upper tail-coverts white, barred with dusky; anterior small. Wing-coverts, alula, primary coverts, and primary quills, brownish-black, without spots, shaft of first primary white, of the rest brown; tail-feathers white, with numerous bands of dark greyish-brown, the middle six feathers more or less of a light brownish-grey toward the end, the bars not extending over their central part. In winter, the upper parts much paler, the lower having the greater part of the breast and abdomen pure white.

*Male*, 14, 24  $\frac{3}{4}$  . *Female*, 13  $\frac{3}{4}$  , 25  $\frac{1}{2}$  .

Abundant during autumn, winter, and spring, from Texas along the Atlantic, and throughout the interior to Labrador. Few breed in the Jerseys; most from Labrador northward.

Tell-tale Godwit or Snipe, *Scolopax vociferus*, WILS. Amer. Orn. v. vii. p. 57.

*Totanus melanoleucus*, BONAP. Syn. p. 324.

*Totanus vociferus*, Tell-tale, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 389.

Tell-tale or Greater Yellowshanks, NUTT. Man. v. ii. p. 148.

Tell-tale Godwit, *Totanus melanoleucus*, AUD. Orn. Biog. v. iv. p. 68.

### 347. 5. *Totanus Glottis*, LINN. Greenshank Tatler.

PLATE CCLXIX. Male.

Bill nearly one-half longer than the head, dusky green; legs long dull greyish-green; all the lower parts, and the back, excepting a small portion anteriorly, pure white; the fore part of head

and cheeks also white; loral band with small oblong spots of greyish-brown, sides of lower part of fore neck and a portion of the breast faintly undulated with grey; upper part of head, hind part and sides of neck, greyish-white, lineated with greyish-brown; scapulars and inner secondaries greyish-brown, edged with greyish-white, and lined or mottled with dark brown towards the margins; smaller wing-coverts plain brown, the larger darker near the edge, and margined with whitish, as are the outer secondaries; primary quills and coverts dark brown, the shaft of the outer white; tail greyish-white, undulated with light brown, the outer four feathers on each side with only a series of spots on the outer edge, which on the outermost feathers is almost obliterated.

*Male*, 11, wing, 7.

Only three procured on Sand Key, Florida.

*Scolopax Glottis*, LINN. Syst. Nat. v. i. p. 245.

Greenshank, NUTT. Man. v. ii. p. 68.

Greenshank, Totanus Glottis, AUD. Orn. Biog. v. iii. p. 483.

### 348. 5. *Totanus semipalmatus*, LATH. Semipalmated Tatler.—Willet. Stone Curlew.

PLATE CCLXXIV. Fig. 1. Male in spring. Fig. 2. Female in winter.

Bill nearly a half longer than the head, rather stout, light blue, dusky toward the end; feet long, rather stout, light blue, the basal membranes large. In summer, the head and neck brownish-grey, streaked with blackish-brown; throat and a band from the bill over the eye white; fore part of back and scapulars brownish-grey, variegated with central marks of blackish-brown; third part of back brownish-grey with a gloss of olive; wing-coverts grey, with central lines of brownish-black; primary coverts and primary quills brownish-black, the latter white in their basal half; outer secondaries white, inner like the scapulars; lower wing-coverts and axillar feathers blackish-brown; breast and sides white, the latter transversely undulated with brownish-black; abdomen, and lower and upper tail-coverts white, with a few dusky bars; four middle tail-feathers barred with brownish-black and brownish-grey, the rest pale grey, fading to white on the outer, and all more or less minutely undulated with pale brownish-grey.

*Male*, 15  $\frac{1}{2}$ , 27  $\frac{3}{4}$ . *Female*, 15  $\frac{1}{2}$ , 31.

Breeds abundantly in Texas, and along the Atlantic shores to New York, sparingly as far as Massachusetts. Constant resident in the Southern States. Rare in the interior.

Semipalmated Snipe, *Scolopax semipalmata*, WILS. Amer. Orn. v. vii. p. 27.

*Totanus semipalmatus*, Semipalmated Tatler, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 388.

Semipalmated Snipe or Willet, NUTT. Man. v. ii. p. 144.

Semipalmated Snipe or Willet, *Totanus semipalmatus*, AUD. Orn. Biog. v. iii. p. 510; v. p. 585.

## GENUS V. LIMOSA, BRISS. GODWIT.

Bill very long, slender, subcylindrical, tapering to an obtuse point, slightly recurved; upper mandible with the dorsal line slightly curved upwards, the ridge convex, the sides with a narrow groove extending almost to the point, the edges rather obtuse, the tip very slightly enlarged; lower mandible with the angle very long and extremely narrow, the sides with a narrow groove extending almost to the end, the edges blunt, the tip obtuse. Nostrils basal, linear, nearer the edge. Head small, oblong; neck rather long, slender; body slender. Feet long and slender; tibia bare for about a third, anteriorly scutellate; tarsus long, slender, scutellate before and behind; toes small, slender, scutellate above; anterior connected by webs at the base, first very small. Claws small, compressed, slightly arched, obtuse. Plumage soft and blended. Wings rather long, narrow, very acute; primaries tapering, the first longest, the inner secondaries elongated. Tail short, even, of twelve narrow rounded feathers.

### 349. 1. *Limosa Fedoa*, LINN. Great Marbled Godwit.

PLATE CCXXXVIII. Male and Female.

Bill dull flesh-colour at the base, blackish-brown toward the end; feet bluish-grey; head and neck light yellowish-grey, streaked with dusky; the rest of the upper parts spotted and barred with brownish-black and greyish-yellow; alula and primary coverts brownish-black, as are the outer webs of the first three quills, those of the other primaries, and both webs of the secondaries, reddish-ochre, all more or less finely mottled with dusky, and the primaries of that colour towards the end, but with the terminal margins whitish; the inner secondaries barred like the back, as are the tail-feathers; breast, abdomen, and lower surface of wings, light reddish-



yellow, the axillar feather of a deeper tint, the sides faintly barred with dusky.

*Male*, 16  $\frac{1}{2}$ , 28  $\frac{1}{2}$ . *Female*, 20  $\frac{1}{2}$ .

Passes in spring from Texas along the coast, in immense flocks, to Massachusetts, and apparently across the land, to the Saskatchewan, where it breeds. None seen in Labrador. A few breed in South Carolina, perhaps also in Texas. Not observed in the Western Country. In autumn returns southward beyond the limits of the United States.

Great Marbled Godwit, *Scolopax Fedoa*, WILS. Amer. Orn. v. vii. p. 30.

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*Limosa Fedoa*, BONAP. Syn. p. 328.

*Limosa Fedoa*, Great Marbled Godwit, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 395.

Great Marbled Godwit, NUTT. Man. v. ii. p. 173.

Great Marbled Godwit, *Limosa Fedoa*, AUD. Orn. Biog. v. iii. p. 287; v. v. p. 590.

### 350. 2. *Limosa Hudsonica*, LATH. Hudsonian Godwit.

PLATE CCLVIII. Adult, Male, and Young Female.

Bill greyish-yellow, dark brown along the ridge of the upper mandible, and blackish toward the tips of both; feet light greyish-blue; head and neck brownish-grey, with darker lines; a band from the bill over the eye, and the throat, greyish-white; back deep grey, the scapulars brownish-black, with small white markings on the edges of the feathers; smaller wing-coverts, alula, primary quills, and their coverts brownish-black; secondaries lighter, and with their inner webs pale grey; tips of primary coverts and bases of quills white, as is a broad band over the rump; tail-feathers and upper tail-coverts brownish-black, their bases white; lower parts bright yellowish-red, the sides mottled with dark brown; abdomen and lower tail-coverts paler and variegated with dusky; lower wing-coverts blackish-brown, edged with whitish. Young in winter with the lower parts pale brownish-grey, the upper brownish-grey, the fore part of the back and scapular brownish-black, the feathers edged with light brownish-red, wing-coverts brownish-grey.

*Male*, 15  $\frac{3}{4}$ , 28. *Female*, 16  $\frac{3}{4}$ , 29.

Rather rare along the Atlantic Districts in spring and autumn. Breeds in the barren grounds of the Arctic seas in great numbers. Migratory.

*Scolopax hudsonica*, LATH. Ind. Orn. v. ii. p. 720.

*Limosa hudsonica*, Hudsonian Godwit, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 396.

Hudsonian Godwit, NUTT. Man. v. ii. p. 175.

Hudsonian Godwit, *Limosa hudsonica*, AUD. Orn. Biog. v. iii. p. 426; v. v. p. 592.

## GENUS VI. SCOLOPAX, LINN. SNIPE.

Bill twice as long as the head; subulate, straight, compressed for half its length, depressed toward the end; upper mandible with the dorsal line declinate at the base, then straight, at the end slightly arched, that part being considerably enlarged, the ridge convex, towards the end flattened, the sides with a narrow groove extending to near the tip, the edges soft and obtuse or flattened, the tip narrowed, but blunt; lower mandible with the angle extremely long and narrow, the sides erect, with a longitudinal groove, the edges flattened, and directly meeting those of the upper mandible, the extremity enlarged, the tip contracted and rather blunt. Nostrils basal, linear, very small. Head rather small, oblong, the forehead elevated and rounded; neck rather short; body rather full. Legs of moderate length, slender; tibia bare below; tarsus scutellate before and behind; toes very slender, free, scutellate; first toe very small and elevated, lateral toes nearly equal, the outer connected with the third by a basal web. Claws small, slightly arched, compressed, rather acute. Plumage very soft, rather dense. Wings long, narrow, pointed; the first quill longest; inner secondaries much elongated. Tail moderate, nearly even.

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### 351. 1. *Scolopax Wilsonii*, TEMM. Wilson's Snipe.—Common Snipe. English Snipe.

PLATE CCXLIII. Male and Female.

Tail of sixteen feathers; upper part of head with two brownish-black longitudinal broad bands, separated by a narrower central pale brown band; another band of the latter colour on each side over the eye, then a loreal band of dark brown; chin whitish; neck pale reddish-brown, spotted with brownish-black; general colour of upper parts brownish-black, variegated with pale reddish-brown, of which latter colour are the outer edges of the scapulars and of the lateral feathers on the anterior part of the back; wing-coverts and inner secondaries similarly mottled, the smaller anterior coverts, primary coverts, primary quills, and outer secondaries, deep brown, more or less tipped with white; first quill with the outer web brownish-white, rump barred with yellowish-

grey and dusky; upper tail-coverts similar, but the larger barred with brownish-red and black; tail-feathers brownish-black at the base, with a broad subterminal band of brownish-red on the outer web of the two middle, and on both webs of the rest, excepting the outer on each side, which is barred with brownish-black and white, the black bars five, the tips of all white; anterior part of breast like the neck, the rest white; abdomen and lower tail-coverts greyish-yellow, barred with brownish-black, as are the sides; axillars white, barred with greyish-black, lower wing-coverts similarly marked.

MALE, 10  $\frac{1}{2}$ , 17.

Distributed throughout the country. Breeds from Virginia northwards. Exceedingly abundant in the Southern and Western Districts during winter.

Scolopax Wilsonii, BONAP. Syn. p. 330.

Snipe, Scolopax Gallinago, WILS. Amer. Orn. v. vi. p. 18.

Scolopax Wilsonii, Wilson's Snipe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 401.

Wilson's Snipe, NUTT. Man. v. ii. p. 185.

American Snipe, Scolopax Wilsonii, AUD. Orn. Biog. v. iii. p. 322; v. v. p. 583.

### 352. 2. *Scolopax Drummondii*, SWAINS. **Drummond's Snipe.**

Not figured.

"Dorsal plumage and wings mostly brownish-black; the top of the head, scapulars, interscapulars, intermediate coverts, posterior greater ones, and tertiaries, reflecting green and mottled, or barred with yellowish-brown; this colour also forming stripes from the forehead to the nape, over the eyes to the sides of the neck, and more broadly on the exterior edges of the scapulars and interscapulars; middle dorsal plumage and first quill fringed with white, and most of the wing-coverts and lesser quills tipped with the same. Shafts of the primaries deep brown, an inch of the first near its point whitish. Rump and tail-coverts rich greenish-black, with reddish-orange or ferruginous ends, crossed by a blackish subterminal line, and tipped with white; the three exterior pairs barred externally with clove-brown and brownish-white, the white tips broader; the two intermediate pairs coloured nearly like the middle ones, but partly barred and tipped with white. Under plumage, a dark brown stripe on the lores, another under the ear; sides of the head, front of the neck, and breast pale wood-brown, with central spots of dark amber; the flanks, insides of the wings, and under tail-coverts barred with black and white, which on the latter is tinged with brown; belly white; bill blackish towards its tip, dark wood-brown at the base. Length 11  $\frac{1}{2}$ , wing 5  $\frac{3}{8}$ .

"Fur Countries to Lat. 55°. Rocky Mountains."

Scolopax Drummondii, Drummond's Snipe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 400.

Drummond's Snipe, Scolopax Drummondii, AUD. Orn. Biog. v. v. p. 319.

### 353. 3. *Scolopax noveboracensis*, GMEL. **Red-breasted Snipe.**

PLATE CCCXXXV. Adult in summer and winter.

Tail of twelve feathers; bill dark olive; feet light yellowish-olive. In summer, the upper parts brownish-black, variegated with light brownish-red, the feathers being margined and the scapulars obliquely barred with that colour; hind part of back, upper tail-coverts, and tail-feathers light buff or white, barred with black, the bars on the tail seven or eight, and its tip white; wing-coverts and secondaries greyish-brown, margined with greyish-white; secondary coverts tipped with white, the quills tipped and obliquely banded with the same; alula, primary coverts, and quills brownish-black, the shaft of the first quill white; from the base of the bill to the eye, and surrounding it, a dull reddish-white band; loreal space dusky; all the lower parts dull orange-red, with streaks and spots of black, more numerous along the sides and on the tail-coverts. In winter, the upper parts of a nearly uniform brownish-grey, the hind part of the back and tail barred as in summer, head and neck all round ash-grey, streaked with dusky, the rest of the lower parts greyish-white, the sides barred with dusky.

Adult, 10  $\frac{1}{4}$ , 18  $\frac{1}{2}$ .

Passes in immense numbers from Texas eastward and northward to the highest latitudes, where it breeds, and returns in autumn. Occasionally seen in groups through the interior. Columbia River.

Red-breasted Snipe, *Scolopax noveboracensis*, WILS. Amer. Orn. v. vii. p. 48.

*Scolopax grisea*, BONAP. Syn. p. 330.

*Scolopax noveboracensis*, New York Godwit, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 398.

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Brown or Red-breasted Snipe, NUTT. Man. v. ii. p. 181.

Red-breasted Snipe, Scolopax noveboracensis, AUD. Orn. Biog. v. iv. p. 285.

## GENUS VII. MICROPTERA, NUTT. BOGSUCKER.

Bill double the length of the head, straight, slender, tapering, subtrigonal, and deeper than broad at the base, slightly depressed towards the end; upper mandible with the ridge narrow, towards the end flattened, the sides with a narrow groove extending to near the tip, the tip blunt, knob-like, and longer than that of the lower. Head rather large, oblong; eyes large, and placed high; neck short; body full. Feet rather short; tibia feathered to the joint; tarsus rather short, compressed, scutellate; first toe very small, the third much longer than the tarsus. Claws very small, arched, acute. Wings short, rounded, the fourth and fifth quills longest, the first three extraordinarily attenuated. Tail very short, cuneate, of twelve feathers.

### 354. 1. *Microptera Americana*, AUD. Common Bog-sucker.—American Woodcock.

PLATE CCLXVIII. Male, Female, and Young.

Bill and feet flesh-coloured; forehead yellowish-grey, with a few dark mottlings in the centre; on the upper part of the head two broad blackish-brown transverse bands, and on the occiput two narrower, separated by bands of light red; a brownish-black loreal band, and a narrow irregular line of the same across the cheek, and continued to the occiput; upper parts variegated with brownish-black, light yellowish-red, and ash-grey; inner wing-coverts and secondary quills similarly barred, the outer pale greyish-red, faintly barred with dusky; quills brown, tipped with dull grey, secondaries spotted on the outer web with dull red; upper tail-coverts barred; tail-feathers brownish-black, their tips grey, their outer edges mottled with reddish; sides of the neck grey, tinged with red; lower part in general light red, tinged with grey on the breast, on the sides and lower wing-coverts deeper; lower tail-coverts with a central dusky line, the tip white. Young with a longitudinal black band on the head.

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*Male*, 11, 16. *Female*, 11  $\frac{7}{12}$ , 17  $\frac{1}{4}$ .

Distributed throughout the country. Extremely abundant in the Middle and Eastern Districts, as well as in the interior, where it breeds, as far as Nova Scotia. Equally abundant in winter in the Southern States, though many migrate southward.

*Scolopax minor*, GMEL. Syst. Nat. v. i. p. 661.

Woodcock, *Scolopax minor*, WILS. Amer. Orn. v. vi. p. 40.

*Scolopax minor*, BONAP. Syn. p. 331.

Lesser Woodcock, NUTT. Man. v. ii. p. 194.

American Woodcock, *Scolopax minor*, AUD. Orn. Biog. v. iii. p. 474.

## GENUS VIII. RECURVIROSTRA, LINN. AVOCET.

Bill twice the length of the head, very slender, much depressed, tapering to a point, and slightly recurved; upper mandible with the dorsal line straight for half its length, then a little curved upwards, and at the tip slightly decurved, the ridge broad and flattened, the edges rather thick; nasal groove rather long and very narrow; lower mandible with the angle long and very narrow, the dorsal line slightly curved upwards, the point very slender, extremely thin, and a little curved upwards. Nostrils linear, basal. Head small, rounded above, rather compressed; neck long; body compact. Legs very long, slender; tibia bare for half its length, and reticulated; tarsus very long, compressed, reticulated with hexagonal scales; toes rather short, the first extremely small; outer toe a little longer than inner; anterior toes connected by webs of which the anterior margin is deeply concave. Claws very small, compressed, rather acute. Plumage soft and blended. Wings long, pointed, the first quill longest; inner secondaries elongated and tapering. Tail short, even, of twelve rather narrow rounded feathers. Tongue short in proportion to the length of the bill, slender, tapering to a point; oesophagus wide, considerably dilated at the lower part of the neck; stomach an oblong gizzard of moderate strength, its epithelium hard, longitudinally rugous; intestine long and of moderate width; cæca rather long.

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### 355. 1. *Recurvirostra Americana*, LINN. American Avocet.

PLATE CCCXVIII. Adult, and Young in winter.

Bill black; feet light blue; head, neck, and fore part of breast reddish-buff, the parts around the base of the bill and the eye nearly white; back white, with a longitudinal band of brownish-black elongated feathers on each side; inner scapulars of the same colour, the outer and interior edge of the wing being white; wing brownish-black, with a broad band of white, formed by the

tips of the secondary coverts, four of the inner secondaries, and the basal part, with the inner webs and outer edges of the rest; lower parts white.

*Male*, 18, 30  $\frac{5}{8}$ .

Passes along the coast from Texas northward, in small numbers, a few breeding in New Jersey. Indiana, Illinois, and Missouri. Abundant in the Rocky Mountains, and the Fur Countries. Migratory.

American Avocet, *Recurvirostra Americana*, WILS. Amer. Orn. v. vii. p. 126.

*Recurvirostra Americana*, BONAP. Syn. p. 394.

*Recurvirostra Americana*, American Avocet, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 375.

American Avocet, NUTT. Man. v. ii. p. 74.

American Avocet, *Recurvirostra Americana*, AUD. Orn. Biog. v. iv. p. 168.

## GENUS IX. HIMANTOPUS, BRISS. STILT.

Bill about twice as long as the head, very slender, roundish, tapering, slightly recurved; upper mandible with its outline slightly curved upwards, the ridge rather flattened, the sides convex, the edges inflected, the tip narrow and rather acute; nasal groove nearly half the length of the bill; lower mandible with the angle very long and narrow, the sides grooved as far as the angle. Nostrils linear, direct, subbasal. Head small, ovate, rounded above; neck very long and slender; body rather compact. Legs extremely elongated, slender; tibia bare for more than half its length, covered anteriorly with large curved scutella; tarsus very long, moderately compressed, scutellate before, reticulate on the sides; toes of moderate length, slender; first toe wanting; outer a little longer than inner, anterior toes webbed at the base. Claws small, nearly straight, moderately compressed. Plumage ordinary. Wings very long, of moderate breadth, acute, the first quill longest. Tail short, even, of twelve feathers. [253]

### 356. 1. *Himantopus nigricollis*, VIEILL. Black-necked Stilt.—Lawyer.

PLATE CCCXXVIII. Male.

Bill black; feet lake-coloured; upper part of head, fore part and sides of neck, and all the lower parts, together with the hind part of the back, rump, and tail, white, the middle feathers of the latter tinged with ash-grey; hind neck, fore part of back, scapulars, wings, and lower wing-coverts, bluish-black, glossed with green. Young individuals have only the forehead white, and the back greyish-brown.

*Male*, 14  $\frac{1}{2}$ , 27. *Female*, 14, 25  $\frac{3}{4}$ .

Rather common in Texas during spring. Breeds on different parts of the Atlantic coast, as far as Long Island. A few spend the winter about the mouths of the Mississippi. Migratory.

Long-legged Avocet, *Recurvirostra Himantopus*, WILS. Amer. Orn. v. vii. p. 48.

*Himantopus nigricollis*, BONAP. Syn. p. 322.

Black-necked Stilt, NUTT. Man. v. ii. p. 8.

Black-necked Stilt, *Himantopus nigricollis*, AUD. Orn. Biog. v. iv. p. 247.

## GENUS X. NUMENIUS, BRISS. CURLEW.

Bill very long, slender, subcylindrical, slightly compressed, more or less arcuate or decurved; upper mandible with the ridge broad and flattened at the base, broad and rounded in the rest of its extent, a deep groove running from the nostrils to near the tip, which is decurved, enlarged so as to form an oblong obtuse knob, projecting beyond the point of the lower mandible, the edges rounded; lower mandible similar in its curvature to the upper, its angle extremely narrow, and extending to near the middle, the ridge rounded, the sides with a shallow groove to near the end, the edges directly meeting those of the upper, the tip obtuse. Head rather small, oblong, compressed; neck long; body compact. Feet long; tibia bare below; tarsus scaly above, scutellate for two-thirds; toes rather small, scutellate, first very small, lateral nearly equal. Claws small, compressed, blunted. Wings long, very acute, the first quill longest, some of the inner secondaries greatly elongated. Tail short, much rounded, of twelve rounded feathers. [254]

### 357. 1. *Numenius longirostris*, WILS. Long-billed Curlew.

PLATE CCXXXI. Male and Female.

Bill more than four times the length of the head, nearly straight to the middle, beyond which it

is slightly decurved, deep brown, toward the base dark flesh-coloured; feet light greyish-blue; general ground colour of the plumage light yellowish-red; the head marked with oblong spots; the back with spots and bars of brownish-black; alula and outer web of first four quills deep brown, the rest of the quills of the general colour, barred on both webs with dark brown, as are the tail-feathers; upper part of throat and lower eyelid whitish; neck marked with longitudinal lines of brownish-black; sides barred with the same, as are the lower larger wing-coverts; the rest of the lower parts unspotted, the sides and lower wing-coverts of a richer yellowish-red than the rest. The bill varies from seven to nine inches.

*Male*, 26, 40.

Resident, and breeds in the Texas and on the Islands off South Carolina. Stragglers go far north. Columbia River. Occasionally seen in the interior.

Long-billed Curlew, *Numenius longirostris*, WILS. Amer. Orn. v. viii. p. 23.

*Numenius longirostris*, BONAP. Syn. p. 314.

*Numenius longirostris*, Long-billed Curlew, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 376.

Long-billed Curlew, NUTT. Man. v. ii. p. 94.

Long-billed Curlew, *Numenius longirostris*, AUD. Orn. Biog. v. iii. p. 240; v. v. p. 587.

### **358. 2. *Numenius Hudsonicus*, LATH. Hudsonian Curlew.**

PLATE CCXXXVII. Male.

Bill little more than twice the length of the head, brownish-black, base of lower mandible flesh-coloured; upper part of head deep brown, with a central and two lateral lines of whitish; a brown line from the bill to the eye, and another behind the latter; neck all round pale yellowish-grey, longitudinally streaked with brown, excepting the upper part of the throat, which is greyish-white; upper parts in general blackish-brown, marked with numerous spots of brownish-white, there being several along the margins of each feather; wings and rump somewhat lighter; upper tail-coverts and tail barred with dark brown and olivaceous grey; primaries and their coverts blackish-brown, all with transverse yellowish-grey markings on the inner web, the shaft of the first quill white, of the rest brown; breast and abdomen greyish-white, the sides tinged with cream-colour and barred with greyish-brown.

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*Male*, 18, 33.

Passes from Texas northward, returning in autumn. Abundant in the middle districts at both periods. Breeds at Hudson's Bay, and farther north.

Esquimaux Curlew, *Scolopax borealis*, WILS. Amer. Orn. v. vii. p. 92.

*Numenius hudsonicus*, BONAP. Syn. p. 314.

*Numenius hudsonicus*, Hudsonian Curlew, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 377.

Esquimaux Curlew, *Numenius hudsonicus*, NUTT. Man. v. ii. p. 97.

Hudsonian Curlew, *Numenius hudsonicus*, AUD. Orn. Biog. v. iii. p. 283; v. v. p. 589.

### **359. 3. *Numenius borealis*, LATH. Esquimaux Curlew.**

PLATE CCVIII. Male and Female.

Bill half as long again as the head, slender, brownish-black, the lower mandible flesh-coloured at the base; upper part of head brownish-black, streaked with pale yellowish-brown, and having an indistinct central and two lateral lines of whitish; upper parts brownish-black, marked with numerous spots of light brownish-yellow, there being several along the margin of each feather; wing-coverts and secondaries of a lighter tint, similarly spotted; alula, primary quills, and coverts, dark brown, the shaft of the first quill white, of the rest brown; inner webs not barred as in *N. Hudsonicus*; tail barred with light greyish-brown and dark brown; sides of head and neck all round pale yellowish-grey, striped with dark brown; breast and sides greyish-yellow, with longitudinal and transverse dark markings; lower wing-coverts and tail-coverts similarly barred, axillars of a rufous buffy tint, regularly banded.

*Male*, 14  $\frac{1}{2}$ , 27  $\frac{3}{8}$ .

Passes in spring from Texas along the coast eastward to the Fur Countries, returning in autumn. Abundant at times in the Middle Atlantic Districts. Rarely seen in the interior. Breeds in the northern barren grounds.

*Numenius borealis*, BONAP. Syn. p. 314.

*Numenius borealis*, Esquimaux Curlew, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 378.

Esquimaux Curlew, *Numenius borealis*, NUTT. Man. v. ii. p. 101.

**FAMILY XXXVII. TANTALINÆ. IBISES.**

Bill very long, arcuate, rather stout at the base, obtuse. Nostrils basal, linear or oblong. Head bare in front, rather large or of moderate size; neck long and slender; body ovate. Legs long and rather stout; tibia bare to a large extent; tarsus reticulate, sometimes scaly in front; toes four, articulated on the same level, the anterior webbed at the base, the first more slender. Claws arched, compressed, rather obtuse. Wings long and very broad, with the second quill longest. Tail short, of twelve feathers. Tongue triangular, extremely short, flat, and thin. Œsophagus wide; stomach large, muscular, broadly elliptical, with the epithelium dense, longitudinally rugous; intestines generally of moderate length and width, cœca very small; cloaca globular. Trachea without inferior laryngeal muscles.

**GENUS I. IBIS, CUV. IBIS.**

Bill very long, slender, higher than broad, compressed, tapering, arched, obtuse; upper mandible with the dorsal line arched in its whole length, the ridge convex, broader towards the end, the sides at the base erect, towards the end very convex and narrow, separated in their whole length from the ridge by a deep narrow groove, the edges inflected and sharp; lower mandible more slender, its angle very narrow, and protracted in the form of a groove to the tip. Nostrils basal, dorsal, linear. Head small, compressed, oblong, bare before the eyes; neck long and slender; body rather slender. Feet very long, slender; tarsi scutellate; anterior toes connected by membranes at the base. Claws rather small, slightly arched, pointed. Wings long, ample, with the second quill longest. Tail short, nearly even, of twelve feathers. Œsophagus wide, like that of a heron; stomach muscular.

**360. 1. Ibis Falcinellus, LINN. Glossy Ibis.**

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PLATE CCCLXXXVII.

Bill black, bare part of head greyish-blue, feet greyish-black; upper part and sides of head dark glossy green, with purplish reflections; neck, part of the back anteriorly, breast, abdomen, and tibiæ, deep rich brownish-red or dark chestnut; part of the breast shaded with green, the sides dusky, tinged with green, as are the lower wing-coverts and lower tail-coverts; except the anterior edge of the wing, and the anterior scapulars, which are deep brownish-red, the upper parts splendid dark green, glossed with purple; primaries black, shaded with green; tail glossy, with purple reflection. Young, in its second plumage, with the head, neck, and lower parts greyish-brown, the head and greater part of the neck marked with small longitudinal streaks of white, of which there are two on each feather; all the upper parts blackish-green, glossy in a less degree than those of the adult.

*Male*, 25, 42; wing, 11  $\frac{1}{4}$ .

Rare or accidental in the Middle Atlantic Districts; more common in South Florida and Texas, where it breeds. Rarely seen far inland. Migratory.

Ibis Falcinellus, BONAP. Syn. p. 312.

Bay or Glossy Ibis, NUTT. Man. v. ii. p. 88.

Glossy Ibis, Ibis Falcinellus, AUD. Orn. Biog. v. iv. p. 608.

**361. 2. Ibis rubra, LINN. Scarlet Ibis.**

PLATE CCCXCVII. Adult Male and Young.

Bill, feet, and bare parts of head, pale lake; plumage bright scarlet, excepting the quills, which are white, and the terminal portion of the outer four primaries, which are bluish-black. Young in first plumage with the bill and feet brownish-grey, the bare parts of the head pale flesh-colour; plumage of head, neck, and upper parts, brownish-grey, of lower, white.

*Adult*, 29; wing, 11  $\frac{1}{4}$ .

Accidental. Three specimens seen by me in Louisiana.

Scarlet Ibis, Tantalus ruber, WILS. Amer. Orn. v. viii. p. 41.

Ibis rubra, BONAP. Syn. p. 311.

Scarlet Ibis, NUTT. Man. v. ii. p. 84.

Scarlet Ibis, Ibis rubra, AUD. Orn. Biog. v. v. p. 62.

**362. 3. Ibis alba, LINN. White Ibis.**

Bill and bare parts of the head light orange-red, feet paler; plumage pure white, excepting the ends of from three to five of the outer primaries, which are deep black, glossed with blue and green. Young with the bill greyish-yellow, the feet leaden-coloured, the plumage dull brown all over, excepting the rump, which is whitish, and the tail, which is tinged with grey. Young after first moult with the bill pale yellow, the feet pale blue; the plumage dull olivaceous brown, the quills dark, the tail lighter, the hind part of the back white, as are the breast and abdomen.

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*Adult*, 24  $\frac{1}{2}$ , 40.

Constant resident in South Florida, where it is abundant. Breeds along the coast to Texas, westward, and occasionally as far as New Jersey eastward, inland as far up the Mississippi as Natchez and Red River. Returns to the Floridas in autumn.

White Ibis, *Tantalus albus*, WILS. Amer. Orn. v. viii. p. 43.

Ibis alba, BONAP. Syn. p. 312.

White Ibis, NUTT. Man. v. ii. p. 86.

White Ibis, Ibis alba, AUD. Orn. Biog. v. iii. p. 173; v. v. p. 593.

## GENUS II. TANTALUS, LINN. TANTALUS.

Bill long, stout, at the base as wide as the face, deeper than broad, compressed, tapering towards the end, which is decurved; upper mandible with the ridge rather broad and flattened at the base, narrowed at the middle, convex towards the end, the sides sloping at the base, convex toward the end, the edges inflected and sharp, the tip declinate, rounded, with a notch on each side; nostrils basal, close to the ridge, direct, oblong; lower mandible with the angle rather wide, with a bare dilatible membrane, the edges erect and sharp, the tip blunted. Head of ordinary size, and with part of the hind neck bare and scurfy. Feet very long, like those of the Herons; tibia and tarsus reticulate; hind toe rather large, third longest; claws small, arched, that of the third toe not serrate. Wings long, ample, with the third quill longest. Tail of twelve broad rounded feathers.

