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A

SYNOPTICAL LIST

OF THE

ACCIPITRES

(Diurnal Birds of Prey)



PART II.

(Erythrotriorchis to Lophoaetus)

Comprising described Species and Subspecies, with their Characters and Distribution

BY

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ACCIPITRES

(DIURNAL BIRDS OF PREY)

PART II.

Sub-Fam. III. BUTEONINÆ.

Bill moderate, bending from base, with a slight projection on cutting edge of upper mandible.

Outer toe connected to middle toe by an interdigital membrane; tibia much longer than tarsus, exceeding it by more than the length of hind claw.

Gen. XXVII. ERYTHROTRIORCHIS Sharpe (1875).

Wing about equal to tail, the latter moderately graduated; ridge of bill (without cere) less than half length of middle toe (without claw).

126. Erythrotriorchis radiatus (Lath.), Ind. Orn. Suppl., ii., p. xii. (1801) [N.S. Wales.] Red Buzzard.

E.C.N. and N.W. Australia.

Gen. XXVIII. MEGATRIORCHIS Salvad. & D'Alb. (1875).

Wings short, slightly longer than tail; tail long, rounded; inner toe shorter than outer.

Larger; length $\ \ 26.75$, wing 14 in.; plumage above brownish black, with rufescent margins; below white, spotted longitudinally with brown; wings and tail above banded alternately with brownish-black and greyish-brown.

127. Megatriorchis doriœ Salvad. & D'Alb., Ann. S.E. New Mus. Civ. Genov. vii., p. 85 (1875). [Yule Guinea. Island.] Doria's Buzzard-Hawk.

Gen. XXIX. HETEROSPIZIAS Sharpe (1874).

Nostrils round, with large tubercular process; wings reaching up to or beyond tail; tail. about equal to twice tarsus.

Size of Buteo: length $\bigcirc 24$, wing 18.3, $\bigcirc 20$, wing 16.5 in.; head and shoulders rufous; mantle and scapulars pale slate grey with rufous margins; rump and tail purplish black, tail with a median white bar and white tips; below rufous with narrow obsolete black bars on breast.

128. Heterospizias meridionalis (Lath.), Ind. Orn., 1., p. 36 (1790). [Cayenne.] Red-winged Hawk. S. America (Colombia to S.E. Brazil, Paraguay and Argentina).

Gen. XXX. GERANOAETUS Kaup (1844).

Size much larger than *Buteo*; tail proportionately shorter, and wings proportionately longer.

Length 328, ♀31, wing 23.7, tail 11.5 in; slaty-black, with the shoulder grey, finely barred with blackish; abdomen and under wing and tail-coverts greyish-white, finely barred with blackish.

129. Geranoaetus melanoleucus (Vieill.), N. Diet. Colombia d'Hist. Nat., xxxii., p. 57, 1819 [Paraguay]. to Chile and Chilian Eagle. Patagonia.

Gen. XXXI. BUTEO Lacep. (1799).

Cere large; nostrils oval with no tubercle; wings moderately long, the 3rd to 5th quills longest, the first 3 to 5 emarginate or notched on inner webs; tarsus short, strong, usually scaled, and feathered in front for a varying distance. Size usually under 24 in.

KEY TO THE NATURAL GROUPS AND SPECIES (ADULTS).

A. Tail usually brown, sometimes washed with rufous, with a varying number of transverse bars; generally from 6 to 12, often indistinct. General plumage sooty-black, shaded with brown; tail greyish-brown with 12 or 13 blackish bars.

130. Buteo galapagensis (Gould), P.Z.S., 1837, p. 9 Galapagos Is. [Galapagos Is.] Galapagos Buzzard.

Aberrant species; size small; wing 3 10.75 in., very short and rounded; inner webs of first 4 primaries emarginate; tips of primaries reaching to about middle of tail; tail with 8 or 9 darker bars; plumage blackish-brown (dark phase) or brown above and buff below and on head (light phase).

131. Buteo solitarius Peale, Zool. U.S. Expl. Hawaiian Exped. Birds, p. 62 (1848). [Karakaloa Bay, Archipelago Hawaii.]

Solitary Buzzard.

Size small; length 3 18.50, wing 11.8 in.; above pale brown; tail with 6 or 7 bands of darker brown; below white, throat narrowly and breast broadly streaked with pale brown; belly and thighs uniform pale brown.

Buteo brachypterus Hartl., Faun. Madag. p. l. Madagascar. (1861). [Madagascar.]
 Short-winged Buzzard.

Size large, length $\ \$, 24.5; wing 19 in.; head and neck white, with broad streaks of pale brown; above dull brown; tail with indistinct darker cross-bars, the base and inner webs white; below white, barred on throat and streaked on breast with dark brown; flanks dark brown.

133. Buteo hemilasius Temm. et Schl., Faun. Japon. Aves, p. 18, pl. vii (1844). [Japan.] [Archibuteo strophiatus(Hodgs.)is a synonym.] Upland Buzzard.

E. Siberia,
Mongolia
to Tibet,
Nepal and
L. Baikal;
Cas. Japan;
winters
China,
Turkestan,
N. India,

Length \Im , 19, wing 15 in.; first 3 primaries notched; above dark-brown to slate-brown with paler edgings; tail with 10 or 12 darker cross-bars, the sub-terminal broad; throat white, upper breast rufous (\Im) to deep chest-nut or brownish-black (\Im): other lower parts buffy-white, generally with rufous arrow heads or flank bars; a uniform sooty-brown phase is met with.

134. Buteo swainsoni Bonap. Geogr. and Comp. List, p. 3 (1838). [Near the Columbia River.] Swainson's Hawk.

N. and S. America, from Alaska to Chile.

Tail brown with 8 or 9 darker bars; below whitish, heavily blotched lengthwise with dark brown; thighs buffish, barred with dark brown.

135. Buteo oreophilus Hart, and Neum., Orn. M.B. xxii., p. 31 (1914). [S. Abyssinia.] E. African Buzzard.

E. Africa, Abyssinia and Uganda to the Cape.

First 4 primaries notched; length 3 about 20 in.; wing 14.75-15; tail 8.75-9; tarsus 3.10; \$\times\$ wing 15-16 in.; plumage variable; adult in breeding plumage (Brit. Isles) brown to dark brown above, sometimes with rusty edges to scapulars; lower parts whitish, heavily blotched on breast and barred on belly with dark brown (occasionally rufous brown), the upper breast, flanks and thighs nearly uniform; tail with 12 or 13 darker bars, the sub-terminal one broad*; a sootybrown phase also a "white" variety are met with.

136. Buteo buteo buteo (Linn.) S.N. ed. X. i. p. 90 (1758). [Europe.] Common Buzzard. W., N. and C. Europe, N. to Brit. Isles and Sweden, S. to Spain.

^{*} Adults among the Buzzards usually have the tail much less numerously barred than is the case with young birds and often have a broad sub-terminal band, lacking in young birds; the latter also have the under-parts of the body as a rule lighter, often with the arrow-head, circular or elongated dark markings characteristic of the young birds of other groups of the Accipitres. Individuals of all the species of Buteo vary greatly in plumage.

Smaller insular race; darker and more rufous; more heavily marked below, tail tinged rufous.

136a. Buteo buteo arrigonii Picchi, Avicula, vii., p. 40 (1903). [Sardinia.] Sardinian Buzzard.

Sardinia, Corsica.

Wing $\ \$ 16.50, $\ \ \$ 15.50 in.; large and dark insular race; more similar to zimmermanne than typical form; darker than latter generally is and nearly uniform below, blackish-brown to rufous-brown, the abdomen barred; tail with 10 or 12 darker bars and with or without rufous tinge.

Buteo buteo harterti subsp. nov. [B. buteo subsp. ? Hart., Vög. Pal. Faun., p. 1123 (1914)]. [Type in Tring Mus.]
Madeira Buzzard.

Madeira.

Wing ♂ 13.40-14.10; ♀ 14.70-15.25 in.; rufous form, but tail generally light ashy, with 7-9 bars, the sub-terminal broad, more or less tinged with rufous; below with belly either uniform deep rufous or barred and mottled with buffish-white.

136c. Buteo buteo rothschildi, subsp. nov.* [No. 1904, 12. 31. 286, Coll. B.M., ♀ Terceira, Az. Apl. 6, 1903, W.R.O. Grant.]
Azores Buzzard.

Azores.

Wing ♀ 15.40-15-70, ♂ (juv.) 13.80 in.; rufous form; chest and abdomen rufous brown; tail brown, slightly tinged with rufous and with the darker bars nearly obsolete in very old bird, about 5 being apparent; younger birds have about 10 distinct bars.

136d. Buteo buteo insularum Floericke, Mitteil. Canary Oesterr. Reichsb., iii., p. 64 (1903). [Gran Isles. Canaria.] Canary Isles Buzzard.

Paler and less rufous than three preceding forms; wing \$\times\$ 14.60; above ashy-brown, with paler margins to the feathers; tail with 9 darker bars; below throat white, streaked with dusky-brown; chest brown, mottled with buffy-white; centre of breast whiter; belly

^{*} The fine series in Brit. Mus. does not appear to me to confirm the view that the Azores race is the same as the Canary Is. race.

barred with brown; thighs dark brown, slightly barred with rufous; feet smaller and

slighter.

136e. Buteo buteo bannermani, subsp. nov. [♀Near Mindello Bay, St. Vincent, Cape Verd Is. Sept. 26, 1913, in Coll. B. M. No. 1919. 8. 15. 148.] Cape Verd Buzzard.

