

PART IV.—MARCH 31, 1920

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A

SYNOPTICAL LIST OF THE ACCIPIITRES

(Diurnal Birds of Prey)

PART IV.

(FALCONINÆ AND PANDIONES)

Comprising described Species and Subspecies, with their
Characters and Distribution

BY

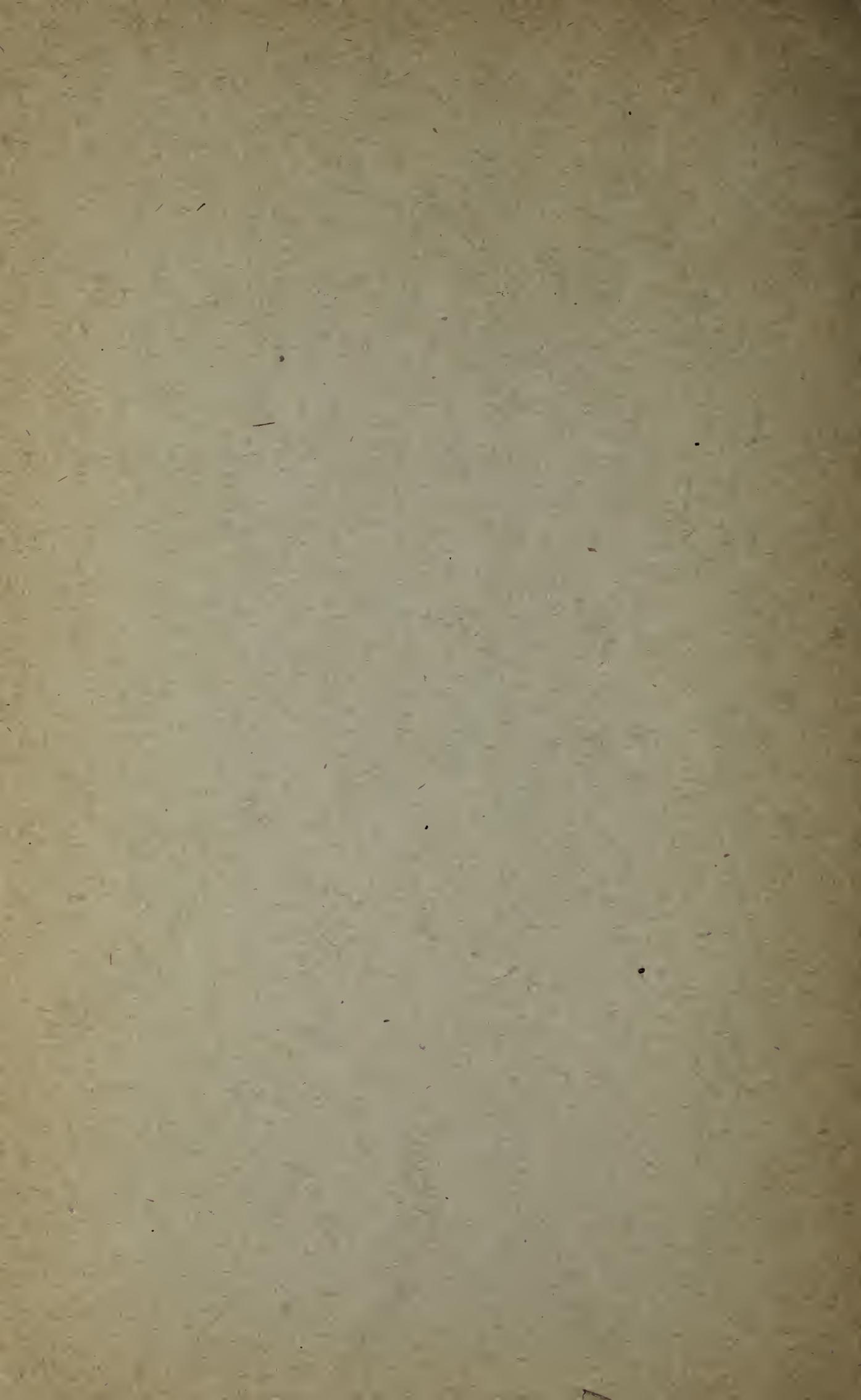
H. KIRKE SWANN, F.Z.S., M.B.O.U.

Corresponding Fellow of Amer. Orn. Union.

LONDON :

JOHN WHELDON & CO., 38, GREAT QUEEN STREET,
KINGSWAY, W.C.2

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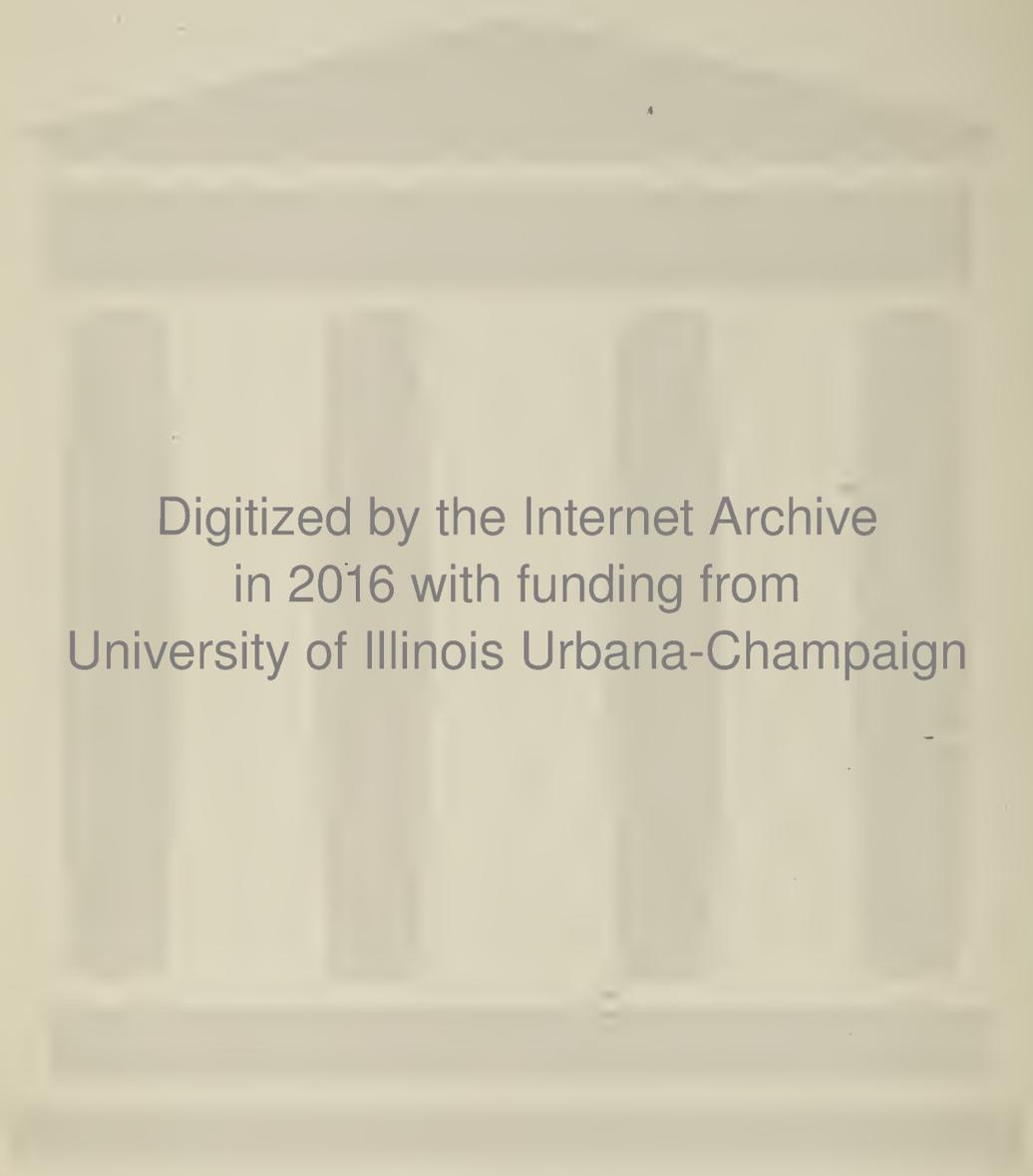
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P R E F A C E