### 363. 1. *Tantalus Loculator*, LINN. Wood Ibis.

PLATE CCXVI. Male.

Head all round, and hind neck half-way down, destitute of feathers, the skin wrinkled and covered with irregular scurfy scales; bill dusky yellowish-brown, sides of head dark bluish-purple, upper part of head horn-colour; legs indigo-blue; toes yellowish, with the scutella black; plumage white, tinged with yellow; alula, primary coverts, primary and secondary quills, excepting the inner, and tail, black, with green and purplish-blue reflections. Young dusky grey all over, the quills and tail brown and black, the head covered with down.

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*Male*, 44  $\frac{1}{2}$ , 62; bill, 9.

Resident from Texas to North Carolina, in deep woody swamps; or fresh-water lakes, not on the sea-shores; breeds on trees in swamps; moves in large flocks. Up the Mississippi to Natchez. Abundant in Florida and Lower Louisiana.

Wood Ibis, *Tantalus Loculator*, WILS. Amer. Orn. v. viii. p. 39.

*Tantalus Loculator*, BONAP. Syn. p. 310.

Wood Ibis, NUTT. Man. v. ii. p. 82.

Wood Ibis, *Tantalus Loculator*, AUD. Orn. Biog. v. iii. p. 128.

## GENUS III. PLATALEA, LINN. SPOONBILL.

Bill very long, excessively depressed, being, when viewed laterally, very slender; but, when seen from above, nearly as broad as the head at the base, considerably contracted in the middle, and at the end expanded into a large obovate disk much broader than the head; upper mandible with the dorsal line almost straight, at the tip decurved, the ridge extremely broad and flat, gradually widening beyond the nostrils, at the end terminated by the very small, decurved, blunt unguis, the sides declinate at the base, horizontally flattened towards the end, separated in their whole length from the ridge by a narrow groove, their margins soft and blunt; lower mandible with the angle very long, narrow, rounded, the coma narrow, and gradually flattened, the extremity expanded into a flattened disk, as in the upper; both mandibles covered with soft skin, which, for half their length, is rough, with roundish plates, having their anterior margin somewhat prominent. Nostrils basal, oblong-linear, of moderate size. Head of moderate size, flattened above; neck long and slender; body compact, ovate; legs long and rather stout; tibia

bare in its lower half, and reticulate; tarsus rather long, stout, roundish, covered all round with subhexagonal scales; toes rather long, moderately stout, scutellate, at the base reticulate; first more slender, articulated at the same level, second considerably shorter than third. Claws moderate, arched, compressed, laterally grooved, rather obtuse. Head, gular sac, and a small part of neck, destitute of feathers. Wings long and very broad, the second quill longest. Tail short, even, of twelve rather broad feathers. Tongue extremely small, broader than long; gular sac dilatable; œsophagus wide, with a dilatation at the lower part of the neck; proventriculus bulbiform; stomach a powerful gizzard, roundish, with large muscular fasciculi not disposed into distinct muscles, the epithelium very thick, longitudinally fissured; intestine very long, of moderate width; cœca two slight knobs.

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### **364. 1. Platalea Ajaja, LINN. Roseate Spoonbill.**

PLATE CCCXXI. Male.

Bill greyish-blue, at the base mottled with dusky; feet pale lake; head yellowish-green; space around the eye and gular sac orpiment-orange; a band of black from the lower mandible to the occiput; feathers of the neck white; back and wings rose-coloured; lower parts of a deeper colour; tuft of recurved feathers on fore neck, a broad band across the wing, along the cubitus, and the upper and lower tail-coverts, rich carmine, with silky lustre; shafts of quills and scapulars light carmine; on each side of the lower part of the neck a patch of pale ochre; tail-feathers ochre-yellow, but at the base roseate.

*Male*, 30  $\frac{3}{4}$ , 53. *Female*, 28, 48.

Constant resident in the Texas, South Florida, and as far eastward as North Carolina, where it is however very rare. Occasionally in summer up the Mississippi to Natchez. Breeds in flocks on trees, low bushes, or cactuses.

Roseate Spoonbill, *Platalea Ajaja*, WILS. Amer. Orn. v. vii. p. 123.

*Platalea Ajaja*, BONAP. Syn. p. 346.

Roseate Spoonbill, NUTT. Man. v. ii. p. 79.

Roseate Spoonbill, *Platalea Ajaja*, AUD. Orn. Biog. v. iv. p. 188.

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## **FAMILY XXXVIII. ARDEINÆ. HERONS.**

Bill longer than the head, stout, tapering, compressed, pointed, its edges often irregularly serrate. Head oblong, compressed; neck very long; body much compressed. Eyes large or moderate. Nostrils basal, linear, longitudinal. Legs long, rather slender; tibia bare to a great extent; tarsus compressed, anteriorly scutellate; toes rather long, the first on the same place, of moderate size, the outer toe a little longer than the inner, and with a slight web at the base; all compressed and scutellate. Claws rather long, arched, compressed, acute, that of the hind toe larger and more curved. Plumage blended. Wings long, very broad, with the outer four quills longest, secondaries very long. Tail very short, nearly even, of twelve rather weak feathers. Œsophagus very wide, without dilatation; stomach small, very thin, with the inner coat soft and smooth; intestine very long and extremely narrow; no cœcal appendages, but the large intestine forming a small sac at its commencement; cloaca very large, globular. Trachea simple, generally cylindrical, with the bronchi wide, and a single pair of slender inferior laryngeal muscles. Nests large, flat, widely constructed, placed on trees, bushes, sometimes on the ground; eggs from three to four, oval, light blue. Young remain in the nest until fledged.

### **GENUS I. ARDEA, LINN. HERON.**

\* Night Herons. Bill slightly longer than the head, stout, tapering, compressed, with the upper outline somewhat curved; legs of moderate length, bare part of tibia short; neck thick; body full; feathers of the neck elongated and curved backwards.

### **365. 1. Ardea Nycticorax, LINN. Black-crowned Night Heron.—Qua-Bird.**

PLATE CCXXXVI. Adult and Young.

Male with the feathers of the upper and hind part of the head elongated and loose, three or four very long linear, incurved occipital feathers, not present in winter; upper part of the head and back glossy blackish-green; anterior part of forehead and elongated occipital feathers white; neck anteriorly yellowish-white, on the sides and behind shaded into pale lilac, the lower elongated feathers tinged with cream-colour; breast and abdomen white; wings, rump, and tail light greenish-blue, tinged with lilac. Female similar. Young, when fledged, with the upper parts pale purplish-brown, streaked and spotted with yellowish-white; lower parts yellowish-white, streaked with light purplish-brown. Young after first moult purplish-brown, tinged with grey above, brownish-white beneath, the upper part of the head dull greenish-black.

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Resident in the Floridas and Texas, where it breeds. Migrates in spring eastward as far as Maine, up the Mississippi to Memphis. Occurs one hundred miles inland. Rather common. Returns southward early in autumn.

Night Heron or Qua-Bird, *Ardea Nycticorax*, WILS. Amer. Orn. v. vii. p. 3.

*Ardea Nycticorax*, BONAP. Syn. p. 306.

Qua-Bird or American Night Heron, *Ardea discors*, NUTT. Man. v. ii. p. 54.

Night Heron, *Ardea Nycticorax*, AUD. Orn. Biog. v. iii. p. 275; v. v. p. 600.

### 366. 2. *Ardea violacea*, LINN. Yellow-crowned Night Heron.

PLATE CCCXXXVI. Male and Young.

Male with the feathers on the upper part of the head lanceolate and acuminate, those on the occiput very long and linear; between the scapulæ two longitudinal series of very elongated feathers with loose margins, the longest extending far beyond the tail; occipital and dorsal plumes not present in winter; head and throat greenish-black, crown and band on each side below the eye white, the former tinged with reddish-yellow; general colours light greyish-blue; the feathers of the fore part of the back and wings with their central parts bluish-black, margined with bluish-white; quills and tail dark greyish-blue; edge of wings white. Female similar. Young in its first plumage dark greyish-white, beneath dull yellowish-white, streaked with dark brown.

*Adult*, 23  $\frac{1}{2}$ , 43  $\frac{1}{2}$ . *Young* in October 23  $\frac{1}{2}$ , 40.

A few spend the winter in Florida. Migrates in spring as far as New Jersey, up the Mississippi to Natchez. Never goes far inland. Not very abundant. Migratory.

Yellow-crowned Heron, *Ardea violacea*, WILS. Amer. Orn. v. viii. p. 26.

*Ardea violacea*, BONAP. Syn. p. 306.

White-crowned Heron, NUTT. Man. v. ii. p. 52.

Yellow-crowned Heron, *Ardea violacea*, AUD. Orn. Biog. v. iv. p. 290.

\*\* Bitterns. Bill considerably longer than the head, stout, tapering, compressed, with the upper outline slightly curved; legs of moderate length, bare part of tibia short; neck thick; body exceedingly compressed; feathers of the neck elongated and curved backwards. Trachea and bronchi wider.

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### 367. 3. *Ardea lentiginosa*, SWAINS. American Bittern.

PLATE CCCXXXVII. Male and Female.

Feathers of the head and occiput elongated and loose; tail of ten feathers; bill and feet dull yellowish-green; upper part of head brownish-grey; a streak of pale buff on the eye; cheek and an oblique band to the middle of the neck light brownish-yellow, beneath which a dusky brown band from the base of the lower mandible, continuous with a gradually enlarged band of black running along the sides of the neck; upper parts yellowish-brown, patched, mottled, freckled, and barred with dark-brown; most of the quills deep greyish-blue, tipped with light reddish-brown; fore part of neck white above, yellowish-white beneath, the throat with a middle longitudinal line of yellowish-brown spots; on the rest of the neck each feather with a light brown central mark edged with darker; the rest of the lower parts dull yellowish-white, most of the feathers marked like those on the neck. Female similar, but with the upper part of the head reddish-brown.

*Male*, 27, 45. *Female*, 26  $\frac{1}{2}$ , 42  $\frac{1}{2}$ .

Winter resident in the Floridas. Migrates over most part of the United States. Not seen in Kentucky. Abundant in Texas. Migratory.

American Bittern, *Ardea minor*, WILS. Amer. Orn. v. vii. p. 35.

*Ardea minor*, BONAP. Syn. p. 307.

American Bittern, *Ardea lentiginosa*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 374.

American Bittern, NUTT. Man. v. ii. p. 60.

American Bittern, *Ardea minor*, AUD. Orn. Biog. v. iv. p. 296.

### 368. 4. *Ardea exilis*, WILS. Least Bittern.

PLATE CCX. Male, Female, and Young.

Bill rather slender; feathers on the crown and occiput somewhat elongated and loose. Male

with the upper part of the head, back, and tail, glossy greenish-black, some of the lateral feathers edged with white; sides of head and hind part of neck light chestnut; wing-coverts brownish-yellow; quills purplish-grey, tipped with yellowish-brown, inner secondaries broadly margined with light chestnut, of which colour also are the secondary coverts and edge of the wing at the flexure; throat and fore neck reddish-white, with a series of reddish-brown spots; fore part of breast, under the elongated feathers, blackish-brown; the rest of the lower parts reddish-white; tibia reddish-brown in front. Female smaller, with the colours duller, the upper part of the head inclining to brown. Young with the upper parts light brownish-red, variegated with brownish-yellow; primary quills and tail black.

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*Male*, 13  $\frac{1}{2}$ , 17  $\frac{3}{4}$ . *Female*, 12, wing 14  $\frac{3}{4}$ .

Resident in Florida. Migrates in spring eastward as far as Maine, and throughout the Western Country, far up the Missouri. Retires southward in winter. Texas.

Least Bittern, *Ardea exilis*, WILS. Amer. Orn. v. viii. p. 37.

*Ardea exilis*, BONAP. Syn. p. 308.

Least Bittern, *Ardea exilis*, NUTT. Man. v. ii. p. 66.

Least Bittern, *Ardea exilis*, AUD. Orn. Biog. v. iii. p. 77; v. v. p. 606.

### 369. 5. *Ardea virescens*, LINN. Green Heron.

PLATE CCCXXXIII. Male and Young.

Bill rather slender; feathers of the crown and occiput elongated, of the fore part of the back much elongated and acuminate. Upper part of the head and nape glossy deep green; neck purplish-red behind, with an anterior longitudinal band of white, spotted with dusky brown; elongated feathers of the back greyish-green, changing to bluish-grey, with the shafts bluish-white; scapulars, wing-coverts, and inner secondaries deep glossy green, bordered with yellowish-white; primaries and outer secondaries greyish-blue tinged with green; hind part of back and tail deep green; lower parts pale purplish tinged with yellow; lower tail-coverts greyish-white. Young in first plumage without the elongated feathers on the back, otherwise similar, but with the wing-coverts tipped with a triangular white spot, the lower parts chiefly white with brown streaks.

*Male*, 17  $\frac{3}{4}$ , 27. *Female*, 17, 25.

Resident in the Floridas and along the Gulf of Mexico to Texas. In spring and summer disperses over the whole country as far as Maine, and up the Missouri. Returns southward at the approach of winter. Very common.

Green Heron, *Ardea virescens*, WILS. Amer. Orn. v. viii. p. 97.

*Ardea virescens*, BONAP. Syn. p. 307.

Green Heron, NUTT. Man. v. ii. p. 63.

Green Heron, *Ardea virescens*, AUD. Orn. Biog. v. iv. p. 274.

\*\*\* Bill much longer than the head, with its outline scarcely curved; legs very long, tibiae bare to a great extent; feathers of the lower fore neck very long and tapering. *Ardea* and *Egretta* of authors.

### 370. 6. *Ardea occidentalis*, AUD. Great White Heron.

PLATE CCLXXXI. Male.

Bill, tibiae, and hind part of tarsi yellow; anterior part of the latter and toes dull green; feathers of the head elongated, lanceolate, and loose, of the back not much elongated; plumage entirely pure white.

*Male*, 54, 83. *Female*, 50, 75.

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Resident in the Southern Florida Keys. Texas. Never seen to the eastward of Cape Florida, nor on the mainland. Common.

Great White Heron, *Ardea occidentalis*, AUD. Orn. Biog. v. iii. p. 542; v. v. p. 596.

### 371. 7. *Ardea Herodias*, LINN. Great Blue Heron.

PLATE CCXI. Male.

Bill dusky green above, yellow beneath; feet dull green, paler behind; feathers of the head long, tapering, decurved, two of them extremely elongated; very long, tapering, pointed feathers from the anterior part of the back; forehead pure white, the rest of the crest feathers bluish-black; throat white, neck pale purplish-brown, the elongated feathers beneath greyish-white, with

part of the inner webs purplish-blue, forming a longitudinal band; upper parts light greyish-blue, the elongated tips of the dorsal feathers greyish-white; edge of the wing, some feathers at the base of the fore neck, and the tibial feathers, brownish-orange; two tufts of large curved feathers on the fore part of the breast bluish-black, some of them with a central stripe of white; lower surface of wings and sides light greyish-blue; elongated feathers of breast, white, their inner edge black, of the abdomen chiefly black; lower tail-coverts white, some of them with an oblique mark of black near the tip. Young in first plumage without the elongated dorsal feathers, the colours duller and tinged with brown; upper part of head streaked with white, as is the breast.

*Male*, 48, 72.

Resident from Texas to South Carolina. In spring migrates over the United States, and along the Atlantic coast to the Gulf of St Lawrence. Breeds everywhere. Retires southward in autumn. Common.

Great Heron, *Ardea Herodias*, WILS. Amer. Orn. v. vii. p. 106.

*Ardea Herodias*, BONAP. Syn. p. 304.

Great Heron, *Ardea Herodias*, NUTT. Man. v. ii. p. 42.

Great Blue Heron, *Ardea Herodias*, AUD. Orn. Biog. v. iii. p. 87; v. v. p. 599.

### **372. 8. *Ardea Egretta*, GMEL. Great American White Egret.**

PLATE CCCLXXXVI. Male.

Feathers of the head scarcely elongated, those of the fore part of the back extremely long, slightly decurved, with loose filaments, and extending about ten inches beyond the tail; bill yellow; feet black; plumage pure white. Young white, the elongated feathers not fully developed until the second year, bill greenish-black.

*Male*, 37, 57.

Resident in Florida, and Galveston Bay in Texas. Migrates in spring sometimes as far as Massachusetts; up the Mississippi, to Natchez, Breeds in all intermediate districts. Returns south before winter. Very Abundant.

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*Ardea Egretta*, GMEL. Syst. Nat. v. i. p. 629.

Great White Heron, *Ardea Egretta*, WILS. Amer. Orn. v. vii. p. 106.

*Ardea alba*, BONAP. Syn. p. 304.

*Ardea Egretta*, WAGLER, Syst. Av.

Great White Heron, NUTT. Man. v. ii. p. 47.

Great American Egret, *Ardea Egretta*, AUD. Orn. Biog. v. iv. p. 600.

### **373. 9. *Ardea rufescens*, GMEL. Reddish Egret.**

PLATE CCLVI. Adult and Young.

Feathers of the upper and hind part of the head and of the neck generally, much elongated, very narrow, loose, with linear-acuminate compact tips; of the back extremely long, slightly recurved, with loose filaments, and extending several inches beyond the tail; bill pale flesh-colour, with the terminal third black; feet ultramarine blue, the scutella bluish-black; plumage of the head and neck light reddish-brown; back and wings greyish-blue; long train-feathers yellowish toward the end; lower parts greyish-blue, paler than the upper. Young with the plumage white, the feet dusky green, the soles yellow.

*Male*, 31, 46.

Resident on the Florida Keys, and in Galveston Bay. Never seen inland. Extremely abundant.

*Ardea rufescens*, GMEL. Syst. Nat. v. i. p. 628.

Peale's Egret Heron, *Ardea Pealii*, BONAP. Amer. Orn. v. iv. p. 96. Young.

Peak's Egret, *Nutt.* Man. v. ii. p. 49. Young.

Reddish Egret, *Ardea rufescens*, AUD. Orn. Biog. v. iii. p. 411; v. v. p. 604.

### **374. 10. *Ardea cœrulea*, LINN. Blue Heron.**

PLATE CCCVII. Male and Young.

Feathers of the upper and hind part of the head very long and linear; of the middle of the back extremely long, linear-acuminate, compact, their tips extending about five inches beyond the tail; bill blue; feet black; plumage of head and neck vinaceous purple, of the other parts deep greyish-blue. Young with the plumage white, becoming patched with blue as they advance in age.

*Male*, 24  $\frac{1}{2}$ , 42.

Resident in Florida and Texas, where it breeds. In spring migrates as far as Long Island; up the Mississippi to a hundred miles above Natchez. Never seen far inland.

Blue Heron, *Ardea cœrulea*, WILS. Amer. Orn. v. vii. p. 117.

*Ardea cœrulea*, BONAP. Syn. p. 300.

Blue Heron, NUTT. Man. v. ii. p. 58.

Blue Heron, *Ardea cœrulea*, AUD. Orn. Biog. v. iv. p. 58.

### 375. 11. *Ardea Ludoviciana*, WILS. Louisiana Heron.

PLATE CCXVII. Male.

Feathers of the upper and hind part of the head elongated, tapering, curved, about six of them larger and much longer; of the back extremely elongated, with loose threadlike filaments, extending beyond the tail; bill brownish-black above, yellow beneath; feet light greenish-yellow, with the scutella dusky; general colour of upper parts light purplish-blue; elongated feathers of head and neck above, reddish-purple, as are those of the lower part of the neck; six longest feathers of head white; elongated loose feathers of back dull purplish-yellow; throat white, its lower part chestnut; a line of white down the fore neck; rump and lower parts pure white, except the anterior feathers of the breast, which have their inner webs dusky blue. Young with the neck and fore part of the back light brownish-red; throat and lower parts white, as is the hind part of the back; quills, larger wing-coverts and tail light purplish-blue. Plumage and colouring completed at the end of the second year.

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*Male*, 27, 37.

Resident in the Floridas and Texas, where it is abundant. Migrates eastward to New Jersey, where it is rare; up the Mississippi to Natchez. Never seen far inland.

Louisiana Heron, *Ardea Ludoviciana*, WILS. Amer. Orn. v. viii. p. 13.

*Ardea Ludoviciana*, BONAP. Syn. p. 305.

Louisiana Heron, NUTT. Man. v. ii. p. 51.

Louisiana Heron, *Ardea Ludoviciana*, AUD. Orn. Biog. v. iii. p. 136; v. v. p. 605.

### 376. 12. *Ardea candidissima*, GMEL. Snowy Heron.

PLATE CCXLII. Male.

Feathers of the upper and hind part of the head very long, loose, decurved; of the middle of the back very long, loose, decurved, with their extremities recurved; bill and legs black; toes yellow. Plumage pure white. Young white, with the legs and toes dull green.

*Male*, 22  $\frac{1}{2}$ , 38.

Resident from Texas to Florida. Migrates in spring as far as Massachusetts. Breeds in all intermediate districts; up the Mississippi to Memphis. Abundant.

Snowy Heron, *Ardea candidissima*, WILS. Amer. Orn. v. vii. p. 120.

*Ardea candidissima*, BONAP. Syn. p. 305.

Snowy Heron, *Ardea candidissima*, NUTT. Man. v. ii. p. 49.

Snowy Heron, *Ardea candidissima*, AUD. Orn. Biog. v. iii. p. 317; v. v. p. 606.

## FAMILY XXXIX. ANATINÆ. DUCKS.

Bill of moderate length, stout, straight, depressed toward the end, obtuse, covered with soft skin; upper mandible transversely convex, with the margins internally lamellate, the tip furnished with a decurved horny broad unguis; lower mandible with the angle long and narrow, the crura slender, flattened, the edges internally lamellate, the tip a flattened unguis. Nostrils elliptical, open, subbasal. Head of moderate size; neck long or of moderate length, slender; body full; legs generally short, stout, with little of the tibia bare; tarsus scutellate; toes four, first small; anterior three palmate. Claws moderate, arched, compressed, obtuse. Plumage very full, dense, soft. Wings of moderate length, curved, acute, outer two quills longest. Tail short, of twelve or more feathers. Tongue fleshy, with a median groove, lateral reversed papillæ, laminæ, or bristles, and a semicircular thin horny tip; œsophagus narrow, slightly enlarged at the lower part of the neck; stomach a transversely elliptical gizzard, of which the lateral muscles are excessively developed, the epithelium dense, with two concave grinding surfaces; intestine long and wide; cœca long, cylindrical, contracted at the base. Trachea various, generally much enlarged at the bifurcation,

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without inferior laryngeal muscles, or only with the slips of the lateral muscles prolonged. Nest generally on the ground; eggs numerous. Young clothed with stiffish down, and able to walk and swim from birth.

## GENUS I. PHŒNICOPTERUS, LINN. FLAMINGO.

Bill more than double the length of the head, straight and higher than broad for half its length, then deflected, and tapering to an obtuse point; upper mandible with its dorsal line at first straight, then convex, and again straight nearly to the end, when it becomes convex at the tip, the ridge broad and concave, on the deflected part expanded into a lanceolate plate, having a shallow groove in the middle, and separated from the edges by a narrow groove, its extremity narrow and thin edged, but obtuse, this part being analogous to the unguis of ducks; lower mandible narrower than the upper at its base, but much broader in the rest of its extent; its angle rather long, wide, and filled with bare skin; its dorsal line concave, but at the tip convex, the ridge deeply depressed, there being a wide channel in its place, the sides nearly erect and a little convex, with six ridges on each side toward the tip. Both mandibles internally lamellate, the edge of the lower much incurved. Nostrils linear, direct, and subbasal, operculate. Head small, ovate; neck extremely elongated, and very slender; body slender; legs extremely long; tibia bare for more than half its length, and with the long tarsus anteriorly scutellate; hind toe very small and elevated; anterior toes connected by emarginate webs, scutellate above, tessellate beneath. Claws oblong, obtuse, depressed. Space between the bill and the eye bare; plumage compact; wings long, very broad, pointed; second quill longest; some of the secondaries extremely elongated, so as to extend far beyond the primaries when the wing is closed. Tail very short. Tongue confined by the lower mandible, fleshy, compressed, decurved, with recurved conical papillæ; œsophagus extremely narrow, but at the lower part of the neck enlarged into a crop; proventriculus elliptical; stomach a very muscular, transversely elliptical gizzard, exactly resembling that of a goose or duck, with the epithelium dense, and longitudinally sulcate; intestine very long, and of considerable width; cœca rather long; cloaca globular.

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### 377. 1. *Phœnicopterus ruber*, LINN. American Flamingo.

PLATE CCCCXXXI. Male.

Bill yellow tinged with bright orange, at the end black; feet lake; plumage scarlet, excepting the ten primaries, and twenty of the secondaries, which are black.

*Male*, 45  $\frac{1}{2}$ , 66.

Rather rare, and only during summer in the Florida Keys, and the western coast of Florida. Accidental as far as South Carolina. Constantly resident in Cuba.

Red Flamingo, *Phœnicopterus ruber*, WILS. Amer. Orn. v. viii. p. 145.

*Phœnicopterus ruber*, BONAP. Syn. p. 348.

American or Red Flamingo, NUTT. Man. v. ii. p. 71.

American Flamingo, *Phœnicopterus ruber*, AUD. Orn. Biog. v. v. p. 255.

## GENUS II. ANSER, BRISS. GOOSE.

Bill shorter than the head, rather higher than broad at the base, somewhat conical, depressed toward the end, rounded at the tip; upper mandible with the dorsal line sloping, the ridge broad and flattened, the sides sloping, the edges soft and obtuse, internally with numerous oblique marginal lamellæ, the unguis obovate, convex; nasal groove oblong, filled by the soft membrane of the bill; nostrils medial, lateral, longitudinal, narrow-elliptical, open, pervious, lower mandible straight, with the angle very long, narrow, and rounded, the edges soft and obtuse, with numerous oblique lamellæ, the tip broadly convex. Head small, oblong, compressed; neck long and slender; body very full, slightly depressed. Feet short, stout; tibia bare for a short space below; tarsus short, a little compressed, covered all round with angular scales; hind toe very small and elevated, third toe longest, fourth longer than second; all reticulated at the base, scutellate toward the end, the anterior webbed. Claws small, arched, rather compressed. Plumage close, compact above, blended beneath. Wings long, convex, the second quill longest, the first and third nearly equal. Tail very short, of sixteen or more feathers.

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### 378. 1. *Anser Canadensis*, LINN. Canada Goose.

PLATE CCI. Male and Female.

Tail of eighteen feathers; bill, feet, and claws black, head and two upper thirds of neck glossy black; forehead, cheeks, and chin, tinged with brown; lower eyelid white; a broad band of white across the throat to behind the eye; rump and tail-feathers black; general colour of the rest of upper parts greyish-brown, wing-coverts shaded into ash-grey, all the feathers terminally edged with very pale brown; lower part of neck passing to greyish-white, which is the general colour of

the lower parts, unless in old birds where it is buff, with the exception of the abdomen, which is pure white, the sides, which are pale brownish-grey, the feathers tipped with white, and the lower wing-coverts, which are also pale brownish-grey; margins of rump and upper tail-coverts pure white. Female with the tints somewhat duller.

*Male*, 43, 65. *Female*, 41.

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Breeds sparingly from the Mississippi to Nova Scotia; abundantly in Labrador, and farther north. In the interior, on the Missouri, and across to the Columbia River. Abundant. Migrates far south in winter.

Canada Goose, *Anas canadensis*, WILS. Amer. Orn. v. viii. p. 52.

*Anser canadensis*, BONAP. Syn. p. 377.

*Anser canadensis*, Canada Goose, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 468.

Canada Goose, NUTT. Man. v. ii. p. 349.

Canada Goose. *Anser canadensis*, AUD. Orn. Biog. v. iii. p. 1; v. v. p. 607.

### **379. 2. *Anser Hutchinsii*, RICHARDSON. Hutchins's Goose.**

PLATE CCLXXVII. Adult.

Tail of sixteen feathers; bill, feet, and claws black; head and two upper thirds of neck glossy black; a large subtriangular patch of white on each side of the head and neck; general colour of the upper parts brownish-grey, the feathers margined with paler, of the lower parts pale greyish-brown, margined with yellowish-grey; abdomen and lower tail-coverts white; hind part of back brownish-black; primary quills and tail-feathers deep brown.

*Adult*, 25, 50.

From New Jersey to Maine, during winter. Breeds in the Arctic Regions. Columbia River. Abundant.

*Anser Hutchinsii*, Hutchins's Bernacle Goose, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 470.

Hutchins's Goose, *Anser Hutchinsii*, AUD. Orn. Biog. v. iii. p. 526.

### **380. 3. *Anser leucopsis*, BECHST. Bernacle Goose.**

PLATE CCXCVI. Male and Female.

Tail very short, rounded, of sixteen feathers; bill, feet, and claws black; anterior parts of head, including a broad space above the eye, the sides of the head and the throat, white; feathers margining the bill, and a line from the bill to the eye, curving beneath the lower eyelid, and running along the upper, brownish-black; neck all round glossy bluish-black, of which colour are the anterior feathers; the scapulars, and the wing-coverts, towards their extremities, while the bases are ash-grey, and their terminal margins white; rump and tail-feathers deep black; quills greyish-black, darker towards the tips, the outer webs more or less tinged with ash-grey; upper and lower tail-coverts, and sides of rump, pure white.

*Male*, 27, 56. *Female*, 23  $\frac{1}{2}$ , 52.

Accidental in North America.

*Anser leucopsis*, BONAP. Syn. p. 377.

Bernacle Goose, NUTT. Man. v. ii. p. 355.

Bernacle Goose, *Anser leucopsis*, AUD. Orn. Biog. v. iii. p. 609.

### **381. 4. *Anser Bernicla*, LINN. Brent Goose.**

PLATE CCCXCI. Male and Female.

Tail of sixteen feathers, rounded; bill and feet black; head and neck all round black, glossed with blue; a small streak under the eye, a spot on the chin, and patch on each side of the neck, white; general colour of upper parts brownish-grey, the feathers margined with light greyish-brown; quills and primary coverts greyish-black; upper tail-coverts white; tail greyish-black; fore part of breast light brownish-grey, the feathers terminally margined with greyish-white; abdomen and lower tail-coverts white; sides grey, the feathers broadly tipped with white; axillar feathers and lower wing-coverts grey.

*Male*, 24  $\frac{1}{2}$ , 48. *Female*, 23, 44  $\frac{1}{2}$ .

Abundant along the coast of the Atlantic, from Maine to Maryland, during winter. Never seen far inland. Breeds from Labrador northward. Columbia River.

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Brant, *Anas Bernicla*, WILS. Amer. Orn. v. viii. p. 131.

Anser *Bernicla*, BONAP. Syn. p. 378.

Anser *Bernicla*, Brent Goose, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 469.

Brant or Brent Goose, NUTT. Man. v. ii. p. 358.

Brent Goose, Anser *Bernicla*, AUD. Orn. Biog. v. v. pp. 24, 610.

### 382. 5. *Anser albifrons*, BECHST. White-fronted Goose.

PLATE CCLXXXVI. Male and Female.

Tail of sixteen feathers, rounded; bill carmine-red, with the unguis white; feet orange, claws white; head and neck greyish-brown; a white band, margined behind with blackish-brown on the anterior part of the forehead along the bill; general colour of back deep grey, the feathers of its fore part broadly tipped with greyish-brown, the rest with greyish-white; hind part of back deep grey; wings greyish-brown, toward the edge ash-grey, as are the primary coverts, and outer webs of the primaries; the rest of the primaries and secondaries greyish-black, the latter with a narrow edge of greyish-white, the former edged and tipped with white; breast, abdomen, lower tail-coverts, sides of rump, and upper tail-coverts, white; the breast and sides patched with brownish-black, on the latter intermixed with greyish-brown feathers.

*Male*, 27  $\frac{1}{4}$ , 60.

Through the interior of the Western and Southern States during winter, as well as along the coast, from Massachusetts to Texas. Columbia River. Breeds in the far north.

*Anser albifrons*, BONAP. Syn. p. 376.

*Anser albifrons*, Laughing Goose, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 456.

White-fronted Goose, NUTT. Man. v. ii. p. 346.

White-fronted Goose, *Anser albifrons*, AUD. Orn. Biog. v. iii. p. 568.

### 383. 6. *Anser hyperboreus*, GMEL. Snow-Goose.

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PLATE CCCLXXXI. Adult Male and Young Female.