Cape Verd Islands.

Size of but more rufous than *B. buteo buteo*; more heavily marked below; abdomen and under tail-coverts white barred transversely with rufous brown; tail distinctly barred and with a rufous tinge; wing 3 14.32, tail 8.25 in.

136f. Buteo buteo zimmermannæ, Ehmeke, J.f.O. 1893, p. 117. [Kreis Gumbinnen, E. Prussia.] Bufous Buzzard. E. Europe: E. Prussia & W. & C. Russia, N. to Archangel, S. to Balkans, W. casually to Holland, Brit. Islands (*) France and Italy.

Tarsus feathered about half-way down in front; plumage above purplish brown, with rufescent margins; tail with 4 or 5 indistinct darker bars; below rufous, abdomen buffywhite, barred with rufous (younger birds buffy-white below, streaked on breast and blotched on abdomen with dark brown.)

136g. Buteo buteo japonicus (Temm. et Schl.) in Siebold's Fauna Jap. Aves., p. 16. [pl. vi, vi^a] (1844). [Japan.] [=B. plumipes. (Hodgs.)]
Japanese Buzzard.

Japan, China Corea, Manchuria, Turkestan, Punjab to Burma.

B. Tail more definitely red in old birds, with most of the bars obsolete.

Smaller: wing $\circlearrowleft 13.40\text{-}14.50$, tail 7-8, tarsus 3 in., \circlearrowleft wing about 15 in.; above brown

^{*} There are eight rufous Brit. birds in the Brit. Mus. collection, two of which seem referable to B. rufiventer and the rest to this form, while there is another example in Brighton Mus. from the Monk coll., labelled "England." Devonshire birds are, however, often almost as rufous as those from E. Europe.

with conspicious rufous margins and blackish shafts; tail more or less rufous, with subterminal band and remains of other bars (in younger birds ashy-brown barred with dark brown); head, neck and under parts tawny rufous, breast varied with creamy buff and throat streaked with brown; belly not barred in adult.

137. Buteo rufiventer Jerd. Madr. Jnl. 1844, p. 165. [Nilghiri Hills, India.] [=B. desertorum Daud. ex Levaill.] Desert Buzzard.

W. Asia and S.E. Europe* (S. Russia to Caucasus); S. to India, Arabia and Africa below the Sahara in winter; cas. in Brit. Islands.

Much larger: Wing ♂ 16.25-17.75, tail 10.5, tarsus 3.75. ♀ wing 18-19 in.; breast buffish to pale rufous with dark shaft streaks; abdomen, flanks and thighs rufous to chocolate brown, unbarred; tail pale rufous, whitish at base and shafts white, with 2 or 3 definite bars towards tip and remains of others; uniform dark under parts of some birds probably a dark phase or erythrism rather than age; also subject to melanism; immature buffish white below blotched and streaked with dark rufous brown; tail ashy with darker bars.

138. Buteo ferox ferox S. G. Gmel., N. Comm. Ac. Petrop. xv., p. 442, pl. x (1769). [Astrakan.] Long-legged Buzzard.

S.E. Europe (cas. S. & W. Europe), Egypt, Arabia, Asia Minor; W. & C. Asia; N.W. India and Africa in winter.

^{*} The form B. menetriesi, Bogd., is not separable. It appears to rest upon birds with a fully rufous tail and the bands obsolete, except the subterminal one, but there is no doubt these are only very old birds and there is no means of distinguishing European from Asiatic examples in the various other stages of tail marking, while the red stage seems common to both. Both forms migrate to Africa.

Much smaller: wing 14.50, tail 8.2, tarsus

Buteo ferox cirtensis (Levaill). Expl. Sci. de l'Alger., pl. 3 (1850). [Algeria.] Algerian Buzzard.

N.W. and N. Africa, (Morocco, Algeria, Tunis), Spain (acc. ?)

Length of 21, wing 17, tail 8, tarsus 3.30 in.; ♀ length 23, wing 18 in.; general plumage sooty or brownish-black; lower breast chestnut; abdomen more or less barred white and chestnut; primaries externally ashy, secondaries whitish, both barred with black; tail chestnut red, with black sub-terminal band; younger birds have under parts rufous, excepting throat.

Buteo jakal (Daud.), Traité, ii., p. 161 (1800). 139.[Cape of Good Hope, ex Le Vaillant.] Jackal Buzzard.

S. Africa.

139a. Buteo jakal archeri W. Scl., Bull. B.O.C., Somaliland. xxxix., p. 17 (1918).

Size similar; tail less chestnut, more tawny; lower parts black in old birds; in younger chiefly white, excepting the throat which is more or less black.

Buteo augur Rüpp., Neue Wirb. Vög., p. 38, pl. 140. 16 (1835). [Abyssinia.] Augur Buzzard.

N.E. Africa, Equatorial Africa.

General plumage of 3 dusky blackish, the feathers of back and wings margined with brown; sides of head and cervical collar varied with rufous; forehead, nape spot and throat white; breast as upper parts; abdomen and flanks white spotted and streaked with black; tail rufous with subterminal black band.

Buteo auguralis Salvad., Att. Soc. Ital. Sc. 141. Nat., viii., p. 377 (1865). [Abyssinia.] Salvadori's Buzzard.

W. Africa to N.E. Africa.

Size variable; average length, \$\frac{1}{2}1\$, wing 15.50 in.; $\bigcirc 24$, wing 17.50 in.; above blackishbrown with more or less of lighter variegation; tail chestnut with one sub-terminal darker band and often remains of others; below buffy-white, flanks barred or mottled and abdomen heavily streaked with blackish-brown. 142. Buteo borealis borealis (Gmel.), S.N., 1, p. 266 (1788). [Carolina.]Red-tailed Buzzard.

E. North America, N. to Canada and Newfoundland W. to Gt. Plains.

Light form, pure white below with few or no markings; sub-terminal tail-bar reduced or obliterated.

142a. Buteo borealis krideri (Hoopes), Pr. Ac. Nat. Soc. Philad., 1873, p. 238, pl. 5. [Iowa.] Krider's Hawk.

Gt. Plains, from Missouri and Minnesota, W. to Rocky Mountains, N. to S. Manitoba.

Strongly developed form of *B. borealis borealis*, more strongly marked below, especially on thighs, and with more bars than the sub-terminal one on tail; melanisms are frequent, but they usually retain the rufous tail.

142b. Buteo borealis calurus Cassin, Proc. Ac. Nat. Sci. Philad., vii., p. 281 (1855). [New Mexico.] Western Red-tail. W. North America, beyond W. edge of Gt. Plains E. to Middle Yukon, S. to Guatemala; Guadaloupe Is.

Perhaps a melanism of *B. borealis borealis*; size similar, but more robust; nearly uniform sooty-brownish-black, with much less of concealed white; tail mottled with greyish, dusky-white and rufous, with subterminal black band.

142c. Buteo borealis harlani (Aud.), Bds. Am., i., p. 86 (1830). [Louisiana.]
Harlan's Buzzard.

Lower Mississippi Valley & Gulf States, from Louisiana to Georgia and Florida. Resembling B. borealis calurus, but smaller throughout; wing 3 ad. 344 mm.; 9 365 mm.; dark areas blacker and more extended.

142d. Buteo borealis alascensis Grinnell, Univ. Cal. S. E. Alaska. Pub. Zool., v., No. 2, p. 211 (1909). [Glacier Bay and Chichagof I. Alaska Red-tail.

Tail uniform rufous, with one very narrow sub-terminal band; flanks and thighs light rufous; juv., tail barred, and flanks and thighs sparsely barred with rufous.

142e. Buteo borealis costaricensis Ridgw., Hist. N. Am. Bds., iii., p. 285 (1874). [Costa Rica.] Central American Red-tail.

Costa Rica to Panama.

Size of B, borealis borealis, but darker above: throat and middle of belly with broad conspicuous striping and banding of deep chocolate brown; tail feathers with dark brown markings (remains of bands) near shaft.

142f. Buteo borealis umbrinus Bangs, Pr. New Engl. Zool., Cl. ii., p. 67 (1901). Manatee Co., Florida.] MyakkaFlorida Red-tail.

Florida. Bahamas.

Small form: wing 3.14.94-15.70, 9.16.76 in. Insular race, undescribed ? *

142g. Buteo borealis socorroensis Ridgw., Pr. U.S.N. Socorro Mus., iii., 1880, p. 220 (1881) [Socorro I.] Island. [nom. nudem.] Socorro Island Red-tail.

> More rufous on sides of breast and belly; thighs heavily barred with brown.

142h. Buteo borealis fumosus Nelson, Pr. Biol. Tres Marias Soc. Wash, xii, p. 7 (1898) [Tres Marias Islands. Is.Tres Marias Red-tail.

> Length 21, wing 14.50 in.; above sootybrownish with purplish gloss and ferruginous

> edgings; tail rusty ferruginous, base and tips white with sub-terminal dusky-black band and 7-9 dusky bars; wing quills rich brown, barred with black; below white tinged

^{*} The example in Tring Mus. is black with rufous tail, having broad sub-terminal band, and 8 or 9 narrow obsolete bars, presumably a melanism.

buff; throat streaked with dusky, chest more thickly with ferruginous; a dusky zone across abdomen; thighs barred ferruginous.

143. Buteo tropicalis Verrill., Pr. Ac. Nat. Sci. Philad. Ixi. pp. 357-8. (1909) Lorenzo.]

San Domingo

Tropical Buzzard.