IN concluding my work on the *Accipitres*, a work which I fear has grown far beyond my original intention of publishing a mere list, I have to acknowledge my indebtedness to the sources from which I have received inspiration and help. In the first place I must acknowledge that a good deal of the systematic part and the generic characters have been borrowed from the late Richard Bowdler Sharpe's "Catalogue of the *Accipitres* in the Collection of the British Museum" (1874) of which his annotated copy, laid down on sheets and extended, came into my possession after his death, as also his interleaved copy of the *Accipitres* portion in Gray's "Genera of Birds," upon which he based his 1874 monograph. For permission to make use of the former work I have to thank the Trustees of the British Museum. I have also derived assistance from Mr. W. L. Sclater's work at the British Museum (Natural History) in so far as his had preceded mine, and his MS. Catalogue of the skins, which he kindly gave me permission to use. I have also to thank Mr. Bannerman, Mr. Chubb and other assistants at the Museum for help rendered during my studies there. To Lord Rothschild and Dr. Hartert for the use of the superb collections at Tring I am grateful, and to Dr. Hartert especially for much personal assistance. The Rev. F. C. R. Jourdain and a number of other friends have also given me help and encouragement in various ways in what, although an arduous and unprofitable undertaking, will I hope be of some permanent help in systematizing this interesting group of birds.



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† Mr. Sclater (*Ibis*, 1919, p. 777, *Auk*, 1920, p. 154) points out that, if the rules are strictly adhered to, *Vultur* Linn. must replace *Sarcoramphus*, while the logical result is that *Vulturidæ* must replace *Cathartidæ* and the Old World (or true) Vultures be called *Ægyptidæ*.

A
SYNOPTICAL LIST
OF THE
ACCIPITRES
(DIURNAL BIRDS OF PREY)
PART IV.

Sub. Fam. VII. FALCONINÆ.

Bill short, curved from the base, with one distinct tooth near the end of cutting edge of upper mandible; nostrils usually circular with central tubercle; feet strong; tibia much longer than tarsus; toes long, talons curved and sharp; tarsus short, usually reticulated; wings long and pointed; size moderate, or small.

Gen. LXXX. MICROHIERAX Sharpe (1874).

Nostrils perpendicular ovals, without central tubercle; tarsus covered with broad scales in front and feathered nearly half way down; wings proportionately shorter than in *Falco*.

Size very small; length 5.5; wing ♂ 3.90-4.25; ♀ 4.10-4.40 in.; above greenish black; forehead, broad stripe above eye and down sides of neck, as well as collar on hind neck, white; primaries barred with white on inner webs; tail with 5 or 6 white bars on inner webs, basal one concealed and subterminal one either obsolete or a tiny spot; below entirely ferruginous, darkest on throat, vent and thighs and

paler on chest ; sides of breast greenish black. Immature with stripes on sides of head rufous, instead of white, and throat, chest and breast white.

265. *Microhierax caerulescens caerulescens** Linn., Himalayas
S.N. i., p. 88 (1758) [ex. Edwards— to Bhutan.
"Asia" = Bengal]
Red-breasted Pigmy Falcon.

Wings shorter ; ♂ 3.75 ; ♀ 4.10 in. ; throat vent and thighs only ferruginous, chest and breast silky white, the latter slightly washed with ferruginous ; tail with the subterminal white band in the form of two fair-sized spots of white, much larger than in last form.

- 265a. *Microhierax caerulescens burmanicus* subsp. Burma,
nov. [♂ *Thayetmyo*, Burma, E. W. Oates, Siam,
Hume Coll. 1871. Brit. Mus. Reg. No. 85, Cambodia,
8, 19, 2195] S. Annam.
White-breasted Pigmy Falcon.

Size of *M. c. caerulescens* ; wing ♂ 3.50, ♀ 4 in. ; without the white collar on hind neck ; no white eyebrow but sides of neck with a white patch ; cheeks and ear-coverts forming a large rounded patch of black ; chest white ; abdomen and under tail-coverts pale chestnut, the longer under tail-coverts and whole flanks glossy black ; tail with 5 or 6 white bars on inner webs, first one concealed ; wing quills spotted rather than barred on inner webs.

* This is quite certainly the correct name for this species. Edwards's plate accurately represents the Indian form except for the white neck band, a point which has given rise to much discussion, but there is no doubt this is an accidental variation, as in the Brit. Mus. coll. such a bird actually exists, without a trace of white collar, from Riocour's collection. (B. M. Reg. No. 89, 5, 30, 48) marked "Malaisie," and although not of the Indian race it proves the possibility of the collar being lost. The Indian form, it should be remarked has the under parts white (except vent and thighs) when immature, but nearly uniform ferruginous when adult. The eastern form on the other hand has, when adult, only a small throat patch and the vent and thighs ferruginous, with a wash of same on breast. In a large series a good deal of variation is found in the width and purity of the white collar, and Indian examples in particular often show a strong shading of black on it.

266. *Microhierax fringillarius* Drap., Dict. Class. Malay
d'Hist. Nat. VI., p. 412. pl. 5 (1824). Peninsula,
[“Indes”—type loc. sugg. *Malacca*] Java,
Malayan Pigmy Falcon. Sumatra,
Sarawak.

Slightly larger; wing ♂ 4.30, ♀ 4.75; above glossy black; forehead, narrow line above eye and down side of neck as well as entire under parts white; cheeks and ear-coverts as well as sides of breast black; thighs white; wing quills broadly banded with white on inner webs; tail with 5 or 6 white bars on inner webs.

267. *Microhierax melanoleucus melanoleucus* Assam,
Blyth, Jnl. As. Soc. Beng. XII., pt. 1, Cachar to
p. 179* (1843). [*Assam.*] Indo-
Black and White Pigmy Falcon. China?

Size similar; wing ad. 4.25; similar, but having an irregular white nape band and with more black on sides of body. [See pl. 8 *Oiseaux de la Chine*, David et Oustalet, 1877].

- 267a. *Microhierax melanoleucus sinensis* Sharpe, China.
Ibis, 1875, p. 254 [new name for *M. chinensis*, David, Bull. Soc. Philom. Séance 27 Fevr. 1875, (*Kiangsi*)].

Size of *M. fringillarius*; (wing ad. 4 in.); greater part of crown as well as forehead white; region round eye black; cheeks white; no white stripe on sides of neck; below paler than in *M. fringillarius*, but sides and thighs black.

268. *Microhierax latifrons* Sharpe, *Ibis* 1879, N. Borneo.
p. 237 [*Lawas River and Lumbidan*], type in Brit. Mus.
White-headed Pigmy Falcon.

Size similar; wing ♂ 4, ♀ 4.25 in.; above greenish black; primaries barred with white on inner webs in ♂, uniform black in ♀; cheeks, ear-coverts, sides of neck

and under surface silky white, the sides, flanks, thighs and lower under tail-coverts black; tail entirely black.

269. *Microhierax erythrogenys erythrogenys* Vigors, P.Z.S. 1831, p. 96 [*Luzon*, type in Brit. Mus.] N. Philippine Is. (Luzon).
Luzon Pigmy Falcon.

Larger; wing ♂ 4.30-4.45; ♀ 4.60-4.80 in.; under wing-coverts and inner webs of primaries uniform black in ♂; belly, vent and under tail-coverts washed with pale fulvous.

- 269a. *Microhierax erythrogenys meridionalis* Ogilvie Grant, Ibis, 1897, p. 220 [♂ *Zamboanga*, *S. Mindanao*, ♀ *Samar*, types in Brit. Mus.] S. Philippine Is. (Samar, Cebu, Mindanao).
Samar Pigmy Falcon.

Gen. LXXXI. POLIOHIERAX Kaup (1847).

Nostrils as in *Microhierax*; tarsus less feathered in front.

Size small; length ♂ 7.5; wing 4.6 in.; wing ♀ 4.8 in.; ♀ above bluish grey; head darker; forehead, sides of face and hind neck pure white; quills and tail brown, spotted on outer and barred on inner webs with white; upper tail-coverts white, as well as entire under parts; ♀, interscapular region and scapulars deep vinous chestnut.