Bill and feet carmine, unguis white, claws dusky; plumage pure white, fore part of head tinged with yellowish-red; primaries brownish-grey, toward the end blackish-brown, their shafts white, unless toward the end. Young in its second plumage, with the bill yellow, or flesh-coloured, the feet lake; head and upper part of neck, with the wing-coverts, greyish-white; lower part of neck all round, fore part of back, scapulars, fore part of breast and sides blackish-grey; hind part of back and upper tail-coverts, ash-grey; quills greyish-black, secondaries margined with greyish-white; tail-feathers dusky grey, margined with greyish-white; breast and abdomen greyish-white.

*Male*, 31  $\frac{3}{4}$ , 62. *Female*, 26, 55.

Western and Southern States, in autumn and winter. Breeds in the Arctic Regions. Abundant.

Snow Goose, *Anas hyperborea*, WILS. Amer. Orn. v. viii. p. 76.

*Anser hyperboreus*, BONAP. Syn. p. 376.

Snow Goose, NUTT. Man. p. 344.

*Anser hyperboreus*, Snow Goose, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 467.

Snow Goose, *Anser hyperboreus*, AUD. Orn. Biog. v. iv. p. 562.

## GENUS III. CYGNUS, MEYER. SWAN.

Bill longer than the head, higher than broad at the base, depressed, and a little widened toward the end, rounded; upper mandible with the dorsal line sloping, the ridge very broad at the base, with a large depression; narrowed between the nostrils, convex toward the end, the sides nearly erect at the base, gradually becoming more horizontal and convex toward the end, the sides soft and thin, with numerous transverse little elevated internal lamellæ, the unguis obovate; nasal groove elliptical, subbasal, covered by the soft membrane of the bill; lower mandible flattened, with the angle very long, and rather narrow, the sides convex, the edges with numerous transverse lamellæ. Nostrils submedial, longitudinal, placed near the ridge, elliptical. Head of moderate size, oblong, compressed; neck extremely long and slender; body very large, compact, depressed. Feet short, stout, placed a little behind the centre of the body; tibia bare for a very small space; tarsus short, a little compressed, covered all round with angular scales; hind toe extremely small, with a very narrow membrane; third longest, fourth very little shorter; anterior toes covered with angular scales for nearly half their length, then scutellate, and connected by broad reticulated entire membranes. Claws rather small, strong, arched,

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compressed, rather obtuse. Space between the bill and eye bare; plumage dense and soft. Wings long, broad; primaries curved, stiff, the second longest. Tail very short, graduated, of twenty or more feathers. Œsophagus very slender, at the lower part of the neck a little dilated; stomach transversely elliptical, with the lateral muscles extremely large, the epithelium dense, with two concave grinding surfaces; intestine long, and of moderate width; cœca rather large, narrow; cloaca globular. Trachea generally enters a cavity in the sternum, whence it is reflected, before it passes into the thorax; no inferior laryngeal muscles.

### **384. 1. Cygnus Buccinator, RICHARDSON. Trumpeter Swan.**

PLATE CCCCVI. Adult Male. PLATE CCCLXXVI. Young after first moult.

Tail-feathers twenty-four; bill and feet black; plumage pure white, excepting the upper part of the head, which is often brownish-red. Young after first moult with the bill flesh-coloured in the middle, the feet dull yellowish-brown; upper part of head and cheeks bright reddish-brown, each feather tipped with whitish; throat nearly white; general colour of the other parts greyish-white, slightly tinged with yellow.

*Adult*, 68; wing, 27. *Young*, 52 ½, 91.

Breeds from North California northward. Fur Countries. Abundant during winter on the Missouri, Mississippi, Ohio, and in Texas. Never seen eastward of South Carolina.

Cygnus Buccinator, Richardson's Trumpeter Swan, F. Bor. Amer. v. ii. p. 464.

Trumpeter Swan, Cygnus Buccinator, NUTT. Man. v. ii. p. 370.

Trumpeter Swan, Cygnus Buccinator, AUD. Orn. Biog. v. iv. p. 536; v. v. p. 114.

### **385. 2. Cygnus Americanus, SHARPLESS. American Swan.**

PLATE CCCCXI. Male.

Tail feathers twenty; bill and feet black, the former with a small orange spot on each side at the base; plumage pure white. Young grey. [275]

*Male*, 53, 84.

Common during winter in the Middle Atlantic Districts, especially on Chesapeake Bay. Not seen south of Carolina. Columbia River. Breeds in the Fur Countries.

American Wild Swan, Cygnus americanus, SHARPLESS, Amer. Journ. of Sc. and Arts, v. xxii.

American Swan, Cygnus americanus, AUD. Orn. Biog. v. v. p. 133.

## **GENUS IV. ANAS, LINN. DUCK.**

Bill about the length of the head, somewhat higher than broad at the base, depressed and widened towards the end, rounded at the tip; upper mandible with the dorsal line sloping, and a little concave, the ridge at the base broad and flat, towards the end broadly convex, as are the sides, the edges soft and rather obtuse, the marginal lamellæ numerous, oblique; unguis decurved, obovate; nasal groove elliptical, subbasal, filled by the soft membrane of the bill; lower mandible flattened, slightly recurvate, with the angle very long and narrow, the unguis roundish, the lamellæ numerous. Nostrils subbasal, elliptical, near the ridge. Head of moderate size, oblong, compressed; neck rather long and slender; body full, depressed. Feet short, stout, placed a little behind the centre of the body; tibia bare a little above the joint; tarsus short, somewhat compressed, anteriorly with small scutella, laterally and behind with angular scales; hind toe extremely small, with a very narrow membrane; third toe longest, fourth a little shorter, but longer than second; all covered with numerous oblique scutella; anterior connected by reticulated membranes. Claws small, arched, compressed, rather acute. Plumage dense, soft. Wings of moderate length, acute; second quill longest, first very little shorter; inner secondaries elongated and tapering; tail short, much rounded, of sixteen feathers. Œsophagus rather narrow, dilated on the lower part of the neck; stomach an extremely muscular, transversely elliptical gizzard; intestine long and rather wide; cœca long. Trachea of the males, with a transverse bony unsymmetrical dilatation at the inferior larynx. [276]

### **386. 1. Anas Borchas, LINN. Mallard.**

PLATE CCXXI. Male and Female.

Male with the feathers of the head and neck short, blended, and splendent; tail much rounded, of sixteen acute feathers, of which the four central are recurved; bill greenish-yellow, feet orange-red; head and upper part of neck deep green; about the middle of the neck a white ring; its lower part anteriorly, and the fore part of the breast, dark brownish-chestnut; fore part of back light yellowish-brown, rest of the back brownish-black, the rump black, splendent with



green and purplish-blue, as are the recurved tail-feathers; upper surface of wings greyish-brown, scapulars lighter, except their inner webs, and with the anterior dorsal feathers, minutely undulated with brown, speculum on about ten of the secondaries purple and green, edged with velvet-black and white, the anterior bands of these colours being on the secondary coverts; breast, sides, and abdomen very pale grey, minutely undulated with darker; lower tail-coverts black. Female with the bill black in the middle, dull orange at the extremities and along the edges; upper parts pale yellowish, streaked and spotted with dusky; feathers of the head narrowly streaked, of the back with the margins and a central streak yellowish-brown, the rest dark, the scapulars similar, but with the light streak on the outer web; speculum as in the male, but with less green; lower parts dull ochre, deeper on the lower neck, faintly streaked and spotted with brown.

*Male, 24, 36. Female, 22.*

Breeds from Texas sparingly throughout the United States. Columbia River, and Fur Countries. Abundant during winter in all the Southern Districts. Not found in Maine, or farther eastward.

Mallard, *Anas Borchas*, WILS. Amer. Orn. v. viii. p. 112.

*Anas Borchas*, BONAP. Syn. p. 383.

*Anas (Borchas) domestica*, MALLARD, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 442.

Mallard Duck, *Anas domestica*, NUTT. Man. v. ii. p. 378.

Mallard, *Anas Borchas*, AUD. Orn. Biog. v. iii. p. 164.

### **387. 2. *Anas obscura*, GMEL. Dusky Duck.**

PLATE CCCII. Male and Female.

Tail much rounded, of eighteen acute feathers, none of which are recurved; bill yellowish-green; feet orange-red, the webs dusky; upper part of head glossy brownish-black, the feathers margined with light brown; sides of head and a band over the eye light greyish-brown, with longitudinal dusky streaks; general colour blackish-brown, a little paler beneath, all the feathers margined with pale reddish-brown; wing-coverts greyish-dusky, with a faint tinge of green; ends of secondary coverts velvet black; primaries and their coverts blackish-brown; secondaries darker; speculum green, blue, violet, or amethyst-purple, bounded by velvet-black, the feathers also tipped with a narrow line of white; under surface of wing and axillaries white. Female more brown, with the speculum similar, but without the white terminal line.

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*Male, 24 ½, 38 ½. Female, 22, 34 ¼.*

Breeds in Texas, westward, and throughout the United States, British Provinces, and Labrador. Columbia River. Common in autumn and spring along the Middle Atlantic Districts. Abundant in the Southern and Western States, in winter.

Dusky Duck, *Anas obscura*, WILS. Amer. Orn. v. viii. p. 141.

*Anas obscura*, BONAP. Syn. p. 384.

Dusky Duck, *Anas obscura*, NUTT. Man. v. ii. p. 392.

Dusky Duck, *Anas obscura*, AUD. Orn. Biog. v. iv. p. 15.

### **388. 3. *Anas Breweri*, AUD. Brewer's Duck.**

PLATE CCCXXXVIII. Male.

Very nearly allied to the Mallard, but with the bill narrower, no recurved feathers in the tail, and the feet dull yellow; the speculum more green without white bands, and a large patch of light red on the side of the head; bill dull yellow, dusky along the ridge; head and upper part of neck deep glossy green; an elongated patch of pale reddish-yellow from the base of the bill over the cheeks to a considerable way down the neck; a space immediately over and behind the eye light dull purple; a narrow ring of pale yellowish-red on the middle of the neck, of which the lower part is dull brownish-red, the feathers with a transverse band of dusky, and edged with paler; upper parts dull greyish-brown, transversely undulated with dusky; smaller wing-coverts without undulations, but each feather with a dusky bar behind another of light dull yellow; first row of smaller coverts tipped with black; primaries and their coverts light brownish-grey; some of the outer secondaries similar, the next five or six duck-green, the next light grey with a dusky patch toward the end; rump and upper tail-coverts black, as are the parts under the tail, excepting two longitudinal white bands; tail-feathers light brownish-grey, edged with whitish; all the rest of the lower parts greyish-white edged with yellow, beautifully undulated with dusky lines, on the middle of the breast these lines less numerous, and each feather with a reddish-grey central streak.

*Male, 23, 39.*

One specimen procured in Louisiana.

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**389. 4. *Anas strepera*, LINN. Gadwall Duck.—Violon.**

PLATE CCCXLVIII. Male and Female.

Tail short, rounded, of sixteen pointed feathers. Male with the bill bluish-black, the feet dull orange-yellow, the webs dusky; head light yellowish-grey, its upper part and nape much darker and barred with dusky, the rest dotted with the same; lower part of neck, sides of body, fore part of back, and outer scapulars, undulated with dusky and yellowish-white, the bands much larger and semicircular on the fore part of the neck and breast; the latter white; abdomen faintly and minutely undulated with brownish-grey; elongated scapulars brownish-grey, broadly margined with brownish-red; hind part of back brownish-black, rump and upper and lower tail-coverts bluish-black; anterior smaller wing-coverts light grey undulated with dusky, middle coverts deep chestnut-red; primary coverts brownish-grey, outer secondary coverts darker and tinged with chestnut, the rest black, excepting the inner which are grey; primaries and inner elongated secondaries brownish-grey, of which colour also are the inner webs of the rest; part of the outer webs, of five of the outer black, and their terminal margins, white, of which colour are the whole outer webs of the three next to the inner elongated quills; tail brownish-grey, the feathers margined with paler. Female with the bill dusky along the ridge, upper part of head brownish-black, the feathers edged with light reddish-brown; a streak over the eye, the cheeks, the upper part of the neck all round, light yellowish-red tinged with grey, and marked with small longitudinal dusky streaks, which are fainter on the throat, that part being greyish-white; the rest of the neck, the sides, all the upper parts, and the lower rump-feathers brownish-black broadly margined with yellowish-red; wing-coverts brownish-grey, edged with paler; wing with the speculum fainter; tail-feathers and their coverts dusky, laterally obliquely indented with pale brownish-red, and margined with reddish-white.

*Male*, 21  $\frac{3}{4}$ , 35. *Female*, 19  $\frac{1}{4}$ , 31.

Breeds in Texas, and westward to the Columbia River, Fur Countries, and sometimes in the States of New York, Massachusetts, and Maine. Rather common in autumn and spring in the middle Atlantic districts; more so in the Southern and Western States.

Gadwall, *Anas strepera*, WILS. Amer. Orn. v. viii. p. 120.

*Anas strepera*, BONAP. Syn. p. 383.

*Anas* (*Chauliodus*) *strepera*, Gadwall, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 440.

Gadwall or Grey, NUTT. Man. v. ii. p. 383.

Gadwall Duck, *Anas strepera*, AUD. Orn. Biog. v. iv. p. 353.

**390. 5. *Anas Americana*, GMEL. American Widgeon.**

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PLATE CCCXLV. Male and Female.

Tail short, pointed, of sixteen feathers. Male with the bill and feet light greyish-blue; upper part of head white, more or less mottled with dusky on the sides; loreal space and cheeks reddish-white, dotted with greenish-black; a broad band from the eye to behind the occiput deep green; lower part of hind neck, scapulars, and fore part of back, minutely transversely undulated with brownish-black and light brownish-red; the hind part similarly undulated with blackish-brown and greyish-white; smaller wing-coverts brownish-grey; primary quills and coverts dark greyish-brown; secondary coverts white, tipped with black; speculum duck-green, anteriorly bounded by the black tips of the secondary coverts, black behind, internally black with white streaks, the inner elongated secondaries having their outer webs black, margined with white, their inner webs brownish-grey; tail-feathers light brownish-grey; throat brownish-black, lower part of neck in front, and fore part of breast light brownish-red; breast, belly, and sides of rump, white; sides of body finely undulated with white and dusky; rump beneath and lower tail-coverts black. Female similar, with less white on the head, the back duller and less undulated; the wings greyish-brown, the secondary coverts tipped with white, secondary quills brownish-black, inner greyish-brown, all margined with white; tail-feathers greyish-brown, edged with white, lower parts white, except the feathers of the sides and under the tail, which are broadly barred with dusky and light reddish-brown. Perhaps not distinct from *Anas Penelope*.

*Male*, 20  $\frac{1}{2}$ , 34  $\frac{1}{2}$ . *Female*, 18, 30.

Breeds in Texas, and in the Northern Districts. Abundant in the south and west in winter. Columbia River. Middle Atlantic districts in autumn and spring.

American Widgeon, *Anas americana*, WILS. Amer. Orn. v. viii. p. 86.

*Anas americana*, BONAP. Syn. p. 384.

*Mareca americana*, Steph. American Widgeon, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 445.

American Widgeon, *Anas americana*, NUTT. Man. v. ii. p. 389.

American Widgeon, *Anas americana*, AUD. Orn. Biog. v. iv. p. 337.

### 391. 6. *Anas acuta*, LINN. Pintail Duck.

PLATE CCXXVII. Male and Female.

Tail tapering, of fourteen tapering feathers, of which the two middle project far beyond the rest. Male with the bill black, the sides of upper mandible pale blue; feet greyish-blue; head, throat, and upper part of neck anteriorly greenish-brown, faintly margined behind with purplish-red; a small part of hind neck dark green; the rest and the upper part in general beautifully undulated with very narrow bars of brownish-black and yellowish-white, smaller wing-coverts, alula, and primary quills grey, the latter dark brown toward the end; speculum coppery-red, changing to dull green, edged anteriorly with light brownish-red, posteriorly with white; inner secondaries and scapulars black and green with broad grey margins; upper tail-coverts cream-coloured, the outer webs blackish and green; tail light grey, the middle feathers dark brown glossed with green; on each side of the neck an oblique band of white, of which colour are the lower parts in general, but the sides undulated like the back, the lateral feathers of the rump cream-coloured, the lower tail-coverts black, and those at the sides edged with white. Female with the upper parts variegated with brownish-black and light yellowish-brown, the margins of the feathers, and a mark on each side of the shaft being of the latter colour; the speculum dusky green, margined behind with white; primary quills greyish-brown; lower parts light brownish-yellow, sides variegated with brown.

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*Male*, 29, 36. *Female*, 22  $\frac{1}{2}$ , 34.

From Texas, throughout the interior, to the Columbia River, and along the Atlantic coast to Maine, during winter, and early spring. Breeds in the Arctic regions. Abundant.

Pintail Duck, *Anas acuta*, WILS. Amer. Orn. v. viii. p. 72.

*Anas acuta*, BONAP. Syn. p. 383.

*Anas caudacuta*, Pintail Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 441.

Pintail or Winter Duck, *Anas acuta*, NUTT. Man. v. ii. p. 386.

Pintail Duck, *Anas acuta*, AUD. Orn. Biog. v. iii. p. 214; v. v. p. 615.

### 392. 7. *Anas sponsa*, LINN. Wood Duck.—Summer Duck.

PLATE CCVI. Male and Female.

Male with the feathers of the head and upper and hind part of neck elongated and incurved, inner secondaries very broad, tail much rounded, of sixteen feathers; bill bright red at the base, yellow on the sides, ridge and unguis black; feet greenish-yellow; upper part of head and loreal space deep green; below the eye a patch of dark purple, behind it a larger patch of the same colour; sides of neck, its hind part under the crest, and the middle all round, very dark purple; a narrow line along the base of the upper mandible and over the eye, meeting on the occiput, pure white, as are some of the feathers of the crest; another from behind the eye meeting below the occiput, and including several of the lower elongated feathers; throat pure white, with a process on each side a little beyond the eye, and another nearly half-way down the neck; sides of the neck and its lower part anteriorly reddish-purple, each feather on the latter with a triangular white tip; middle of the neck behind, back and rump, very dark reddish-brown, the latter deeper, and tinged with green; upper tail-coverts and tail greenish-black; some of the lateral tail-coverts dull reddish-purple, a few on either side with their central filaments light red; smaller wing-coverts, alula, and primaries dull greyish-brown, most of the latter, with part of the outer web greyish-white, and the inner toward the end darker and glossed with green; secondary quills tipped with white, the outer webs green, with purple reflections, those of the inner secondaries and scapulars velvet-black, their inner webs partially glossed and changing to green; the broad feathers anterior to the wings white, terminated with black; breast and abdomen greyish-white; feathers under the wings yellowish-grey, minutely undulated with black, and tipped with a white and two black bands; lower wing-coverts and axillar feathers white, barred with greyish-brown; lower tail-coverts dull greyish-brown. Female with the bill blackish-brown, the feet dull green; upper part of head dusky glossed with green, sides of head and neck, with hind part of latter, light brownish-grey; throat white, but without the lateral processes; fore part of neck below and sides light yellowish-brown, mottled with dark greyish-brown, as are the sides under the wings; breast and abdomen white, the former spotted with brown; hind neck, back, and rump dark brown, glossed with green and purple; wings as in the male, but the speculum less, and the secondaries externally faint reddish-purple, the velvet-black of the male diminished to a few narrow markings; tail dark brown, glossed with green; lower tail-coverts pale greyish-brown, mottled with white.

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*Male*, 20  $\frac{1}{2}$ , 28. *Female*, 19  $\frac{1}{2}$ .

Breeds throughout the country from Texas to the Columbia, and eastward to Nova Scotia. Fur Countries. Accumulates in the Southern Districts in winter.

Summer Duck or Wood Duck, *Anas sponsa*, SWAINS. & RICH. F. Bor. Amer. v. viii. p. 97.

*Dendronessa sponsa*, Summer Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 446.

Summer or Wood Duck, *Anas sponsa*, NUTT. Man. v. ii. p. 394.

Wood Duck, *Anas sponsa*, AUD. Orn. Biog. v. iii. p. 52; v. v. p. 618.

### 393. 8. *Anas Carolinensis*, STEPH. American Green-winged Teal.

PLATE CCXXVIII. Male and Female.

Male with the feathers of the head and upper part of hind neck elongated; tail short, acuminate, of sixteen feathers; bill black, feet light bluish-grey; head and upper part of neck chestnut-red; a broad band, narrowing backwards, from the eye, down the back of the neck, deep shining green, edged with black below, under which is a whitish line, meeting before the eye another that curves forward and downward to the angle of the mouth; chin brownish-black, as are the feathers at the base of the upper mandible; upper parts and flanks beautifully undulated with brownish-black and white lines; anterior to the wings a short broad transverse band of white; wings brownish-grey; speculum in its lower half velvet-black, the upper bright green, changing to purple, and edged above with black, behind margined with white, before with reddish-white; tail brownish-grey, the feathers margined with paler; upper coverts brownish-black, edged with light yellowish-grey; lower part of neck partly barred as behind, yellowish-white and spotted with black, as is the fore part of the breast; abdomen white, faintly barred with grey; a patch of black under the tail; lateral tail-coverts cream-coloured, the larger black, with broad white margins and tips. Female with the head and neck streaked with dark brown and light red, the fore neck whitish, the upper parts mottled with dark brown, the anterior feathers barred, the posterior margined with yellowish-white; the speculum less extensive; the lower part of fore neck tinged with yellowish-red, and mottled with dark brown, as are the sides; the rest of the lower parts white. This species differs from *Anas Crecca* chiefly in having a white band before the wing, which the European bird has not, while the latter has the greater part of the outer webs of most of the scapulars white, there being none of that colour on those of our bird.

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*Male*, 14  $\frac{3}{4}$ , 24. *Female*, 13  $\frac{3}{4}$ , 22  $\frac{1}{2}$ .

Dispersed throughout the country during autumn and spring. Extremely abundant during winter in all the Southern States and Texas. Breeds sparingly along the Great Lakes, and far north.

Green-winged Teal, *Anas Crecca*, WILS. Amer. Orn. v. viii. p. 101.

*Anas Crecca*, BONAP. Syn. p. 386.

American Teal, *Anas Crecca*, var. NUTT. Man. v. ii. p. 400.

*Anas Crecca*, Green-winged Teal, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 400.

Green-winged Teal, *Anas Crecca*, AUD. Orn. Biog. v. iii. p. 218; v. v. p. 616.

### 394. 9. *Anas discors*, LINN. Blue-winged Teal.

PLATE CCCXIII. Male and Female.

Male with the feathers of the head and hind neck slightly elongated, the tail rounded, acuminate, of fourteen feathers; bill bluish-black; feet dull yellow; upper part of head black; a semilunar white patch on the side of the head before the eye, margined before and behind with black, the rest of the head and the anterior parts of the neck purplish-blue, with purplish-red reflections; lower hind neck and fore part of back brownish-black, glossed with green, each feather with a curved band of pale reddish-buff, and a line or band of the same in the centre, the hind part of the back greenish-brown, the feathers edged with paler; smaller wing-coverts light blue; alula, primary coverts, and primary quills greyish-brown, edged with pale bluish; outer secondaries of the same colour, those of the speculum duck-green, changing to blue and bronze, with a narrow line of white along their terminal margin; the inner greenish-black on the outer web, greenish-brown on the inner, with a central line and narrow external margin of pale reddish-buff; the more elongated scapulars similar, but some of them margined with greenish-blue; secondary coverts greenish-brown, the outer tipped with white, the inner with blue; tail-feathers chocolate-brown, slightly glossed with green, their margin buffy; lower parts pale reddish-orange, shaded on the breast with purplish-red, and thickly spotted with black, the number of spots on each feather varying from eight to twenty-five, those on the upper and hind parts of the sides running into transverse bars; axillar feathers, some of the lower wing-coverts, and a patch on the side of the rump pure white; lower tail-coverts brownish-black. Female with the upper parts blackish-brown, the lower lighter, the feathers edged with greyish-white, the throat and lore whitish; the smaller wing-coverts light blue, but the scapulars without that colour.

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*Male*, 16, 31  $\frac{1}{4}$ . *Female*, 15, 24.

Breeds in Texas and westward. Great Lakes. Fur Countries. Columbia River. Very abundant in

autumn and spring in the Middle Atlantic Districts, as well as in the interior. Abundant also in all the Southern States.

Blue-winged Teal, *Anas discors*, WILS. Amer. Orn. v. viii. p. 74.

*Anas discors*, BONAP. Syn. p. 385.

*Anas discors*, Blue-winged Teal, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 444.

Blue-winged Teal, NUTT. Man. v. ii. p. 397.

Blue-winged Teal, *Anas discors*, AUD. Orn. Biog. v. iv. p. 111.

### 395. 10. *Anas clypeata*, LINN. Shoveller Duck.—Micoine.

PLATE CCCXXVII. Male and Female.

Male with the bill longer than the head, depressed and much widened towards the end, where its breadth is doubled; laminae of the upper mandible very numerous, prolonged beyond the edges and tapering to a point, unless at the commencement of its broadest part; tail rounded, of fourteen acute feathers; bill greyish-black; feet vermilion; head and upper part of neck deep green with purple reflections; a longitudinal band on the hind neck and the back, greyish-brown, the feathers edged with paler; rump and upper tail-coverts greenish-black; anterior scapulars white, posterior light blue on the outer web, longitudinally banded with white and greenish-black on the inner; smaller wing-coverts light blue; alula, primary coverts and quills blackish-brown, their shafts white; outer secondaries greyish-brown, eight of them externally of a rich duck-green, the inner greenish-black, with a longitudinal white streak; secondary coverts broadly tipped with white; tail-feathers greyish-brown, margined with reddish-white; lower part of neck pure white; breast and middle part of abdomen dull purplish-chestnut; a large patch of white on each side of the rump, with a band of the same towards the tail; lower tail-coverts greenish-black; axillaries and lower wing-coverts pure white. Female with the bill much less dilated, and the laminae less elongated; the bill dull green; feathers of the upper parts blackish-brown, edged with light reddish-brown; throat and sides of the head light reddish-brown, which is the prevailing colour over the lower part of the neck, part of the breast, and the sides, of which, however, the feathers are edged with dusky, middle of breast whitish; smaller wing-coverts dull brownish-grey; alula and primaries as in the male; inner secondaries brownish-black, speculum as in the male but paler, and changing to blue.

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*Male*, 20  $\frac{1}{2}$ , 31  $\frac{1}{2}$ . *Female*, 17, 29  $\frac{1}{2}$ .

Breeds abundantly in the Texas, westward to the Columbia, and Fur Countries. During winter from the Middle Atlantic Districts to Texas. Common.

Shoveller, *Anas clypeata*, WILS. Amer. Orn. v. viii. p. 45.

*Anas clypeata*, BONAP. Syn. p. 382.

*Anas clypeata*, Shoveller, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 439.

Shoveller, NUTT. Man. v. ii. p. 383.

Shoveller Duck, *Anas clypeata*, AUD. Orn. Biog. v. iv. p. 241.

## GENUS V. FULIGULA. SEA-DUCK.

Bill about the length of the head or shorter, higher than broad at the base, depressed toward the end, the margins parallel, slightly dilated towards the end, which is rounded, the frontal angles rather pointed; upper mandible with the dorsal line generally declinate, but various at the base, being often prominent, the ridge broad at the base, narrowed at the middle, enlarged and convex at the end, the sides nearly erect at the base, gradually more declinate, the edges soft and internally lamellate, the unguis oblong and decurved; lower mandible flattened, being but slightly convex, with the angle very long and rather narrow, the dorsal line very short and straight, the edges internally lamellate, the unguis flat, obovato-elliptical. Nostrils submedial, linear-oblong, rather large, near the ridge, in an oblong depression covered with the soft membrane of the bill. Head rather large, compressed, convex above; neck of moderate length, rather thick; body full, depressed. Feet very short, strong, placed rather far behind; tarsus very short, compressed, anteriorly with narrow scutella continuous with those of the middle toe, and having another series commencing half-way down and continuous with those of the outer toe; hind toe small, with an inner expanded margin; middle toe nearly double the length of the tarsus, outer a little shorter, all scutellate. Claws small, compressed, that of the first toe very small and curved. Plumage dense, firm, blended. Wings shortish, narrow, pointed, first and second quills longest; inner secondaries elongated and tapering. Tail very short, rounded or cuneate, of fourteen or more feathers. Œsophagus rather wide, considerably dilated at the lower part of the neck; stomach an extremely muscular, roundish gizzard; intestine long and wide; cœca long. Trachea of the males with a transverse, bony, unsymmetrical dilatation at the inferior larynx.

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\* Bill of ordinary length, broad, without enlargements at the base, unguis small,

decurved.

### 396. 1. *Fuligula Valisneriana*, WILS. **Canvass Back Duck.**

PLATE CCCI. Male and Female.

Bill as long as the head; tail much rounded, of fourteen feathers. Male with the bill black; upper part of head and a space along the base of the bill dusky, a small transverse band of white on the chin; the rest of the head and the neck all round for more than half its length, rich brownish-red; a broad belt of brownish-black occupying the lower part of the neck and the fore part of the body; upper parts white, minutely undulated with dark grey or blackish; primary quills brownish-black, tinged with grey towards the base; secondaries ash-grey, toward the end whitish and undulated, five of them also having a narrow strip of black along their outer margin; rump and tail-coverts above and below brownish-black; tail brownish-grey; lower parts white, the sides and abdomen marked with five undulating grey lines. Female with the upper parts greyish-brown, the top of the head darker, the chin whitish, the neck greyish-brown, as are the sides and abdomen; breast white; wing-coverts brownish-grey; primary quills greyish-brown, dusky at the end, secondaries ash-grey, five of the inner with an external black margin; the innermost greyish-brown, like the back, and with some of the scapulars faintly undulated with darker; tail greyish-brown, paler at the end; axillars and smaller under wing-coverts white.

*Male*, 22, 33. *Female*, 20  $\frac{1}{4}$ , 30  $\frac{3}{4}$ .

Abundant during winter from the mouth of the Delaware to New Orleans, in all the estuaries. Columbia River. Breeds on the Rocky Mountains and northward.

Canvass-backed Duck, *Anas valisneria*, WILS. Amer. Orn. v. viii. p. 103.

*Fuligula valisneria*, BONAP. Syn. p. 392.

*Fuligula valisneria*, Canvass-back Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 450.

Canvass-backed Duck, NUTT. Man. v. ii. p. 430.

Canvass-back Duck, *Fuligula valisneriana*, AUD. Orn. Biog. v. iv. p. 1.

### 397. 2. *Fuligula Ferina*, LINN. **Red-headed Duck.—Dos-gris.**

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PLATE CCCXXII. Male and Female.

Bill as long as the head, tail much rounded, of fourteen feathers. Male with the bill light greyish-blue, with a broad band of black at the end, and a dusky patch anterior to the nostrils; head and neck all round, for more than half its length, of a rich brownish-red, glossed with carmine above; a broad belt of brownish-black occupying the lower part of the neck and the fore part of the body; back and scapulars pale greyish-white, being minutely traversed by dark brownish-grey lines; sides and abdomen similar, the undulations gradually fading away into the greyish-white of the middle of the breast; upper wing-coverts brownish-grey, the feathers faintly undulated with whitish toward the end; primary quills brownish-grey, dusky along the outer web and at the end; secondaries ash-grey, narrowly tipped with white, four or five of the inner of a purer tint tinged with blue, and having a narrow brownish-black line along the margin; the innermost like the scapulars, but more dusky; tail brownish-grey; axillar feathers and lower wing-coverts white; rump above and below brownish-black. Female with the head and upper part of the neck dull reddish-brown, darker above; the rest of the neck all round, and the upper parts in general, dull greyish-brown, the feathers paler at their tips; flanks and fore part of the neck dull reddish-brown, the feathers broadly tipped with pale greyish-brown; wings as in the male, but of a darker tint, and without undulations; tail as in the male; lower wing-coverts light grey, those in the middle white; middle of breast greyish-white, hind part of abdomen light brownish-grey.

*Male*, 20, 33. *Female*, 21, 32  $\frac{1}{2}$ .

Breeds throughout the Fur Countries, from which it migrates southward in early autumn. Abundant on the Chesapeake, New York Bay, Ohio, and Mississippi, with their tributaries. None seen westward of the Mississippi.

Red-headed Duck, *Anas Ferina*, WILS. Amer. Orn. v. viii. p. 110.

*Fuligula Ferina*, BONAP. Syn. p. 392.

*Fuligula Ferina*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 452.