Doubtful species: "Possibly the light phase of B. b. harlani." A.O.U. Check List; only type example known.*

144. Buteo cooperi Cassin, Pr. Ac. Nat. Sci. California. Philad, 1856, p. 253. [Santa Clara Co., Calif.] Cooper's Buzzard.

C. Tail black.

Smaller than B. borealis borealis; average length, 3, 19, wing 12.50 in.; plumage above reddish brown with darker centres; lesser wing-coverts bright chestnut; below pale rufous, barred with white; brownish thighs paler and more buffy; quills and tail black, barred with white, the tail with about 6 bars.

145. Buteo lineatus lineatus (Gmel.), S.N. 1., p. 268 (1788) [Long Is., N.Y.] Red-shouldered Buzzard.

E. North America, N. to Canada, W. to edge of Great Plains.

Much darker: "An erythrism of last form" (Coues); below generally much darker reddish, with much less white barring; thighs rufous.

145a. Buteo lineatus elegans Cassin, Pr. Ac. Nat. Sci. Philad. vii, p. 281 (1855) [Cali-

Western Red-shouldered Buzzard

W. North America from Brit. Colombia to N.W. Mexico and Lower California.

Smaller: wing 11-12 in.

145b. Buteo lineatus alleni Ridgw., Pr. U.S. Nat. S. Carolina Mus. vii., p. 514 (1885) [Tampa, Fla.] to Florida. Florida Red-shouldered Buzzard.

^{*} A.O.U. Check List, ed. 3, 1910, but Gurney (Ibis, 1876, p. 242) refers to another from Colorado.

Wing (type) 12.98; tail 8.62 in.; darker, approaching B. l. elegans; breast usually more spotted with buffy; dark shaft of chest more conspicuous; head and back more rufous.

145c. Buteo lineatus texanus Bishop, Auk., xxix, p. 232 (1912). [Texas.]

Texan Red-shouldered Buzzard.

Texas, Mexico.

Considerably smaller; length 315, wing 10.75 in.; \$\overline{16}\$, wing 11.40 in.; only 3 outer primaries emarginate; plumage above dark brown with lighter edges; nape much mottled with white; tail brownish-black with 2 bands of greyish-white; below rufous brown cross-barred with white in the form of transverse oblong spots.

146. Buteo platypterus platypterus (Vieill.), Tabl. Encl. Meth., iii., p. 1273 (1823). [Near Philadelphia.]

Broad-winged Buzzard

E. North America; C. America, Colombia, Ecuador, E. Peru (winter.)

Insular race; smaller and lighter than antillarum and bars below narrower and less sharply defined.

146a. Buteo platypterus insulicola Riley, Auk., Antigua. xxv., p. 273 (1908). [Antiqua.]

Larger and darker.

146b. Buteo platypterus antillarum Clark, Pr. Biol. Soc. Wash., xviii., p. 62 (1905). [St. Vincent.]

St. Vincent, St. Lucia, Grenada.

[Description not seen.]

146c. Buteo platypterus rivieri Verrill, Add. to Dominica. Avif. of Dom. ca. 1905, p.---?

Smaller; wing 3 (Surinam) 15.25 in.*; general plumage black; tail black with broad median band of grey (showing white below) and remains of a second band.

^{*} Examples from Mexico (Tring Mus.) are larger; wing 3 16.75 in. A \(\)? Bolivia has the wing 18 in., and if this is a migrant from Mexico, there may be a large northern race, and if so it could be called mexicanus. Gray's albonotatus (Mexico) is a nominum nudem and cannot stand, while Kaup's albonotatus (Isis, 1847, p. 954) is neither a name nor a description. His albonotatus in Contr. Orn. 1850, p. 75, is from "S. America" and is based on the "concealed white spots," which can be seen on the Surinam bird at Tring, and not on the Mexican; they appear only to mark a stage of plumage. The only certain distinction seems to lie in the relative sizes.

147. Buteo abbreviatus abbreviatus Cab., in Schomb. Reis. Guiana. iii, p. 739 (1848)
[British Guiana.]
Zone-tailed Buzzard.

Brit. Guiana, Surinam, Brazil, Venezuela, Mexico, Arizona, New Mexico, Texas, S. to Bolivia.

Much smaller; wing " \updownarrow " 12.50; tail 6 in.; uniform sooty black; tail with 4 grey bars above, showing white below.

147a. Buteo abbreviatus minimus subsp. nov. ["♀" Miritiba, Braz., 18.8.09, coll. H.K.S.]

S. Brazil.

D. Tail white.

Length 32; wing 15.25 in.; general colour of 3 bluish-slate; tail white with about 9 narrow bars of slate grey and broad subterminal blackish band; 9 head, neck and upper breast slate; mantle, scapulars and belly rufous.

148. Buteo poliosomus (Quoy et Gaim.) Voy. de l'Uran. Ois. p. 92, pl. 14 (1824) ["Iles Malouines."]
Falkland Island Buzzard.

Chile,
Patagonia,
Falkland Is.,
Tierra del
Fuego.

Size similar; adult \mathcal{J} , general plumage slate, tail with 8 darker bars and broad black subterminal band; abdomen and thighs slate, more or less barred with white; \mathcal{I} wings, rump and belly more or less suffused with rufous; thighs rufous barred with white.

149. Buteo hypospodius Gurney, Ibis, 1876, p. 73, pl. 3. [Medellin.]
Grey-bellied Buzzard.

Colombia, Venezuela, Amazonia. Brazil.

Larger: wing (\bigcirc ?) 19 in.; above and tail much as in \bigcirc of B. e. erythronotus; below barred with white and slate, the breast mixed with rufous.

150. Buteo pacilochrous Gurney, Ibis, 1879, p. 176. [Yauayacu.] [=B. melanosternus. Berl. and Stolzm.] Gurney's Red-backed Buzzard.

Ecuador, Peru, Bolivia, Chile, Argentina, Length \circlearrowleft 21; wing 15 in.; \circlearrowleft wing 16.5 in.; \circlearrowleft above slaty-blue, below white; tail white with 10 or 11 narrow grey bars and subterminal blackish band; \circlearrowleft back and scapulars brick red.

151. Buteo erythronotus erythronotus (King) Zool. Jnl.iii, p. 424 (1827). [Str. of Magellan.] Red-backed Buzzard.

Patagonia to Chile and Peru, Falkland Is., Argentina.

Insular form; \circlearrowleft darker slate grey above; \circlearrowleft back uniform like \circlearrowleft instead of red.

151a. Buteo erythronotus exsul Salvin, Ibis, 1875, p. 371 [Masafuera.]* Masafuera Buzzard.

Masafuera Island.

Length 321, wing 17 in.; above and throat slaty-grey, darker on head and wings; shoulder ferruginous; rump and upper tail-coverts white; tail silvery grey, centre feathers white, with 8 or 9 silvery bars and sub-terminal black band; below white, axillaries and flanks barred with blackish.

152. Buteo albicaudatus albicaudatus (Vieill.), N. Diet. d'Hist. Nat. iv, p. 477 (1816). [S. America.]
White-tailed Hawk.

S. America, to Chile and Argentina.

Cross bars on tail and lower parts finer and more broken.

152a. Buteo albicaudatus sennetti Allen, Bull. Am. Mus, N.H. v., p. 144 (1893). [Texas.] Sennett's White-tailed Hawk.

Middle Texas to S. America.

"Notably smaller: with the upper parts, particularly the head and sides of the neck, darker and more slaty."

152b. Buteo albicaudatus exiguus, Chapm., Bull. Am. Mus. N.H. xxxiv., p. 637 (1915). [Barrigon, Col.] Columbian White-tailed Hawk.

Llanos of E. Columbia & E. into Venezuela.

^{*} The following additional forms of Buteo have been described from Chile by Philippi (Arch. für Naturg., 1899, pp. 167-70) viz.: Buteo melanostethos, B. pæcilogaster, B. macronychus, B. ater, B. pictus, B. albigula, B. [Asturina?] ethiops et elegans, but what the respective value of these forms is I have been unable to judge.

Ad. plumage not seen; imm. black, abdomen somewhat barred with buff; tail with indistinct darker bars. [Tring Mus.]

152c. Buteo albicaudatus colonus Berl., J.f.O. 1892, p. 91. [Curagao.]
Curagao White-tailed Hawk

Curagao, Bonaire, & Aruba Is

Gen, XXXII. ARCHIBUTEO Brehm (1828)

With characters and appearance of *Buteo*, but tarsi feathered to the toes.

Length ♂ 26, wing 18.7 in.; ♀ length 22.5, wing 17 in.; above deep brown with paler margins; head, neck, throat and chest white, streaked with dark brown; scapulars and least wing-coverts with white bases; upper tail-coverts banded with white; tail white, terminal portion ashy, with sub-terminal blackish band; centre of belly and flanks deep brown mottled with white; thighs and tarsi buffish-white, barred with brown; much variation occurs, some birds being much darker, almost uniform below.

153. Archibuteo lagopus lagopus (Gmel.), S.N., i., p. 260 (1788). [ex Brûnn.; Christiansoe near Bornholm.]
Rough-legged Buzzard.

N. Europe and N. Asia; in winter S. to Mediterranean, Black Sea and Caspian.

Much paler; plumage above with broad white margins; streaks on throat and breast and thighs much narrower and paler; upper tail-coverts white with a central streak of brown.