270. *Poliohierax semitorquatus semitorquatus* Smith, Rep. Expl. Centr. Afr., p. 44 (1836). S. Africa, N. to Damaraland.
[Near *Latakoo*, *Bechuanaland*].
African Pigmy Falcon.

Above with head and neck darker slaty grey; below with white bars on under surface of wings and tail broader; wings rather longer; feet stronger and stouter;

[back chestnut brown in both sexes according to Heuglin].

- 270a. *Poliohierax semitorquatus castanonotus* Abyssinia.
Heugl., Ibis, 1860, p. 407. [Méré Belenia, *White Nile*].
Abyssinian Pigmy Falcon.

Larger; wing ♂ 5.7 in.; ♂ above slaty blue with black shaft lines; no white collar on hind neck; rump and upper tail-coverts white; tail with 3 bands of white, except on central feathers; below white, with black shaft lines, the flanks washed with grey; ♀ head and mantle bright ferruginous red.

271. *Poliohierax insignis* Walden, P.Z.S., 1871, Burma,
p. 627. [*Tongoo, Upper Burma*, type in Indo-
Walden Coll.] Chinese
Burmese Pigmy Falcon. Provinces.

Gen. LXXXII. SPIZIAPTERYX Kaup (1851).

Nostrils round with central tubercle; outer toe longer than inner; middle toe very short; distance between tips of primaries and tips of secondaries less than half length of tail.

Length ad. 11.5; wing 6.35; tail 5.7 in.; above ashy brown, the head blackish brown; rump and upper tail-coverts creamy white; wing-coverts with blackish central streaks and spots of white on each web; quills blackish with large spots of white; tail black, all but central feathers spotted on outer and barred on inner web with white; sides of face, eyebrow and hinder part of cheeks white; below ashy white, with blackish central streaks.

272. *Spizapteryx circumcinctus* Kaup, P.Z.S., Argentina.
1851, p. 43. [*Chile*, errore = *Argentina*].
Spot-winged Falcon.

Gen. LXXXIII. HARPA Bp. (1855).

Size much larger ; middle toe very long. Length ♀ 18.5 ; wing 10.8-11.4 ; tail 8.3 ins. ; ♂ wing 9.8-10.3 in. ; above blackish brown, narrowly barred, except on head, which is blackish, with pale rufous ; quills and tail barred with greyish white ; the tail bands 8 in number ; ear-coverts and moustachial streak black ; below buffy white, the breast and abdomen with central streaks of dark brown, broader on sides, which are also ocellated with large white spots ; thighs and under tail-coverts bright rusty red with dark brown shaft-streaks.

273. *Harpa novæ-zealandiæ novæ-zealandiæ* New Zealand ;
(Gmel.) S.N., i., p. 268 (1789). [ex. Lath. Auckland
—*New Zealand*.] Islands.
New Zealand Quail-Falcon.

Smaller ; wing ♂ 9-9.2 ; ♀ 9.7-10.1 in. ; plumage similar ; [scarcely distinguishable except by sexing].

- 273a. *Harpa novæ-zealandiæ pottsi*,* Math. and New Zealand.
Iredale, *Ibis*, 1913, p. 420. [*Puroah Bay*,
N. Island.] Bush Falcon.

Gen. LXXXIV. FALCO Linn. (1758).

Distance between tips of primaries and tips of secondaries more than half length of tail ; first and third quills equal, second longest ; feet large and powerful ; tarsus short, reticulated ; toes long with curved and sharp claws, the outer toe rather longer than inner.

* *H. australis* (Hombr. & Jacq.) being not tenable, the small form has been re-named by Mathews and Iredale.

Length ♀ about 18 in. ; wing 13.85-14.60, ♂ wing 12-12.75 in. ; head, hind neck and wing-coverts blackish, as also cheeks, ear-coverts and short moustachial stripe ; forehead and sides of neck behind ear-coverts white ; rest of upper parts bluish slate, barred or arrow-headed with blackish ; tail broadly barred with black and tipped with white ; below white, with a buff tinge on breast, the chest with narrow black shaft stripes, breast spotted and belly and under tail-coverts irregularly barred with black ; bill bluish ; feet yellow. Immature brown above, with paler margins, including head ; tail barred with pale rufous ; immature also without the black head and longitudinally marked below.

274. *Falco peregrinus peregrinus* Tunst., Orn. Brit., p. 1 (1771). [Ex Pennant—*Gt. Britain.*]
Peregrine Falcon.

Europe, N. of Mediterranean ; in winter to Africa ; cas. Greenland.

With the black of cheeks and ear-coverts reduced to a narrow stripe and the white band behind much increased.

- 274a. *Falco peregrinus calidus* Lath., Ind. Orn. 1., p. 41 (1790). [*India.*]
Siberian Peregrine Falcon.

N. Asia, W. Siberia ; in winter to India, Ceylon, China, Egypt, Cyprus, N. Africa, and Malay Archipel.

Very slightly larger ; wing ♂ 13-13.15, ♀ 14.60-14.80 in. ; chest with a more

reddish buff tint, and with few or no markings.

- 274b. *Falco peregrinus anatum* Bp., Geogr. and Comp. List, p. 4 (1838). [ex. Aud. pl. 16 —*New Jersey*.]
American Peregrine Falcon.
- N. America (except N.W.); wintering in Southern U.S. and W. Indies; Southern S. America; England (cas.)

Size similar; darker above and below; the head not so black but more uniform with the dark plumbeous upper parts; below more heavily and broadly banded with blackish.

- 274c. *Falco peregrinus pealei* Ridgw., Bull. Essex Inst., v. p. 201 (1873). [*Oregon*, type in U.S. Nat. Mus.]
Peale's Falcon.
- Pacific Coast of N.W. America, from Oregon to Aleutian, Commander and Kuril Islands.

Smaller than *F. p. peregrinus* and with more slender feet; wing ♂ 11.05-11.85, ♀ 12.60-13.40 in.; less heavily marked below and with the ground colour more ruddy.

- 274d. *Falco peregrinus brookei* Sharpe Ann. and Mag. N.H. (4) xi., p. 21 (1873). [*Sardinia*, type in Brit. Mus. = *F. punicus*, auct.]
Lesser Peregrine Falcon.
- Mediterranean countries and islands, from S. Spain to Greece, Cyprus and Asia Minor, N. Morocco

Slightly smaller; wing ♂ 10.65-11.20, ♀ 11.05-11.35 in.; duller in colour than *F. p. peregrinus* and with the dark bars on abdomen closer together.

- 274e. *Falco peregrinus minor* Schleg., Abh. Geb. Zool. & Vergl. Anat., heft iii., p. 20 (1844). [*Mtns. of Cape of Good Hope.*] S. African Peregrine Falcon. Africa, from Cape Colony to the Blue Nile.

Smaller than *F. p. peregrinus*; wing ♀ 12.0-13.0 in.; below tawny ferruginous, paler on throat and sides of neck, marked on flanks, thighs and under tail-coverts with a few spots and cross bars of black.

- 274f. *Falco peregrinus peregrinator* Sund., Physiogr. Sällskapetets Tidsskr. Lund. i., p. 177, taf. 4 (1837). [*Indian Ocean, off Nicobar Is.*] Indian Peregrine Falcon. Indian Peninsula; E. to S. China.

Wing ♂ 11.65-12 in.; ♀ 13.25-13.50 in., ♂ head and nape deep black, including sides of face, cheeks and ear-coverts; interscapular region blackish, with obsolete bars of bluish grey; rest of upper parts bluish ashy, barred with black; tail blackish tipped with white, with broad subterminal and 11 other bars of black; throat and chest deep creamy buff, latter with a few black shaft stripes; below buffy white closely and narrowly barred with black, the sides and thighs tinged with grey; ♀ more ferruginous below and with the cross bars more irregular.

- 274g. *Falco peregrinus macropus* Swains., Anim. in Menag., p. 341 (Jan. 1838). [*Tasmania*] [= *F. p. melanogenys* Gould.] Black-cheeked Falcon. E. and W. Australia, Tasmania.