Red-headed Duck or Pochard, NUTT. Man. v. ii. p. 434.

Red-headed Duck, *Fuligula Ferina*, AUD. Orn. Biog. v. iv. p. 198.

### 398. 3. *Fuligula Marila*, LINN. **Scaup Duck.—Flocking Fowl.**

PLATE CCXXIX. Male and Female.

Bill as long as the head, enlarged toward the end; tail much rounded, of fourteen feathers.

Male with the bill light greyish-blue, the unguis blackish; head, neck, and fore part of the back and breast black, the head and neck glossed with purple and green, the rest tinged with brown; hind part of back, rump, abdomen, and upper and lower tail-coverts brownish-black; middle of back, scapulars, inner secondaries, anterior part of abdomen, and sides greyish-white, beautifully marked with undulating black lines; wings light brownish-grey; alula, primaries, at the base and end, brownish-black; speculum white, as are the middle of the breast, the axillars, and some of the lower wing-coverts. Female with the head, neck, and fore part of the back and breast, umber-brown; a broad patch of white along the fore part of the forehead; upper parts in general blackish-brown, the middle of the back and the scapulars faintly undulated with whitish dots and lines; primary quills greyish in the middle; speculum dull white; the greater part of the breast and abdomen white, the sides and parts under the tail umber-brown.

*Male*, 16  $\frac{1}{2}$ , 29. *Female*, 16  $\frac{1}{2}$ , 28.

Abundant during autumn on the Ohio and its tributaries, as well as those of the Missouri and the Mississippi. Rather common also along the Middle Atlantic Districts. Breeds far north.

Scaup Duck, *Anas Marila*, WILS. Amer. Orn. v. viii. p. 84.

Fuligula Marila, Scaup Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 456.

Scaup Duck, NUTT. Man. v. ii. p. 437.

Scaup Duck, Fuligula Marila, AUD. Orn. Biog. v. iii. p. 226; v. v. p. 614.

### 399. 4. *Fuligula rufitorques*, BONAP. Ring-necked Duck.

PLATE CCXXXIV. Male and Female.

Bill about the same length as the head, a little enlarged toward the end; tail much rounded, of sixteen feathers; occiput slightly crested. Male with the bill black, with a basal and subterminal line bluish-white; head and upper part of neck greenish-black, with purple reflections; a very narrow brownish-red collar; lower part of neck all round, as well as the back, scapulars, smaller wing-coverts, and rump above and below, brownish-black; inner secondaries of the same colour, outer bluish-grey on the outer web, light brown on the inner, as are the primaries, of which the outer webs and tips are dark brown; tail brownish-grey; chin white; breast greyish-white; sides and abdomen greyish-white, minutely undulated with grey. Female with the bill dusky, the neck umber-brown, upper part of head darker, back blackish-brown, speculum bluish-grey as in the male; breast brownish-white; loreal space and chin pale brown; sides and abdomen dark umber-brown.

*Male*, 18, 28. *Female*, 16.

Abundant on the Ohio during autumn, winter, and early spring; rather rare along the coasts of the Middle Atlantic Districts. Breeds far north.

*Fuligula rufitorques*, BONAP. Syn. p. 393.

Tufted Duck, *Anas Fuligula*, WILS. Amer. Orn. v. viii. p. 60.

Ring-necked Duck, *Anas (Fuligula) rufitorques*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 453.

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Ring-necked Duck, *Fuligula rufitorques*, NUTT. Man. v. ii. p. 439.

Ring-necked Duck, *Fuligula rufitorques*, AUD. Orn. Biog. v. iii. p. 259.

\*\* Bill very broad, much flattened, the unguis abruptly curved backwards.

### 400. 5. *Fuligula rubida*, WILS. Ruddy Duck.

PLATE CCCXLIII. Male, Female, and Young.

Tail short, much graduated, of eighteen stiff, narrow feathers; plumage of lower parts stiff and glossy. Male with the bill light greyish-blue; upper part of head and nape deep bluish-black; a large white patch on each side of the head, from the bill to behind the ear; neck all round, all the upper parts, and sides glossy chestnut-red; lower parts greyish-white, tinged with brown, and marked with transverse interrupted bands of dusky; wing-coverts, quills, and tail-feathers blackish-brown. Female with the bill darker, the crown, and all the upper parts dark reddish-brown, minutely dotted and undulated with dusky; lower parts duller, but similarly marked; throat, and a band from the base of the upper mandible to beneath the eye, brownish-white. Young, in second plumage, reddish-brown above, barred with dusky; wings and tail dark greyish-brown; cheeks, fore part and sides of neck, and all the lower parts dull yellowish-white, undulated with dusky, as in the rump above; lower tail-coverts white.

*Male*, 14  $\frac{3}{4}$ , 21  $\frac{1}{2}$ .

Ruddy Duck, *Anas rubida*, WILS. Amer. Orn. v. viii. p. 137.

*Fuligula rubida*, BONAP. Syn. p. 390.

Fuligula rubida, Ruddy Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 455.

Ruddy Duck, NUTT. Man. v. ii. p. 426.

Ruddy Duck, Fuligula rubida, AUD. Orn. Biog. v. iv. p. 326.

\*\*\* Bill semicylindrical, at the end enlarged by soft membranous expansions, the unguis broadly obovate and incurved.

#### 401. 6. Fuligula Labrador, LATH. Pied Duck.

PLATE CCCXXXII. Male and Female.

Bill nearly as long as the head; tail much rounded, of fourteen tapering feathers. Male with the bill pale greyish-blue at the base above, dull orange on the sides, black toward the end; head and upper half of neck white, except an elongated patch of black on the crown and nape; below the middle of the neck a black ring, from the hind part of which proceeds a longitudinal band of the same colour, gradually becoming wider on the back and rump; below the black ring anteriorly, a broad band of white, including the scapulars; all the under parts black, excepting the axillaries and lower wing-coverts, which are white, as are the upper wing-coverts and secondary quills, some of the inner secondaries having a narrow external black margin; alula, primary coverts, and primary quills brownish-black; tail brownish-black, tinged with grey; upper tail-coverts dusky, minutely dotted with reddish-brown. Female brownish-grey, darker on the head, cheeks, back, rump, and abdomen, lighter on the throat, breast, wing-coverts, and inner secondaries, which latter are margined externally with black; seven or eight of the secondaries white, as are the sides of the forehead.

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*Male*, 20, 30. *Female*, 18  $\frac{1}{4}$ , 29.

Along the shores of the Atlantic from Nova Scotia to New Jersey, rather rare, in winter. Breeds from Labrador northward. Never seen in the interior.

Pied Duck, *Anas labradora*, WILS. Amer. Orn. v. viii. p. 91.

*Fuligula labradora*, BONAP. Syn. p. 391.

Pied Duck, NUTT. Man. v. ii. p. 428.

Pied Duck, *Fuligula labradora*, AUD. Orn. Biog. v. iv. p. 271.

\*\*\*\* Bill about the length of the head, very broad; upper mandible with a prominence at the base above, and two lateral protuberances; unguis very large, slightly arched.

#### 402. 7. Fuligula fusca, LINN. Velvet Duck.

Bill with an abrupt prominence in front, the lateral protuberances covered with feathers; tail wedge-shaped, of fourteen stiff, narrow feathers. Male with the basal prominence and sides at the base black, toward the end bright red; unguis flesh-coloured, with a black line on each side; feet carmine on the outer, orange-red on the inner side, webs greyish-black; plumage brownish-black, glossed with blue above, lighter beneath; outer secondary quills and a spot beneath the eye white. Female with the bill dusky, its basal prominence slight; plumage sooty-brown, breast and abdomen lighter; two whitish spots on each side of the head; outer secondary quills white, as in the male.

*Male*, 22, 39. *Female*, 22, 38.

From the coast of Georgia eastward to Nova Scotia, during winter, when it is extremely abundant in all the estuaries and bays. Breeds from Labrador northward.

Velvet Duck, *Anas fusca*, WILS. Amer. Orn. v. viii. p. 137.

*Fuligula fusca*, BONAP. Syn. p. 390.

*Oidemia fusca*, Velvet Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 449.

Velvet Duck, NUTT. Man. v. ii. p. 419.

Velvet Duck, *Fuligula fusca*, AUD. Orn. Biog. v. iii. p. 354.

#### 403. 8. Fuligula perspicillata, LINN. Surf Duck.

PLATE CCCXVII. Male and Female.

Bill with a gently sloping prominence in front, the lateral protuberances bare; tail wedge-shaped, of fourteen stiff narrow feathers. Male with the bill deep reddish-orange, bluish-white on the sides, with a black patch, the unguis greyish-yellow; tarsi and toes orange-red, webs dusky; plumage deep black, glossed with blue; a white patch on the top of the head, and another on the nape. Female with the bill greenish-black; the plumage brownish-black, darker on the top of the head, back, wings, and tail.

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*Male*, 20, 33 ½ . *Female*, 19, 31 ½ .

Abundant from Nova Scotia to Maryland during winter, and removing southward to the mouth of the Mississippi in severe weather. Never seen in the interior. Breeds from Labrador northwards.

Black or Surf Duck, *Anas perspicillata*, WILS. Amer. Orn. v. viii. p. 49.

*Fuligula perspicillata*, BONAP. Syn. p. 389.

*Oidemia perspicillata*, Surf Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 449.

Black or Surf Duck, NUTT. Man. v. ii. p. 416.

Surf Duck, *Fuligula perspicillata*, AUD. Orn. Biog. v. iv. p. 161.

#### **404. 9. *Fuligula Americana*, SWAINS. American Scoter Duck.**

PLATE CCCCVIII. Male and Female.

Bill a little shorter than the head, with an obtuse prominence at the base of the upper mandible; tail graduated, acuminate, of sixteen pointed feathers; first quill with the inner web extremely attenuated. Male with the bill black, the basal prominence rich orange; feet brownish-black; the general colour of the plumage black, on the lower parts tinged with brown, the inner webs of the quills brownish-grey. Female with the bill brownish-black, and having scarcely any protuberance at the base; the upper parts light sooty-brown, the lower light brownish-grey.

This species differs very little from *Fuligula nigra*, being nearly of the same size, proportions, and colours. The male differs from that of the other species in having the sides of the unguis narrowed, and the orange patch on the upper mandible less extended beyond the nostrils, and destitute of the median black line and lateral streak.

*Male*, 19, 33 ½ . *Female*, 17, 29 ½ .

In winter abundant in the Bays of Boston, New York, and Chesapeake, and as far south as the mouth of the Mississippi. Never inland. Breeds from Labrador to the Arctic seas.

Scoter Duck, *Anas nigra*, WILS. Amer. Orn. v. viii. p. 135.

*Fuligula nigra*, BONAP. Syn. p. 390.

*Oidemia americana*, Swains. American Scoter, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 450.

American Scoter Duck, *Fuligula americana*, NUTT. Man. v. ii. p. 422.

American Scoter Duck, *Fuligula americana*, AUD. Orn. Biog. v. v. p. 117.

\*\*\*\*\* Bill shorter than the head, with a basal protuberance above, the inner secondaries curved outwards.

#### **405. 10. *Fuligula spectabilis*, LINN. King Duck.**

PLATE CCLXXVI. Male and Female.

Upper mandible with a soft tumid compressed substance at the base, extending perpendicularly upon the forehead, and by a medial band of feathers divided into two broad lobes; tail much rounded, of fourteen stiff feathers. Male with the bill flesh-coloured. The sides of the upper mandible and soft frontal lobes bright orange; band of feathers separating the frontal lobes and margining their upper and posterior edges, lower eyelid, and a forked patch on the throat, black; upper part of head ash-grey; hair-like feathers on the sides of the head pale bluish-green; fore neck cream-coloured; sides and hind part of neck, a patch on the wings, and another on each side of the rump, white; hind part of back, scapulars, large wing-coverts, and secondary quills, brownish-black, the latter glossed with green; primary quills and tail blackish-brown; breast and abdomen blackish-brown; lower wing-coverts white, the outer brown. Female with the bill shorter, pale greenish-grey, with the tumid basal lobes scarcely apparent, so that the forehead is low; head and neck pale greyish-yellow, with small lines of brownish-black; feathers of the back brownish-black towards the end, with yellowish-grey edges; the scapulars brownish-red on the margins; quills and tail-feathers deep greyish-brown; fore part of neck, breast, sides, and lower tail-coverts, with a central mark and submarginal band of brownish-black, the middle of the breast scarcely spotted, being of the general colour of the lower parts, which is pale yellowish-brown.

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*Male*, 25; wing, 11 ¼ . *Female*, 20; wing, 10 ½ .

Rare in Massachusetts during winter. Breeds from Labrador to the Arctic Seas.

*Fuligula spectabilis*, BONAP. Syn. p. 389.

*Somateria spectabilis*, King Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 447.

King Duck, *Fuligula spectabilis*, NUTT. Man. v. ii. p. 414.

King Duck, *Fuligula spectabilis*, AUD. Orn. Biog. v. iii. p. 523.

#### 406. 11. *Fuligula mollissima*, LINN. Eider Duck.

PLATE CCXLVI. Male and Female.

Male with the bill nearly as long as the head, greyish-yellow, the upper mandible with a soft tumid substance at the base, extending upon the forehead, and deeply divided into two narrow rounded lobes, its whole surface marked with divergent oblique lines; tail much rounded, of sixteen narrow feathers; the upper part of the head bluish-black, with the central part white; the hair-like feathers on the upper part and sides of the neck of a delicate pale green; sides of the head, throat, and neck white; fore neck at its lower part cream-coloured; the rest of the lower surface brownish-black, as are the upper tail-coverts, and the central part of the rump; the rest of the back, scapulars, smaller wing-coverts, and inner curved secondary quills white, the scapulars tinged with yellow; secondary coverts and outer secondaries brownish-black; primaries and tail-coverts greyish-brown. Female with the bill shorter, pale greyish-green, its tumid basal part much less and narrower; head and neck all round light brownish-red, with small lines of brownish-black; lower part of neck all round, the whole upper surface, the sides and lower tail-coverts light brownish-red, with transverse brownish-black markings; secondary quills and coverts greyish-brown, tipped with white; primaries brownish-black; tail-feathers greyish-brown; breast and abdomen greyish-brown, obscurely mottled.

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*Male*, 25, 42. *Female*, 24, 39.

Breeds in Maine, on the Bay of Fundy, in Labrador, Newfoundland, as far northward as travellers have proceeded. Common in winter from Nova Scotia to Massachusetts; rarely seen in New York.

Eider Duck, *Anas mollissima*, WILS. Amer. Orn. v. viii. p. 122.

*Fuligula mollissima*, BONAP. Syn. p. 389.

*Somateria mollissima*, Eider, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 448.

Eider Duck, NUTT. Man. v. ii. p. 406.

Eider Duck, *Fuligula mollissima*, AUD. Orn. Biog. v. iii. p. 344; v. v. p. 611.

\*\*\*\*\* Bill much shorter than the head, higher than broad at the base, narrowed toward the end.

#### 407. 12. *Fuligula Clangula*, LINN. Golden-eye Duck.

PLATE CCCCI. Male in summer.

PLATE CCCXLII. Male and Female in winter.

Bill shorter than the head, very high at the base; tail short, graduated, of sixteen feathers. Male in summer with the bill black, feet orange-yellow, webs dusky; head and upper part of neck deep greenish-blue, changing to deep dusky purple; back, posterior scapulars, inner secondaries, edge of wing, alula, primary coverts, primary quills, and outer four secondaries black; an oblong curved or semilunar patch of white between the bill and eye; lower part of neck all round, sides of the body anteriorly, lower parts generally, scapulars, excepting their margins, which are black, a broad band across the wing formed by the first row of small coverts, and several of the others, of which the base only is black, and a large patch formed by the tips of some of the secondary coverts, and six of the secondary quills, pure white; the two patches on the wings separated by an intervening band of black; axillar feathers and lower wing-coverts dusky; elongated feathers of the sides with the inner, some of them also the outer margins, and many with a large portion of the tip black, that colour on those of the innermost covering the whole inner webs; tail brownish-grey. Male in winter similar, but with the white patch on the side of the head elliptical, and the black band separating the white patches on the wing not apparent, although seen on turning aside the tips of the smaller coverts. Female with the bill dusky, but having a portion toward the end yellow; head and upper part of neck dull reddish-brown; lower part of the neck and sides of the body brownish-grey, the feathers margined with pale grey, the rest of the lower parts white; upper parts greyish-brown, much darker behind; wings brownish-black, seven of the coverts, unless at the base, white; the small coverts lighter and tipped with grey; tail brownish-grey.

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*Male*, 20, 31  $\frac{1}{2}$ . *Female*, 16, 28.

Abundant during winter on all the running streams of the interior, as well as along the Atlantic coast, as far south as the Gulf of Mexico. Breeds in high northern latitudes. Accidental in the North-eastern Districts. Rocky Mountains, and Columbia River.

Golden-eye, *Anas Clangula*, WILS. Amer. Orn. v. viii. p. 62.

*Fuligula Clangula*, BONAP. Syn. p. 393.

Clangula vulgaris, Common Golden-eye, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 456.

Clangula Barrovii, Rocky-mountain Garrot, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 453.

Common Golden-eye, NUTT. Man. v. ii. p. 441.

Golden-eye Duck, Fuligula Clangula, AUD. Orn. Biog. v. iv. p. 318; v. v. p. 105.

#### **408. 13. Fuligula dispar, GMEL. Western Duck.**

PLATE CCCCXXX. Male.

Bill shorter than the head, greyish-blue; tail rather short, pointed, of fourteen feathers; upper part of head and broad band surrounding the neck, white; throat and some feathers around the eye black; a light green patch in the loreal space, and a transverse patch of the same on the nape, margined behind and laterally with black; a broad band on the neck and the whole of the back velvet-black, with green reflections; smaller wing-coverts white; secondary coverts bluish-black, terminating in a broad white band; elongated secondaries and scapulars with the inner web white, the outer black, with blue reflections; primaries and coverts brownish-black; tail black, as are the lower tail-coverts and abdomen; the breast and sides reddish-buff, fading towards the shoulders and neck into pure white; a bluish-black spot on each side of the lower part of the neck anterior to the wing.

*Male*, 16; wing,  $8\frac{3}{4}$ .

North-west coast.

Anas dispar and Anas Stelleri, GMEL. Syst. Nat. v. i. p. 535, 518.

Fuligula Stelleri, BONAP. Syn. p. 394.

Western Duck, Fuligula dispar, AUD. Orn. Biog. v. v. p. 253.

#### **409. 14. Fuligula Albeola, LINN. Buffel-headed Duck.—Spirit Duck. Butter-box. Dipper. Die-dipper. Marrionette.**

PLATE CCCXXV. Male and Female.

Bill much shorter than the head, light greyish-blue; feet pale flesh-colour; feathers of head and upper part of neck elongated; tail short, graduated, of sixteen feathers; fore part of head of a deep rich green, upper part rich purplish-blue, as are the elongated feathers on the fore part and sides of the neck; the hind part of the latter deep green; a broad band of pure white from one cheek to the other over the occiput; rest of the neck, lower parts, outer scapulars, and a large patch on the wing, including the greater part of the small coverts, and some of the secondary coverts and quills, pure white, the scapulars narrowly margined with black, as are the inner lateral feathers; axillars brownish-black, some of them white on the margin and towards the end; lower wing-coverts brownish-black, the smaller tipped with white; back, inner scapulars, and secondary quills velvet-black; alula, primary coverts, and primary quills deep black; rump gradually fading to greyish-white; tail-feathers brownish-grey, with the tips whitish. Female much smaller, with the feathers of the head not elongated, unless in the median line; bill darker, feet greyish-blue; head, upper part of neck, hind neck, back, and wings, greyish-brown; a short transverse white band from beneath the eye, and a slight speck of the same on the lower eyelid; six of the secondary quills white on the outer web; lower parts white, shaded into light greyish-brown on the sides.

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*Male*,  $14\frac{1}{2}$ , 23. *Female*, 13,  $22\frac{1}{4}$ .

Distributed throughout the country and along the Atlantic shores during autumn, winter, and spring. Texas, Upper California, Columbia River. Breeds very far north.

Buffel-headed Duck, Anas albeola, WILS. Amer. Orn. v. viii. p. 51.

Fuligula albeola, BONAP. Syn. p. 394.

Clangula albeola, Spirit Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 458.

Spirit Duck, NUTT. Man. v. ii. p. 445.

Buffel-headed Duck, Fuligula albeola, AUD. Orn. Biog. v. iv. p. 217.

#### **410. 15. Fuligula histrionica, LINN. Harlequin Duck.**

PLATE CCXCVII. Male, Female, and Young.

Bill much shorter than the head, comparatively narrow, light yellowish-olive; feet light greyish-blue, the webs dusky; a broad median band from the base of the bill to the occiput bluish-black, margined behind with light yellowish-red, before with white, that colour forming a broad triangular spot on the cheek anterior to the eye; sides of the head and neck all round purplish-blue; a spot of white behind the ear, a curved line on the side of the neck, and a complete ring

below the middle of the neck, with a curved band of the same anterior to the wing, all broadly edged with black; fore part of back light purplish-blue, hind part gradually deepening in tint, so as to become almost black, of which colour is the rump all round; scapulars chiefly white; wing-coverts purplish-blue, as are the alula and primary coverts; the quills dark greyish-brown; tail greyish-black; a band of white across the wing, formed by the tips of the secondaries, of which the inner have their outer webs principally of the same colour; fore part of breast purplish-blue, hind part and abdomen greyish-brown, sides light red, generally undulated with dusky; a lateral spot of white near the root of the tail. Female greyish-brown, deeper on the head and rump, lighter on the fore neck, and mottled with greyish-white on the breast; quills dark brown, edged with lighter, tail blackish-grey; a large whitish spot mottled with grey before the eye, and another of a purer white behind the ear; bill and feet dull bluish-grey.

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Harlequin Duck, *Anas histrionica*, WILS. Amer. Orn. v. viii. p. 139.

*Fuligula histrionica*, BONAP. Syn. p. 394.

*Clangula histrionica*, Harlequin Duck, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 459.

Harlequin Duck, *Fuligula histrionica*, AUD. Orn. Biog. v. iii. p. 612; v. v. p. 617.

#### 411. 16. *Fuligula glacialis*, LINN. Long-tailed Duck.

PLATE CCCXII. Male, Female, and Young.

Male with the bill black in its basal half, orange-yellow towards the end; the scapulars much elongated and tapering, the tail very long, acuminate, of fourteen feathers; a large oblong greyish-white patch on each side of the head from the bill to behind the ear; the upper part of the head and nape black, that colour being narrowed in front by the encroachment of the white patches; neck all round, and anterior half of the breast, dark chocolate; back and wing-coverts brownish-black; scapulars broadly margined with light reddish-brown; quills chocolate, secondaries externally margined with lighter, primaries internally; middle four feathers of the tail brownish-black, the outer two of these margined with white, all the rest white, but the inner with a longitudinal patch of dusky on the outer webs. Male in winter with the head, neck, fore part of back, and scapulars, white; space about the eye pale greyish-red, and a large oblong patch of chocolate-brown on the side of the neck; upper parts including the middle four tail-feathers, brownish-black, but the secondary quills tinged with reddish-brown, and having paler margins; anterior half of breast chocolate-brown, the rest of lower parts and the four lateral tail-feathers white. Female considerably smaller, with the scapulars not elongated, and the tail short and rounded; bill dusky green; head dark greyish-brown, with a patch of greyish-white surrounding the eye, but not extending to the bill; a large patch of the same colour on the side of the neck, the hind part of which is dusky brown, the fore part greyish-brown, the feathers broadly margined with whitish; the upper parts dark greyish-brown, the two lateral tail-feathers edged with white; lower parts white, the feathers under the wings slightly tinged with grey.

*Male*, 23, 29  $\frac{1}{2}$ . *Female*, 15  $\frac{3}{4}$ , 26.

Breeds from Labrador northward to the Arctic Seas. Abundant during winter along the coasts of the Atlantic Districts to the mouth of the Mississippi. Never in the interior.

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Long-tailed Duck, *Anas glacialis*, WILS. Amer. Orn. v. viii. p. 93.

*Fuligula glacialis*, BONAP. Syn. p. 395.

Long-tailed Duck, *Harelda glacialis*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 460.

Long-tailed Duck, NUTT. Man. v. ii. p. 453.

Long tailed Duck, *Fuligula glacialis*, AUD. Orn. Biog. v. iv. p. 103.

### FAMILY XL. MERGINÆ. MERGANSERS.

Bill rather long, straight, rather slender but strong, tapering, higher than broad at the base, nearly cylindrical toward the end; upper mandible with the dorsal outline sloping gently to the middle, then straight, along the unguis suddenly decurved; the ridge broad and flattened at the base, then convex, the sides sloping, toward the end convex, the edges serrate internally with oblique dentiform lamellæ, the unguis oblong, much curved, abruptly rounded at the end; nasal groove elongated, covered by the soft skin of the bill; lower mandible with the angle very narrow and extended to the unguis, which is obovate, the sides nearly erect, with a long narrow groove, the edges internally serrate, the unguis convex, thick-edged. Head rather large, compressed, oblong; neck of moderate length; body full, depressed, rather elongated. Feet placed far behind, stout; tibia bare for a short space; tarsus very short, compressed, anteriorly covered with small scutella, and another series on the lower half externally. Hind toe very small, with an inferior free membrane; anterior toes half as long again as the tarsus, second shorter than the fourth, which is almost as long as the third, all scutellate, and connected by anteriorly concave webs. Claws rather small, moderately arched, compressed, acute. Plumage moderately full, dense, soft, glossy, blended beneath. Wings of moderate breadth, convex, acute; inner secondaries elongated and tapering. Tail short, much rounded, of more than twelve feathers. Upper mandible with an

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internal series of small papillæ or laminae on each side, besides those on the margin. Tongue long, fleshy, emarginate and papillate at the base, tapering, with a double row of slender reversed papillæ along the upper surface, and two lateral series of filaments on each side, the tip lacerated; œsophagus very wide, of nearly uniform diameter; stomach a strong gizzard of moderate or small size, with the lateral muscles thick; epithelium dense and longitudinally rugous; intestine long, rather narrow; cœca rather long; cloaca globular. Trachea with one or two extensive dilatations, besides the enormously developed tympanum at the bifurcation; no inferior laryngeal muscles. Nest on the ground, or in hollow trees. Eggs numerous.

## GENUS I. MERGUS, LINN. MERGANSER.

Character as above.

### 412. 1. *Mergus Merganser*, LINN. **Buff-breasted Merganser or Goosander.**

PLATE CCCXXXI. Male and Female.

Male with a short longitudinal crest, eighteen tail-feathers, the bill and feet of bright vermilion; the head and upper part of neck greenish-black, splendent, with bright green reflections; lower part of neck all round, and all the under parts of a delicate reddish-buff; sides of rump and part of abdomen greyish-white, finely undulated and dotted with dark grey; some of the lower wing-coverts dusky, the larger coverts grey; fore part of back and inner scapulars glossy black; hind part ash-grey, becoming lighter, and finally undulated on the rump; upper tail-coverts and tail-feathers deep grey; outer scapulars white; a transverse band of black at the base of the wing concealed by the scapulars; wing-coverts white; alula, primary coverts and quills, and a band formed by the base of the first row of large coverts black; secondaries white, six of them margined externally with a black line. Female much smaller, with the crest much longer; the head and upper part of neck brownish-red; throat and lower parts white, the breast and abdomen tinged with buff; upper parts and sides ash-grey; smaller wing-coverts and inner secondaries grey; bases and tips of secondary coverts black, the intermediate part white; middle secondaries white, outer and primaries greyish-black.

*Male*, 27, 36. *Female*, 24, 34.

In winter dispersed over the United States, and westward as far as Texas. Breeds from Massachusetts northward, and along the Great Lakes. [298]

Goosander, *Mergus Merganser*, WILS. Amer. Orn. v. viii. p. 68.

*Mergus Merganser*, BONAP. Syn. p. 397.

*Mergus Merganser*, Goosander, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 461.

Goosander, *Mergus Merganser*, NUTT. Man. v. ii. p. 460.

Goosander, *Mergus Merganser*, AUD. Orn. Biog. v. iv. p. 261.

### 413. 2. *Mergus Serrator*, LINN. **Red-breasted Merganser.**

PLATE CCCCCI. Male and Female.

Male with an elongated longitudinal double crest, eighteen tail-feathers, bill and feet deep carmine; head and upper part of neck glossy greenish-black, with bright green reflections along the sides, and purplish on the crest; a broad collar of white, succeeded by another of light brownish-red, longitudinally streaked with dusky; lower parts white, except the sides of the body and rump, which are transversely undulated with greyish-black, and the larger wing-coverts, which are ash-grey; fore part of back, and inner scapulars deep black; feathers anterior to the wing white, with a broad margin of black; some of the anterior wing-coverts ash-grey, the rest, the outer scapulars, and the terminal half of the secondary coverts, pure white; basal portion of the latter, primary coverts, and primary quills, black, the latter tinged with brownish-grey; secondaries white, with the base and the outer margin of most black, which colour predominates on the inner; middle and hind part of back ash-grey, undulated with white and dusky; tail brownish-grey. Female with crest shorter, the bill and feet paler; head and fore part of neck light reddish-brown; throat and under part white, excepting the sides and larger wing-coverts, which are brownish-grey; hind neck, back, tail-coverts, tail, scapulars, and wing-coverts brownish-grey; wings greyish-black, with a large white patch, formed by the terminal portions of the secondary coverts, and the greater part of some of the outer secondaries. Young, when fledged, resemble the female. Young, in down, with the head and hind neck reddish-brown, the back greyish-brown, with three white spots on each side, the lower parts greyish-white; a white band from the bill to the eye, a reddish-brown band under the eye, and along the side of the neck; the lower parts greyish-white.

*Male*, 24  $\frac{1}{2}$ , 33. *Female*, 24, 34  $\frac{1}{2}$ .

From Texas westward to the Columbia River and northward. Common during autumn and spring. Also throughout the United States, and along the Atlantic shores. Breeds from New York

to Labrador and the Fur Countries, as well as along the Great Lakes, and on the Rocky Mountains.

Red-breasted Merganser, *Mergus Serrator*, WILS. Amer. Orn. v. viii. p. 91.

*Mergus Serrator*, BONAP. Syn. p. 397.

*Mergus Serrator*, Red-breasted Merganser, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 462. [299]

Red-breasted Merganser, NUTT. Man. v. ii. p. 463.

Red-breasted Merganser, *Mergus Serrator*, AUD. Orn. Biog. v. v. p. 92.

#### 414. 3. *Mergus cucullatus*, LINN. Hooded Merganser.

PLATE CCXXXIII. Male and Female.

Male with an elongated, compressed, rounded crest, the tail with eighteen feathers; bill black, feet yellowish-brown; upper part of the head, back, smaller wing-coverts, quills, and tail brownish-black; sides of the head, upper half of neck all round, the broad extremities of the large feathers on the shoulders, the scapulars, inner secondaries, and larger wing-coverts, greenish-black; a broad patch of white behind the eye, very conspicuous in the erected crest; lower part of neck and breast also white, as are the speculum and the central part of the inner secondaries; sides beautifully marked with undulated transverse lines of yellowish-brown and brownish-black; lower tail-coverts whitish, similarly undulated. Female much smaller, with the crest less elongated, and of looser texture; bill brownish-black, towards the base orange; upper part of head, including the crest, yellowish-brown; chin whitish; upper part of neck all round, and sides of head greyish-brown; general colour of the back, upper surface of wings, tail, and sides, blackish-brown, the feathers edged with paler. Young, when fledged, like the female, but with the crest shorter.

*Male*, 19, 26. *Female*, 17  $\frac{1}{2}$ , 24.

Breeds sparingly in South Carolina, along the Mississippi, Ohio, and the Great Lakes, as well as further northward. Abundant, during autumn and winter, on all the western and southern waters; rarer in the Middle Atlantic Districts.

*Mergus cucullatus*, BONAP. Syn. p. 397.

Hooded Merganser, *Mergus cucullatus*, WILS. Amer. Orn. v. viii. p. 79.

*Mergus cucullatus*, Hooded Merganser, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 463.

Hooded Merganser, NUTT. Man. v. ii. p. 465.

Hooded Merganser, *Mergus cucullatus*, AUD. Orn. Biog. v. iii. p. 246; v. v. p. 619.

#### 415. 4. *Mergus Albellus*, LINN. White Merganser.—Smew. White Nun.

PLATE CCCXLVII. Male and Female.