153a. Archibuteo lagopus pallidus (Menzb.), Orn. Turkest., i., p. 163 (1888). [Siberia, Turkestan, etc.]

Siberian Rough-legged Buzzard.

Much darker and more ochraceous below normally than A. l. lagopus and varying in melanistic examples to nearly uniform black.

153b. Archibuteo lagopus sancti-johannis (Gmel.), S.N., i., p. 273 (1788). [Hudson Strait and Newfoundland.] American Rough-legged Buzzard.

Siberia, Turkestan, Kamtschatka Ussuri.

N. America, N. of Mexico, breeding N. of U.S Plumage above blackish with chestnut margins; head streaked with black and white; tail silvery ashy, tinged with rufous, the base and tip white; below white, with black shaft lines on breast and arrow heads on flanks; legs bright chestnut barred with black.

154. Archibuteo ferrugineus (Licht.), Abh. K. Akad. Wiss. Berl. (Phys. Kl.), 1838, p. 428 (1839). [Near Monterey, Cal.] Ferruginous Rough-leg.

W. North America, S. to California; in winter to Lower California and N. Mexico.

Gen. XXXIII. BUTEOLA Bp. (1855).

Nostrils round, with distinct central tubercle; wing with 3 outer primaries emarginate on inner webs, the 4th sinuate.

Size moderate; length \circlearrowleft (?) 15.5, wing 11.3 in.; \circlearrowleft (?) 16, wing 13 in. Above slaty-black; tail ashy-brown, tipped with whitish and with 4 bars of blackish-brown; sides of face and under surface of body white; melanistic variety [B. fuliginosa, Sel.] immature?, general plumage sooty-black; tail brown with 8 blackish bands.

155. Buteola brachyura (Vieill.), N. Diet. d'Hist., Nat.iv., p. 477 (1816). [Cayenne]. Short-tailed Buzzard. Brazil,
Bolivia,
Peru, Guiana,
N. to Central
America and
Florida.

Gen. XXXIV. ASTURINA Vieill. (1816).

Tibiæ long; feet large and powerful; nostrils round, with indistinct and concealed tubercle at base of upper margin. Size medium (length 16-18 in.).

3 a bove ashy-grey, barred with silvery white, most narrowly on the head and nape, bars becoming duller and broader on wings; upper tail-coverts blackish, tipped with white; tail blackish with a broad white band about ⅓rd of distance from tip and a second incomplete band on outer feathers; body below regularly banded with silvery white and slaty grey.

Asturina nitida nitida (Lath.), Ind. Orn, i., p. 41 (1790). [Cayenne]. Shining Buzzard-Hawk.

S.E. Brazil, Amazonia, Guiana. Colombia to Panama.

[Not seen.]

156a. Asturina nitida pallida Todd, Proc. Biol. Soc., Bolivia. Wash., xxviii., p. 170 (1915).

Above ashy-grey without white bars: head and nape lighter; tail with whitish band across middle with remains of another nearer base, below banded as A. n. nitida, except on breast. which is ashy-grey with black shaft stripes. Asturina plagiata Schl. Mus. Pays-Bas, i.,

157. Asturinæ, p. 1 (1862), [Vera Cruz]. Mexican Goshawk.

Costa Rica, N. to S. Arizona and Lower Rio Grande Valley.

Gen. XXXV. RUPORNIS Kaup (1844).

Feet and claws much smaller and weaker. Size rather smaller than Asturina.

> Length of 14. wing 8.70 in.; above pale ashygrey; tail light ashy with 3 broad bands of black; inner webs of wing quills rufous, barred with black, outer webs and tips ashy brown; below white, barred with pale rufous or rufous ashy, the chest and throat nearly uniform.

Rupornis magnirostris magnirostris (Gmel.), 158.S.N., i., p. 282 (1788). [Cayenne]. Large-billed Hawk.

Guiana, Venezuela. Colombia, Peru, Lesser Antilles.

[Not seen.]

158a. Rupornis magnirostris occidus Bangs, Pr. Biol. Soc., Wash., xxiv., p. 187 (1911). [Rio Tembonata. Bangs's Hawk.

Peru.

Above browner; tail with interspaces ashy. 158b. Rupornis magnirostris griseicauda Ridgw., Pr. Bos. Soc., N.H., xvi., p. 47, (1873) [Mexico?]

Mexico to Guatemala and N. Nicaragua

Smaller; much paler (smoke grey) above;

slightly paler below.

158c. Rupornis magnirostris conspecta, Peters, Auk, 1913, p. 370 [San Ignacio.]

Yucatan Peninsula.

Tail with the interspaces rufous instead of ashy; below buff banded with rufous, throat and chest ashy.

158d. Rupornis magnirostris ruficauda (Sel. & Salv.), P.Z.S., 1869, p. 133 [Type loc. sugg. David, W. Panama, Chapm.]. Red-tailed Hawk. Central America (S. Nicaragua to Panama.)

Insular race.

158e. Rupornis magnirostris gracilis Ridgw., Pr. U.S.N. Mus., viii., p. 94 (1885). [Cozumel I.]

Cozumel I. Yucatan.

Length $\[\]$ 14.50, wing 10 in.; tail dark brown imperfectly banded with white and shaded with dull rufous; below dark rufous narrowly banded with white.

158f. Rupornis magnirostris ridgwayi Cory, Auk, i., p. 4 (1884). [S. Domingo].

Haiti and S. S. Domingo.

Larger; above brown, darker on head; quills paler rufous than in *R. m. ruficauda*, and with bases pale rufous externally; tail pale rufous banded with dark brown; below buffy-white, very narrowly and indistinctly barred with pale rufous.

158g. Rupornis magnirostris pucherani, J. & E. Verr. Rev. et Mag. de Zool., 1855, p. 350 [type loc. sugg. Paraguay, Brab. & Chubb.] Paraguay, S.E. Brazil, Bolivia, Argentina.

Above ashy brown, head much clearer; tail with the interspaces ashy-brown; throat ashy-grey; chest pale rufous, rest of under parts fulvous barred with pale rufous.

158h. Rupornis magnirostris nattereri (Scl. & Salv.) P.Z.S. 1869, p. 132. [Sao Paulo et Mattogrosso.]
Natterer's Hawk.

S.E. & C. Brazil.

Uniform black, lower upper tail-coverts and base of tail white; tail black, with a single band of ashy-brown; tibial plumes rufous; under tail-coverts buffy-white.

159. Rupornis leucorrhos (Quoy et Gaim.), Voy. de l'Uran. p. 91, pl. 13 (1824). [Brazil.] White-rumped Hawk.

Brazil to
Peru,
Colombia,
Venezuela.

Gen. XXXVI. BUSARELLUS Lafr. (1842.)

Size of *Buteo*; sole of foot covered with rugose and throny spicules (like that of *Pandion*) tip of upper mandible much curved.

Above bright chestnut, with narrow black shaft stripes; outermost wing-coverts and quills black; basal half of tail chestnut banded with black, apical half black with narrow white tip; head and neck creamy buff; lower throat black; below chestnut.

160. Busarellus nigricollis (Lath.), Ind. Orn. 1, p. 35 (1790). [Cayenne.]
Black-collared Hawk.

Brazil, Guiana, Peru, Paraguay.

Gen. XXXVII. BUTEOGALLUS Less. (1831.)

Size nearly the same; outer toe hardly longer than inner; soles of feet smooth, wings short of tail by less than length of hind toe.

Plumage above black, with rufous margins on mantle and wing-coverts; quills bright chestnut, the outer webs black; tail black with white tip and indistinct median band of white; throat blackish; below rufous, narrowly barred with black.

161. Buteogallus æquinoctialis (Gmel.), S.N. i. p. 265 (1788). [Cayenne.]
Equinoctial Buzzard.

Guiana; Colombia, Paraguay.

Gen. XXXVIII. URUBITINGA Lafr. (1837).

Rather larger: tarsus scutellate before and behind, reticulated laterally; distance between tips of wing and tail greater than length of hind toe; secondaries nearly as long as primaries; general plumage black.

Above and below black; upper tail-coverts mostly white; basal half of tail white with a broad black band; apical half black with white tip.

162. Urubitinga urubitinga urubitinga (Gmel.), S.N. i., p. 265 (1788). [Brazil.] Brazilian Eagle.

Chile, Argentina, Paraguay, E. Peru, Brazil, Venezuela. Guiana, C. America to Costa Rica

Under wing-coverts and tibiæ with more white; tail with less white and an extra black bar.

162a. Urubitinga urubitinga ridawayi Gurney. Guatemala List Diurn. Bds. Prey, p. 77, 148 (1884). and Mexico. [Guatemala.] Ridgway's Black Hawk.

162b. Urubitinga urubitinga subtilis Thayer and S.W. Bangs, Bull. Mus. Harvard, xlvi. p. 94. Colombia. (1905). [Gorgona I.] Gorgona Black Hawk.

Black above and below; upper and under tailcoverts narrowly tipped with white; tail with a broad white median band and white tip.

163. Urubitinga anthracina anthracina (Light.). Preis. Verz.; Vogel, Mexico, etc., p. 3 (1830). [Mexico.] Mexican Black Hawk.

Tropical America to W. Indies, Guatemala. Mexico and Arizona.

Doubtful form; said to be dark chocolate brown with 2 more or less distinct extra white bands at base of tail.

Urubitinga anthracina gundlachii Cab., J. Cuba. 163af.O. (1854). [Cuba.] Cuban Black Hawk.