Size similar; wing ♂ 11.6 in.; darker above; chest much more rufous; under wing-coverts and axillaries more closely

bared with black, the white inter-bars more rufous ; under tail-coverts and thighs barred with bluish grey and black, instead of whitish and black.

- 274h. *Falco peregrinus ernesti* Sharpe, Ibis, 1904, p. 545. [*Mt. Dulit*, type in Brit. Mus.] Hose's Falcon. Borneo, Greater Sunda Is., Philippine Islands, New Guinea, Fiji Islands

Slightly larger ; wing ♂ 12, ♀ 13.5 in. ; entire head, including cheeks and ear-coverts, hind neck, interscapulary region and least wing-coverts deep black ; rest of upper parts dark bluish ashy, barred and spotted with black ; tail with the apical quarter black, rest bluish ashy, barred with black ; under parts marked much as in *F. p. macropus*, but the bars broader and the lower parts with a pronounced grey shade.

- 274i. *Falco peregrinus cassini* Sharpe, Ann. & Mag. N.H. (4), xi., p. 223 (1873). [*Magellan Str.* and *Falkland Is.*] Cassin's Falcon. Chile, Falkland Islands.

Immature ♂ [*Tring Mus.*]. Wing 9 in. ; above black with remains of rufous edgings ; an indistinct collar on hind neck pale rufous ; upper tail-coverts with broad ashy margins ; tail slate, tipped buffy white and indistinctly barred with black ; throat white, sides of head and moustachial patch black ; below rufous fawn, narrowly striated with black.

275. *Falco fasciinucha* Reichen. and Neum., Orn. M.B. iii., p. 114 (1895). [*Teita, E. Africa.*] Kilimanjaro Falcon. E. Africa (Kilimanjaro district).

Smaller than *F. p. peregrinus*; wing ♂ 10.95-11.40, ♀ 11.10-11.60 in.; above much paler bluish grey, the cross bars fainter; crown dusky brown instead of black, the fore part tinged with rufous; entire hind neck rusty red, with some dusky mottlings; fore part of ear-coverts and cheek stripe blackish; throat and sides of neck buffish white; below pale buffy fawn, breast unspotted, but sides with a few blackish spots, becoming bars on under wing and tail-coverts. Younger birds dark brown above, with rufous margins; hind neck creamy white, tinged with rufous; below creamy white, breast and flanks streaked with brown, more broadly on the latter.

276. *Falco pelegrinoides pelegrinoides* Temm., Pl. Col. 479 (1830?) [*Nubia*] [= *F. barbarus* Linn.? and *F. punicus* Levaill. jun.] Barbary Falcon.

N. Africa
(N. of the
Sahara)
from W.
Morocco
to Egypt;
in winter
S. to
Khartoum.

Said to be darker above. [Doubtful form.]

- 276a. *Falco pelegrinoides arabicus* Erlanger, J.f.O. 1903, p. 293 [*Lahadsch*, type in Berlin Mus.]

Larger; wing ♂ 12, ♀ 13 in.; above lighter bluish grey; fore part of crown more rufous; hind part of crown greyish black; nape and hind neck clear rufous, with darker centres to many of the feathers; below buffy white, with arrow-head brown spots on centre of belly and bars on the sides; throat and chest unspotted.

- 276b. *Falco pelegrinoides babylonicus* Gurney, Ibis, 1861, p. 218, pl. vii. [*Oudh*, type in Norwich Mus.]
Red-capped Falcon.
- C. Asia, from Turkestan and E. Persia to Afghanistan and N.W. India; Mesopotamia; in winter S. to India; also to Sudan in Africa.

Size similar; wing ♂ 12, ♀ 14 in.; forehead whitish; fore part of crown black; rest of crown and nape brick-red, with black shaft stripes; moustachial stripe, feathers round eye and band down side of neck black; above dark brown, barred, except on interscapular region, with blue-grey, inclining to fulvous on scapulars and secondaries and more regular and paler grey on rump; tail regularly barred with fulvous grey and blackish brown; below vinous buffish, warmer on breast; streaked on chest and slightly spotted on sides with blackish in most birds, but nearly unspotted in oldest examples.

277. *Falco biarmicus biarmicus* Temm., Pl. Col. livr. 55, pl. 324 (1825). [*Kaffirland and Cape Colony*.]
South African Lanner.
- S. Africa, N. to Angola and E. Africa.

Slightly larger; wing ♂ 12.35-12.85, ♀ 14-14.75 in.; above darker and more uniform; nape less rufous; slightly more spotted below, but with the ground colour more buffish white, and the chest as a rule free from markings.

- 277a. *Falco biarmicus tanypterus* Schleg., Krit. Uebers. ii., p. 11 (1844). [*Nubia* and *Abyssinia*; restricted type loc. *Nubia*.] Nubian Lanner. Nubia, Egypt, Arabia, Palestine.
- Very slightly larger; wing ♂ 12.90-13.60; ♀ 14.35-14.85 in.; lower parts more heavily spotted with black.
- 277b. *Falco biarmicus abyssinicus* Neum., J.f.O. 1904, p. 369. [*Shoa*; type in Tring Mus.] Abyssinian Lanner. Abyssinia, Shoa, Gallaland, Blue and White Niles, Sudan to Hausa land & Togoland
- Similar to *F. b. feldeggii*, but paler and less marked with blackish on crown, also slightly smaller; wing ♂ 12.20-12.80, ♀ 13.35-14.25 in.
- 277c. *Falco biarmicus erlangeri* Kleinschm., Aquila, viii., p. 33 (1901). [*Tunis* and *Tangier*, *N. Morocco*, types in Kleinschmidt's coll.] North African Lanner. N. Africa (Atlas district from Tunis to W. Morocco).
- Size about the same; wing ♂ 12.20-12.90; ♀ 13.65-14.10 in.; with the under parts much more heavily spotted than in *F. b. biarmicus* and the ground colour more creamy white; crown and nape creamy rufous.
- 277d. *Falco biarmicus feldeggii* Schleg., in Vögel Europas von Susemihl, tafl. 8a (1843 or 1844); idem Abh. Geb. Zool. iii., p. 2-3 (1844). [*Dalmatia*.] European Lanner. S. Europe (Balkan countries [not extending to Russia], S. Italy.
- Larger; wing ♂ 13.85-14.70, ♀ 15.45-16.60 in.; head pale rufous to rufous white,

with narrow blackish shaft stripes ; above earthy brown, all the feathers margined with rufous ; quills with the white bars on inner webs uniting on the margins ; tail barred with rufous white on the inner webs and with oval spots on the outer webs ; sides of face and throat white, with dusky streaks on ear-coverts, but little indication of a blackish moustache ; below whitish, the chest slightly and breast and belly thickly marked with blackish brown, more in form of bars on flanks. Immature : very little rufous on head ; moustache stripe more apparent ; tail with the central feathers generally unmarked ; below more heavily and longitudinally marked.

278. *Falco cherrug cherrug* Gray, in Hardw. Ind. Zool. ii., pl. 25 (1833-34). [*India*] Saker Falcon.

S.E. Europe (Balkan Penin. and S. Russia) ; Cyprus (cas.) C. Asia ; to N.W. India and China in winter.

Size similar ; more barred above with pale rufous ; tail regularly and closely barred across centre feathers, not marked with oval spots.

- 278a. *Falco cherrug milvipes* Hodgson, Gray's Zool. Misc., p. 81 (1844) [*nom. nud.*] ; Jerdon, Ibis, 1871, p. 240. [*Umballa, India.*] Hodgson's Saker.

High plateaux of Central Asia : Thibet ; Mongolia ; Nepal ; Baluchistan ; China ; in winter S. to India.

Smaller ; wing ♂ 12.50-13.0, ♀ 14-14.60 in. ; feathers of crown dull rufous, with blackish brown centres ; nape rather paler and mottled with black ; above ashy brown, with pale fulvous margins ; rump paler and clearer grey ; tail ashy grey, tipped with white ; the outer feathers barred on inner web with whitish ashy ; below white, with narrow black moustachial stripe ; lower breast with a few dark shaft-streaks, flanks and thighs ashy brown.