Male with a longitudinal crest; tail graduated, of sixteen feathers; bill black, feet livid blue; head, neck, lower parts, scapulars, and a patch on the wing, white; a short band on each side of the hind neck bordering the crest, duck-green; a broad patch on the lore and below the eye, a narrow band across the lower part of the hind neck, formed by single bars near the tips of the feathers, the middle of the back in nearly its whole length, a short transverse bar under the fore edge of the wing, the anterior margin to beyond the carpal joint, the outer edge of the scapulars, the primary coverts, secondary coverts, and outer secondary quills, excepting the tip of both, deep black; quills also black, of a less deep tint; hind part of back tinged with grey; rump and tail-feathers dusky grey; sides of body and rump white, finely undulated with blackish-grey. Female much smaller, similarly crested; all the lower parts white, excepting a belt across the lower fore part of the neck, and a narrow portion of the sides, which are pale grey; a patch of brownish-black on the lore and beneath the eye; upper part of head and half of hind neck light reddish-brown; the rest of hind neck and all the upper parts bluish-grey, darker behind, and in the middle of the back approaching to black; tail dusky grey; wings, bill, and feet as in the male. [300]

*Male*, 17  $\frac{1}{2}$ , 27. *Female*, 15  $\frac{1}{2}$ , 25.

Exceedingly rare in America, one specimen only having been procured at New Orleans.

Smew or White Nun, *Mergus Albellus*, WILS. Amer. Orn. v. viii. p. 126.

*Mergus Albellus*, BONAP. Syn. p. 398.

Smew or White Nun, NUTT. Man. v. ii. p. 467.

Smew or White Nun, *Mergus Albellus*, AUD. Orn. Biog. v. iv. p. 350.

## FAMILY XLI. PELECANINÆ. PELICANS.

Bill longer than the head, rather slender, straight, upper mandible with the ridge separated from the side by a groove, and terminated by a narrow, generally decurved, pointed unguis; lower mandible with the crura elastic and extensile, the angle very long and narrow. Nostrils basal, lateral, linear, small, or obsolete. Space around and before the eye generally bare, as is a portion of the gular sac. Head generally of moderate size, but various; neck long; body elongated, rather slender. Feet short and stout; tibia bare at its lower part; tarsus short, very stout, compressed, scaly or scutellate in front; toes four, all connected by webs, and scutellate; first small, fourth longest. Claws short, strong, curved, rather blunt, that of the third toe generally pectinate. Plumage soft, blended, on the back compact and imbricated. Wings long; tail of moderate length, narrow, rounded or tapering. Tongue extremely small, triangular, fleshy; œsophagus excessively wide; a gular sac, sometimes of enormous capacity; proventricular belt generally discontinuous; stomach very small, slightly muscular, epithelium smooth; a globular pyloric lobe; intestine very long and slender; cœca small, cylindrical; cloaca globular. Trachea simple, flattened; no inferior laryngeal muscles.

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### GENUS I. PHALACROCORAX, BRISS. CORMORANT.

Bill about the length of the head, rather slender, nearly straight, compressed toward the end; upper mandible with the dorsal line concave, until on the unguis, where it is decurved, the ridge convex, flattened toward the end, separated from the sides by a narrow groove, the sides convex, the edge sharp and nearly straight as far as the unguis, which is decurved, convex above, acute, its tip ascending far beyond that of the lower; lower mandible with the angle long and very narrow towards the end, filled up by an extensile membrane, which extends to the level of the angle of the mouth; the outline of the crura very slightly convex, that of the terminal part descending and very slightly convex, the sides convex, the edges sharp and inflected, the tip compressed, with its marginal outline decurved. Nostrils obliterated (in youth open). Head rather small, oblong; neck long and rather thick; body full, elongated, depressed. Feet short, stout, placed far behind; tibia feathered in its whole length; tarsus very short, strong, much depressed, covered all round with angular scales; a series on part of the inner side anteriorly, and another on the lower part of the outer, scutelliform. Toes all placed in the same plane, connected by webs, and covered above by very numerous oblique scutella; first the smallest, fourth the longest. Claws rather small, strong, compressed, acute, convex above, arched, that of the third toe pectinated on its inner edge. Plumage soft, generally blended, compact on the back and wings; the small gular sac, and the space before and beneath the eye, with the eyelids, bare. Wings of moderate size, broad; primaries curved, pointed, the second longest. Tail of moderate length, very narrow, much rounded, of twelve or more narrow strong-shafted feathers. Gular sac small; tongue extremely small; œsophagus very wide; proventricular glands disposed in two large roundish masses; stomach small, slightly muscular, inner coat smooth and soft; a globular or triangular pyloric lobe; duodenum at first curving upwards; intestine very long, and of moderate width; cœca small; rectum narrow; cloaca globular. Trachea considerably flattened; bronchi of moderate width.

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#### 416. 1. *Phalacrocorax Carbo*, LINN. Great Cormorant.

PLATE CCLXVI. Male, Female, and Young.

Tail of fourteen feathers. In summer, a small longitudinal occipital black crest, and numerous linear elongated white feathers on the head and upper part of neck; bill dusky, with the lower mandible whitish toward the base; gular sac yellow; plumage black, glossed with deep greenish-blue; at the base of the gular sac a broad gorget of white; a patch of white on the side over the thigh; feathers of wings and part of the back dull bluish-grey, glossed with bronze, their fringe-like margins greenish-black; primary quills greyish-black, secondary like the other wing-feathers; tail greyish-black; shafts of all the feathers black at the end, leaden-grey towards the base. Female similar. After the breeding season the white feathers on the head and sides fall off. Young, before being fledged, with the skin dull livid, the bill dusky, at the base flesh-coloured, the feet purplish-dusky, the webs yellowish-brown.

*Male*, 37, 62.

Ranges during winter southward to New York. Abundant from Massachusetts eastward. Breeds on high precipitous rocks, in Newfoundland, Labrador, and Baffin's Bay. Migratory.

*Phalacrocorax Carbo*, BONAP. Syn. p. 402.

Cormorant, NUTT. Man. v. ii. p. 479.

Common Cormorant. *Phalacrocorax Carbo*, AUD. Orn. Biog. v. iii. p. 458.

#### 417. 2. *Phalacrocorax dilophus*, SWAINS. Double-crested Cormorant.

PLATE CCLVII. Male.

Tail of twelve feathers. In summer an elongated tuft of about forty long, slender, loose,

recurved feathers, from behind the eye to the length of an inch and a half on each side; upper mandible dusky, along the edges greenish-yellow, lower yellow, irregularly marked with dusky toward the edges; bare space on the head, and gular sac rich orange; plumage greenish-black, strongly glossed with green; imbricated feathers on the back and wings greyish-brown, their fringe-like margins greenish-black; primary quills brownish-black, secondary like the other wing-feathers; tail black; the shafts of all the feathers black. Female similar to the male. After the breeding season the tufts disappear. Young after the first moult have the head and neck mottled with greenish-black and greyish-brown, the other parts as in the adult, but the tufts on the head wanting.

*Male*, 33, 51.

Common as far south as the coast of Maryland, in winter. Breeds in Newfoundland and Labrador, as well as on the Saskatchewan.

*Pelecanus (Carbo) dilophus*, Double-crested Cormorant, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 473.

Double-crested Cormorant, NUTT. Man. v. ii. p. 483.

Double-crested Cormorant, *Phalacrocorax dilophus*, AUD. Orn. Biog. v. iii. p. 420; v. v. p. 629.

### 418. 3. *Phalacrocorax Floridanus*, AUD. Florida Cormorant.

PLATE CCLI. Male.

Tail of twelve feathers. In summer an elongated series of about forty linear feathers directed backwards, commencing behind the eye, and extending to the length of an inch and a half on each side; upper mandible black, along the basal margin bright blue, lower bright blue, spotted with white; bare space on the head and gular sac rich orange; plumage greenish-black, strongly glossed with green; imbricated feathers on the back and wings greyish-brown, tinged with purple, their fringe-like margins greenish-black; primary quills brownish-black, secondary like the other feathers of the wing; tail brownish-black; shafts of all the feathers brownish-black. Female similar to the male. After the breeding season the tufts disappear. Young after the first moult with the bill dull yellow, the ridge of the upper mandible dusky, naked parts of the head rich yellow; upper part of the head and neck brownish-black, tinged with green, throat grayish-white; fore neck and anterior part of breast variegated with pale brownish-grey and black; the rest of the plumage as in the adult, but the imbricated feathers of the upper parts lighter. This species differs from the last, chiefly in being smaller, and in having the elongated feathers behind the eye more slender and directed backwards instead of being recurved.

*Male*, 29  $\frac{1}{4}$ , 46  $\frac{1}{2}$ .

Constantly resident in the Floridas and their Keys, and along the coast to Texas. The young in summer pass up the Mississippi and Ohio, returning in autumn to the sea. Abundant. Breeds on trees only.

*Phalacrocorax Floridanus*, Florida Cormorant, AUD. Orn. Biog. v. iii. p. 387; v. v. p. 632.

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### 419. 4. *Phalacrocorax Townsendi*, AUD. Townsend's Cormorant.

PLATE CCCCXII. Fig. 2. Male.

Tail of twelve feathers; plumage of the neck and sides interspersed with linear white feathers; bill yellow, with the ridge brown; gular sac and bare skin on the head bright orange; upper part of head and hind neck dusky, tinged with green; hind part of back greenish-black; the rest of the upper parts brownish-grey, each feather edged with black; quills brownish-grey, similarly edged with black; outer primaries and tail-feathers black; sides of the head, fore part of neck, and breast light yellowish-brown; the middle of the neck in front darker, the sides, abdomen, and tibial feathers shaded into brownish-black, tinged with green. This description from a single individual shot on the 8th of October. Another individual, apparently a bird in its first plumage, has the head and upper part of the fore neck darker, the middle of the breast lighter, the feathers on the back margined with greyish-brown, and an inner band of dark brown; its bill is longer, but more slender, the unguis less curved, the feathers not entirely obliterated from the space before the eye, and extending farther on the gular sac.

*Male*, 35, wing 12  $\frac{1}{2}$ ; tail 6  $\frac{3}{4}$ .

Cape Disappointment, Columbia River. Common.

*Phalacrocorax Townsendi*, Townsend's Cormorant, AUD. Orn. Biog. v. v. p. 149.

### 420. 5. *Phalacrocorax resplendens*, AUD. Violet-green Cormorant.

PLATE CCCCXXII. Fig. 1. Female.



Bill scarcely as long as the head, slender, dusky; tail of twelve feathers; gular sac and bare skin on the head, bright orange; plumage silky and splendid, deep green, seeming black in some lights and bright green and purple in others, the somewhat compact feathers of the back edged with dark purple; along the sides of the neck and the hind part of the sides of the body, numerous white piliform feathers terminated by a pencil of filaments; quills and tail-feathers brownish-black and less glossy. This description from an individual shot in October.

*Female*, 27; wing 10; tail 5  $\frac{1}{2}$ .

Cape Disappointment, near Columbia River. Abundant.

Violet-green Cormorant, *Phalacrocorax resplendens*, AUD. Orn. Biog. v. v. p. 148.

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## GENUS II. PLOTUS, LINN. ANHINGA.

Bill about twice the length of the head, almost straight, being very slightly recurved, rather slender, compressed, tapering to a fine point; upper mandible with the dorsal line slightly declinate, very slightly convex, the ridge convex, gradually narrowed, the sides sloping, the edges sharp, and beyond the middle cut into minute slender-pointed serratures directed backwards, the tip acuminate; lower mandible with the angle very long and narrow, the dorsal line beyond it straight and ascending, the sides sloping slightly outwards, the edges sharp and serrated, the point extremely narrow; gape-line ascending towards the end. No external nostrils in the adult. Head very small, oblong; neck very long and slender; body elongated and slender. Feet very short and stout; tibia feathered to the point; tarsus very short, roundish, reticulated; toes all connected by webs, the first of moderate length, the fourth longest, the first toe and the first phalanges of the rest with transverse series of scales; the rest of their extent scutellate. Claws rather large, very strong, compressed, curved, very acute, the third with parallel slits on the inner edge. A bare space at the base of the upper mandible, including the eye; skin of the throat bare and dilated, as in the Cormorants. Plumage close, blended, silky, the feathers oblong; scapulars elongated, lanceolate, compact, the outer web of the largest undulated. Wings of moderate length and breadth; third quill longest, inner secondaries elongated and resembling the posterior scapulars. Tail very long, narrow, of twelve straight feathers, having very strong shafts, and increasing in breadth to the end. Tongue a slight oblong knob; œsophagus very wide; proventricular glands placed on the right side in the form of a globular sac; stomach roundish, of moderate size, rather thin, with its inner coat soft and smooth; a large roundish pyloric lobe; intestine long and very slender; no cœca, but a small rounded termination to the rectum.

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### 421. 1. *Plotus anhinga*, LINN. American Anhinga.—Snake-Bird.

PLATE CCCXVI. Male and Female.

Upper mandible dusky, lower bright yellow; gular sac orange; tarsus and toes dusky olive, the hind parts and webs yellow; general colour of head, neck, and body, glossy blackish-green, of the scapulars, wings, and tail, glossy bluish-black; long loose feathers on the neck purplish-white; lower part of neck behind marked with very numerous minute oblong spots of white, forming two broad bands, extending backwards, and gradually becoming more elongated, there being one along the centre of each feather, including the scapulars; smaller wing-coverts similarly marked with broader white spots disposed in regular rows; first row of small coverts and secondary coverts white, excepting a portion of the inner web; five elongated secondaries marked with a narrow white band; occupying the inner half of the outer web; tail-feathers tipped with a band of brownish-red fading into white. Female with only a few inconspicuous elongated feathers on the neck; upper part of head and hind neck dull greenish-brown, lighter on the lower part; fore part of neck pale reddish-brown, tinged with grey, lighter on the throat, that colour extending over part of the breast, and terminating abruptly in a transverse band of deep reddish-chestnut; the other parts as in the male, only the fore part of the back is tinged with brown, and its spots are less distinct.

*Male*, 35  $\frac{3}{4}$ , 44. *Female*, 34, 43.

Constant resident from Florida to Georgia; in summer as far east as North Carolina, and up the Mississippi to Natchez. Common.

*Plotus Anhinga*, BONAP. Syn. p. 411.

Black-bellied Darter, *Plotus melanogaster*, WILS. Amer. Orn. v. ix. p. 75.

Black-bellied Darter, NUTT. Man. v. ii. p. 507.

Anhinga or Snake-Bird, *Plotus Anhinga*, AUD. Orn. Biog. v. iv. p. 136.

## GENUS III. TACHYPETES, VIEILL. FRIGATE BIRD.

Bill longer than the head, strong, broader than high, unless towards the curved extremity; upper mandible with its dorsal line slightly concave, at the tip decurved, its ridge broad and

nearly flat at the base, narrowed and more convex towards the end, the sides separated from the ridge by a narrow groove, convex, the edges sharp, direct, irregularly jagged, with a prominence at the commencement of the curve at the elongated, compressed, tapering, decurved point; lower mandible with the angle extremely long, narrow, the membrane bare and dilatible into a small pouch, the very short dorsal line decurved, the sides erect at the base, convex in the rest of their extent, the edges sharp, much inflected, irregularly jagged, at the tip narrow and decurved. Nostrils basal, linear, inconspicuous. Head of moderate size, oblong; neck of moderate length, stout; body rather slender. Feet very short, stout; tibia very short; tarsus extremely short, feathered; toes all placed in the same plane, and connected by short deeply emarginate webs, which run out narrow along the sides, scutellate above, first small, second shorter than fourth, third much longer. Claws strong, compressed, curved, acute, that of the third toe long, with the inner edge pectinate. Plumage compact, glossy; feathers of the head, neck, and back lanceolate. Wings extremely long, pointed, the first quill longest; the rest rapidly diminishing; secondaries very short, the inner long and tapering. Tail very long, deeply forked, of twelve feathers. Tongue exceedingly small, fleshy, flattened; œsophagus very wide; proventricular glands forming a complete belt; stomach very small, roundish, its muscular coat thin, the inner soft and corrugated; no pyloric lobe; intestine of moderate length; cœca extremely small; cloaca globular.

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#### **422. 1. Tachypetes Aquilus, LINN. Frigate-Bird.—Man-of-war Bird.**

PLATE CCLXXI. Male.

Male with the bill light purplish-blue, white in the middle, the gular sac orange; bare skin around the eye blue; feet light carmine above, orange beneath; general colour of plumage brownish-black, the head, neck, back, breast, and sides, splendid with green and purple, the former predominating on the head, the latter on the back; wings tinged with green; inner secondaries and tail with brown, the shafts of the former black, of the latter brown. Female with a broad white space on the breast, that colour extending forwards along the sides of the neck, and encircling it about the middle; feathers of the back less elongated, and glossy; the dark parts more tinged with brown. Young at first covered with yellowish soft down.

*Adult*, 41, 86.

Resides constantly on and about the Florida Keys, where it breeds in vast numbers on trees. Ranges over the Gulf of Mexico, Bays of Texas, but rarely seen to the eastward of North Carolina.

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Tachypetes Aquilus, BONAP. Syn. p. 406.

Frigate Pelican, NUTT. Man. v. ii. p. 491.

Frigate Pelican. Tachypetes Aquilis, AUD. Orn. Biog. v. iii. p. 495; v. v. p. 684.

### **GENUS IV. PELECANUS, LINN. PELICAN.**

Bill about thrice the length of the head, rather slender, almost straight, depressed; upper mandible linear, depressed, convex at the base, gradually flattened, and a little enlarged to near the end, when it narrows, and terminates in a hooked point; ridge broad and convex at the base, gradually narrowed and flattened beyond the middle, separated by a groove from the sides, erect at the base, sloping toward the edges, edges very acute, with an internal groove; lower mandible with the angle excessively long, extending to the unguis, the sides erect and convex, the edges thin and involute, the tip decurved. Nostrils basal, lateral, linear, concealed by the wrinkles of the skin. Head small, oblong; neck long, stout; body full, rather flattened. Feet short, and very stout; tarsus short, compressed, covered all round with hexagonal scales; toes in the same plane, all connected by webs, first shortest, fourth longer than third. Claws short, strong, curved, that of the third toe pectinate. Feathers of head and neck exceedingly small, slender, downy; of the other parts generally lanceolate and acuminate; wings very long, rather narrow, rounded; primaries much curved. Tail short, broad, rounded, of more than sixteen feathers. An enormous bare, extensile, gular sac; tongue extremely small, papilliform; œsophagus excessively wide; proventricular glands arranged in broad longitudinal series; stomach very small, with its muscular coat thin, its epithelium smooth and soft; a globular pyloric lobe; intestine long and narrow; cœca very small, cylindrical; cloaca globular.

#### **423. 1. Pelecanus Americanus, AUD. American White Pelican.**

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PLATE CCCXI. Male.

Bill with an erect crest on the ridge, and with the gular pouch and feet bright yellow; plumage white; elongated feathers on the occiput and breast pale yellow, with which also the smaller wing-coverts are tinged; alula, primary coverts, primary quills, and outer secondaries, black, with white shafts, inner ten secondaries white; tail of twenty-four feathers. Female generally without the horny crest, otherwise similar.

*Male*, 61  $\frac{3}{4}$ , 103; bill, 13  $\frac{3}{4}$ .

Common during winter from Texas to South Carolina, both along the coast, and about the lakes and rivers adjoining Missouri, Mississippi, and Ohio Rivers. Breeds from California

northward, to Lat. 61°. Accidental in the Middle Atlantic Districts.

American White Pelican, *Pelecanus americanus*, AUD. Orn. Biog. v. iv. p. 88.

#### 424. 2. *Pelecanus fuscus*, LINN. Brown Pelican.

PLATE CCLI. Male. PLATE CCCCXXI. Young.

Bill greyish-white, tinged with brown, and marked with irregular spots of pale carmine; bare space between the bill and the eye deep blue, eyelids pink, gular pouch greenish-black; feet black; hair-like feathers on the fore part of the head light yellow, the rest of the head white; a stripe of the same margining the pouch to the middle of the neck; a short space between these two lines anteriorly, and the whole of the posterior and lateral parts of the neck dark chestnut-brown, the small crest paler; back and wings dusky, each feather with the central part greyish-white; the latter colour prevailing on the scapulars and larger wing-coverts; primaries and coverts brownish-black, secondaries greyish-brown; their outer edges greyish-white; tail light grey, shafts of quills and tail-feathers white, unless toward the end; lower parts brownish-grey; sides of the neck and body with narrow longitudinal white lines; on the fore neck, below the dark chestnut spot a smaller pale yellow mark, behind which the feathers for a short space are blackish-brown. Young in second plumage with the bill greyish-blue, its edges and unguis greyish-yellow; gular pouch dull greyish-blue; bare space around the eye dusky blue; head and neck dark brown, as are the upper parts generally; secondary and many of the smaller coverts margined with pale brown; primaries and their coverts, as well as the tail-coverts, brownish-black, with white shafts; feet and claws dull leaden. Tail of twenty-two feathers.

*Adult*, 52, 80.

Very abundant and constantly resident from Texas along the shores eastward to North Carolina. Breeds on trees and also on the ground; eggs three.

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*Pelecanus fuscus*, BONAP. Syn. p. 401.

Brown Pelican, NUTT. Man. v. ii. p. 476.

Brown Pelican, *Pelecanus fuscus*, AUD. Orn. Biog. v. iii. p. 376; v. v. p. 212.

### GENUS V. *SULA*, BRISS. GANNET.

Bill longer than the head, opening beyond the eyes, straight, elongated, conical, moderately compressed; upper mandible, with the dorsal line, straight and declinate, at the end convex and a little decurved; the ridge very broad, convex, with a slight median carina, and separated on each side from the sides, which are perpendicular, slightly convex, and have an additional narrow-jointed piece below the eye; edges sharp, direct, irregularly serrate with numerous slender cuts directed backwards, tip compressed, a little decurved, rather acute; lower mandible with the angle extremely long and narrow, the dorsal line straight, ascending, the sides erect, convex, the edges sharp and serrated, the tip compressed, acute. No external nostrils. Head large, neck of moderate length, and very thick; body of moderate bulk, rather elongated. Feet short, strong, placed rather far behind; tibiæ concealed; tarsus very short, rounded before, sharp behind, scaly, with three lines of small transversely oblong scutella, which run down the toes, the latter long and slender, all united by membranes having their margins straight; first toe rather small, directed inwards and forwards; middle toe longest, the outer almost equal. Claws of moderate size, slightly arched, that of the third toe pectinate. Plumage generally close, rather compact, on the head and neck blended. Wings very long, narrow, acute; first quill longest. Tail rather long, cuneate, of twelve or fourteen feathers. Gular sac small, with a small median portion bare; tongue extremely small, blunt; œsophagus extremely wide; proventricular glands forming a broad belt partially divided by intervals; stomach extremely small, its muscular coat thin, the inner soft; intestine of moderate length, slender; cœca very small; cloaca globular.

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#### 425. 1. *Sula Bassana*, LINN. Common Gannet.

PLATE CCCXXVI. Adult Male, and Young.

Adult with the bill pale bluish-grey, tinged with green towards the base; bare space about the eye, lines on the bill and gular membrane blackish-blue; tarsi, toes, and webs, brownish-black, the scutella light greenish-blue, claws greyish-white; general colour of plumage white; upper part of head and hind neck buff-coloured; primary quills brownish-black, their shafts white toward the base. Young at first covered with very soft white down; when fully fledged, with the bill light greyish-brown, the bare space around the eye pale greyish-blue; feet dusky, the narrow bands of scutella pale greyish-blue; head, neck, and upper parts, chocolate-brown, each feather with a terminal narrow triangular white spot; lower parts greyish-white, spotted with greyish-brown, each feather having a broad terminal margin of that colour; quills and tail-feathers brownish-black.

*Adult*, 40  $\frac{1}{2}$ , 75. *Young* fledged, 38, 72.

Ranges southward off the coast at all seasons as far as the Gulf of Mexico. Breeds on rocks on

the Gulf of St Lawrence, and off the coast of Labrador. Abundant. Migratory.

*Sula bassana*, BONAP. Syn. p. 408.

Gannet, *Sula bassana*, NUTT. Man. v. ii. p. 495.

Common Gannet, *Sula bassana*, AUD. Orn. Biog. v. iv. p. 222.

#### **426. 2. *Sula fusca*, LINN. Booby Gannet.**

PLATE CCVII. Male.

Bill and naked parts at its base bright yellow, the former flesh-coloured toward the end; a dusky spot before the eye; tarsi, toes, and webs pale yellow, claws white; head, neck all round, upper parts in general, and lower surface of wings dusky brown, tinged with grey; breast, abdomen, and lower tail-coverts, pure white. Young when fledged of a greyish-brown colour all over, the breast and abdomen being merely a little lighter than the rest; bill and claws dusky; tarsi and toes with their membranes dull yellow.

*Male*, 31, 49  $\frac{1}{4}$ .

Gulf of Mexico, and as far east as the coast of Georgia. Breeds on the Fortugas Keys, south of Florida. Abundant. Migratory.

*Sula fusca*, BONAP. Syn. 408.

Booby, *Sula fusca*, NUTT. Man. v. ii. p. 500.

Booby Gannet, *Sula fusca*, AUD. Orn. Biog. v. iii. p. 63.

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### **GENUS VI. PHAETON, LINN. TROPIC BIRD.**

Bill as long as the head, stout, very much compressed, slightly curved, tapering, acute, opening to beneath the eye; upper mandible with the dorsal line slightly arched, the ridge narrow, rounded, the sides sloping and slightly convex at the base, nearly erect towards the end, the edges sharp, direct, irregularly broken, the tip acuminate; nasal groove short, near the ridge, lower mandible with the angle long, and extremely narrow, the dorsal line straight and ascending, the sides erect and slightly convex, the tip acuminate. Nostrils basal, linear, very small. Head rather large, ovate; neck short and thick; body rather full. Feet very short; tibia bare for a considerable space; tarsus extremely short, roundish, covered with small round scales; toes rather small, placed in the same plane, and connected by reticulated webs; first very small, third a little longer than fourth, all scutellate above. Claws small, arched, compressed, rather sharp, that of the third toe with a thin entire inner edge. Plumage soft, blended, on the back rather compact. Wings long, acute, the first quill longest. Tail of twelve feathers, tapering, the two middle feathers extremely elongated, narrow, and tapering. This genus appears to be intermediate between *Sula* and *Sterna*.

#### **427. 1. *Phaeton æthereus*, LINN. Common Tropic Bird.**

PLATE CCLXII. Male and Female.

Bill, tarsi, and hind toes yellow, the rest of the foot black; general colour of plumage pale pink, or white tinged with carmine, the two middle tail-feathers redder; a curved spot before the eye, and a short band behind it, black; a band of the same colour across the wing from the flexure, running narrow along the middle coverts, much enlarged on the inner secondaries and their coverts, and including the extremities of the scapulars; outer webs, shafts, and a portion of the inner webs of the first four primary quills, also black; and a spot of the same on some of the primary coverts; shafts of two middle tail-feathers black, unless toward the end; some of the elongated feathers on the hind part of the sides greyish-black in the centre. Female less tinged with red, and having the tail-feathers less elongated.

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*Male*, 29  $\frac{1}{2}$ , 38. *Female*, 26, 34.

Rare on the coast of Florida. Migratory.

*Phaeton æthereus*, BONAP. Syn. p. 409.

Tropic Bird, NUTT. Man. v. ii. p. 503.

Tropic Bird, *Phaeton æthereus*, AUD. Orn. Biog. v. iii. p. 442.

### **FAMILY XLII. LARINÆ. GULLS.**

Bill of moderate length, straight, compressed, acute; upper mandible with the dorsal line generally straight until toward the end, when it is decurved, the ridge convex, the nasal groove rather long, the edges sharp, direct, overlapping, the tip rather acute and declinate; lower

mandible with the angle long and very narrow, the dorsal line ascending and nearly straight, with an angular prominence at its commencement. Nostrils submedial or basal, oblong. Head of moderate size, ovate; neck of moderate length; body rather stout. Legs short or of moderate length; tibia bare at its lower part; tarsus anteriorly scutellate; toes four, the first very small, free, the third longest; anterior toes connected by webs. Claws small, arched, compressed, rather acute. Plumage full, soft, blended, somewhat compact on the back and wings, the latter long and pointed; tail of twelve feathers, even, rounded, or emarginate. Tongue long, slender, pointed; oesophagus very wide; stomach rather small, moderately muscular, with a dense, longitudinally rugous epithelium; intestine of moderate length and width; cæca small; cloaca globular. Trachea simple, with a single pair of inferior laryngeal muscles. Nest on the ground, rudely constructed. Eggs few, not exceeding four, spotted. Young covered with down.

## GENUS I. RHYNCHOPS, LINN. SKIMMER.

Bill longer than the head, nearly straight, tetragonal at the base, suddenly extremely compressed and continuing so to the end; upper mandible much shorter than the lower, its ridge sharp, the sides erect but a little convex, the edges approximated so as to leave merely a very narrow groove between them, the tip a little rounded, when viewed laterally; nasal groove rather short, near the margin; lower mandible with the angle extremely short, the dorsal line straight or slightly decurved, the sides erect, obliquely grooved, the edges united into a very thin blade, which fits into the narrow groove of the upper mandible, the tip rounded or abrupt, when viewed laterally. Nostrils linear-oblong. Head rather large, oblong, considerably elevated in front; neck rather short, thick; body short, ovate. Feet short, moderately stout; tibia bare below, with narrow transverse scutella before and behind; tarsus short, anteriorly covered with broad scutella; toes very small, the first extremely short and free, unless at the base; middle toe slightly longer than outer; anterior toes united by deeply emarginate webs. Claws long, compressed, slightly arched, rather obtuse. Plumage moderately full, soft, and blended; wings extremely long, and very narrow; primary quills excessively long, the first longest; secondaries short. Tail of moderate length, deeply forked, of twelve feathers. Tongue short, triangular, tapering; oesophagus wide; stomach rather small, oblong, muscular, the cuticular lining dense, with nine broad longitudinal rugæ; intestine rather long, narrow; cæca very small; cloaca large, globular, the digestive organs are precisely similar to those of the Terns and smaller Gulls.

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### 428. 1. *Rhynchops nigra*, LINN. Black Skimmer.

PLATE CCCXXIII. Male

Bill rich carmine in its basal half, the rest black; feet carmine; upper plumage deep brownish-black; secondary quills and four or five of the primaries tipped with white, the latter on the inner web chiefly; tail-feathers black, broadly margined on both sides with white, the outer more extensively; the middle tail-coverts black, the lateral black on the inner, and white on the outer web; a broad band of white over the forehead, extending to the fore part of the eye; cheeks and throat of the same colour; the rest of the neck, and lower parts in spring and autumn of a delicate cream-colour; axillary feathers, lower wing-coverts, and a large portion of the secondary quills, white, the coverts along the edge of the wing black. Female smaller, similar to the male, but with the tail-feathers white, excepting a longitudinal band including the shaft. After the first autumnal moult, there is on the hind part of the neck a broad band of white mottled with greyish-black; the lower parts pure white, the upper of a duller black; bill and feet less richly coloured.

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*Male*, 20, 48. *Female*, 16  $\frac{3}{4}$ , 44  $\frac{1}{2}$ .

During winter, in vast multitudes on the coast of Florida. In summer dispersed in large flocks from Texas to New Jersey, breeding on sand beaches or islands. In the evenings and at night ascends streams sometimes to the distance of one hundred miles.

Black Skimmer or Shear-water, *Rhynchops nigra*, WILS. Amer. Orn. v. vii. p. 85.

*Rhynchops nigra*, BONAP. Syn. p. 352.

Black Skimmer, NUTT. Man. v. ii. p. 264.

Black Skimmer or Razor-billed Shear-water, *Rhynchops nigra*, AUD. Orn. Biog. v. iv. p. 203.