Gen. XXXIX. LEUCOPTERNIS Kaup (1847).

Similar in structure to *Urubitinga*; nostril nearly circular; tarsus not more than twice as long as middle toe; plumage usually more white than black.

> Plumage uniform bluish slate colour; tail black, with a white median band and white tip.

164. Leucopternis schistacea schistacea (Sundev.) Œfv. K. Vet. Akad. Förh. 1849, p. 132. [Brazil.] Slate-coloured Hawk.

E. Peru Colombia. C. and N.E. Brazil.

Smaller: Uniform leaden grey; wings and tail black, latter with a median bar of ashvwhite; under wing-coverts white and tibial plumes barred with same.

164a. Leucopternis schistacea plumbea Salv., Ibis. 1872, p. 240, pl. viii. [*Ecuador*.] Plumbeous Hawk.

Ecuador, W. Colombia

General plumage white; head streaked with black, neck all round white; mantle and wing-coverts black varied with white; quills black; tail white with broad sub-terminal black band.

165.Leucopternis albicollis albicollis (Lath.), Ind. Orn. 1, p. 36 (1790). [Cayenne.] White-collared Hawk.

Guiana, Trinidad, Venezuela, N. Brazil.

Similar, but rather smaller and with head plumbeous; upper parts plumbeous instead of black: black sub-terminal band on tail narrower.

165a. Leucopternis albicollis occidentalis Salv. W. Ecuador. Ibis. 1876, p. 496. [Puna I.] Puna White-collared Hawk.

Larger; above and below white; tail with broad sub-terminal black band; greater wing-coverts and secondaries black tipped with white; primaries black.

166.Leucopternis ghiesbrechti, Du Bus, Esq. Orn. pl. 1 (1845). [S. Mexico.] Ghiesbrecht's Hawk,

S. Mexico to Panama.

Above blackish-slate, most of feathers tipped or barred with white; head, neck and underparts white; basal half of tail black, terminal white.

167. Leucopternis palliata (Pelz.), Sitz. Akad. S. Brazil. Wien. xliv., p. 11. (1861, ex Natterer.) [Ypanema.]Mantled Hawk.

Above more slate coloured, with less white variegation: neck shaded with greyish; tail with narrow sub-terminal black band on white apical half.

168. Leucopternis lacernulata (Temm.), Pl. Col. S.E. Brazil 1, pl. 437 (1827) [Brazil.] White-headed Hawk.

Smaller: above slate-black; above eye a white stripe, and nape streaked and margined with same; tail black, tipped with ashybrown, with a median band of white; below white narrowly streaked with black on sides of chest.

169. Leucopternis kuhli Bp., Consp. Av. 1, p. 19, N.E. Brazil. 1849. [Para.] White-browed Hawk.

Above black; head, neck and lower parts white; lores and stripe behind eye black; crown and nape streaked with black; tail black with broad band of white about $\frac{1}{3}$ rd from end.

170. Leucopternis melanops (Lath.), Ind. Orn. 1, p. Guiana; 37 (1790). [Cayenne.] N. Brazil. Black-faced Hawk.

Above uniform plumbeous; wings and tail black; latter with a narrow band of white near middle; below white with a few black shaft stripes on sides of breast.

171. Leucopternis semi-plumbea (Lawr.) Ann. Lyc. N.Y. vii., p. 288 (1861). [Panama.] Semi-plumbeous Hawk.

Colombia and Panama to Costa Rica.

Above, also throat and foreneck, slaty-black, below white narrowly barred with black; tail black with a median band of white, and a few anterior incomplete bars of same.

172. Leucopternis princeps Sclat., P.Z.S. 1865, p. Costa 429, pl. xxiv. [Costa Rica.] Rica. Barred Hawk. N. Ecuador.

Gen. XL. HARPYHALIAETUS Lafr. (1842.)

Much larger than *Buteo*; Head with a long occipital crest; tail short, not three times as long as tarsus.

Length ad. 33, wing 22 in.; tail 13.5 in.; above and below ashy-brown, shaded with chocolate; quills blackish; secondaries ashygrey mottled with black and with a broad sub-terminal band of same; tail black, tipped with white, with broad white median band, and a second indistinct one nearer base.

173. Harpyhaliaetus coronatus coronatus (Vieill.) N. Diet. xiv., p. 237 (1817). [Paraguay.] Crowned Harpy.

Paraguay, Bolivia, Patagonia. S. Brazil.

Much darker; general colour bluish-black, shaded with chocolate; crest much shorter. Harpyhaliaetus coronatus solitarius Tsch. Arch. f. Naturg. 1844, p. 264. [Peru].

Solitary Harpy.

Chili, Peru. Ecuador, Colombia.

Gen. XLI. MORPHNUS Cuv. (1817.)

Size similar; head crested; tail long, more than four times as long as tarsus; toes very short; claws large.

> Length ♀ 36, wing 19.3, tail 17 in.; above brownish-black; head and neck greyish. brown; wings barred with lighter ashybrown; tail black, tipped with whitish and with from 3 to 5 bands of ashy-brown; chest ashy-brown; below white barred with rufous or brown.

Morphnus guianensis guianensis (Daud.), 174. Traité, ii., p. 78 (1800). [Guiana]. Guiana Crested Eagle.

Guiana, E. Peru. Paraguay, Colombia.

Crown and sides of head dark slate; above blackish-brown; wing-coverts more conspicuously barred with white; tail with 4 bands of white, mottled and tinged with brownish-grey; throat and upper breast blackish; below closely barred with black and white.

174a. Morphnus guianensis tæniatus Gurney, Ibis, Ecuador. 1879, p. 176, pl. iii. [Sarayacu.]. Ecuadorian Crested Eagle.

Gen. XLII. THRASAËTUS Gray (1837

Larger; bill robust, culmen much curved; feet very powerful; tarsus almost entirely bare, the scutallæ rough and irregular; claws very large and strong; head with broad depressed crest, erectile.

Length 38 in.; wing 22.30; above, also crest and chest-patch, ashy grey; tail irregularly barred with black; head, neck and underparts white.*

175. Thrasaëtus harpyia (Linn.) S.N., i., p. 86 (1758) [Mexico].
Great Harpy Eagle.

and Brazil; N. to Mexico.

Paraguay

Gen. XLIII. HARPYOPSIS Salvad. (1875).

Size large; head crested; tail long and rounded.

Length about 34 in.; wing 19 in.; above dusky brown; below dirty white; chest greyish; tail with 6 indistinct transverse bands.

176. Harpyopsis novæ-guinæ Salvad., Ann. Mus. S.E. New Civ. Genov., vii., p. 682 (1875). [Yule Island.] Guinea. New Guinea Hawk-Eagle.

SUB, FAM. IV. GYPAETINÆ.

Gen. XLIV. GYPAETUS Storr (1784).

Nostrils hidden by stiff bristles: chin with a long tuft of black bristles; tarsus more or less feathered.

Size large: length 41 in.; wing 29.50; head white, a line each side of crown and another below ear black; general plumage above black with white shafts; wings and tail brown and scapulars washed with ochraceous brown; below tawny; tarsus feathered to the toes.

177. Gypaetus barbatus grandis Storr, Alpenreise vom Jahr 1781, p. 69 (1784) [Switzerland.]
 Bearded Vulture.

Spain,
Alps and S.E.
Europe,
Central Asia,
Himalayas,
N. China.

^{*} Immature birds are black above and on chest; head and neck ashy-grey; below white.

Below warmer tawny reddish.

Gypaetus barbatus barbatus (Linn.) S.N. 1, Atlas Mtns., 177a. p. 87. (1758.) [Africa.] Atlas Bearded Vulture.

N. Africa (Morocco. Algeria, Tunis.)

Length 38 in.; wing 29 in.; cheeks white without the black markings: tarsus bare towards lower part.

177b. Gypaetus barbatus meridionalis, Keys. and Blas., Wirbelt. Europ. p. xxviii. (1840). [S. Africa.Southern Bearded Vulture.

S. Africa, Nubia. Abyssinia.

SUB. FAM. V. AQUILINÆ.

Outer toe connected to middle toe by membrane: tibia much longer than tarsus, which is reticulated on hinder aspect and generally more or less clothed with feathers; bill large, long and powerful; cutting edge of upper mandible festooned, but not toothed; wings long; tail moderate; sexes generally alike.

Gen. XLV. UROAETUS Kaup (1844).

Tail strongly graduated, wedge-shaped; tarsi clothed with feathers all round to base of toes.

> Size large; length 38, wing 24.2 in.; general colour above and below black, browner on wings; nape tawny chestnut; upper tailcoverts brown mottled with white; tail feathers white at base of inner web.

178. Uroaetus audax audax (Lath.) Ind. Orn. Suppl. p. ii (1801). [New South Wales.] Wedge-tailed Eagle.

E. & W. Australia, Tasmania.

Gen. XLVI. AQUILA Briss. (1760).

Tail nearly square or moderately rounded; tarsi feathered all round: toes reticulated above, except last phalanx which is scaled; head without crest; claws powerful and curved.

> Length (♀) 37, wing 26 in.; plumage black, with back, rump and some of scapulars white; immature fawn colour, tail uniform.