279. *Falco jugger* Gray, in Hardw. Ill. Ind. Zool. ii., pl. 26 (1833-4). [*India.*] Laggar Falcon. Indian Peninsula ; Baluchistan ; Assam.

Size similar ; wing ♂ 12-13, ♀ 13-14 in. ; above brown, with paler fulvous margins ; crown and nape with whitish margins ; tail tipped with white and all but the centre pair of feathers barred on inner webs with whitish, but outer webs scarcely spotted ; below white, chest streaked and breast and belly spotted with brown, more in form of bars on flanks.

280. *Falco mexicanus* Schleg., Abh. Geb. Zool. heft iii., p. 15 (1844). [ex. Licht.—*Mexico*] Prairie Falcon. W. North America, from S. Brit. Columbia to S. Mexico.

Size small ; wing ♂ 10.6 in. ; above ashy, with indistinct fulvous margins and blackish shaft-stripes, especially distinct on head and nape, latter of which is whitish tinged with rufous ; tail with broad fulvous tip, and some obsolete black bars at apical end ; below white, tinged with buff on flanks and vent, and with narrow blackish shaft-streaks, except on throat.

- 281 *Falco hypoleucus* Gould, P.Z.S. 1840, p. 162 (1841). [60 miles from Swan River, W. Australia.]
Australia.
Grey Falcon.

Size large ; wing ♂14.3, ♀ 15.8 in. ; general colour blackish brown ; forehead and sides of head and neck and under tail-coverts mottled with white ; throat white, streaked with brown ; breast slightly spotted with buff ; tail barred.

282. *Falco subniger subniger* Gray, Ann. Mag. N.H. xi., p. 371 (1843). [Victoria.]
Australia.
Black Falcon.

Without bars on tail.

- 282a. *Falco subniger minnie* Math., Austr. Av. Rec. ii., p. 127 (1915). [Queensland.]
Queensland Black Falcon. Queensland.

Size large ; wing ♂13.60-14.80, ♀ 15.25-16 in. ; head blackish grey ; above dark slate grey barred with pale bluish grey ; wings and tail browner, latter barred with bluish grey and tipped with white ; below white with a broad slate brown moustachial stripe, the breast and abdomen with drop-shaped stripes and flanks barred ; bill bluish, tip black ; feet yellow.

283. *Falco rusticolus rusticolus* Linn., S.N. i., p. 88 (1758). [Sweden.]
Norwegian Gyrfalcon. N. Sweden & Norway ; Lapland ; N. Russia ; S. in winter to middle Europe.

Larger ; wing ♂ 14.5, ♀ 16 in. ; above dark slate, barred with greyish white, the head streaked with dusky slate and buffish white ; chin and throat white ; below white, chest streaked and belly and sides spotted with slaty black.

- 283a. *Falco rusticolus islandus* [*partim*] Brün-
nich, Orn. Bor., p. 2 (1764). [*Iceland.*]
Iceland Falcon. Iceland and
S. Green-
land, S. in
winter to
Brit. Isles,
Europe and
N.E.
America.

Size similar ; much darker above and be-
low ; above more sooty and with trans-
verse markings darker ; rump uniform
without markings ; thighs dark slaty,
with buffy white transverse spots. Im-
mature : very much darker ; uniform
dusky brown above.

- 283b. *Falco rusticolus obsoletus* Gmel., S.N. i.,
p. 268 (1789). [*"Fredo Hudsonis"*] [= *F.*
labradorius, auct.] Labrador
Newfound-
land.
Labrador Falcon.

Very slightly larger ; wing ♂ 14.35-14.90,
♀ 16-17 in. ; general colour white, the
feathers above marked with a slaty black
spot towards tip ; tail pure white and
head nearly so ; below with slight stria-
tions on flanks only. Immature : mark-
ings much heavier and browner ; head
with dark stripes and tail with transverse
dark markings.

- 283c. *Falco rusticolus candicans** Gmel., S.N. i.,
p. 275 (1789). [*"Islandia et Scotia,"* er-
rore, type loc. subst. Hartert—*Greenland.*]
Greenland Falcon. Greenland
& Arctic
America ;
in winter to
Brit. Isles ;
N.W.
Europe ;
Northern
United
States.

* The Gyrfalcons visiting Canada and the Northern United States in winter appear to be dark immature birds of this form, and not *F. r. rusticolus* as stated in the A.O.U. Check List (1910).

[Not seen]. Size slightly larger and tail longer than in *F. r. rusticolus*; wing ♂ 14.7-15.5; ♀ 15.8-17 in.; (Sewertz).

- 283d. *Falco rusticolus uralensis* (Sewertz. and Menzb.) Orn. Geogr. Europ. Russl., i., p. 288, tab. 3 (1882). [*Ural Mtns. Russia.*] Ural Gyrfalcon. N. Asia from the Ural Mtns. to Kamtschatka and Bering Is. †

Wing ♂ 14.6; differs from *F. r. rusticolus* in having upper parts reddish brown washed with ash, under parts ochraceous with tear-shaped dark brown stripes; tail brown, tipped with pale ochreous, the two middle feathers unbarred, rest with indistinct oval transverse reddish brown spots; tarsus bare for more than half its length. (Dresser). [Not seen.]

284. *Falco altaicus* (Menzb.), Orn. Turkestan, i., p. 272 (1892). [*Altai and Minusinsk.*] Altai Gyrfalcon. Mountain ranges of Central Asia; West Siberia. [*F. lorenzi* (Menzb.) a synonym.]

Size small; wing ♂ 10-10.50, ♀ 10.75-11 in.; above dark slate grey, darker on head and paler on rump; hinder part of cheeks and sides of neck buffy white, with well-defined black moustachial stripe below; nuchal collar reddish white; tail slate grey, all but middle pair of feathers barred on inner webs with ferruginous; below creamy white, striped on breast and flanks with black; thighs and under tail-coverts rust-red.

† *Hierofalco grebnitzkii* Sewertz. and Menzb., described from Bering Island, is probably synonymous with this form.

285. *Falco subbuteo subbuteo* Linn., S. N., i., p. 89 (1758.) ["*Europe*" = *Sweden*.]
Hobby. Europe ;
from Scandinavia and
Brit. Isles
to Mediterranean ;
W. Siberia ;
in winter S.
to Africa &
N.W. India.

Size scarcely larger ; above paler ; below
with the stripes rather smaller.

- 285a. *Falco subbuteo jugurtha* Hart. and Neum.,
J.f.O., 1907, p. 591. [*Tangier*.] [= *F.*
gracilis, auct.] Tunis,
Algeria,
Morocco.
North African Hobby.

Paler above and with slightly longer wings
than *F. s. subbuteo* ; wing of ♂ nearly
equal to wing of ♀ of typical form.

- 285b. *Falco subbuteo centralasiæ* (Buturl.) Orn.
Mitt. ii., p. 175 (1911). [*Baimgol, Tianshan*]
[= *F. s. cyanescens* Lonnberg.] Central
Asian Hobby. Central
Asia, S. to
Chinese
Turkestan
and Assam.

Slightly larger than *F. s. subbuteo* ; wing
♂ about 10.75 in. ; darker and more
heavily marked below.

- 285c. *Falco subbuteo jakutensis* (Buturl.), Nascha
Ochota, 4. 6, p. 71 (1910). [New name for
his *F. saturatus*, type loc. *Tschuktschen-
Bezirk, N.E. Siberia*.] E. Asia and
Kamt-
schatka ;
S. in winter
to Japan &
N. China.
Kamtschatkan Hobby.

Similar to *F. s. subbuteo*, but smaller ;
wing ♂ 9.40-9.75, ♀ 9.85-10.15 in.

- 285d. *Falco subbuteo streichi* Hart & Neum.,
J.f.O., 1907, p. 592. [*S. China—Swatow*.]
Chinese Hobby. [China, from
Kwang-
tung Prov.
N. to
Shensi.

[Not seen.]

- 285e. *Falco subbuteo erkutensis* Johansen, Orn. Siberia ;
 Jahr., xxv., p. 83 (1915). [*Irkutsk Gov.*] Irkutsk
 Siberian Hobby. Govt.