## GENUS II. STERNA, LINN. TERN.

Bill longer than the head, rather stout or slender, nearly straight, compressed, very acute; upper mandible with the dorsal line slightly arched, the ridge rather broad and convex at the base, gradually narrowed toward the end, sides convex, edges sharp and direct, tip acute; nasal groove short; lower mandible with the angle very narrow, acute, extending to the middle, the dorsal line straight, the sides slightly convex, nearly erect, the sharp edges inflected, the tips very acute. Nostrils basal, lateral, linear, direct. Head rather large, oblong; neck of moderate length and thick; body slender. Feet short, moderately stout; tibia bare for a considerable space; tarsus short, roundish, covered all round with small scales; first toe very small, third longest,

fourth a little shorter; anterior toes connected by emarginate webs. Claws slightly curved, compressed, acute. Plumage soft, close, blended, rather compact on the back and wings. Wings extremely long, narrow, and pointed, the first quill longest, the rest rapidly graduated. Tail long, generally forked, of twelve feathers. Tongue very slender, tapering, with the point slit; oesophagus extremely wide; proventricular belt complete; stomach rather small, moderately muscular, with the epithelium dense and longitudinally rugous; intestine of moderate length, rather narrow; coeca small.

#### 429. 1. *Sterna Cayana*, LATH. **Cayenne Tern.**

PLATE CCLXXIII. Male.

Bill longer than the head, stout; wings longer than the tail, which is moderately forked; bill carmine; feet black; upper part of the head and occiput greenish-black; back and wings light greyish-blue; primary quills bluish-grey on their outer webs, darker on the outer part of the inner, their inner part white, as are the ends and inner webs of the secondaries; upper tail-coverts and tail greyish-white; all the other parts pure white.

*Male*, 19, 44.

From Texas, in spring, to the Floridas, where it breeds on the Tortugas. Labrador, but not observed in the intermediate parts of the Atlantic coast. Abundant. Migratory.

*Sterna cayana*, BONAP. Syn. v. ii. p. 353.

Cayenne Tern, NUTT. Man. v. ii. p. 208.

Cayenne Tern, *Sterna cayana*, AUD. Orn. Biog. v. iii. p. 505; v. v. p. 639.

#### 430. 2. *Sterna Anglica*, MONTAGU. **Gull-billed Tern.—Marsh Tern.**

PLATE CCCCX. Male.

Bill about the length of the head, stout; wings longer than the tail, which is moderately forked; bill and feet black; upper part of the head and occiput greenish-black; sides of the head, fore neck, and all the lower parts, white; upper parts pale greyish-blue, edges of the wings whitish; primaries hoary on the outer web, deep grey on the inner, their shafts and those of the tail-feathers white; the tail of a paler tint than the back, and the outer feather nearly white.

*Male*, 14, 34.

Cosmopolite. In America, breeds from the mouth of the Mississippi to Connecticut. Not abundant. Migratory.

Marsh Tern, *Sterna aranea*, WILS. Amer. Orn. v. viii. p. 143.

*Sterna aranea*, BONAP. Syn. p. 354.

Marsh Tern, *Sterna anglica*, NUTT. Man. v. ii. p. 269.

Marsh or Gull-billed Tern, *Sterna anglica*, AUD. Orn. Biog. v. v. p. 127.

#### 431. 3. *Sterna Cantiaca*, GMEL. **Sandwich Tern.**

PLATE CCLXXIX. Adult.

Bill considerably longer than the head, rather slender, black, with the tips yellow; inside of mouth deep blue; feet black; wings longer than the tail, which is deeply forked; upper part of head and hind neck bluish-black; sides of head, neck all round, and the rest of the lower parts white, the sides and breast tinged with pink; fore part of back, scapulars, and upper surface of wings pale greyish-blue; the tips and greater part of the inner webs of the scapulars and quills white, as are the rump and tail; the four outer quills blackish, but covered with light grey down on the outer webs, and over a considerable extent of the inner, their shafts white. Young, after the first moult, of a light greyish-blue on the upper parts, the feathers tipped and banded in an undulating manner with brownish-black; the upper part of the head and hind neck brownish-black mottled with white; quills as in the adult; tail grey, with irregular blackish markings towards the tips of the feathers; lower parts of a much lighter pale grey; bill and feet black.

*Adult*, 15  $\frac{3}{4}$ , 33  $\frac{3}{4}$ .

From Texas, during spring and summer, to the Floridas, where it breeds in great numbers. Never observed in any other part of the coast of America. Migratory.

Sandwich Tern. NUTT. Man. v. ii. p. 276.

Sandwich Tern, *Sterna cantiaca*, AUD. Orn. Biog. v. iii. p. 531.

#### 432. 4. *Sterna fuliginosa*, LATH. **Sooty Tern.**

PLATE CCXXXV.

Bill slightly longer than the head, rather slender, and with the feet black; tail very deeply forked, much longer than the wings; forehead white; lores, upper part of head, hind neck, and all the upper parts deep black, tinged with brown, on the head glossed with blue; edges of wings and lateral tail-feathers white, the latter with the inner web toward the end dusky; lower parts and sides of head and neck pure white. Young with the lower parts and forehead white, the upper parts greyish-brown, the feathers edged with brownish-white, the primary quills greyish-black.

*Male*, 16  $\frac{1}{4}$ , 34  $\frac{3}{4}$ .

From Texas to the Floridas, in spring. Breeds in immense multitudes on the Tortugas. Migratory.

*Sterna fuliginosa*, BONAP. Syn. p. 355.

Sooty Tern, *Sterna fuliginosa*, WILS. Amer. Orn. v. viii. p. 145.

Sooty Tern, NUTT. Man. v. ii. p. 284.

Sooty Tern, *Sterna fuliginosa*, AUD. Orn. Biog. v. iii. p. 263; v. v. p. 641.

### 433. 5. *Sterna Hirundo*, LINN. Common Tern.

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PLATE CCCIX. Male.

Bill about the same length as the head, rather slender, bright coral-red, towards the end black, the tip light yellow; feet coral-red, lighter than the bill; wings slightly shorter than the tail, which is very deeply forked; upper part of head and hind neck half-way down, deep bluish-black, anteriorly tinged with brown; sides of head, fore neck, and all the lower parts white, with a slight tinge of greyish-blue on the breast; back, scapulars, and wings light greyish-blue; edges of wings, rump, and upper tail-coverts white, slightly tinged with grey; first primary with the outer web deep black, the shaft white, on the inner web a greyish-black band running along the shaft, narrow at the base, and widening, so as to occupy the whole breadth of the web for an inch at the end, where it is hoary; the next five with the outer web, and a varying portion of the inner in nearly their whole length hoary, but with a dusky shade, becoming more apparent at the end; the rest of the quills like the back, but margined and tipped with white; tail-feathers with the inner webs white, the outer of the colour of the back, paler on the middle feathers, gradually deepening outwards, and on the outer feathers dark grey. Young, in first plumage, with the bill dull greenish-black, its tip yellowish, feet greenish-yellow; upper parts chiefly light brown. In winter, the bill black, with the base pale orange, the tip yellowish, the feet orange-yellow; the colour of the plumage as in the adult, the forehead white, the rest of the head dusky, the upper parts having the feathers slightly margined with lighter.

*Male*, 16, 31  $\frac{1}{2}$ .

Breeds from Galveston Islands along the shores of the Atlantic to Labrador, and as far north as Lat. 57°. Returns southward in autumn, passing beyond the Texas. Extremely abundant.

Great Tern, *Sterna Hirundo*, WILS. Amer. Orn. v. viii. p. 76.

*Sterna Hirundo*, BONAP. Syn. p. 354.

*Sterna Hirundo*, Great Tern, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 412.

Great or Common Tern, NUTT. Man. v. ii. p. 271.

Common Tern, *Sterna Hirundo*, AUD. Orn. Biog. v. iv. p. 74.

### 434. 6. *Sterna Havellii*, AUD. Havell's Tern.

PLATE CCCCIX. Fig. 1. Adult.

Bill about the length of the head, rather stout; wings a little shorter than the tail, which is deeply forked. In winter, the bill black, towards the base brown, and a small portion of the tip yellowish; feet orange; a broad band of black surrounding the eye, and extending toward the nape; fore part of head, cheeks, and all the lower parts pure white; hind head and nape dusky grey, mixed with white; the rest of the upper parts light greyish-blue, excepting the rump, which is white; the primary coverts and quills, as well as the tail-feathers and their coverts, hoary, with the shafts white, but five of the quills dusky on the outer web, on the inner along the shaft, and on the inner margin toward the end. Young, in winter, with the bill somewhat shorter, and more tinged with brown, the lower parts, rump, outer web of lateral tail-feathers, and sides of neck, white; wings as in the adult, but the primaries internally margined with white, and the secondaries tipped with the same; upper part of the head, and the rest of the upper parts, light yellowish-brown, intermixed with greyish-blue; a band of black on the sides of the head, as in the adult.

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*Adult*, 15  $\frac{1}{2}$ , wing, 10  $\frac{9}{12}$ .

From Texas to South Carolina. Common. Migratory.

**435. 7. *Sterna Trudeaui*, AUD. Trudeau's Tern.**

PLATE CCCCIX. Fig. 2. Adult.

Bill about the length of the head, rather slender; wings a little longer than the tail, which is deeply forked. Bill black, with part of the base of the lower mandible, the edges of both, and their tips to the length of five-twelfths of an inch, yellow; feet orange, claws brown, toward the end yellow; a band of blackish-grey surrounding the eye, and extending toward the nape; fore part of head, cheeks, and upper part of throat, white; the rest of the upper and lower parts light greyish-blue, excepting the axillar feathers, lower wing-coverts, and rump, which are white; tail-coverts and tail greyish-white; primary coverts and quills hoary, but the outer five dusky grey on the inner web, toward the margin, and less so along the shaft, and on the outer web; the shafts of all the quills and tail-feathers white, as are the inner edges of the primaries and tips of the secondaries, the inner excepted. This species has the bill somewhat longer and more slender than that of Havell's Tern, and differently coloured; the tarsus longer, and the lower parts of the body of the same tint as the upper, whereas that species is white beneath.

*Adult*, 16; wing, 10  $\frac{1}{2}$ .

Great Egg Harbour and Long Island. Rare. Migratory.

Trudeau's Tern, *Sterna Trudeaui*, AUD. Orn. Biog. v. v. p. 125.

**436. 8. *Sterna arctica*, TEMM. Arctic Tern.**

PLATE CCL. Male.

Bill about the same length as the head, slender, and with the mouth and feet vermilion, tinged with carmine; wings about two inches shorter than the tail, which is very deeply forked; upper part of head and occiput greenish-black; sides of head and chin white; upper parts pale greyish-blue, the rump bluish-white, the tail and its coverts white, excepting the outer webs of the two lateral feathers, which are dusky grey; primaries dusky towards the ends, the two outer with their outer webs blackish, all with the greater part of the inner web white, secondaries tipped with white; neck, breast, and sides, pale greyish-blue, like the upper parts, but lighter; abdomen, lower tail-coverts, and lower surfaces of wings and tail, white.

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*Male*, 15  $\frac{1}{2}$ , 32.

Along the coast of the Atlantic in autumn and winter, sometimes as far as New Jersey. Common in Maine, Nova Scotia, and Labrador, where it breeds in multitudes, as well as on the Magdalene Islands, and on the shores of the Arctic Seas. Migratory.

*Sterna arctica*, BONAP. Syn. p. 354.

*Sterna arctica*, Arctic Tern, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 414.

Arctic Tern, NUTT. Man. v. ii. p. 275.

Arctic Tern, *Sterna arctica*, AUD. Orn. Biog. v. iii. p. 366.

**437. 9. *Sterna Dougallii*, MONT. Roseate Tern.**

PLATE CCXL. Male.

Bill about the same length as the head, slender, brownish-black, deep orange at the base; feet vermilion; wings about three inches shorter than the tail, which is very deeply forked; upper part of the head and occiput bluish-black; hind neck white; the rest of the upper parts pale bluish-grey, the tail lighter; edges of wings, tips and inner edges of quills, and their shafts, white; first quill black on the outer web and part of the inner, the next two similarly marked, but with the black shaded over with pale grey, the loose barbules being of that colour, the other primaries becoming gradually lighter; lower parts of a beautiful roseate hue, soon fading after death; under surface of wings and tail white.

*Male*, 14  $\frac{1}{2}$ , 30.

Florida Keys, where it is abundant, and breeds. Migratory.

*Sterna Dougallii*, MONT. TEMM.

Roseate Tern, NUTT. Man. v. ii. p. 278.

Roseate Tern, *Sterna Dougallii*, AUD. Orn. Biog. v. iii. p. 296.

**438. 10. *Sterna nigra*, LINN. Black Tern.**

PLATE CCLXXX. Adult and Young.



Bill about the same length as the head, rather slender, brownish-black; feet reddish-brown; wings two inches longer than the tail, which is merely emarginate; head, neck, breast, sides, and abdomen, greyish-black; lower tail-coverts white, lower wing-coverts bluish-grey; upper parts dark bluish-grey, the outer web of the first quill greyish-black; shafts of quills and tail-feathers white. Young in second plumage with the upper parts greyish-blue, the feathers of the fore part of the back, and especially the scapulars, brown towards the end; the upper and hind part of the head greyish-black, of which there is a darker mark behind and another before the eye; forehead greyish-white, as are the sides of the head, the fore neck, breast, and abdomen; sides dusky grey; lower wing-coverts greyish-white.

*Adult*, 9, 24. *Young*, in autumn, 7  $\frac{3}{4}$ ; wing, 9  $\frac{1}{2}$ .

Arrives in Texas from the south early in spring, proceeds along the coast to the Mississippi, then ascends that river and its tributaries, breeding around ponds, or along the streams; and even advances to the Fur Countries, where it also breeds. Abundant. Migratory. Occasionally along the coasts of the Middle Atlantic Districts.

*Sterna nigra*, BONAP. Syn. p. 355.

*Sterna nigra*, Black Tern, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 415.

Black Tern or Stern, NUTT. Man. v. ii. p. 282.

Black Tern, *Sterna nigra*, AUD. Orn. Biog. v. iii. p. 593; v. v. p. 642.

#### 439. 11. *Sterna minuta*, LINN. Least Tern.

PLATE CCCXIX. Adult and Young.

Bill about the length of the head, slender, yellowish-orange, with the tips black, but the extreme points horn-colour; feet light orange-red; wings an inch or more longer than the tail, which is deeply forked; on the forehead a triangular white patch, extending to over the middle of the eye; upper part of head and nape, and loreal space, deep black; sides of head, fore neck, and lower parts pure white; back and wings very pale bluish-grey; first two quills with the outer web greyish-black, and rather less than half of their inner web of the same colour, the rest white, extending to about half an inch from their extremities; tail white in summer, of a paler tint than the back at other times. Young, when fledged, with the bill greenish-black, all the lower parts dull greyish-white, as are the upper, including the tail, the hind part of the head streaked with dusky, on the back and rump the feathers with a curved marginal band of greyish-brown; primary quills greyish-brown, the outer two darker; tail even, each feather narrowly margined with greyish-white.

*Adult*, 8  $\frac{3}{4}$ , 18  $\frac{3}{4}$ .

Breeds from Galveston along the shores to Labrador. Not mentioned as found in the Fur Countries. Returns southward, and passes beyond Texas in autumn. Extremely abundant at times on the Great Lakes, as well as the Ohio and Mississippi.

Least Tern, *Sterna minuta*, WILS. Amer. Orn. v. vii. p. 80.

*Sterna minuta*, BONAP. Syn. p. 355.

Silvery Tern, *Sterna argentea*, NUTT. Man. v. ii. p. 280.

Least Tern, *Sterna minuta*, AUD. Orn. Biog. v. iv. p. 175.

\* Tail graduated.

#### 440. 12. *Sterna stolidus*, LINN. Noddy Tern.

PLATE CCLXXV. Male.

Bill a little longer than the head, rather slender, a little decurved, black; tail cuneate; general colour of plumage sooty-brown; primaries and tail-feathers brownish-black; upper part of head greyish-white; a black spot anterior to and over the eye.

*Male*, 16  $\frac{1}{2}$ , 32.

Abundant on the Gulf of Mexico during the whole year. Breeds in vast multitudes on the Tortugas Keys.

*Sterna stolidus*, BONAP. Syn. p. 356.

Noddy, NUTT. Man. v. ii. p. 285.

Noddy Tern, *Sterna stolidus*, AUD. Orn. Biog. v. iii. p. 516; v. v. p. 642.

Bill shorter than the head, nearly straight, moderately stout, compressed; upper mandible with its dorsal outline straight to the middle, then decurved, the ridge convex, the sides rapidly sloping, the edges sharp and direct, the tip rather obtuse; nasal groove rather long and narrow; nostrils submedial, longitudinal, linear-oblong, broader anteriorly; lower mandible, with the angle long and pointed, the outline of its crura decurved anteriorly, that of the ridge slightly concave and ascending, the sides erect, the edge-line decurved toward the tip, which is narrow but obtuse. Head of moderate size, broadly ovate; neck of ordinary length; body compact. Feet rather long or of moderate length, rather stout; tibia bare at the lower part; tarsus moderately compressed, with numerous curved anterior scutella, and smaller behind; toes slender, of moderate length, scutellate; first very small, third a little longer than fourth. Claws small, slightly arched, compressed, rather blunt. Plumage close, soft, blended, on the back and wings rather compact. Wings very long, pointed; first and second quills longest; secondaries broad, the inner more elongated. Tail of moderate length, generally even, rarely rounded or emarginate, of twelve feathers. In those which have the head white in summer, it is streaked with dusky in winter; and those which are hooded in summer, have the head white and slightly streaked in winter.

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\* Tail emarginate.

#### **441. 1. *Larus Sabini*, SABINE. Fork-tailed Gull.**

PLATE CCLXXXV. Fig. 1, Male.

Tail of moderate length, forked; bill of moderate length, rather slender, black, with the terminal third yellow; feet black; head and upper part of neck all round blackish-grey, that colour terminated by a collar of pure black; lower neck all round, the whole lower surface, upper tail-coverts, and tail, pure white; back and wings bluish-grey, excepting a large terminal portion of the secondaries, and the tips of the primaries, which are white, the primaries themselves being black, with their shafts brownish-black.

*Male*, 13, 33.

Accidental as far south in winter, as New York. Rather common along the coast of Nova Scotia. Breeds in Newfoundland, and along the coasts of the Arctic Seas. Seen on the banks of Newfoundland in great numbers.

*Larus Sabini*, Fork-tailed Gull, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 428.

Fork-tailed Gull, NUTT. Man. v. ii. p. 295.

Forked-tailed Gull, *Larus Sabini*, AUD. Orn. Biog. v. iii. p. 561.

\*\* Tail cuneate.

#### **442. 2. *Larus Rossii*, RICHARDSON. Ross's Gull.**

Not figured.

Tail much rounded, the middle feathers being an inch longer than the lateral; bill of moderate length, slender, black; feet vermilion; head, neck, all round, lower parts, rump and tail, white, the lower parts tinged with pink, which soon fades; a narrow collar of black; fore part of back, scapulars, and both surfaces of wings light greyish-blue; tips of scapulars and secondaries white.

*Adult*, 14; wing  $10 \frac{1}{2}$ .

Arctic Seas.

*Larus Rossii*, Cuneate-tailed Gull, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 427.

Ross's Gull, *Larus Rossii*, AUD. Orn. Biog. v. v. p. 324.

\*\*\* Tail even.

#### **443. 3. *Larus Bonapartii*, RICHARDSON. Bonaparte's Gull.**

PLATE CCCXXIV.

Bill slender, black; feet orange, tinged with vermilion; head and upper part of neck all round greyish-black, that colour extending half an inch lower on the throat than on the occiput; a white band divided by a narrow black line margining the eye behind; lower part of neck all round, anterior edge of wing, alular, smaller coverts on the carpal margin, four outer primary coverts, shaft and inner web of outer primary, both webs of second, inner webs of third and fourth, rump, tail, and all the lower parts, white; back, scapulars, and wings light greyish-blue; outer web of first quill, excepting a small portion toward the end, its tips to the length of half an inch, black, as are the ends of the next six, which however have a small tip of white, the black on some of them being an inch long, and running along the inner edge to a considerable extent. Female somewhat smaller, similar to the male, but with the head and upper part of the neck umber-brown. Young in second plumage with the bill greyish-black, the feet flesh-coloured; head and neck greyish-white; a small patch of black behind the eye; upper parts dull bluish-grey, many of the wing-coverts

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greyish-brown, edged with paler; quills as in the adult; rump and tail white, the latter with a broad band of black at the end, the tips narrowly edged with whitish.

*Adult*, 14  $\frac{1}{8}$ , 32  $\frac{1}{4}$ .

Extremely abundant in winter, on the coast of Florida. Equally plentiful in spring, along the coasts of the Middle and Eastern Districts, especially in the Chesapeake. Breeds from the Bay of Fundy to high latitudes. Not uncommon in autumn, on the Great Lakes, and the Ohio and Mississippi.

Brown-masked Gull, *Larus capistratus*, BONAP. Amer. Orn. v. iv. Female.

*Larus capistratus*, BONAP. Syn. p. 358.

*Larus Bonapartii*, Bonapartian Gull, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 425.

Bonapartian Gull, NUTT. Man. v. ii. p. 294.

Bonapartian Gull, *Larus Bonapartii*, AUD. Orn. Biog. v. iv. p. 212.

#### 444. 4. *Larus atricilla*, LINN. Black-headed Gull.—Laughing Gull.

PLATE CCCXIV. Male and Young.

Bill moderately stout, and with the feet, margin of eyelids, and inside of mouth deep carmine; wings extending three inches beyond the tail, which is even; head and upper neck all round blackish lead-grey, darker on the upper part of the head and along the posterior margin, which descends lower in front, or to the extent of about two inches and a half from the base of the lower mandible; two narrow white bands bordering the upper and lower eyelids; lower neck all round, the whole lower surface, rump and tail white, but the fore part of the neck and the breast down to the legs, of a beautiful light rosy tint; back and wings greyish-blue, with a slight tinge of purple, excepting a large terminal portion of the secondaries, and the tips of the primaries, which are white; first primary black, with a tinge of grey on the inner web at the base; second and third similar, with the grey more extended; the fourth with it extending over two-thirds, the fifth black only for an inch and a half, on the sixth the black reduced to two spots near the end; the other parts and the remaining primaries of the same general colour as the back. Female similar, but considerably smaller. In winter, the head white, the feathers on its upper part and the nape more or less brownish-grey in their concealed part, that colour appearing in slight patches here and there, and especially along the posterior margin of the part that is coloured in summer, as well as on a small space before the eye; in other respects the plumage as in summer, but without the rosy tint. Young, when fledged, with the bill, feet, inside of mouth, and edges of eyelids olivaceous brown; upper parts brownish-grey, the feathers edged with paler; hind part of back light bluish-grey; upper tail-coverts nearly white; tail pale greyish-blue, with a broad band of brownish-black at the end, the extreme tips narrowly edged with white, the outer margin of the lateral feathers of the same colour; the first four primaries destitute of white at the tip; a small patch before the eye, two slight bands on the eyelids, and the throat, greyish-white; lower part of neck brownish-grey; the rest of the lower parts greyish-white, the sides darker, the axillars ash-grey, lower surface of wing dusky grey.

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*Adult*, 17, 40  $\frac{3}{4}$ .

Most abundant from Texas to Massachusetts, breeding along the coast. Up the Mississippi to New Orleans. Those which in spring remove to the eastward of the Floridas return early in autumn.

Black-headed Gull, *Larus ridibundus*, WILS. Amer. Orn. v. ix. p. 89.

*Larus atricilla*, BONAP. Syn. p. 359.

Black-headed Gull, NUTT. Man. v. ii. p. 291.

Black-headed or Laughing Gull, *Larus atricilla*, AUD. Orn. Biog. v. iv. p. 118.

#### 445. 5. *Larus franklinii*, RICHARDSON. Franklin's Rosy Gull.

Not figured.

"Bill rather stout, and with the feet vermilion; mantle pearl-grey; wings an inch and a half longer than the tail, which is even; five exterior quills barred with black, the first one tipped with white for an inch; tarsus twenty lines long; hood black in summer. Both eyelids, the neck, rump, tail, and whole under plumage white, the latter and interior of the wings deeply tinged with peach-blossom red; black hood covering three-quarters of an inch of the nape, and extending as much lower on the throat; mantle and wings bluish-grey; the outer web of the first quill-feathers is black to near the top, and a broad band of the same crosses the ends of the five outer primaries; all the quill-feathers are terminated with white, that of the first primary and of all the secondaries being upwards of an inch long; all the shafts whitish."

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*Male*, 17, wing, 11.

Interior of Fur Countries, breeding on the edges of large lakes.

*Larus Franklinii*, Franklin's Rosy Gull, SWAINS. & RICH. F. Bor. Amer. v. ii p. 424.

Franklin's Rosy Gull, *Larus Franklinii*, AUD. Orn. Biog. v. v. p. 323.

#### **446. 6. *Larus tridactylus*, LINN. Kittiwake Gull.**

PLATE CCXXIV. Adult and Young.

Bill moderately stout, greenish-yellow; feet black, with the hind toe rudimentary, and furnished with a minute knob in place of the claw; head, neck, rump, tail, and lower parts pure white; back and upper surface of wings light greyish-blue; the first five quills black at the end, the first on its outer web also; the fifth with a small white tip; the tips of all the other quills more or less white. Young in its second plumage with the bill and feet black; hind head and neck bluish-grey; a semilunar blackish mark before the eye; tips of auriculars dark grey; forehead, sides of head, throat, and lower parts, white, as are the rump and tail, the latter with a broad terminal band of black; mantle bluish-grey, with a broad band of black crossing the lower part of the hind neck; larger wing-coverts of the same colour toward the end; primary quills black, more or less margined with white internally.

*Adult*, 18, 36 ½.

Common as far south as New York. Abundant from Massachusetts eastward. Breeds from the Bay of Fundy northward.

*Larus tridactylus*, BONAP. Syn. p. 359.

*Larus tridactylus*, Kittiwake, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 423.

Kittiwake, NUTT. Man. v. ii. p. 298.

Kittiwake Gull, *Larus tridactylus*, AUD. Orn. Biog. v. iii. p. 186.

#### **447. 7. *Larus eburneus*, GMEL. Ivory Gull.**

PLATE CCLXXXVII.

Bill moderately stout, yellow, feet black; wings an inch and a half longer than the tail; plumage pure white. After the second moult, the bill dusky for two-thirds, yellow at the end, feet black; plumage white, the forehead and sides of the head mottled with leaden-grey, most of the wing-coverts with, a greyish-black spot towards the end; the quills, large coverts, and tail-feathers similarly marked, the markings on the tail forming a subterminal bar.

*Adult*, 19, 41.

Accidental on the coast of the United States. Common in winter in Labrador and Newfoundland. Breeds in high latitudes.

*Larus eburneus*, BONAP. Syn. p. 360.

*Larus eburneus*, Ivory Gull, SWAINS. & RICH. F. Bor. Amer.

Ivory Gull, NUTT. Man. v. ii. p. 301.

Ivory Gull, *Larus eburneus*, AUD. Orn. Biog. v. iii. p. 571.

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#### **448. 8. *Larus zonorhynchus*, RICHARDSON. Ring-billed Gull.—Common American Gull.**

PLATE CCXII. Adult and Young.

Bill stout, compressed, greenish-yellow, with a broad band of black opposite the prominence; wings two inches and a half longer than the tail; feet greenish-yellow; general colour of the plumage pure white, excepting the back and upper surface of the wings, which are light greyish-blue; the first-six quills black towards their extremities, the first and second being almost entirely so, the sixth with only a small spot; the tips of these feathers white, the first moreover with a long patch of white, over its whole breadth, the second with a smaller patch, not occupying the entire breadth, sometimes confined to the inner web, the other quills white at the end. Young after second moult with the bill black, the feet purplish-grey; general colour of plumage dull white, mottled with greyish-brown beneath, on the back with large brownish-black spots, the dark markings being central; anterior to the eye a crescent of greyish-black; outer primary quills black, terminally edged with white.

*Adult*, 20, 48.

Common during winter from Texas, along the coast, to Maine. Up the Mississippi to Natchez. Breeds from Maine to Labrador, Hudson's Bay, and Arctic shores. Columbia River. Migratory.

*Larus canus*, Mew or Common Gull, RICH. & SWAINS. F. Bor. Amer. v. ii. p. 420.

*Larus zonorhynchus*, Ring-billed Mew-Gull, *Ibid.* p. 421.

*Larus brachyrhynchus*, Short-billed Mew-Gull, *Ibid.* p. 422.

Ring-billed Mew-Gull, *NUTT. Man.* v. ii. p. 300.

Common American Gull, *Larus zonorhynchus*. *Aud. Orn. Biog.* v. iii. p. 98; v. v. p. 638.

#### **449. 9. *Larus leucopterus*, FABR. White-winged Silvery Gull.**

PLATE CCLXXXII. Adult and Young.

Bill stout, gamboge-yellow, with a spot of orange-red near the end of the lower mandible; angle of the mouth and edges of eyelids orange-red; feet pale flesh-colour; wings more than two inches longer than the tail; plumage pure white, excepting the back and upper surface of the wings, which are light greyish-blue; the tips of the secondaries, the terminal third of the primaries, and the upper tail-coverts, also white. Young in second plumage with the bill yellow, tipped with black, the feet yellowish flesh-colour; plumage yellowish-grey, marked on the head and neck with longitudinal streaks of pale brown, on the back and wings with transverse undulations, those on the tail much fainter; the first six quills destitute of markings.

*Adult*, 26, 50.

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During winter from New York to Nova Scotia. Not rare. Breeds on the islands and peninsulas of the Arctic Seas.

*Larus leucopterus*, *BONAP. Syn.* p. 361.

*Larus leucopterus*, White-winged Silvery Gull, *SWAINS. & RICH. F. Bor. Amer.* v. ii. p. 418.

White-winged Silvery Gull, *NUTT. Man.* v. ii. p. 305.

White-winged Silvery Gull, *Larus leucopterus*, *AUD. Orn. Biog.* v. iii. p. 553.

#### **450. 10. *Larus occidentalis*, AUD. Western Gull.**

Not figured.

Bill robust, compressed, yellow, with an orange-red patch toward the end of the lower mandible; iris light hazel; feet flesh-coloured; head, neck, lower parts, rump, and tail pure white; back and wings light greyish-blue, of a deeper tint than in *L. argentatus*; edges of the wings and extremities of the quills white; first seven quills greyish-black toward the end, that colour including the outer webs and the greater part of the inner of the two first, and on the rest gradually diminishing, so as on the seventh merely to form a subterminal bar; the first quill with a patch of white on both webs near the end; the tips of all white. Young male in winter with the bill black, feet flesh-coloured; upper part and sides of the head, hind part and sides of the neck, light brownish-grey, faintly mottled and streaked with white; upper parts in general greyish-brown, confusedly mottled with whitish; rump white barred with brown; primary quills greyish-black, without white at the end; secondary quills similar, more grey toward the base, margined and tipped with white, undulated with brown; tail greyish-black, tipped with whitish; lower parts greyish-white, mottled with greyish-brown. This species, which is very intimately allied to *Larus argentatus*, is remarkable for the great depth and comparative shortness of its bill.

*Male*, 27, wing  $17 \frac{1}{4}$ , but the feathers not complete.

Western Gull, *Larus occidentalis*, *AUD. Orn. Biog.* v. v. p. 320.

#### **451. 11. *Larus argentatus*, BRUNNICH. Herring or Silvery Gull.**

PLATE CCXCI. Adult and Young.

Bill robust, compressed, gamboge-yellow, with an orange-red patch toward the end of the lower mandible; iris silvery-white; feet flesh-coloured; head, neck, lower parts, rump, and tail pure white; back and wings light greyish-blue; edges of wing and extremities of quills white; the first six quills brownish-black towards the end, that colour including the outer webs and the greater part of the inner of the first two, and on the rest gradually diminishing, so as on the sixth merely to form a bar; the first quill with a patch of white about an inch and a half long on both webs near the end, the second with a circular patch on the inner web; the tips of all white. The terminal markings of the outer quills vary. Young with the bill brownish-black, paler at the base of the lower mandible, feet purplish flesh-colour; general colour of plumage light purplish-grey, the upper part of the head darker, the lower parts mottled with pale yellowish-grey; feathers of upper parts and upper tail-coverts irregularly edged and barred with greyish-white; primary quills greyish-black, terminally margined with whitish; tail of the same colour, its base and the outer webs of the lateral feathers irregularly mottled with whitish, the tips brownish-white.

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*Male*, 23, 53. *Young*, in winter,  $18 \frac{3}{4}$ , 51.

Abundant in autumn, winter, and early spring, from Texas along the whole Atlantic coast to Newfoundland. Breeds from the Bay of Fundy to Melville Island. Common in autumn on the Great Lakes, the Ohio, and Mississippi.