179. Aquila verreauxi Less., Cent. Zool. p. 105, taf. 38 (1830). [Interior of Cape of Good Hope.

S. Africa, N.E. Africa (Abvssinia) Palestine (occ.)

Length ♂ 32, wing 23-24.5 in.; ♀ average length 35.5, wing 26-27.50 in.; general plumage above blackish brown, with paler margins: crown brown; nape and hind neck tawny rufous (W. Europe; much paler in E. European birds.); tail blackish at apical fourth, browner towards base, middle irregularly banded with grey; below blackish with brown bases to the feathers; in younger birds basal half of tail white, centre mottled brown, apical third black.

180. Aquila chrysaëtos chrysaëtos (Linn.), S.N.i., p. 88 (1758). [Europe.]

Golden Eagle.

Europe, N. Asia to N China.

Spain and

N. Africa

(Morocco,

Algeria,

Averaging smaller; plumage darker and duller.

180a. Aquila chrysaëtos occidentalis, Olphe-Galliard Faune. Orn. Eur. Occ., ii, fasc. xviii, p. 23. (Mar. 1889.) [Spain.] Spanish Golden Eagle.

Larger: length \bigcirc 40, wing 27.9 in.; colour generally brighter.

180b. Aquila chrysaëtos daphanea, Hodgs. in Gray's Zool. Misc. p. 81 (1844). [Nom nud.-Nepal.] Menz. Orn. Turkest, 1, p. 75 (1888). [Haute Asie.] Himalayan Golden Eagle.

Large and more rufous; max.length ♀ 40 in.; wing 27 in. [Doubtfully distinct.]

180c. Aquila chrysaëtos canadensis (Linn.) S.N. i, p. 88 (1758) [Canada.] American Golden Eagle. Tunis.)
High
Central

Himalayas.

Asia.

N. America Arctic Regions S. to California and Alleghenies in N. Carolina

Smaller; wing \$\frac{1}{2} \cdot 23.5 \text{ in.; head and neck above dull yellowish is abelline; forehead marked with dark brown, and nape tinged with rufous; general plumage blackish-brown; some of the scapulars pure white; tail dark grey with broad terminal blackish band; immature brown; tail uniform.

181. Aquila heliaca heliaca Savigny, Descr. Egypte Ois. p. 82, pl. 12 (1809). [Upper Egypt.] Imperial Eagle.

S.E. Europe to C. Asia, N. India, China, Burma.

Size similar; forehead and crown blackish brown: edge of wing and some of scapulars white, forming a conspicuous shoulder patch; immature fawn colour, tail uniform.

Spain ; N.W. Africa.

181a. Aquila heliaca adalberti Brehm, Ber. Vers. deutsch. Orn. Ges. 1860, p. 60. (1861.) [Spain.]
White-shouldered Eagle.

Rather smaller: length \circlearrowleft 30, wing 23 in.; plumage brown, paler below; head brown, nape patch fulvous; quills, larger scapulars and tail blackish-brown, latter with fulvous tip and obsolete ashy bars; edge of wing white, forming conspicuous white shoulder; immature ashy-brown, tail darker, with terminal band of fawn.

182. Aquila nipalensis nipalensis Hodgs., Asiat. Res. xviii, pt. 2, pl. 1, pp. 13-16 (1833). [Nepal.]
Eastern Steppe Eagle.

Central Asia N.W. India, and E. Siberia; in winter to Africa.

Smaller: wing 3 21.50, \(\big2 22.50. \)
182a. Aquila nipalensis orientalis Cab., J. f. O.
1854, p. 369. [Sarepta, Volga.]
Western Steppe Eagle.

Steppes of S.E. Europe and W. Asia.

Length \$\omega\$ 31, wing 22 in.; \$\sigma\$ length 28, wing 20 in.; general colour above and below tawny to rufous brown; head and neck somewhat marked with darker brown; scapulars and wing-coverts darker brown, blotched with pale brown; quills and tail blackish-brown, with indications of greyish bars; under parts streaked with darker brown; immature tawny, tail brown tipped with fulyous.

183. Aquila rapax rapax (Temm.) Pl. Col., pl. 455 (1828). [Pte. mėrid. de l'Afrique.]
Tawny Eagle.

Africa, from Cape Colony N. to C. and E. Africa; C. Asia and N.W. India. General colour pale clay or ochraceous colour.

183a. Aquila rapax albicans Rüpp., Neue Wirbelth. p. 34, pl. 13 (1835). [Prov. Simen, Abys.] Rüppell's Tawny Eagle.

N.E. Africa (Abysinia, Somaliland), Arabia.

Size similar: length 3 28, wing 20.5 in.; general colour fulvous brown, paler on head and neck and below, above with lighter margins to the feathers, especially on wing-coverts: tail dark brown with fulvous tip and 8 or 9 indistinct greyish bars on centre feathers.

183b. Aquila rapax vindhiana Frankl., P. Z.S. 1831, p. 114. [Vindhya Mtns., Central India.] Indian Tawny Eagle.

Indian Peninsula and Himalayas

Smaller; head, neck all round and inter-scapulary region chocolate brown.

183c. Aquila rapax belisarius (Levaill. jun.) Expl. Sc. Alg. Ois. pl. 2 (1850). [Guelma, N.E. Algeria.]
Algerian Tawny Eagle.

Algeria.

Nostrils round; length, ♀, about 29, wing 21.50-23 in.; ♂, wing 20 in.; plumage above and below blackish brown; tail unbarred; younger birds purplish brown, much spotted with brownish-buff above and striped below: tail blackish, barred dark brown.

184. Aquila clanga Pall., Zoogr. Rosso-Asiat., i, p. 351 (1827). [In Rossia Sibiriaque universa.]

Greater Spotted Eagle

E. & S.E.
Europe,
south to
Balkans, E.
to Turkestan,
S. Siberia,
N. India and
China; in
winter to
N.E. Africa,
India,
Burma; cas.
Brit. Isles.

Smaller; wing \bigcirc 19–20 in.; \bigcirc 17.70-19 in.; plumage browner: crown and nape creamy brown: tail feathers with obsolete lighter

bars; younger birds less spotted than those of *A. clanga* and tail unbarred: nape patch ochraceous rufous.

185. Aquila pomarina Brehm, Vög. Deutschl., p. 27 (1831). [Pomerania.] Lesser Spotted Eagle. C. Europe from N. Germany to Bessarabia; cas. W. Europe; in winter to N.E. Africa.

Sexes nearly similar in size; wing \bigcirc 19.50, \bigcirc 19.15 in; bill more feeble, tarsi more slender; wings generally exceeding tail in length; least wing-coverts with small spots of white in immature birds.

185a. Aquila pomarina hastata (Less.), Vog. Bélang. Zool., p. 217 (1834). [Bengal]. Long-legged Eagle. Indian
Peninsula:
Burmese
countries.

Gen. XLVII. HIERAAETUS Kaup (1844)

General characters of Aquila, but bill more slender; tarsi feathered to the toes.

Length ♀ 26, wing 21 in.; wing ♂ 19.6 in.; above deep brown, feathers mostly with paler margins and white bases; tail ashy, with broad sub-terminal dark brown band, and 5 or 6 indistinct bars; below white, with blackish-brown shaft stripes, the flanks and legs buffish, barred with black.

186. Hieraaëtus fasciatus fasciatus (Vieill.), Mem. Soc. Linn. Paris, ii., pt. 2, p. 152 (1822). [Montpellier.]
Bonelli's Eagle.

S. Europe (S. France and Spain to S. Russia), Asia Minor, Turkestan, Palestine, India, China, N. Africa.

[Smaller but doubtful form.] 186a. *Hieraaëtus fasciatus minor* Erlanger, J.f.O., 1904, p. 187, taf. x., fig. 42.

S. Arabia; E. Africa (Somaliland, Mozambique).

Wing ♀ 18.3 in.; above blackish-brown, mottled with white; below purer white streaked with black on breast, and with large spots on under tail-coverts; under wingcoverts black.

186b. Hieraaëtus fasciatus spilogaster (Bp.), Rev. et Mag. Zool., 1850, p. 487 [Abyssinia, ex Du Bus. M.S.]. African Hawk-Eagle.

Tropical Africa; rare in S. Africa.

Smaller; wing $\bigcirc 16.5, \bigcirc 14.0$; above brown, head and neck isabelline; tail with obsolete darker bars on outer feathers; below white, throat and breast washed with fawn and streaked with reddish brown or blackish; species subject to variation; younger birds dull brown below with black shaft-stripes. and a white shoulder patch.

187. Hieraaëtus pennatus (Gmel.), S.N., i., p. 272 (1788) [ex Brisson, l. c.]. Booted Eagle.

S. Europe (Spain to S. Russia): Africa, C. Asia, India. Cevlon.

Smaller, and with a short occipital crest; length ad. 21.5 in., wing 15 in.; above brown, crown darker; crest, neck and undersurface rufous, with black shaft-streaks; tail mottled grevish-brown, with 7 or 8 dark brown bars.

188. Hieraaëtus morphnoides morphnoides (Gould), P.Z.S., 1840, p. 161 (1841). [Upper Hunter, N.S.W.Little Eagle.

E. and W. Australia.

Below heavily striped with dark brown. 189. Hieraaëtus weiskei Reichenow, Orn. M.B., viii., p. 185 (1900). [Astrolabe Mtns.] New Guinea Little Eagle.

S.E. New Guinea.

Below pale is a belline: tail with 7 dark bands. 190. Hieraaëtus ayresi Gurney, Ibis, 1862, p. 149, pl. iv. [Natal.] Ayres' Little Eagle $[=Lophotriorchis\ lucani\ Africa.$ Sharpe.]