Wing ♂ 9.60-10, ♀ 9.75-10 in. ; sexes dissimilar ; ♂ above dark plumbeous ; tail black ; below blue-grey with faint blackish shaft-stripes ; thighs, vent and under tail-coverts chestnut ; under wing-coverts greyish black ; cere and feet brownish red ; ♀ head and neck rufous ; above ashy grey, barred with darker grey ; primaries barred with reddish white on inner webs ; throat and cheeks reddish white ; below rufous.

286. *Falco vespertinus vespertinus* Linn., S.N. E. and C.
 ed. xii., i., p. 129 (1766). [*"Ingria"* Europe, N.
 =*Prov. St. Petersburg.*] to Sweden
 Red-footed Falcon. and
 Archangel ;
 W. Siberia*
 Asia Minor ;
 cas.
 Brit. Isles ;
 in winter S.
 to Africa.

Smaller ; wing ♂ 9.25-9.70 in. ; ♂ under wing-coverts pure white, instead of greyish black ; feet orange ; ♀ head browner and below paler rufous, the breast white broadly streaked with black, becoming bars on the flanks.

- 286a. *Falco vespertinus amurensis* Radde, Reisen S.E.
 S. von O. Sibir., ii., p. 102 (1863). [*Amur.*] Siberia ;
 Eastern Red-footed Falcon. Mongolia,
 N. China ;
 in winter to
 India and
 E. Africa.

* Hartert considers *F. v. obscurus* Tschusi from W. Siberia to be a synonym.

Larger ; wing ♂ 12.40-12.90 ; ♀ 12-90-13.35 in. ; sexes dissimilar ; ♂ general colour blackish slate, browner on upper parts ; outer tail-feathers slightly barred with blackish ; below with a trace of rufous, but the thighs dark slate ; ♀ dark slate brown above, tail barred with rufous and blackish ; hind cheeks and throat deep buff, with a conspicuous black moustachial stripe ; breast buffish, becoming rufous on abdomen, striped with black ; thighs deep chestnut.

287. *Falco eleonoræ* Gené, Rev. Zool., 1839, p. 105. [*Sardinia*.]
Eleonora's Falcon.

Islands of Mediterranean ; W. Canaries ; N. Africa, Algeria to Morocco ; in winter S. to Madagascar.

Smaller ; wing ♂ 10.40, ♀ 11.2 in. ; sexes similar ; uniform leaden grey with black shaft-stripes to the feathers ; primaries and tail with whitish bands on inner webs ; cere, orbits and feet bright yellow ; bill bluish.

288. *Falco concolor* Temm. Pl. Col., pl. 330 (1825). [*Senegal, Cotes de Barberie, Egypt, Arabia*—typ. loc. sugg. : *Arabia*.] [*F. eleonoræ schistaceus* Erlang., a synonym ?]
Uniform Falcon.

E. Africa (coast from Red Sea to Madagascar) : Arabian Coast.

Wing ♂ 8.5, ♀ 9.1 in. ; above slaty black ; head, cheeks and ear-coverts deep black ; throat and sides of neck creamy white, washed with ferruginous ; below chestnut,

immaculate in old birds; in younger birds heavily marked with drop-shaped spots of black.

289. *Falco severus severus* Horsf., Trans. Linn. Soc., xiii., p. 135 (1822). [*Java.*] Indian Hobby. Burma, Malay Peninsula & Archipel.; French Indo-China.

Wing ♂ 8.50, ♀ 9.0-9.50 in.; chest usually with black shaft-stripes; above darker; tail nearly black; below darker chestnut; quills and tail below either banded or unbanded in New Guinea birds, not always unbanded.

- 289a. *Falco severus papuanus* A. B. Meyer & Wiglesw. Abhandl. Ber. Mus. Dresden, 1892-3, No. 3, p. 6 (1893). [*S.E. New Guinea.*] New Guinea Hobby. New Guinea; Celebes? Solomon Is.?

Above paler; wings and tail browner slaty; inner webs always barred below with pale cinnamon, chestnut of lower parts paler, without black markings in adults.

- 289b. *Falco severus indicus* A. B. Meyer and Wiglesw. Bds., Celebes, i., p. 84 (1898). [*Calcutta.*] Central Indian Hobby. India; cas. Ceylon

Wing ♀ 9.6 in.; above sooty; primaries and tail-coverts with rufous bars on inner webs; throat buffy white; below black, with remains of chestnut edgings; thighs chestnut, streaked with black; younger bird chestnut below, streaked with black.

- 289c. *Falco severus religiosus* Sharpe, Cat. Bds. Brit. Mus., p. 397 (1874). [*Ceram, type in Leyden Mus.*] Moluccan Hobby. Ceram, Halmahera.

Wing ♂ 9.7, ♀ 10.5 in. ; above slaty blue, darker on head and lighter on rump ; primaries and tail barred on inner webs with rufous ; hind neck tinged with rufous, forehead white ; throat and sides of neck reddish white ; below pale dull rufous, with a few dark shaft-stripes on breast and obsolete grey bars on flanks.

290. *Falco longipennis longipennis* Swains., Anim. in Menag., p. 341 (1838). [*Tasmania*] [= *F. lunulatus* Lath.]
Little Falcon. East Australia ; Tasmania.

Smaller.

- 290a. *Falco longipennis murchisonianus* Math., Nov. Zool., xviii., p. 252 (1912.) [*E. Murchison.*]
Murchison Falcon. South and Mid. West Australia.

Larger than last form, and differs from typical form in its blue-grey upper surface and paler under surface.

- 290b. *Falco longipennis apsleyi* Math., Austral. Av. Rec. i., p. 33 (1912). [*Melville Island.*]
Northern Little Falcon. Northern Territory ; N.W. Australia.

[Not seen.]

- 290c. *Falco longipennis hanieli* Hellmayr, Avif. Timor, p. 100 (1914). [*Timor.*]
Timor Little Falcon. Timor.

Wing ♂ 8.5 in. ; above dark slate grey, blackish on interscapular region ; primaries and tail feathers dark brown, latter barred with fulvous on inner web ; forehead buffy white ; throat and sides of neck white, washed with rufous ; below rusty red, with central streaks of black on breast and sides ; under wing-coverts buff, streaked with black.

291. *Falco cuvieri* Smith, S. Afr. Q. Jnl., i., p. 392 (1830). [*Cafferland, near Kai River.*] African Hobby. S. and W. Africa ; cas. in Egyptian Sudan.
- [Not seen.]
292. *Falco pyrrhogaster* Reichenow, Orn. M.B., xxiii., p. 25 (1915). [*Cameroon.*] Cameroon.
- Wing ♂ 9.45, ♀ 11 in. ; above black, most of the feathers bordered with slate grey ; tail with 3 bars of greyish white ; throat white ; below chestnut, except lower breast and under wing-coverts which are black, tipped and spotted with rufous buff.
293. *Falco deivoleucus* Temm. Pl. Col. i., pl. 348 (1825). [*Brazil.*] [= *F. aurantius* Gmel., auct.] South and Central America ; Brazil to Guatemala.
Orange-breasted Falcon.
- Size small ; length ♂ 9-10 in. ; wing ♂ 7.3, ♀ 8.9 ; above slaty black ; tail black, tipped with white, and with 3 or 4 narrow bands of greyish white ; throat and sides of neck orange rufous to white with a tinge of rufous ; breast black, finely barred with white ; abdomen, thighs and under tail-coverts chestnut.
294. *Falco rufigularis rufigularis* Daud., Traité, ii., p. 131 (1800). [*Cayenne.*] [*F. albigularis* Daud., a synonym.] South and Central America, from Argentina to Mexico.
White-throated Bat Falcon.
- Wing ♂ 7.85 in. ; "upper surface dark slate grey instead of black ; below with breast and sides of body dark brown, not black, and much more broadly banded with white."*

* A larger series is necessary to show if this form is really separable. Paraguayan birds (*F. ophryophanes* Salvad.) appear to me indistinguishable from typical birds.

- 294a. *Falco rufigularis pax* Chubb, Bull. B.O.C., xxxix., p. 23 (1918). [*Charuplaya*, Bolivia, type in coll. Brit. Mus.]
Bolivian White-throated Falcon.