*Larus argentatus*, BONAP. Syn. p. 360.

Herring Gull, *Larus argentatus*, NUTT. Man. v. ii. p. 304.

Herring Gull, *Larus argentatus*, AUD. Orn. Biog. v. iii. p. 588; v. v. p. 638.

#### **452. 12. *Larus glaucus*, BRUNN. Glaucous Gull.—Burgomaster.**

PLATE CCCXCVI. Adult and Young.

Bill stout, compressed, gamboge yellow, with a carmine patch toward the end of the lower mandible; iris yellow; feet flesh-coloured; second quill slightly longer than the first; tail slightly rounded; head, neck, lower parts, rump, and tail pure white; back and wings light greyish-blue; the edges of the wing and a large portion of all the quills toward the end, white. Young when fledged with the bill yellow, in its terminal third black; feet flesh-coloured; plumage very pale yellowish-brown, the feathers of the upper parts with a large dusky spot toward the end, the quills and tail-feathers barred with the same.

*Adult*, 30; wing, 19 ½.

Met with in Labrador in summer. Baffin's Bay and Arctic Seas generally. Not observed within the limits of the United States.

*Larus glaucus*, BONAP. Syn. p. 361.

*Larus glaucus*, Burgomaster Gull, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 416.

Glaucous Gull or Burgomaster, NUTT. Man. v. ii. p. 306.

Glaucous Gull or Burgomaster, *Larus glaucus*, AUD. Orn. Biog. v. v. p. 59.

#### **453. 13. *Larus marinus*, LINN. Great Black-backed Gull.**

PLATE CCXLI. Male.

Bill robust, compressed, gamboge yellow, with a patch of carmine toward the end of the lower mandible, feet flesh-coloured; head, neck, lower parts, rump and tail, pure white; back and wings deep blackish-purple or dark slate-colour; edges of wing and a large portion of the extremities of all the quills white; the second, third, fourth, and fifth primaries with a broad band of black across their ends. Young when fledged with the bill brownish-black, the iris dark brown, the feet as in the adult; the head and neck greyish-white, streaked with pale brownish-grey; upper parts mottled with brownish-black, brownish-grey, and dull white, the rump paler; primary quills blackish-brown, slightly tipped with brownish-white; tail-feathers white, with a large brownish-black patch towards the end, larger on the middle feathers, which are also barred towards the base with dusky; lower parts greyish-white, sides and lower tail-coverts obscurely mottled with greyish-brown.

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*Male*, 29 ½, 67.

Not uncommon during winter as far south as Florida, the young especially. Common from New York to Labrador, where it breeds. Lake Erie, Ontario, the St Lawrence, Ohio, and Mississippi Rivers. Columbia River.

*Larus marinus*, LINN. Syst. Nat. v. i. p. 225.

Black-backed Gull or Cobb, NUTT. Man. v. ii. p. 308.

Great Black-billed Gull, *Larus marinus*, AUD. Orn. Biog. v. iii. p. 305; v. v. p. 636.

### **FAMILY XLIII. PROCELLARINÆ. FULMARS.**

Bill generally shorter than the head, moderately stout, compressed; upper mandible with the ridge formed of two generally united plates, at the anterior part of which, usually about half the length of the bill, are the nostrils; the sides separated by a groove, the tip a decurved, compressed, pointed unguis; lower mandible with the angle very long and narrow, the tip more or less decurved. Head of moderate size, ovate; neck of moderate length; body compact. Feet of ordinary length, rather slender; tibia bare below for a short space; tarsus little compressed, anteriorly scutellate; toes four, the first extremely small and elevated, with a conical deflected claw; anterior toes webbed; the third and fourth nearly equal. Claws arched, compressed, acute. Plumage full, soft, rather compact above. Wings long, rather broad, pointed, the first quill generally longest. Tail short, of from twelve to sixteen feathers. Œsophagus very wide, often enormously dilated, especially at its lower part, stomach small, moderately muscular; intestine of moderate length; cœca rather long; cloaca oblong or globular. Trachea simple, with a single pair

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of inferior laryngeal muscles.

## GENUS I. LESTRIS, ILLIGER. JAGER.

Bill shorter than the head, strong, slightly compressed, straight, with the tip curved; upper mandible with the dorsal line nearly straight, toward the tip decurved, the ridge broad and convex, formed by two plates, which overlap the nostrils, the sides narrow and convex, the edges sharp and inflected, the tip or unguis decurved, compressed, acute; nasal groove long, narrow; the nostrils in its fore part medial, lateral, longitudinal, broad before, extremely narrow behind, open and pervious; lower mandible with the angle long and narrow, a slight prominence at its extremity, beyond which the dorsal line is slightly concave, the sides erect, and slightly convex, the edges sharp and inflected, the tip obliquely truncate. Head rather large; neck of moderate length; body rather full. Feet of moderate length, rather stout; tibia bare at its lower part, and rough all round, with small convex scales; tarsus compressed behind and scabrous, anteriorly scutellate; hind toe extremely small and elevated; fore toes of moderate size, connected by convex webs, the third toe longest, the fourth little shorter. Claws strong, much curved, very acute, compressed. Plumage full, soft, blended, on the back rather compact. Wings very long, rather broad, pointed, the first quill longest. Tail of moderate length, or elongated, of twelve feathers, of which the middle are longest. Tongue broadly channelled above, contracted and induplicate toward the end, with the point slit; oesophagus very wide; stomach small, moderately muscular, with the epithelium thin, dense, and longitudinally rugous; intestine rather short and wide; cœca rather long; cloaca oblong.

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### 454. 1. *Lestris pomarinus*, TEMM. Pomarine Jager.

PLATE CCLIII. Adult Female.

Tail of moderate length, rounded, but with the two middle broad rounded feathers extending an inch beyond the next; bill dull green, toward the end dusky; tibia, toes, webs, and lower half of tarsus black, the upper half light blue; upper part and sides of head anteriorly brownish-black; upper part of neck all round yellowish-white; the rest of the neck white, barred with brownish-black, each feather having two transverse bands of that colour; breast white; sides, abdomen, and lower tail-coverts white, barred with brownish-black, as are the upper tail-coverts; back and wings brownish-black; primary quills of the same colour, white on the inner webs toward the base, as are the secondaries and tail-feathers; lower surface of wings mottled and barred with white and dusky.

*Female*, 20  $\frac{1}{4}$ , 48.

From Massachusetts northward. Seen in Labrador. Breeds in high northern latitudes.

*Lestris pomarina*, BONAP. Syn. p. 364.

*Lestris pomarina*, Pomarine Jager, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 429.

Pomarine Jager, NUTT. Man. v. ii. p. 315.

Pomarine Jager, *Lestris pomarinus*, AUD. Orn. Biog. v. iii. p. 396; v. v. p. 643.

### 455. 2. *Lestris Richardsonii*, SWAINS. Richardson's Jager.

PLATE CCLXXII. Male and Young.

Male with the bill greyish-black, tinged with blue above; feet black; tail-feathers of moderate length, except the middle two, which extend about three inches beyond the rest, and taper to a point; plumage sooty-brown; the upper part of the head, primary quills, and tail darker; cheeks and sides of neck dull yellow; fore part of neck and breast white. Female similar, but without white on the neck and breast, those parts being merely of a lighter brown. Young, when fledged, with the bill light blue, dusky at the end; tarsi and basal portion of the toes and webs light blue, the rest black; general colour of the plumage sooty-brown, lighter on the neck and lower parts, feathers of the back and wings all marginally tipped with whitish; breast, sides, lower wing-coverts, abdomen, and lower tail-coverts, undulatingly barred with pale greyish-yellow.

*Male*, 18  $\frac{1}{2}$ , 40. *Young*, in September, 15  $\frac{1}{2}$ ; wing, 11  $\frac{1}{2}$ .

Coast of Massachusetts and Maine, during winter. Breeds in the northern barren grounds, away from the coast.

*Lestris Richardsonii*, Richardson's Jager, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 433.

Richardson's Jager, NUTT. Man. v. ii. p. 319.

Richardson's Jager, *Lestris Richardsonii*, AUD. Orn. Biog. v. v. p. 503.

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### 456. 3. *Lestris parasiticus*, LINN. Arctic Jager.

Bill greyish-black, tinged with blue above; feet black, but with the greater part of the tarsus yellow; tail-feathers of moderate length, except the two middle, which are extremely elongated and attenuated, extending eight inches or more beyond the next, the rest broad and rounded; neck and lower parts white, the former tinged with yellow; upper and fore part of head, with the space before the cheeks, blackish-brown; lower part of hind neck, and all the upper parts, blackish-grey; primary quills and tail-feathers brownish-black, the shafts of the former white. Female similar to the male, but with the middle tail-feathers about three inches shorter.

*Male*, 23, 45.

Ranges, during winter, along and off the coast, though always in sight of land, as far as the Gulf of Mexico. Breeds in high latitudes.

*Lestris Buffonii*, BONAP. Syn. p. 364.

*Lestris parasitica*, Arctic Jager, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 430.

Arctic Jager, NUTT. Man. v. ii. p. 317.

Arctic Jager, *Lestris parasiticus*, AUD. Orn. Biog. v. iii. p. 470.

## GENUS II. DIOMEDEA, LINN. ALBATROSS.

Bill rather longer than the head, nearly straight, stout, much compressed; upper mandible, with its dorsal line, much declinate, and nearly straight for a third of its length, then concave ascending to the unguis, on which it is arched and decurved in the third of a circle, the ridge broad, convex, rounded at the base, separated in its whole length by a groove, margined below, beyond the nostrils by a prominent line, from the sides, which are erect and slightly convex, the edges sharp, the unguis decurved, much compressed, with its sides flattened, and the tip acute; nostrils subbasal, prominent, tabular, having a horny sheath; lower mandible with the angle very narrow, reaching to the tip, and having at its extremity a long slender interposed horny process; the outline of the crura gently ascending, and quite straight, until near the end, when it is a little decurved, the sides ascending, nearly erect, a little convex, the edges sharp, the tip extremely compressed, its upper edges decurved. Head rather large, ovate; neck of moderate length; body full. Feet rather short, stoutish; tibia bare, below scaly; tarsus roundish, reticulated; toes three, long, slender, outer very little shorter than middle, scaly for half their length, then scutellate. Claws rather small, slender, slightly arched, somewhat obtuse. Plumage full, soft, blended, but rather fine, somewhat compact above. Wings very long, and very narrow, the humerus and cubitus extremely elongated; first quill longest. Tail of twelve broadly rounded feathers, short, rounded. [334]

### 457. 1. *Diomedea chlororhynchos*, GMEL. Yellow-nosed Albatross.

Not figured.

Bill much compressed, its ridge convex in its whole length, but with its basal outline, although semicircular, only half an inch in extent, so that between its margins and those of the sides of the bill, there is behind the nostrils a space nearly a quarter of an inch in breadth; the ridge in its whole length, the tip of the upper mandible, and the crura of the lower along their inferior edge, yellow, the rest black; feet yellow; head and neck ash-grey; the fore part of the back shaded into blackish-grey; wings entirely brownish-black, shafts of primaries white, toward the end brownish-black; hind part of back, rump, and upper tail-coverts white; tail deep grey, the bases and shafts of the feathers white, loreal space of a darker grey than the rest of the head, that colour deepening at the fore part of the eye, forming a spot which includes the whole of the upper eyelid, and the anterior half the lower, of which the other half is white; lower half of the neck anteriorly, breast, sides, abdomen, lower tail-coverts, some of the axillaries, and the larger wing-coverts white; the others being brownish-black.

Length, 37; wing, 21; bill,  $5 \frac{1}{4}$ ; tail,  $8 \frac{1}{4}$ .

Pacific Ocean, not far from Columbia River.

*Diomedea chlororhynchos*, AUD. Orn. Biog. v. v. p. 326.

### 458. 3. *Diomedea nigripes*, AUD. Black-footed Albatross.

Not figured.

Bill brownish-black, moderately compressed, its ridge very broad and convex at the base, its basal outline semicircular and two inches in extent, so that its sides behind overlap and obliterate the sutural space behind the nostrils; feet black; fore part of head, cheeks and throat light dusky-grey, the capistral feathers nearly white, as is a small patch at the posterior angle of the eye; upper part of head, hind neck, and all the upper parts, including the wings and tail, sooty-brown tinged with grey, as are the lower surface of the wings and the axillaries; lower parts dull grey, [335]



deeper on the fore parts and sides of the neck.

Length, 36; wings, 21; bill, 5; tail, 3.

Pacific Ocean, off California.

Black-footed Albatross, *Diomedea nigripes*, AUD. Orn. Biog. v. v. p. 327.

#### **459. 2. *Diomedea fusca*, AUD. Dusky Albatross.**

PLATE CCCCVII. Adult.

Bill black, much compressed, its ridge carinate, with its basal outline running up on the forehead into a very acute angle, lower mandible with a groove on each side in its whole length, as far as the unguis; feet yellow; head and upper part of the neck greyish-black, tinged with brown, the rest of the neck, all the lower parts, the back and rump light brownish-grey, scapulars darker, wings brownish-black, primary quills and tail-feathers greyish-black with white shafts; eyelids narrowly margined with white feathers, their anterior part excepted.

*Adult*, length, 34; wing, 21; tail, 11; bill, 4  $1\frac{1}{2}$ .

Off the Columbia River.

Dusky Albatross, *Diomedea fusca*, AUD. Orn. Biog. v. v. p. 116.

### **GENUS III. PROCELLARIA, LINN. FULMAR.**

Bill of about the length of the head, or somewhat shorter, robust, straight, moderately compressed, with the tip decurved; upper mandible with the nostrils dorsal, separated by a thin septum, covered by an elevated horny case, and opening directly forwards, the ridge nearly straight or concave in its outline, laterally sloping or convex, separated by a groove from the sides, which are erect and convex, the edges sharp, inflected, and in their outline slightly recurved from the base to the unguis, which is strong, decurved, and acute; lower mandible with the angle long, narrow, acute, the sides erect, with a groove in their whole length, the edges sharp and direct, the very short dorsal line ascending and slightly concave, the edges decurved at the end. Head rather large, ovate; neck rather short; body full. Feet of moderate length, stout; tibia bare for a short space below; tarsus a little compressed, reticulated with angular scales; hind toe a slight prominence with a conical claw; fore toes long, slender, scutellate, connected by striated even webs; fourth toe slightly shorter than third. Claws moderate, arched, compressed, rather acute. Plumage full, close, elastic, rather compact above. Wings very long, narrow, the first quill longest. Tail short, or of moderate length, of from twelve to sixteen feathers.

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\* Bill robust; tail of more than twelve feathers.

#### **460. 1. *Procellaria gigantea*, LINN. Gigantic Fulmar.**

Not figured.

Bill longer than the head, nasal plate carinate, very slightly concave above, yellow, as are the feet; tail of sixteen feathers; general colour of plumage a deep brown tinged with grey, lighter on the lower parts, and especially on the lower surface of the wings.

Length, 36; tail, 7  $\frac{1}{2}$ ; bill, 4.

Off the Columbia River.

Gigantic Fulmar, *Procellaria gigantea*, AUD. Orn. Biog. v. v. p. 330.

#### **461. 2. *Procellaria glacialis*, LINN. Common Fulmar.**

PLATE CCLXIV. Male.

Bill shorter than the head, moderately compressed, with the nasal plate flattened concave above; tail slightly rounded, of fourteen feathers; bill, feet, and claws yellow; head, neck, and lower parts, pure white; back and wings light greyish-blue, the rump paler, the tail bluish-white; primary quills and coverts blackish-brown. Young in first plumage greyish-brown.

*Male*, 8, 18.

Not uncommon off the coast, from New York to Nova Scotia. Abundant on the banks of Newfoundland. Breeds in high latitudes.

*Procellaria glacialis*, BONAP. Syn. p. 369.

Fulmar Petrel, NUTT. Man. v. ii. p. 330.

Fulmar Petrel, *Procellaria glacialis*, AUD. Orn. Biog. v. iii. p. 446.

**462. 3. *Procellaria pacifica*, AUD. Pacific Fulmar.**

Not figured.

Bill shorter than the head, considerably compressed, with the nasal plate carinate and almost straight; tail rounded, of fourteen feathers; bill and feet yellow; head, neck, and lower parts pure white; back and wings light greyish-blue, but most of the feathers, including those of the tail, becoming dark grey toward the end; primary quills and their coverts blackish-brown tinged with grey. Differs from *P. glacialis* chiefly in the form of the bill.

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*Adult*, 18; wing, 12  $\frac{3}{4}$ ; tail, 4  $\frac{3}{4}$ ; bill, 1  $\frac{3}{4}$ .

North west coast of America. Abundant.

Pacific Fulmar, *Procellaria pacifica*, AUD. Orn. Biog. v. v. p. 331.

**463. 4. *Procellaria tenuirostris*, AUD. Slender-billed Fulmar.**

Not figured.

Bill about the same length as the head, rather slender, much compressed, with the nasal plate somewhat carinate and concave; tail much rounded, of fourteen feathers; bill yellow, with the nasal plate, half of the unguis of the upper mandible, and the tip of the lower black; feet yellow, claws brownish-black; plumage greyish-blue, paler on the lower parts, neck, and head; primary quills and their coverts blackish-grey. Differs from the last chiefly in the form and colour of the bill.

Length, 18  $\frac{1}{2}$ ; wing, 13; tail, 5; bill, 2  $\frac{1}{2}$ .

Off the Columbia River. Common.

Slender-billed Fulmar, *Procellaria tenuirostris*, AUD. Orn. Biog. v. v. p. 333.

**GENUS IV. PUFFINUS, BRISS. SHEARWATER.**

Bill of the length of the head, rather slender, nearly as deep as broad at the base, much compressed toward the end, nearly straight, being slightly recurved, with the tips decurved; upper mandible with a cere at the base, extending narrow to the nostrils, which are dorsal, each covered with a lateral convex plate, and opening anteriorly, with an elliptical aperture, dorsal line as far as the nostrils nearly straight, then suddenly deflected, afterwards slightly concave, towards the end decurved, the ridge very broad and convex at the base, narrower beyond the nostrils, from which a groove runs obliquely on each side, sides convex, nearly erect, edges sharp, tip or unguis strong, decurved, much compressed, very acute; lower mandible with the angle very long and narrow, the dorsal line beyond it decurved, the sides sloping outwards, the edges sharp and inflected, the unguis decurved, acute. Head rather large, oblong; neck rather short; body moderate. Feet rather large; tibia bare for a short space below; tarsus of moderate length, compressed, reticulated with angular scales; hind toe obsolete, but with a small conical deflected claw; fore toes long, slender, connected by webs; outer toe slightly longer than third. Claws arched, compressed, acute. Plumage full, close, elastic, rather compact above. Wings very long, narrow, the first quill longest. Tail of moderate length, graduated, of twelve rounded feathers.

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**464. 1. *Puffinus cinereus*, LATH. Wandering Shearwater.**

PLATE CCLXXXIII. Male.

Bill yellowish-green, with the tips brownish-black; feet light greenish-grey, webs and claws yellowish flesh-colour; upper parts deep brown, the hind neck paler, and tinged with grey; primary quills and tail brownish-black; lower parts greyish-white, lower wing-coverts white, those next to the edge of the wing greyish-black towards the end, axillary feathers white, greyish-brown toward the end, lower tail-coverts similar.

*Male*, 20, 45.

Common off the shores, from the Gulf of St. Lawrence to that of Mexico. Abundant off Nova Scotia. Ranges to a great distance at sea in autumn and winter.

*Puffinus cinereus*, BONAP. Syn. p. 370.

Cinereous Puffin, NUTT. Man. v. ii. p. 334.

Wandering Shearwater, *Puffinus cinereus*, AUD. Orn. Biog. v. iii. p. 555.

**465. 2. *Puffinus Anglorum*, RAY. Manks Shearwater.**

PLATE CCXCV.

Bill deep greenish-black; inner and middle of outer side of tibia dull orange, the rest greenish-black, as are the fourth toe and outer side of the third, the inner side of the latter and the whole of the second dull orange, webs pale yellow; upper parts brownish-black, lower white.

*Adult*, 15, 32.

Not uncommon off the coast of Maine during summer. Breeds on Sable Island, off Nova Scotia. Ranges, at times, to great distances seaward.

*Puffinus anglorum*, BONAP. Syn. p. 371.

Shearwater Petrel, NUTT. Man. v. ii. p. 336.

Manks Shearwater, *Puffinus anglorum*, AUD. Orn. Biog. v. iii. p. 604.

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### 466. 3. *Puffinus obscurus*, LATH. Dusky Shearwater.

PLATE CCXCIX. Male.

Bill light blue, the tips black; outside of tarsus and toes indigo-black, inside and webs pale yellowish flesh-colour; upper parts sooty-black, lower pure white.

*Male*, 11, 26.

Abundant during summer in the Gulf of Mexico, and off the coast eastward to Georgia. Some wander as far as Long Island.

*Puffinus obscurus*, BONAP. Syn. p. 371.

Dusky Petrel, NUTT. Man. v. ii. p. 337.

Dusky Petrel, *Puffinus obscurus*, AUD. Orn. Biog. v. iii. p. 620.

## GENUS V. THALASSIDROMA, VIGORS. PETREL.

Bill shorter than the head, slender, as high as broad at the base, extremely compressed at the end; upper mandible with the nostrils dorsal forming a tube on its ridge at the base, on which the dorsal line is concave and ascending, then abrupt, afterwards, for a short space, straight, and lastly decurved, the sides separated by a groove, convex, the edges sharp and inflected, the tip decurved, slender, acute; lower mandible with the angle rather long, narrow, and pointed, the dorsal line beyond it decurved, the sides erect, the edges sharp, the tip decurved, acute. Head of moderate size, rounded above; neck short; body rather slender. Feet rather long, slender; tibia bare at its lower part; tarsus slender, reticulate; hind toe minute, with a conical deflected claw; anterior toes of moderate length, slender, scutellate, webbed, the third and fourth about equal. Claws slender, arched, compressed, acute. Plumage very soft and blended, the feathers distinct only on the wings, which are very long, with the primaries a little incurved toward the end, the second longest, the first and fourth about equal; tail emarginate or even, of twelve feathers. Tongue much flattened, tapering to a horny point; œsophagus wide, within the thorax enormously distended, and with the proventriculus forming an ovate sac, which is recurved; stomach very small; intestine short, of moderate width; cœca small; cloaca globular.

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### 467. 1. *Thalassidroma Leachii*, TEMM. Leach's Petrel.—Fork-tailed Petrel.

PLATE CCLX. Male and Female.

Tail forked; bill and feet black; plumage dark greyish-brown; quills and tail brownish-black; smaller wing-coverts and inner secondaries light greyish-brown; rump, sides of abdomen, and outer lower tail-coverts white; upper tail-coverts also white, but with a terminal black band.

*Male*, 8, 18 ½.

Common on the Banks of Newfoundland, and at times off the coast of Massachusetts, Maine, and Nova Scotia. Breeds on the shores of Baffin's Bay.

*Thalassidroma Leachii*, BONAP. Syn. p. 367.

Fork-tailed Stormy Petrel, *Thalassidroma Leachii*, NUTT. Man. v. ii. p. 326.

Forked-tailed Petrel, *Thalassidroma Leachii*, AUD. Orn. Biog. v. iii. p. 434.

### 468. 2. *Thalassidroma Wilsonii*, BONAP. Wilson's Petrel.—Mother Carey's Chicken.

PLATE CCLXX. Male and Female.

Tail even; bill and feet black, but the webs yellow, unless at the margin; plumage dark greyish-brown; quills and tail brownish-black; outer secondary wing-coverts and some of the secondary quills light greyish-brown, and tipped with white; rump, sides of abdomen, and outer lower tail-

coverts, white.

*Male*, 7  $\frac{1}{4}$ , 15  $\frac{3}{4}$ .

Wanders from the Gulf of Mexico, off the whole Atlantic coast to Baffin's Bay, and often almost across the ocean towards Europe. Breeds in vast numbers from Maine to Baffin's Bay.

Stormy Petrel, *Procellaria pelagica*, WILS. Amer. Orn. v. vii. p. 90.

*Thalassidroma Wilsonii*, BONAP. Syn. p. 367.

Wilson's Stormy Petrel, NUTT. Man. v. ii. p. 322.

Wilson's Petrel, *Thalassidroma Wilsonii*, AUD. Orn. Biog. v. iii. p. 486; v. v. p. 645.

### 469. 3. *Thalassidroma pelagica*, LINN. Least Petrel.—Mother Carey's Chicken. [341]

PLATE CCXI.

Tail slightly rounded; bill and feet black; general colour of the upper parts greyish-black, with a tinge of brown; lower parts sooty-brown; secondary coverts margined externally with dull greyish-white; feathers of rump and upper tail-coverts white, with the shafts black, the tail-coverts broadly tipped with black.

*Male*, 5  $\frac{3}{4}$ , 13  $\frac{1}{2}$ .

Not uncommon on the Banks of Newfoundland. Not observed to breed on the American coast.

Stormy Petrel, *Thalassidroma pelagica*, NUTT. Man. v. ii. p. 327.

Least Petrel, *Thalassidroma pelagica*, AUD. Orn. Biog. v. iv. p. 310.

## FAMILY XLIV. ALCINÆ. AUKS.

Bill not longer than the head, much compressed, generally very high, in the species approaching the next family rather slender. Nostrils small, linear, basal, and submarginal. Head large, broadly ovate, anteriorly narrowed; neck short and thick; body full, compact, ovate, or somewhat elongated. Feet short, rather stout, placed far behind; tibia bare for a short space; tarsus very short, compressed, anteriorly scutellate; toes three, of moderate length, scutellate, webbed. Claws strong, arched, acute. Plumage dense, blended, soft. Wings small, narrow, pointed. Tail very short. Tongue slender, trigonal; œsophagus very wide, within the thorax extremely dilated; stomach rather large, muscular, with the epithelium dense and longitudinally rugous; intestine long and wide; cœca of moderate size. Trachea simple, with a single pair of inferior laryngeal muscles. Egg generally single.

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## GENUS I. MORMON, ILLIGER. PUFFIN. [342]

Bill about the length of the head, nearly as high as long, exceedingly compressed, at the base as high as the head, obliquely furrowed on the sides; upper mandible with a horny dotted rim along the basal margin; its dorsal line decurved from the base, the ridge narrow, at the base rounded, the sides rapidly sloped, with three or four curved oblique grooves, the edges sharp, their outline nearly straight, the tip deflected, very narrow, but obtuse; lower mandible with the angle very narrow, and so placed, that the base of the bill is inflected beyond the perpendicular, the dorsal line a little convex at first, towards the end ascending, and nearly straight, the sides perpendicular, the edges sharp; the tip very narrow, obliquely truncate; gape-line extending downwards a little beyond the base of the bill, and furnished with a soft corrugated extensile membrane. Nostrils marginal, linear, direct, in the horny part of the bill. Head large, roundish-ovate; neck short and thick; body full and rounded. Feet short, rather stout, placed far behind; tibia bare for a short space; tarsus very short, little compressed, anteriorly with a series of small scutella; toes three, connected by entire webs, the outer and middle toes nearly equal. Claws strong, of moderate length, arched, acute, that of the inner toe much curved. Plumage close, blended, soft. Wings short, narrow, curved, acute; the first quill longest; secondaries short and rounded. Tail very short, slightly rounded, of sixteen feathers.

### 470. 1. *Mormon cirrhatus*, LATH. Tufted Puffin.

PLATE CCXLIX. Male.

Bill with four curved grooves on the upper mandible anterior to the nostrils, the lower smooth, a horny subcylindrical addition to the ridge at the base about an inch in length, the colour yellowish-red, the basal rim and ridge towards the end of the upper mandible bright red; feet bright red; two tufts of loose, acuminate, decurved feathers on the sides of the head behind the eye; face white; upper parts brownish-black, glossed with blue, lower sooty-brown, tinged with [343]

grey on the abdomen; part of the sides and under wing-coverts greyish-brown.

*Male*, 15, 22  $\frac{1}{2}$ .

Extremely rare and accidental on the coast of the United States in winter. Common in the Arctic Seas, and on the north-west coast of America.

*Alca cirrhata*, LATH. Ind. Orn. v. ii. p. 791.

*Mormon cirrhatus*, BONAP. Syn. p. 429.

Tufted Mormon or Puffin, NUTT. Man. v. ii. p. 539.

Tufted Puffin, *Mormon cirrhatus*, AUD. Orn. Biog. v. iii. p. 364.

#### **471. 2. Mormon glacialis, LEACH. Large-billed Puffin.**

PLATE CCXCIII. Male.

Bill with three curved grooves on each of the mandibles toward the end, a compressed addition to the ridge about three-quarters of an inch long, its colour, and that of the feet, orange-yellow; on the upper eyelid an oblong, tapering, horny body, directed upwards and backwards, on the lower an adherent linear body of the same nature; sides of the head, and the lower parts, white; upper part of head light brownish-grey, tinged with lilac; a broad collar extending to the lower mandible; of a dark greyish-brown tint below, gradually passing into the colour of the upper parts, which is brownish-black, glossed with blue; primary quills and their coverts blackish-brown; part of the sides and under wing-coverts greyish-brown.

*Male*, 13, 24  $\frac{1}{2}$ .

Very rare, and in winter only, off the Bay of Fundy.

*Mormon glacialis*, BONAP. Syn. p. 430.

Large-billed Puffin, NUTT. Man. v. ii. p. 541.

Large-billed Puffin, *Mormon glacialis*, AUD. Orn. Biog. v. iii. p. 599.

#### **472. 3. Mormon Arcticus, LINN. Common or Arctic Puffin.**

PLATE CCXIII. Male and Female.

Bill with three curved grooves on both mandibles toward the end, a very slight addition to the ridge at the base only a quarter of an inch long; the basal rim and first ridge of both mandibles dull yellow, the intervening space greyish-blue, the rest bright red; on the upper eyelid a flattened triangular nearly erect horny body, and along the lower an adherent elongated body of the same nature; feet vermilion; throat and sides of the head greyish-white; upper parts of the head greyish-black, tinged with blue; the middle of the neck all round, and all the upper parts deep black, glossed with blue, the quills tinged with brown; under parts white, except the upper part of the sides, which are dusky, and the lower wing-coverts, which are brownish-grey.

*Male*, 11  $\frac{3}{4}$ , 23.

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Ranges southward along the coast in winter, at times as far as Georgia. Less rare from Long Island eastward, and becomes plentiful in the Bay of Fundy. Breeds in vast numbers in burrows, on the islands off Labrador.

*Mormon arcticus*, BONAP. Syn. p. 430.

Puffin or Coulterneb, NUTT. Man. v. ii. p. 542.

Puffin, *Mormon arcticus*, AUD. Orn. Biog. v. iii. p. 105.

### **GENUS. II. ALCA, LINN. AUK.**

Bill as long as the head, feathered as far as the nostrils, beyond which it is very high, exceedingly compressed, and obliquely furrowed on the sides; upper mandible with the dorsal line decurved, the ridge extremely narrow, the sides nearly flat, the nasal groove very large, and feathered, with its lower margin very narrow, and convex, the edges sharp and inflected, the tip decurved, very narrow, but obtuse; lower mandible with the angle very narrow, and having a horny triangular appendage, the sides at first extremely narrow, towards the end erect and flat, the edges inflected, the dorsal outline concave, the tip decurved. Nostrils medial marginal, linear, short, concealed by the feathers. Head large, ovate; neck short and thick; body full, rather depressed. Feet placed far behind, short, stout; tibia bare for a short space; tarsus very short, compressed, anteriorly scutellate; hind toe wanting; anterior toes of moderate length, rather slender, scutellate, webbed, the outer slightly longer than the middle. Claws rather small, arched, compressed, obtuse. Plumage close, blended, very soft. Wings very short, narrow, acute, first quill longest. Tail short, tapering, of twelve or fourteen feathers.

### 473. 1. *Alca impennis*, LINN. Great Auk.

PLATE CCCXLI. Adult.

Bill rather longer than the head, its dorsal line convexo-declinate, upper mandible with a basal and eight terminal grooves, lower with ten or twelve grooves; wings diminutive, much pointed, the primaries tapering to an acute point, the first longest, secondaries broad, scarcely longer than their coverts; tail short, of fourteen feathers; bill black, with the grooves white; feet black; head, neck, and upper parts black, the throat and sides of the neck tinged with chocolate-brown, the wings with greyish-brown, the head, hind neck, and back glossed with olive-green; fore part of neck below and all the lower parts white, as are a large oblong patch before each eye, and the tips of the secondary quills.