Tropical Africa to S. Length ♀ 26, wing 18 in.; head with distinct occipital crest: plumage above brown, with paler margins; tail dark brown, tipped with whitish, with obsolete lighter bars on inner webs of feathers; below whity brown, varied with dark brown on throat and breast.

Hieraaëtus wahlbergi (Sundev.) Œfv. K. Akad. Stockh., 1850, p. 109. [Caffraria superiori propre 25° lat.]

Tropical Africa.

Gen. XLVIII. LOPHOTRIORCHIS Sharpe (1874).

Head with a long wedge-shaped crest.

Length 21, wing 14.1 in.; above black; cheeks, throat and breast white; below tawny rufous, with black shaft-stripes.

192. Lophotriorchis kieneri (Geoffr. St. Hilaire), Rev. Zool., 1845, pl. 35. [Himalaya]. Kiener's Crested Eagle. Indian
Peninsula,
Ceylon, IndoChinese
Provinces,
Malay
Peninsula to
Celebes and
Lesser Sunda
Islands.

Larger; length 26.5, wing 20.2, crest 3.3 in.; above glossy-black; tail ashy-grey, basal third black; throat black; below tawny rufous with black shaft-streaks; flanks black

193. Lophotriorchis isidorei (Des Murs), Rev. Zool., 1845, p. 177. [Santa Fe de Bogota.] Isidore's Crested Eagle. Colombia.

Gen. XLIX. ICTINAETUS Jerd. (1844).

Head crested; claws nearly straight, the circumference of inner claw exceeding the length of outer toe (which is very short).

Wing 20–20.50 in.; black; the quills mottled with white near base; tail feathers barred with ashy above, mottled with white below

194. Ictinaetus malayensis malayensis (Temm.). Pl. Col. i., pl. 117 (1824). [ex Reinw. MS.] Malayan Crested Eagle. Malay Archipelago (Sumatra, Borneo, etc.) Larger; wing 3 21.50.

194a. Ictinaetus malayensis perniger Hodgs., Jnl. As. Soc. Bengal, v., 1836, p. 227. [Nepal.] Indian Crested Eagle.

India, Ceylon, Burma, Malay Peninsula.

Gen. L. SPIZIASTUR Gray (1841).

Head crested; claws curved and powerful; the circumference of inner claw about equal to length of outer toe and claw.

Length $\ \ 24$ in., $\ \ \ 21$ in.; wing $\ \ \ 16.4$, $\ \ \ 15$ in.; above blackish, quills and tail ashy brown, slightly tipped with fulvous and banded with black; head, neck and under surface white.

195. Spiziastur melanoleucus (Vieill.), N. Diet., iv., p. 482 (1816). [Guiana] Black and White Crested Eagle.

Central & S. America.

Gen. LI. SPIZAETUS Vieill. (1816).

Tarsi feathered as before; crest sometimes fully developed, sometimes absent; wings short, falling short of tail by more than length of crest.

Length ♀ 28.5 in., wing 16.2 in.; ♂ 24, wing 13.4 in.; occipital crest 3 in. long; sides and back of neck bright rufous; above black, feathers brown at base; wings brown, barred with blackish; tail brown with 4 or 5 blackish bands; below white, chest slightly streaked and abdomen broadly banded with black; on each side of face below eye a black moustachial band. Young much browner and with 6 bands on tail.

196. Spizaetus ornatus (Daud.), Traité, ii., p 77 Central and (1800). [Cayenne.] S. America, Manduit's Hawk-Eagle. S. to Paraguay.

Size about the same; above and below black, browner on wings; under surface of wing with 3 irregular bands of white; upper and under tail coverts slightly spotted with white; tail

black with 4 bands of ashy brown. Young browner above and more spotted with white below; tail with 6 bands.

Spizaetus tyrannus (Wied), Reis. Bras., i., p. 300 (1820). [Rio Belmonte].
 Tyrant Hawk-Eagle.

Central and S. America, from Guatemala to S.E. Brazil.

Larger; length ♀ 38 in., wing 27.5. Above dark sepia brown; feathers of head and neck with whitish brown margins and white bases; wings barred with blackish; tail with 6 bands of ashy grey; fore neck and chest dark brown; throat and under parts white, sparingly spotted with dark brown, especially on flanks. Young paler above, more buffy white below, the spots nearly absent and with about 11 bands on tail.

198. Spizaetus bellicosus (Daud.), Traité, ii., p. 38 (1800). [Great Namaqualand.] Martial Hawk-Eagle.

S. Africa, E. Africa, N. to Shoa, Abyssinia, and Bogosland; Nigeria.

Rather smaller; above black; wings brown; quills externally shaded with pale ashy grey, and with a broad subterminal band of black; tail with 2 broad bands of ashy grey and remains of a third; throat black; below yellowish buff, whiter towards vent, broadly banded with black, the chest almost uniform; under wing coverts chestnut. Young above brown with indistinct darker bands and whitish margins; tail with 3 lighter bands; below white.

199. Spizaetus coronatus (Linn.), S.N., ed. xii., i., p. 124 (1766). [Guinea in W. Africa.] Crowned Hawk-Eagle.

S. and W. Africa.

Smaller; length $\ \$ 32 in., wing 20; $\ \$ 3 length 28 in., wing 18.50, crest 2.8 in.; above blackish brown, with paler margins, especially to feathers of head and hind neck; wings paler, banded with dark brown; tail ashy brown with 4 blackish brown bands; throat white, with black central stripe; chest fawn

with black shaft streaks; below brown spotted and barred with white. Young have head and neck white with dark centres to the feathers; tail with 6 darker bands; below white, slightly streaked with dark brown; flanks brown.

200.Spizaetus nipalensis nipalensis (Hodgs.) Jnl. As. Soc. Beng., v., p. 229 (1836) [Nepal]. Himalayan Hawk-Eagle.

Himalayas, S. in winter to plains of India and Malay Peninsula; China?

With the white bands below broader and more regular.

200a. Spizaetus nipalensis kelaarti Legge, Ibis, 1878, Ceylon. p. 202 [Ceylon]. Mountain Hawk-Eagle.

Larger; δ about equal to \mathcal{Q} of typical race. 200b. Spizaetus nipalensis orientalis Temm. & Schleg. N. Japan. in Siebold's Faun. Jap. Aves, p. 7, pl. 3 (text 1844, pl. 1845) [Japan.] Japanese Hawk-Eagle.

[Not separable unless a breeding bird in China.] 200c. Spizaetus nipalensis fokiensis, W. Sclat. in MS. Cat. Accip. Coll. Brit. Mus. [3] Ah Ch'ung, Fokien Prov. China, Coll. B.M.] Chinese Hawk-Eagle.

Above brown; feathers of hind neck and mantle with pale bases and black shaft streaks; crest black, 3.8 in. long; wing quills rich brown, barred with blackish; tail with broad blackish subterminal band and 3 narrower bands; throat white with central black stripe and bordered by 2 black moustachial stripes; below brown, more rufous and mottled with white on chest.

201. Spizaetus cirrhatus cirrhatus (Gmel.), S.N., i., p. 274 (1788) [India]. Indian Hawk-Eagle.

Indian Peninsula.

Smaller; wing 15.20—14 in.

201a. Spizaetus cirrhatus ceylonensis (Gmel.), S.N., Ceylon. i., p. 275 [Ceylon]. Ceylonese Hawk-Eagle.

Small insular race.

201b. Spizaetus cirrhatus andamanensis Tytler. Andaman Proc. As. Soc. Beng., 1865, p. 112 [Port Blair, And. Is.] Andaman Hawk-Eagle.

Islands.

Size of S. c. cirrhatus, but with crest very slight; with dusky phase [S. limnaetus Horsf.] nearly uniform chocolate brown, and pale phase [S. caligatus (Raffles)] dark brown above, below white with large longitudinal brown markings, the thighs barred.

201c. Spizaetus cirrhatus limnaetus (Horsf.), Tr. Linn. Soc., xiii., p. 138 (1821) [Java.]. Javan Hawk-Eagle.

Java. Sumatra, Penang.

Larger; below white, without the dark markings.

201d. Spizaetus cirrhatus floris, Hart., Nov. Zool., v., p. 46 (1898).

Lesser Sunda Is. (Flores).

Smaller; length ad. 22.50, wing 13 in.; above black with occipital crest, tipped with white, 2.75 in. long; wing quills brown, tipped white, barred with black and with broad black subterminal band; tail ashy brown, with broad basal and subterminal bands of black; below white, breast with large black spots and belly banded with black.

Spizaetus alboniger (Blyth), Jnl. As. Soc. 202.Beng., xiv., p. 173 (1845) [Malacca].

Borneo, Greater Sunda Is... Malayan Peninsula. Tenasserim.

Rather larger, length 25 in., wing 14.75, crest 2.50 in.; above dark umber brown; crest with base of feathers white; tail paler brown with 7 darker bands; throat as in S. c. cirrhatus; below yellowish rufous; chest heavily marked with dark brown lanceolate spots; thighs and under tail-coverts barred with brown and white.

203. Spizaetus philippinensis Gurney, in Gould's Bds. Asia, pt. xv. (1863) [Philippine Is.] Philippine Hawk-Eagle.

Philippine Islands.

Larger; length \bigcirc 30 in., wing 21 in.; \bigcirc length 24 in., wing 19.7 in.; blackish brown, blacker on head; lighter and greyer on wings and tail; tail with 6 or 7 obsolete bars.