Wing ♂ 7.45, ♀ 8.45 in. ; differs from *F. r. rufigularis* in being slate colour above, with black shaft-lines, instead of black with slightly paler margins ; bend of wing white varied with buff ; breast and sides of body blackish brown, instead of black, and the white bars broader.

- 294b *Falco rufigularis petoensis* Chubb, Bull. B.O.C., xxxix., p. 22 (1918). [*Peto*, Yucatan, April 1888, Salv.-Godm. coll., types in Brit. Mus.] Yucatan.

Size moderate ; length ♀ about 15.5 ; wing ♂ 10, ♀ 10.5 in. ; ♂ above dull slaty, greyer on crown and lighter on rump ; upper tail-coverts barred and tipped with whitish ; tail blackish brown, with about 6 white bands ; a band from behind eye round hind neck white, below which is a line of black on sides of neck ; throat, chest, ear-coverts and sides of neck buffy white ; sides of breast black, barred with white narrowly ; belly and vent tawny buff ; ♀ larger and more richly coloured ; sides of head and under parts richer tawny.

- 295 *Falco fusco-cærulescens fusco-cærulescens* Vieill., N. Dict., xi., p. 90 (1817). [*Paraguay*.]
Aplomado Falcon. S. and C. America, from Argentina to Mexico.

[Not seen.]

- 295a. *Falco fusco-cærulescens septentrionalis* Todd, Proc. Biol. Soc. Wash., xxix., p. 98 (1916). [*Arizona*.]
Arizona Falcon. Arizona.

Size small ; length ♂ 11.5 ; wing ♂ 8.25, ♀ 9 in. ; head and hind neck chestnut red ; above bluish slate, with remains of blackish cross bars, except on back and scapulars ; tail narrowly barred with black, with a broad black subterminal band and white tips ; eyebrow and moustachial stripe black ; forehead, sides of head and neck, throat and chest white, with a few black shaft-lines on latter ; below white thickly barred with black.

296. *Falco chicquera chicquera* Daud., *Traité*, ii., p. 121 (1800). [ex. Levaill., *Bengal.*] Indian Peninsula.
Red-headed Merlin.

Size similar ; wing ♂ 8.6, ♀ 9.45 in. ; paler, more barred above, especially on back and scapulars, and with bars on breast rather closer together.

- 296a. *Falco chicquera ruficollis* Swains., *Bds. W. Afr.*, i., p. 107, pl. 2 (1837). [*Senegal.*]* African Rufous-necked Falcon. Tropical Africa to South Africa.

Size small ; length ♂ about 11 in. ; wing 8, ♀ wing 8.5 in. ; ♂ above dark to pale slate colour, with distinct black shaft-stripes, the head and wing-coverts darker ; hind neck mottled with rufous buff ; upper tail-coverts paler grey ; tail tipped with fulvous and crossed with 3 black bands, and broad subterminal one ; forehead, cheeks and throat fulvous, with narrow streaks of black, except on latter ; below ochraceous buff, with dark brown shaft-streaks, broadest on the flanks ; ♀ much browner above ; tail umber brown with 4 buffish white bands.

* *Falco horsbrughii*, Gunning and Roberts, *Ann. Trans., Mus.* iii., p. 110 (1911), [*Pretoria*], is a synonym of this species, a fact ascertained from a drawing made by Lt. Finch Davies from the type and examined by Dr. Hartert and myself.

297. *Falco columbarius columbarius* Linn., S.N., i., p. 90 (1758). ["*America*," ex. Catesby = *Carolina*.]
Pigeon Hawk. N. America in winter S. to W. Indies and North. S. America.

Darker form.

- 297a. *Falco columbarius suckleyi* Ridgw., Bull. Essex Inst., v., p. 201 (1873). [*Shoalwater Bay, Washington*.]
Suckley's Merlin. N.W. America, Sitka to N. California.

Size similar ; wing ♂ 7.65-8, ♀ 8.50-8.85 in. ; ♂ above rather lighter slate blue, with the black shaft-lines ; below rather more rufous ; tail slaty blue, tipped with white and with broad subterminal band, the other black bands nearly obsolete ; ♀ above dark brown, tail with 5 narrow pale bands ; below dull white streaked with brown.

- 297b. *Falco columbarius æsalon* Tunst., Orn. Brit. p. 1 (1771) [ex. Pennant, *British Isles*.]
Common Merlin. N. Europe to Brit. Isles and Central Russia ; in winter S. to N. Africa.

Size similar ; wing ♂ 7.75-8.10 in. ; ♂ above lighter grey ; ♀ above paler brown ; much less heavily striped below.

- 297c. *Falco columbarius insignis* (Clark), Pr. U.S. Nat. Mus., xxxii., p. 470 (1907). [*Fusan, Korea*.]
Asiatic Merlin. Asia ; Turkestan to China, Japan and Ussuriland ; in winter to Cyprus, Syria, India, S. China.

Slightly larger ; wing ♂ 8.25 in. ; above still paler grey and below with smaller and paler stripes ; ♀ paler generally.

- 297d. *Falco columbarius pallidus* (Suschk.) Bull. Kirghis-
B.O.C., xi., p. 5 (1900). [*W. Kirghissteppe.*] steppe ; in
Pallid Merlin. winter to
Turkestan
and
N.W. India

Larger ; wing ♂ 8.90, ♀ 9.85 in.

- 297e. *Falco columbarius lymani* Bangs, Bull. E. Asia,
M.C.Z., liv., No. 16, p. 465 (1912). [*Tsche- (Altai
gan-Burgazi Pass, Altai Mtns.)
Altai Merlin.* Mtns.)

Wing ♂ 7.70, ♀ 9 in. ; ♂ above earth brown, with greyer centres and black shaft-lines to all the feathers ; tail with 5 bands of ashy white and tipped with the same ; below buffy white, striped with ochraeous brown, broadest on the flanks ; ♀ more similar to ♂, but the feathers of upper parts with ochraeous spots.

- 297f. *Falco columbarius richardsoni* Ridgw., Gt. Plains
Proc. Acad. Nat. Sci. Philad., 1870, p. 145 of W. North
(1871). [*Mcuth of Vermilion River, S. America ;
Dakota.*] Saskat-
Richardson's Merlin. chewan
Valley to
N. Dakota,
in winter to
N.W.
Mexico.

Gen. LXXXV. IERACIDEA Gould (1837).

Distance between tips of primaries and tips of secondaries less than half length of tail ; tarsus transversely plated bear base of toes, and appreciably longer than in *Falco*.

Size moderate ; wing ♂ 13 in., ♀ 14 in. ; above sandy brown, most of the feathers edged with rufous ; head with blackish shaft-stripes ; tail ashy brown, tipped with white and barred with rufous ; below creamy white with brownish shaft-streaks, and a dark brown moustachial stripe ; thighs, axillaries and inner lower wing-coverts chestnut.

298. *Ieracidea berigora berigora* Vigors & Horsf., Trans. Linn. Soc., xv., p. 184 (1827). [*New South Wales*, types in Brit. Mus.]
Striped Brown Hawk. Interior of S. Queensland and N.S. Wales.

Less rufous above, more uniform darker brown, without shaft stripes ; below without shaft-stripes, the sides blackish brown, often uniform blackish brown.

- 298a. *Ieracidea berigora orientalis* Sharpe Cat. Bds. Brit. Mus., i., p. 422 (1874). [*New S. Wales*, ex. Schl. Naum. 1855, p. 254.]*
Brown Hawk. Coastal districts of S. Queensland and N.S. Wales, Whole of Victoria.

Smaller ; wing (sex ?) 12.85 in. ; above brown with buffy tips.

- 298b. *Ieracidea berigora tasmanica* Math., Bds. Austr., v., p. 276 (1916). [*Tasmania*.]
Tasmanian Brown Hawk. Tasmania.

Smaller.

- 298c. *Ieracidea berigora occidentalis* Gould, P.Z.S. 1844, p. 105. [*Perth*.]
Western Brown Hawk. S.W. Australia.

Wing ♀ 14.50 in. ; dark phase ; above and below smoky black or fuliginous brown.