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*Adult*, 29, 27  $\frac{1}{4}$ .

Rare and accidental on the Banks of Newfoundland; said to breed on a rock near that island.

Great Auk, *Alca impennis*, NUTT. Man. v. ii. p. 553.

Great Auk, *Alca impennis*, AUD. Orn. Biog. v. iv. p. 316.

### 474. 2. *Alca Torda*, LINN. Razor-billed Auk.

PLATE CXCIV. Male and Female.

Bill rather shorter than the head, with its dorsal line very convex, upper mandible with five, lower with four grooves, black with a white band across each mandible; feet black; head, neck, and upper parts black, the head, hind neck, and back glossed with olive-green, the throat and sides of the neck tinged with chocolate, the wings with brown; lower part of neck below and all the lower parts white, as are a line from the eye to the bill on each side, and the tips of the secondaries. Female similar. Young, in the winter, with the colours similar, but the back duller, the wings more brown, the throat and sides of the head mottled with white, and the bill much smaller, without furrows or white line. Old birds, in winter, with the throat and sides of the neck mottled with white, but in other respects the colouring as in summer.

*Male*, 17, 29  $\frac{1}{2}$ .

Rare on the eastern coast of the United States, and only during winter. Breeds in great numbers on the Gannet Rock in the Gulf of St Lawrence, on the shores of Newfoundland, and the western coast of Labrador, chiefly in the fissures of rocks.

*Alca Torda*, BONAP. Syn. p. 431.

Razor-bill, *Alca Torda*, NUTT. Man. v. ii. p. 547.

Razor-billed Auk, *Alca Torda*, AUD. Orn. Biog. v. iii. p. 112; v. v. p. 628.

## GENUS III. PHALERIS, TEMM. PHALERIS.

Bill shorter than the head, stout, straightish, broad at the base, compressed toward the end; upper mandible with a prominent basal rim as in the puffin, its dorsal line convex and declinate, the sides sloping, the edges sharp, with a deep sinus close to the narrow, declinate, blunt tip; lower mandible with the angle rather long and wide, the dorsal line ascending and a little convex, the sides sloping outwards, the edges sharp, the tip ascending, obliquely truncate. Nostrils linear-oblong, direct, near the margin, in the horny part of the bill. Head rather large, ovate; neck short and thick; body full and compact. Feet short, placed far behind; tibia bare below; tarsus very short, much compressed, anteriorly scutellate; toes three, connected by emarginate webs; middle and outer toes of the same length. Claws rather stout, moderately arched, compressed, rather obtuse. Plumage dense, blended, soft. Wings of moderate length, very narrow, pointed. Tail very short, rounded, of fourteen feathers.

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### 475. 1. *Phaleris cristatella*, GMEL. Curled-crested Phaleris.

PLATE CCCCII. Fig. 4. Adult.

Bill scarlet, with the tips yellow. Upper mandible with a somewhat triangular horny plate at the base detached from the other parts, and a deep oblique groove anterior to the nostrils; lower mandible with a groove on each side; a tuft of about twenty linear recurved feathers from the anterior part of the forehead; general colour of upper parts brownish-black, of lower purplish-grey; a short line of elongated linear white feathers commencing under the eye, and proceeding along the side of the neck.

*Adult*, 10, wing, 6  $\frac{3}{4}$ .

North-west coast of America.

Alca cristatella, GMEL. Syst. Nat. v. i. p. 552.

Curled-crested Phaleris, Phaleris cristatella, AUD. Orn. Biog. v. v. p. 102.

#### **476. 2. Phaleris nodirostris, BONAP. Knobbed-billed Phaleris.**

PLATE CCCII. Fig. 3. Adult.

Bill deep red, much shorter than the head, stout, upper mandible with a roundish, compressed, decurved, greyish-blue knob on its ridge, between the nostrils, which are covered by a projecting operculum; tail of fourteen feathers; feet dusky grey; general colour of upper parts brownish-black; fore part and sides of head streaked with linear, acuminate, white feathers; tips of secondaries also white; cheeks and a small portion of the throat at the base of the bill dusky; lower parts white, mottled with dusky, the tips of the feathers being of that colour.

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*Adult*, 6, wing, 4.

North-west coast of America.

Knobbed-billed Phaleris, Phaleris nodirostris, Bonap. AUD. Orn. Biog. v. v. p. 101.

### **GENUS IV. MERGULUS, RAY. SEA-DOVE.**

Bill shorter than the head, stout, nearly straight, subpentagonal at the base, compressed towards the end; upper mandible with the dorsal line convexo-declinate, the ridge convex, the sides sloping, the edges sharp and overlapping, the tip rather obtuse; nasal depression short and broad; nostrils basal, oblong; lower mandible with the angle long and wide, the dorsal line ascending, straight, the sides convex, toward the end ascending and flattened, the edges sharp and inclinate, the tip acute, with a sinus behind. Head large, ovate; neck short and thick; body full and compact. Feet short, rather stout; tibia bare for a very short space; tarsus very short, compressed, anteriorly covered with oblique scutella; hind toe wanting; anterior toes connected by entire webs, the third and fourth nearly equal. Claws rather small, moderately arched, compressed, rather acute. Plumage dense, glossy blended. Wings of moderate length, narrow, pointed; the first quill longest; secondaries rounded. Tail very short, slightly rounded, of twelve feathers.

#### **477. 1. Mergulus Alle, LINN. Common Sea-Dove.**

PLATE CCCXXXIX. Male and Female.

Bill black, feet pale flesh-coloured, webs dusky, inside of mouth light yellow; head, upper part of neck, and all the upper surface glossy bluish-black; a small spot on the upper eyelid, another on the lower, several longitudinal streaks on the scapulars, and a bar along the tips of the secondary quills, together with the breast and abdomen, white; feathers on the sides under the wings with the inner webs dusky, lower wing-coverts blackish-grey. In winter, the throat, and lower parts of the cheeks white, sides and fore part of the neck white, the latter barred with blackish-grey; the other parts as in summer, but the black duller.

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*Male*, 7  $\frac{1}{8}$ , 14  $\frac{1}{4}$ .

Rare and only during winter along the coast of the United States, from New York to Maine. More abundant along the coast of Nova Scotia, and far at sea. Breeds on the Arctic coasts.

Little Auk, Alca Alle, WILS. Amer. Orn. v. ix. p. 94.

Uria Alle, BONAP. Syn. p. 425.

Little Guillemot, Uria Alle, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 479.

Little Auk or Sea Dove, NUTT. Man. v. ii. p. 531.

Little Guillemot, Uria Alle, AUD. Orn. Biog. v. iv. p. 304.

### **GENUS V. URIA, LATH. GUILLEMOT.**

Bill generally shorter than the head, stout, compressed, tapering, acute; upper mandible with the dorsal line slightly arched; the ridge narrow, broader at the base, the sides sloping, the edges sharp and inflected, the tip a little decurved, with a slight notch; nasal groove broad, feathered; nostrils at its lower edge, subbasal, lateral, longitudinal, linear; lower mandible with the angle rather long, narrow, the dorsal line ascending and straight, the back very narrow, the sides nearly flat, the edges sharp and inflected, the tip acute. Head large, oblong; neck short and thick; body stout, elongated, rather depressed. Feet short, placed far behind; the greater part of the tibia concealed, its lower part bare; tarsus short, stout, compressed, anteriorly scutellate; toes three, of moderate length, middle toe longest, outer little shorter, scutellate, connected by entire webs. Claws small, slightly arched, compressed, rather acute. Plumage dense, very soft, blended.

Wings rather short, narrow, acute; primary quills curved, tapering, the first and second longest; secondaries short, rounded. Tail very short, rounded, of twelve or more feathers.

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**478. 1. *Uria antiqua*, GMEL. Black-throated Guillemot.**

PLATE CCCCII. Fig. 1. Adult. Fig. 2. Young.

Bill yellow, shorter than the head, rather stout, compressed toward the end, the upper outline arched; feet yellow; head and upper part of neck black, excepting a band of elongated linear feathers beginning over the eye and extending down the hind part of the neck, and a broad band of white commencing behind the ear and curving forwards, to join the white, which is the general colour of the lower parts, with the exception of the flanks, which are black; back, wings, and tail greyish-black. Young, when fledged, with the bill black, the feet dusky; the upper parts blackish-grey, each feather black in the centre, the lower parts greyish-yellow, transversely barred with dusky; the tail broadly tipped with white.

*Adult*, 10  $\frac{1}{2}$ , wings, 5  $\frac{9}{12}$ .

North-west coast of America. Abundant.

*Alca antiqua*, GMEL. Syst. Nat. v. i. p. 551.

Black-throated Guillemot, *Uria antiqua*, AUD. Orn. Biog. v. v. p. 100.

**479. 2. *Uria occidentalis*, BONAP. Horned-billed Guillemot.**

PLATE CCCCII. Fig. 5. Adult.

Bill orange-yellow, shorter than the head, stout, straight, with the dorsal line arched, and an oblong compressed knob on the ridge between the nostrils, which are linear, and placed in the bare skin; feet greyish-yellow; upper parts black, as are the cheeks, the upper part and sides of the fore neck; the lower parts white; two decurved bands of white slender feathers on each side of the head, one commencing over the eye, the other at the angle of the mouth; tail very short, even, of sixteen feathers.

*Adult*, 15  $\frac{1}{2}$ , wing, 6  $\frac{10}{12}$ .

North-west coast of America.

*Cerorhyncha occidentalis*, BONAP. Syn. p. 428.

Western cerorhyncha, NUTT. Man. v. ii. p. 538.

Horned-billed Guillemot, *Ceratorhyncha occidentalis*, AUD. Orn. Biog. v. v. p. 104.

**480. 3. *Uria Brunnichii*, SABINE. Large-billed Guillemot.**

PLATE CCCXLV. Male.

Bill stout, black; feet dusky, tinged with red; general colour of plumage greyish-black on the upper parts; sides of the head and throat tinged with brown; lower fore part of neck, the breast, abdomen, edges of wings and tips of secondaries white; sides streaked with greyish-black. In winter the sides of the head and neck, the fore part of the latter, with the rest of the lower parts white, the sides streaked with greyish-black, and a line of the same behind the eye.

*Male*, 18  $\frac{1}{2}$ , 30.

Occasionally procured in Maine. Not very rare off the coast of Nova Scotia. Breeds from Hudson's Bay to the Arctic Seas.

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*Uria Brunnichii*, BONAP. Syn. p. 424.

*Uria Brunnichii*, Brunnich's Guillemot, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 477.

Large-billed Guillemot, NUTT. Man. v. ii. p. 529.

Large-billed Guillemot, *Uria Brunnichii*, AUD. Orn. Biog. v. iii. p. 336.

**481. 4. *Uria Troile*, LINN. Foolish Guillemot. Murre.**

PLATE CCXVIII. Male and Female.

Bill rather stout, black; feet black; general colour of upper parts greyish-black, sides of the head and throat tinged with brown; lower fore neck, breast, abdomen, edges of wings, and tips of secondaries white; sides streaked with greyish-black; a line of white encircling the eye, and extending upwards of an inch behind it, but in some individuals wanting. In winter, the sides of the head and neck, the fore part of the latter, with the lower parts, white.

*Male*, 17  $\frac{1}{2}$ , 30.



More or less abundant during winter on the coast of Massachusetts and Maine, rarely as far south as New York. Breeds in vast multitudes on the Rocky Islands of the Gulf of St Lawrence, Newfoundland, and Labrador. Occasionally found in Hudson's Bay.

*Uria Troile*, BONAP. Syn. p. 424.

*Uria Troile*, Foolish Guillemot, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 477.

Foolish Guillemot or Murre, NUTT. Man. v. ii. p. 526.

Foolish Guillemot, *Uria Troile*, AUD. Orn. Biog. v. iii. p. 142.

#### **482. 5. *Uria Grylle*, LINN. Black Guillemot.**

PLATE CCXIX. Adult in summer and winter, and Young.

Bill shorter than the head, rather slender, black; feet vermilion, tinged with carmine; general colour of plumage deep black, on the upper parts tinged with green, on the lower with brown; a patch on each wing, including the secondary coverts and some of the small feathers white, of which colour also are the axillars and lower wing-coverts. In winter the general colour of the plumage white; the sides of the head, the neck all round, the lower parts, and the rump being of that colour, more or less shaded with grey; upper part of head obscurely mottled with greyish-black; back and scapulars black, each feather tipped with greyish-white, those of the latter more broadly; wings and tails brownish-black, the former with a conspicuous white patch as in summer. Young at first covered with soft, thick, brownish-black down.

*Adult*,  $13\frac{7}{8}$ ,  $21\frac{1}{2}$ .

Accidental as far south, on the eastern coast, as New York; not rare from thence eastward, during winter. Breeds from the Bay of Fundy along all the rocky shores, to Labrador, and the highest latitudes, where considerable numbers even spend the winter.

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*Uria Grylle*, BONAP. Syn. p. 423.

*Uria Grylle*, Black Guillemot, NUTT. Man. v. ii. p. 523.

Black Guillemot, *Uria Grylle*, AUD. Orn. Biog. v. iii. p. 148; v. v. p. 627.

#### **483. 4. *Uria Townsendii*, AUD. Slender-billed Guillemot.**

PLATE CCCCXXX. Male and Female.

Bill shorter than the head, straight, slender, much compressed, acute, black; feet yellow, claws black; plumage very soft, close, blended, as in the other species; wings small, very narrow, convex, falcate; first quill longest; secondaries incurved, obliquely rounded; tail extremely short, narrow, rounded, of twelve weak, rounded feathers. Upper parts brownish-black, the feathers of the back terminally margined with light grey; lower parts, cheeks, a transverse band on the nape, both eyelids, and a longitudinal band on each side, formed by some of the scapulars, white, some dusky streaks on the hind part of the sides, and the lower wing-coverts greyish-brown, some of them whitish. Young in autumn with the upper parts brownish-black, the feathers terminally margined with brown; the occipital band merely indicated by some lighter feathers, and the scapular band brownish or chestnut-red; lower parts of a curious mottled appearance, the feathers being brownish-grey at the end, but in the rest of their extent white, that colour appearing more or less on all the parts, and shewing a patch on the hind part of the sides.

*Adult*, 10; wing  $5\frac{1}{2}$ . *Young*, in autumn,  $9\frac{3}{4}$ ; wing  $5\frac{1}{2}$ .

Abundant on the north-west coast of America, not far from the Columbia River.

Slender-billed Guillemot, *Uria Townsendii*, AUD. Orn. Biog. v. v. p. 251.

### **FAMILY XLV. COLYMBINÆ. DIVERS AND GREBES.**

Bill of the length of the head, straight, rather stout, much compressed, pointed; upper mandible with the dorsal line declinate, almost straight, or towards the end convex; nasal groove rather long, feathered at the base. Nostrils basal, linear, direct, pervious. Feet stout, short, placed extremely far behind; tarsus extremely compressed; toes four, the first very small, and lobed; the anterior united by webs, which in some are lobed. Plumage dense, short, glossy, generally silky beneath. Wings small, very narrow, acute. Tail very short, sometimes extremely small, and forming a slight tuft. Tongue slender, trigonal, tapering; œsophagus very wide in its whole length, or narrowed in the anterior part with the proventriculus wide; stomach generally large, muscular, with a dense rugous epithelium; intestine rather long and wide; as are the cœca; cloaca globular.

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### **GENUS I. COLYMBUS, LINN. DIVER.**

Bill as long as the head, straight, rather stout, much compressed, tapering, pointed; upper mandible with the dorsal line descending, and slightly convex towards the end, the ridge convex, narrowed towards the point, the sides nearly erect, convex, the edges sharp and considerably inflected; the tip narrow; nasal groove rather long, feathered at the base. Nostrils basal, linear, direct, pervious; lower mandible with the angle extremely narrow and extending beyond the middle, the dorsal line straight and sloping towards the point, the ridge convex and narrow, the edges sharp and involute, the tip attenuated. Head of moderate size or rather large, oblong, narrowed before; neck rather long and thick; body elongated, much depressed. Feet short, rather large, placed very far back; tibia almost entirely concealed; tarsus short, exceedingly compressed, sharp-edged before and behind, covered all over with reticulated scales; toes four, hind toe extremely small, connected with the second by a very small membrane; anterior toes united by entire membranes, the outer longest, the third a little shorter, all scutellate. Claws very small, depressed, blunt. Plumage short and dense, the feathers in general oblong. Wings very small and narrow, curved, first quill longest, secondaries broad and rounded. Tail extremely short, rounded of more than twelve feathers. Tongue long, trigonal, tapering; oesophagus very wide; proventriculus extremely dilated; stomach rather large, roundish, a little compressed, moderately muscular, with a rather thick, dense, longitudinally rugous epithelium; intestine rather long and wide; coeca rather long and wide; cloaca globular.

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#### **484. 1. *Colymbus glacialis*, LINN. Great Northern Diver.—Loon.**

PLATE CCCVI. Male, and Young in winter.

Adult in summer with the bill black, the feet livid greyish-blue, their inner sides tinged with flesh-colour; head and neck dark greenish-blue with purple gloss; on the throat a small transverse patch of white longitudinally streaked with dusky; above the middle of the neck two large patches of white similarly streaked, separated in front to the distance of an inch, but almost continuous behind; lower parts glossy white, excepting the feathers on the sides under the wings, which are black, each with two, three, or four elliptical white spots, a faint dusky band across the vent, the lower tail-coverts, which are brownish-black tipped with white, and the axillar-feathers and large wing-coverts, which have a dusky streak along the middle; sides of the neck at its lower part longitudinally streaked with black and white; upper parts glossy black, variegated with spots of white in regular transverse slightly curved lines, having the convexity backwards, the spots small and roundish towards the neck and sides, larger and somewhat four-sided along the middle of the back, largest and rectangular on the scapulars, very small and roundish on the hind part of the back and tail-coverts; upper part of wing similar, with smallish spots; alula and quills brownish-black, a few of the inner secondaries only having two white spots at the end of the tail brownish-black, of twenty feathers. Young in winter with the bill pale yellowish-green, the ridge and tip of the upper mandible dusky; upper parts dark greyish-brown, each feather margined with lighter, lower parts white, sides of the neck below streaked with dusky, sides of body dusky, without spots.

*Adult*, 32  $\frac{7}{8}$ , 57  $\frac{1}{2}$ . *Young Male*, in winter, 31  $\frac{1}{4}$ , 54  $\frac{1}{2}$ .

During winter dispersed over the United States, in Texas, as well as along the coasts of the Atlantic, and the north-west. Breeds from Massachusetts northward to very high latitudes. Common.

Great Northern Diver or Loon, WILS. Amer. Orn. v. ix.

*Colymbus glacialis*, BONAP. Syn. p. 420.

*Colymbus glacialis*, Great Northern Diver, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 474.

Loon or Great Northern Diver, NUTT. Man. v. ii. p. 513.

Great Northern Diver or Loon, *Colymbus glacialis*, AUD. Orn. Biog. v. iv. p. 43.

#### **485. 2. *Colymbus arcticus*, LINN. Black-throated Diver.**

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PLATE CCII. Male, Female, and Young in winter.

Adult in summer with the bill black, the feet greyish-blue, the anterior edge of the tarsus, upper surface of toes, and part of the webs, pale livid flesh-colour; fore part and sides of head, throat, and sides of neck light bluish-grey, fore part and sides of head darker; upper parts glossy bluish-black, tinged with green anteriorly, and shaded with brown posteriorly; on the fore part of the back two longitudinal bands of transverse white bars, the feathers being tipped with that colour; the scapulars, excepting the outer, marked in the same manner with transverse rows of rather large square spots; most of the wing-coverts with two roundish spots of white near the end; quills blackish-brown, tinged with grey externally, paler on the inner webs; tail blackish-brown, of eighteen feathers; fore neck to the length of six and a half inches purplish-black, ending angularly below, and with a transverse interrupted band of linear-white spots near the upper part, beyond which the sides of the neck blackish-brown, with several longitudinal white streaks, formed by the edges of the feather; on the lower part of the neck a broad space occupied by their longitudinal dusky and white streaks; lower parts pure white, except a dusky longitudinal band on the sides under the wing. Young in winter with the bill bluish-grey, on the ridge dusky; upper part of head and hind neck dark greyish-brown, sides of head greyish-white, minutely

streaked with brown, sides of neck also streaked, its fore part faintly mottled; lower parts white, the sides and lower tail-coverts greyish-brown; upper parts blackish-brown, the feathers broadly edged with pale grey, quills and tail brownish-black.

*Male*, 29, 39 ½.

The young range throughout the interior and along the coast as far as Texas, in autumn and winter. Adult in full plumage very rare. Breeds in high latitudes. Columbia River.

*Colymbus arcticus*, BONAP. Syn. p. 420.

*Colymbus arcticus*, Black-throated Diver, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 475.

Black-throated Diver, NUTT. Man. v. ii. p. 517.

Black-throated Diver, *Colymbus arcticus*, AUD. Orn. Biog. v. iv. p. 345.

### 486. 3. *Colymbus septentrionalis*, LINN. Red-throated Diver.

PLATE CCII. Male in summer, Male in winter, Female, and Young.

Adult, in summer, with the bill bluish-black, the feet brownish-black, anterior part of tarsus, upper surface of toes, and part of webs, livid flesh-colour; fore part and sides of head, throat, and sides of neck, bluish-grey; fore part of neck rich brownish-red; hind part of head and hind neck longitudinally streaked with greenish-black and pure white, each feather black in the middle, with the sides white, the colours disposed in lines; upper parts in general brownish-black, tinged with green, more or less mottled with white, according to age, excepting the primary quills and the tail-feathers, of which there are twenty; lower parts pure white, excepting the feathers on the sides under the wings, some of those about the vent, and the lower tail-coverts, which are greyish-brown, with white margins and tips. Young, in winter, with the fore part of the neck white, or slightly mottled with red; all the feathers of the upper parts with two white spots near the end; tail-feathers edged and tipped with white. Young at first covered with dense elastic down, of a greyish-black colour, tinged with Brown.

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*Male*, 19, 25. *Female*, 18, 24.

Not uncommon during winter, autumn, and early spring, from Maryland eastward. Breeds in Newfoundland, Labrador, and as far north as the Arctic Seas.

*Colymbus septentrionalis*, BONAP. Syn. p. 421.

Red-throated Diver, *Colymbus septentrionalis*, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 476.

Red-throated Diver, NUTT. Man. v. ii. p. 519.

Red-throated Diver, *Colymbus septentrionalis*, AUD. Orn. Biog. v. iii. p. 20; v. v. p. 625.

## GENUS II. PODICEPS, LATH. GREBE.

Bill about the length of the head, or shorter, straight, rather stout, much compressed, tapering, pointed; upper mandible with the dorsal line declinate and more or less convex toward the end, the ridge convex, the sides erect and somewhat convex, the edges sharp and inflected, the tip narrow; nasal groove rather long, extending to nearly half the length of the mandible, feathered at the base; nostrils linear-elliptical, basal, rather small, pervious; lower mandible with the angle long and extremely narrow, the dorsal line ascending and straight, the sides erect and slightly convex, the edges sharp and involute, the tip acute. Head of moderate size, oblong, narrowed before; neck rather long and slender; body long, depressed. Feet short, large, placed close to the extremity of the body; tibia feathered to the joint; tarsus extremely compressed, its anterior edge with a row of small scutella, the sides broadly scutellate, the posterior ridge with a double row of small prominent scales; toes four, first very small, with a posterior membrane, fourth longest, all scutellate, the anterior connected at the base by membranes, and having on both sides an expanded web-like margin, marked with oblique lines. Claws flat, that of the third toe broadest. Plumage very soft and blended, on the lower parts dusky. Wings small acute, curved, the second primary longest, the first little shorter; secondaries short and rounded. Tail a slight tuft of loose feathers, fourteen in number. Tongue slender, trigonal, pointed; œsophagus of moderate width; proventriculus very large, ovate; stomach extremely large, roundish, its muscular coat thin; the epithelium thick, soft, rugous; a small pyloric sac; intestine of moderate length and width; cœca rather long, slender; cloaca very large, globular. Bronchi with the rings entire and ossified.

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### 487. 1. *Podiceps cristatus*, LATH. Crested Grebe.

PLATE CCXCII. Male and Female.

Male with the bill about the length of the head, rather slender, blackish-brown, tinged with

carmine; feet greenish-black, tinged with greyish-blue; tail of fourteen feathers; two tufts of elongated feathers on the occiput, and a large frill on the sides and anterior part of the neck; upper part of head and tufts greyish-black, tinged with green, as is the hind part of the ruff, its anterior part being brownish-red; sides of the head and throat white; fore neck white, tinged with brown; breast silvery-white, sides reddish-brown, with dusky streaks; upper parts brownish-black, the feathers edged with lighter, the sides of the neck tinged with reddish, as is the rump; wing-coverts greyish-brown; primary quills brownish-black, middle secondaries, inner webs of their coverts, and outer webs of outer scapulars, white. Female with the occipital feathers a little elongated, but without the ruff; bill dusky green, upper part of head and hind neck blackish-grey; back and wings as in the male, but more tinged with grey; lower parts silvery-white, the sides dusky.

*Male*, 24, 33.

Not uncommon during autumn and early spring on all the larger streams of the Western Country, as well as on the coast of the Atlantic, from Nova Scotia to Texas. Breeds in the mountainous parts of the Fur Countries, Rocky Mountains, and high latitudes. Migratory.

*Podiceps cristatus*, BONAP. Syn. p. 417.

*Podiceps cristatus*, Crested Grebe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 410.

Crested Grebe or Gannet, NUTT. Man. v. ii. p. 250.

Crested Grebe, *Podiceps cristatus*, AUD. Orn. Biog. v. iii. p. 598.

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### **488. 2. *Podiceps rubricollis*, LATH. Red-necked Grebe.**

PLATE CCXCVIII. Adult Male, and Young in winter.

Male with the bill about the length of the head, rather slender, brownish-black, yellow at the base; tarsi and toes greenish-black externally, yellow on the inner side; two tufts of elongated feathers behind the eye; feathers on the hind part of the cheeks also elongated; upper part of head greyish-black, lower part ash-grey, with a white line from the base of the lower mandible to beyond the eye; hind part of neck, and upper parts generally, greyish-black, the feathers edged with paler; edges of wings and outer secondaries white; fore part and sides of neck rich brownish-red; breast and sides silvery-white, faintly marked with grey. Young, in winter, with the bill bright yellow, its ridge dusky; feet as in the adult; upper part of head blackish-grey; hind neck and upper parts of the same colour, darker towards the end; edge of wing and outer secondaries greyish-white, the latter grey towards the end; lower parts greyish-white.

*Male*, 18  $\frac{3}{4}$ , 32.

During winter, not uncommon from New York to Maine. Breeds in the Fur Countries. Accidental in the interior.

*Podiceps rubricollis*, BONAP. Syn. p. 417.

*Podiceps rubricollis*, Red-necked Grebe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 411.

Red-necked Grebe, NUTT. Man. v. ii. p. 253.

Red-necked Grebe, *Podiceps rubricollis*, AUD. Orn. Biog. v. iii. p. 617; v. v. p. 620.

### **489. 3. *Podiceps cornutus*, LINN. Horned Grebe.**

PLATE CCLIX. Male and Female.

Male with the bill shorter than the head, rather slender, bluish-black, its tip yellow; feet dusky externally, dull yellow internally; a tuft of feathers on each side behind the eyes, a larger tuft on each side of the upper part of the neck; forehead greyish-brown; upper part of head bluish-black, as are the sides, fore neck anteriorly, and the ruff-feathers; a broad band over the eyes, and the elongated tufts behind them yellowish-brown; fore neck brownish-red; lower parts white, the sides reddish-brown, abdomen dull grey; upper parts brownish-black, the feathers edged with greyish, the middle secondary quills white. Young, in winter, with the feathers of the hind head a little elongated, but no tufts or ruff; bill bluish-grey, as are the feet; upper part of head and hind neck greyish-black, as are the upper parts in general, the feathers of the back edged with light grey; throat, sides of head, a broad patch on each side of the neck, nearly meeting behind, the fore neck and lower parts, white; sides and downy feathers of the abdomen brownish-grey; some of the secondaries white, as in the adult.

*Male*, 14  $\frac{3}{4}$ , 25  $\frac{1}{2}$ .

Very common during autumn on the Ohio, Missouri, Mississippi, and all their tributaries, as well as in all the Atlantic Districts, to Texas. Breeds from the Great Lakes to the Fur Countries. Migratory.

*Podiceps cornutus*, BONAP. Syn. p. 417.

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Podiceps cornutus, Horned Grebe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 411.

Horned Grebe or Dobchick, NUTT. Man. v. ii. 254.

Horned Grebe, Podiceps cornutus, AUD. Orn. Biog. v. iii. p. 429; v. v. p. 423.

#### 490. 4. **Podiceps auritus, LATH. Eared Grebe.**

PLATE CCCCIV. Adult and Young.

Male with the bill considerably shorter than the head, rather stout, bluish-black; feet dusky grey externally, greenish-grey on the inner side; a tuft of very long loose feathers on each side of the head, behind the eye and covering the ears, orange; head and neck all round deep black; upper parts brownish-black, the wings greyish-brown, with a broad patch of white, the secondary quills being of that colour; lower parts silvery-white, except the sides of the body and rump, which are light red. Young, in autumn, with the tufts not developed; the upper part brownish-black, the neck tinged with grey behind, the secondary quills white; throat, and a broad band curving behind the ear so as almost to meet the other on the nape, greyish-white; neck light brownish-grey in front; lower parts of the body and rump dusky grey.

*Adult* 13, wing 5  $\frac{9}{12}$ .

Very rare, and not found by me in America.

Eared Dobchick or Grebe, Podiceps auritus, NUTT. Man. v. ii. p. 256.

Eared Grebe, Podiceps auritus, AUD. Orn. Biog. v. v. p. 108.

#### 491. 5. **Podiceps Carolinensis, LATH. Pied-billed Dobchick.**

PLATE CCXLVIII. Male and Female.

Male with the bill shorter than the head, stout, deep, compressed, pale blue, the upper mandible dusky along the ridge, the lower with a black band beyond the middle; feet greyish-black; feathers on the forehead with stiff enlarged shafts, as in the Rails; upper part of the head and the throat black; neck and sides of the head light greyish-brown; stiff edges of the feathers on the lower parts of the neck greyish-yellow; back brownish-black, as are the inner secondaries; outer secondaries light brown, with a reddish-white spot on the end of the inner web; primaries light brown, dusky at the end; breast silvery-white, abdomen brownish-grey, the sides mottled with greyish-brown. Female without the black band on the bill, or the black patch on the throat, but otherwise nearly similar. Young of both sexes like the female.

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*Male*, 14, 23.

Extremely common in autumn on all our Western streams, as well as those of the Atlantic Districts. In winter in the Southern States, as far as Texas. Breeds on the Wabash, and other streams of the interior, to Maine. Migratory.

Podiceps carolinensis, BONAP. Syn. p. 418.

Podiceps carolinensis, Pied-bill Grebe, SWAINS. & RICH. F. Bor. Amer. v. ii. p. 412.

Pied-bill Dobchick, Podiceps carolinensis, NUTT. Man. v. ii. p. 259.

Pied-bill Dobchick, Podiceps carolinensis, AUD. Orn. Biog. v. iii. p. 359; v. v. p. 624.

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### Transcriber's Note

The cover image was compiled by the transcriber and is placed in the public domain.

Although most taxonomic terms were accepted as printed, a number of species names were changed where two spellings were presented and one was not found through an internet search (*e.g.*, p. 29: Virginana and Virginiana [not found]).

Page Change Made

xii "XLV. COLUMBINÆ. DIVERS..." => "XLV. COLYMBINÆ. DIVERS..."

48 "71. 1. mitratus, Lath..." => "71. 1. Myiodiocytes mitratus, Lath..."

163 "244. Icteria viridis, Gmel." => "244. 1. Icteria viridis, Gmel."

214 "310. Ortygometra Jamaicensis" => "310. 3. Ortygometra Jamaicensis"

220 "tip narrowed, broader than..." => "...tip narrowed, (broader than..."

264 "*Female*, 12, wing 4  $\frac{3}{4}$  ." => "*Female*, 12, wing 14  $\frac{3}{4}$  ."

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\*\*\* END OF THE PROJECT GUTENBERG EBOOK A SYNOPSIS OF THE BIRDS OF NORTH AMERICA \*\*\*

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