204. Spizaetus gurneyi (Gray), P.Z.S., 1860, p. 342, pl. 169. [Batchian.] Gurney's Hawk-Eagle. Molucca Is., Aru Is., Waigiou, New Guinea.

Gen. LII. LOPHOAETUS Kaup (1847).

Crest feathers very long and pendant; tarsi feathered as in preceding genera.

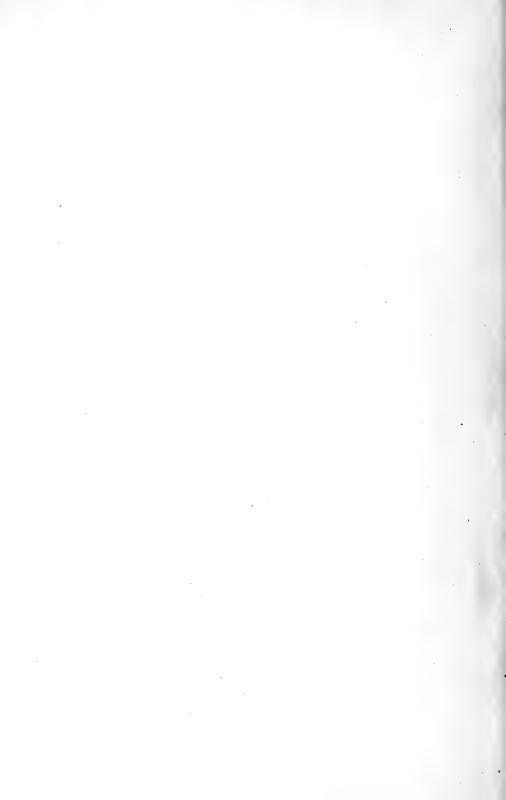
Size small; length ♂ 21, wing 15.50, crest 4.75; ♂ plumage glossy black, with a brown shade on wings; quills white at base, forming a conspicuous patch, and banded with white on inner webs below; tail with 3 greyish bands on middle feathers, becoming broader and whitish on outer ones; ♀ larger and much browner; juv. deep chocolate brown.

205. Lophoaetus occipitalis (Daud.), Traité, ii., p. 40 (1800). [Anteniquoi country.]
Black-Crested Eagle.

S. Africa to E. and W. Tropical Africa.

ADDENDA ET CORRIGENDA (PART I.)

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Page 4 N	70. 7. In distribution for S.E. and N.E. read: S.	and N.
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90	Astur gentilis albidus Menz. t.e.p. 438 (188	2).
,, 23	,, 70. After this article add:	Pools L
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	1, pt. 1, p. 13 (1914).	N. Terr. Austral.
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-	99c. Accipiter fuscus venator, Wetmore, Pr.	Porto Rico.
	Biol. Soc. Wash. xxvii., p. 119 (1914).	
,. 32	,, 102a For pp. 171-6, read: p. 173.	
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Thighs white, barred with orange tawny.

Breast brown with white spots, rest of under parts barred with orange tawny and white; upper tail-coverts white, barred with reddish.

C. cinereus.

d. Thighs rufous.

Below dark brown, with a white band, marked with brown, across breast; upper tail-coverts white, tinged with grey and rufous.

C. œruginosus.

Below brown, streaked with white; upper tail *C. ranivorus*. coverts rufous, tipped with white.

Gen. XIX. MICRASTUR Grav (1841).

Nostrils round, with a bony excrescence; tarsi and feet large and robust; tarsus reticulated behind; in front covered with small scutellac.

> Size large, length, \mathcal{L} , 20 in., wing 10.4; \mathcal{L} , about 24 in.; above blackish with white nuchal collar; tail with 3 white bands; below white with black shaft lines; juv. below barred; intermediate plumage below pale ochraceous fawn, as well as sides of face and nuchal collar.

Micrastur melanoleucus melanoleucus (Vieill.) 49. N.D. x., p. 327 (1817). [Paraguay.] Collared Harrier-Hawk

S. Mexico to Colombia, Venezuela, Brazil and Paraguay.

Much smaller; wing 3 [?] 8.60 in.; tarsi and feet much smaller and weaker; white tail bands above partly obscured by brown patches in centre and below less extensive; those on outer feathers only 4 in number in place of 6 in typical form.

Micrastur melanoleucus buckleyi, subsp. nov. [ad., &?, Sarayacu, Ec. Feb. 1880, Buckley, B. Mus. coll. No. 87, 5. 1. 122.]

Ecuador.

Size medium, length (\mathfrak{Q}) 17.5; wing 9.8; above slate; tail with 3 bands of ashy-brown showing white below; below white with black shaft lines; no nuchal collar.

50. Micrastur mirandollei (Schl.), Nederl. Tijdschr., i., p. 131 (1863). [Dutch Guiana.] Mirandolle's Harrier-Hawk.

Upper E. Peru, Guiana, Panama.

Gen. XIXA. CLIMACOCERCUS CAB. (1845.)

Feet very much smaller; tarsi more slender, with broad and regular scales in front.

Size small, length (3) 13 in.; wing 6.9. Above slate or rufous (rufous phase); tail with 3 greyish white bands; below greyish white, barred with greyish black; throat white, fore-neck rufous.

Climacocercus ruficollis (Vieill.), N. Diet., x.,
 p. 322 (1817). [S. America.]
 Red-necked Harrier-Hawk.

Venezuela, Guiana, Brazil, Paraguay.

Above chocolate brown; tail blackish, with 3 narrow white bands; below thickly barred with black and white; throat brown.

51a. Climacocercus zonothorax Cab., J.f.O., 1865, p. 406. [Porto Cabello, Venez.] Barred Harrier-Hawk. Colombia, Venezuela.

Above (male) ashy brown (female blackish); tail blackish with 3 irregular white bands (4 in immature); below whitish, breast finely barred with wavy blackish lines; lower abdomen white.

52. Climacocercus gilvicollis (Vieill.), N. Diet., x., p. 323 (1817). [Patr. ign.: Cayenne?] White-throated Harrier-Hawk.

Colombia & Amazonia to E. Peru and to 20° S. lat. in Brazil.

Above blackish; tail with 3 irregular white bands; throat and cheeks pale grey; below dull white, closely barred down to thighs with blackish.

53. Climacocercus guerilla*, (Cass.), Pr. Phil. Acad., 1848, p. 87. [Talapa. Mex.]
Grey-throated Harrier-Hawk.

Mexico to Colombia, Venezula, Brazil, and Ecuador.

Gen. XX. GERANOSPIZIAS Sundev. (1873).

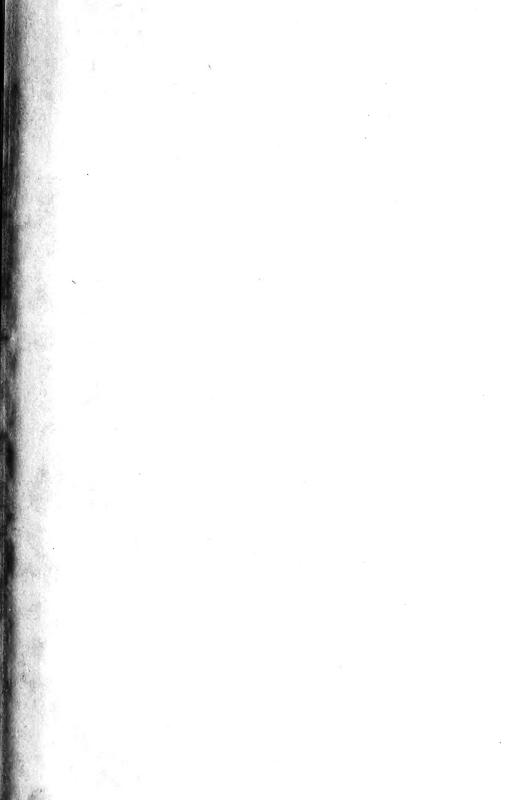
Tarsus scaled behind; thighs without overhanging tuft of feathers; ridge of bill greater than half length of middle toe (without claw); commissure slightly festooned.

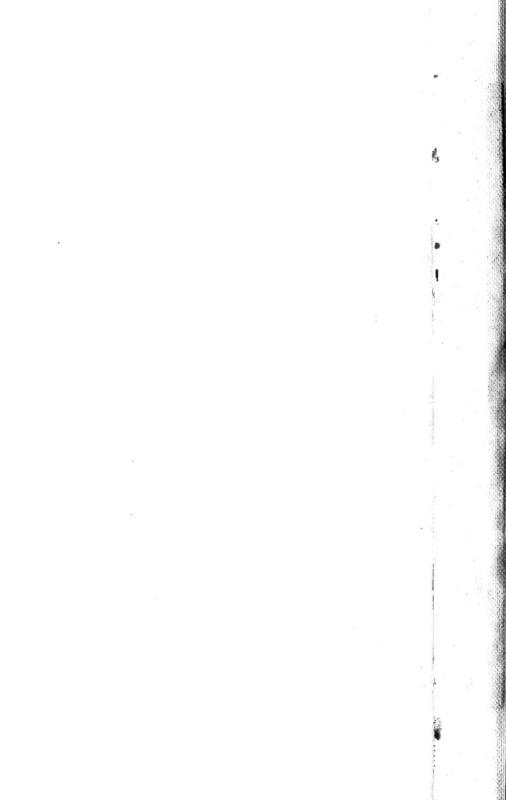
Size moderate (length 16.5-24.5 in.).

* In revising this group the forms jugularis and interstes appear to be untenable and are therefore omitted.









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