* For the forms of this group, all very doubtfully distinct, see Mathews's Birds of Australia.

- 298d. *Ieracidea berigora kempi* Math., Bds. Cape York,
Austr., v., p. 277 (1916). [*Cape York*]. North
Kemp's Brown Hawk. Australia.
- Above dark rusty brown; cheeks black.
- 298e. *Ieracidea berigora melvillensis* Math., Aus- Northern
tral. Av., Rec., i., p. 34 (1912). [*Melville Territory,*
Is.] N.W.
Northern Brown Hawk. Australia.
- Very pale race.
- 298f. *Ieracidea berigora centralis* Math., Bds. Central
Austr., v., p. 277 (1916). [*Central Aus- Australia.*
tralia.]
Central Australian Brown Hawk.
- [Not seen.]
- 298g. *Ieracidea novæ-guineæ* A. B. Meyer, J.F.O., S.E. New
1894, p. 89. [*S.E. New Guinea.*] Guinea.
New Guinea Brown Hawk.

Gen. LXXXVI. CERCHNEIS Boie (1826).*

With the general characters of *Falco*, but wings not so long and 3rd primary nearly equal to 2nd; outer and inner toes equal. (Plumage always rufescent; sexes usually dissimilar).

Size small; wing ♂ 9.10-9.75, tail 6.25-6.50; wing ♀ 9.65-10.25, tail 6.50-6.75 in.; ♂ above brick-red, with a few arrow-head black markings, especially on the inner secondaries; head and neck blue-grey,

* Against the opinion of many systematists I feel it desirable to separate this group from *Falco*, not only because they form a natural group, distinctive in colouration, but also because this group contains within it certain groups of species, closely connected, but having many ramifying forms, which it seems undesirable to treat of under *Falco*.

with narrow black shaft lines ; primaries dark brown, notched with white ; lower back, rump and tail blue-grey, the tail with broad subterminal band of black and tipped with white ; below pale rufous fawn, chest with black streaks, becoming spots on flanks ; thighs rufous buff, throat and under tail-coverts buff, unspotted ; ♀ above entirely rufous, banded with black, with only a bluish shade on rump ; tail rufous barred with black ; below paler.

299. *Cerchneis tinnuncula tinnuncula* Linn., S.N., i., p. 90 (1758). [“*Europe*” = *Sweden*.] Common Kestrel.

Europe, from 68° N. in Scandinavia and 61° N. in Russia to Mediterranean and N.W. Africa ; Brit. Isles ; W. and C. Asia ; in winter to Africa and India.

Below deeper and warmer than in typical form ; which it quite equals in size.

- 299a. *Cerchneis tinnuncula rupicolæformis* Brehm, Vogelfang, p. 29 (1855). [ex. Württemberg MS.—“Egypt and Germany” ; restricted type loc. *Egypt*.] Egyptian Kestrel.

Egypt, Nubia.

Larger and averaging paler above and below ; wings and tail longer, the latter especially much longer than in other forms ; wing ♂ 9.85-10.10, ♀ 10.20-10.50 ; tail ♂ 6.75-7.75, ♀ 7.0-8.0 ins.

- 299b. *Cerchneis tinnuncula dörriesi* subsp. nov. Siberia
 [♂ *Sidemi, E. Siberia*, Dörries coll. June (Amur River to Yeneisei)
 2nd, 1884, Tring Mus. ; ♀ *Amur River, E. to Yeneisei)*
Siberia, Dörries coll., Mar. 27, 1894, Brit. and
 Mus. Reg. No. 97, 10, 30, 258.]* Mongolia ;
 Siberian Kestrel. S. in winter
 to India,
 Ceylon,
 Assam,
 Burma and
 China.
- Smaller ; wing ♂ 8.50-8.90, ♀ 8.90-9.50
 in. ; much darker above and below.
- 299c. *Cerchneis tinnuncula canariensis* Koenig, W. Canary
 J.f.O., 1889, p. 263. [*Canary Is.*] Islands
 Canarian Kestrel. (Tenerife,
 Gran
 Canary,
 Hierro,
 Palma,
 Gomera) ;
 Madeira.
- Size similar ; wing ♂ 8.8, ♀ 9 in. ; a dark
 form approaching the last.
- 299d. *Cerchneis tinnuncula neglecta* Schleg., Mus. Cape Verde
 Pays-Bas, Rev. Accipitres, p. 43 (1873). Islands.
 [*St. Vincent.*]
 Cape Verde Kestrel.
- Wing ♂ 8.40-8.90, ♀ 8.90-9.90 in. ; above
 as pale as in *C. t. tinnuncula*, below deeper
 rusty.
- 299e. *Cerchneis tinnuncula dacotiæ* Hart., Vög. Canary Is.
 Pal. Faun., p. 1086 (1913). [*Lanzarote.*] (Fuerta-
 East Canarian Kestrel. ventura,
 Lanzarote.)

* Material from Siberia being very meagre, I have principally determined this form from the considerable number of large and long-tailed birds, always on the pale side, existing in collections from Ceylon, India, Assam, etc., which are obviously migrants from the north, and have no connection with the smaller and darker form breeding in N. India (*C. t. saturata*), with the rather darker but nearly typical bird breeding in W. Asia, or with the darker but large race breeding in Japan (*C. t. japonica*). A large immature ♂ bird in my collection from Ceylon has a tail measurement of 7.75 in. and there are birds in the Tring collection with nearly the same measurement.

Larger ; wing ♂ 9.50-9.75, ♀ 10.0-10.55 in. ; head darker than in *C. t. tinnuncula* ; dark spots on mantle larger and with broad dark shaft-marks to the feathers ; below darker than *C. c. tinnuncula*.

- 299f. *Cerchneis tinnuncula japonica* Temm. and Schleg., in Siebold's Fauna Jap. Aves, p. 2, pl. 1, and 1b. (1844). [*Japan.*] Japanese Kestrel. Japan ; S. in winter to China & Hainan.

Rather smaller ; wing ♂ 9.10-9.50, tail 6 ; wing ♀ 9.50-10 in. ; smaller and much darker than *C. t. tinnuncula* ; much deeper rufous above and more heavily spotted ; head and tail showing a great tendency to a rufous wash, and tail more generally with remains of black bars even when adult ; chest more heavily striped and breast with larger spots.

- 299g. *Cerchneis tinnuncula saturata* (Blyth) Jnl. As. Soc. Beng., xxviii., p. 277 (1859). [*Tenasserim.*] Himalayan Kestrel. Mountains of N. India to China ; in winter S. to Travancore ; cas. Ceylon?

Smaller than *C. t. tinnuncula* ; wing ♂ 8.70-9.45 in. ; dark form approaching *saturata*.

- 299h. *Cerchneis tinnuncula carlo* Hart & Neumann, J.f.O., 1907, p. 592. [*Bissidimo near Harrar, type in Tring Mus.*] Central African Kestrel. Tropical Africa (Somaliland, Abyssinia and Blue Nile to Victoria Nyanza & Tanganyika) ; S. Arabia.

Size of *C. t. tinnuncula*; wing ♂ 10 in.; similar in general colouration, but with sides of face dull blue-grey like head; ♀ tail blue-grey banded with black, instead of rufous.

- 299i. *Cerchneis tinnuncula rupicola* Daud., *Traité*, ii., p. 135 (1800). [ex. Levaill.—*Cape of Good Hope*.] South African Kestrel. S. Africa, (Natal, Cape Colony, Damara-land).

Smaller; wing ♂ 8.70-9.20, ♀ 9-9.60 in.; ♂ above deep bay, with broad arrow-head markings of black; head and hind neck uniform, streaked with black; rump, upper tail-coverts and tail bluish grey, latter with broad black subterminal band and white tips; throat rufous white; below bay colour, streaked on breast and arrow-headed on flanks with black; ♀ more banded above; tail with extra dark bars, besides the subterminal one.

300. *Cerchneis moluccensis moluccensis* Hombr. & Jacq., *Voy. Pole Sud. Zool. Atlas*, pl. 1., f. i. (1842) et *texte iii.*, p. 46 (1853). [*Moluccas*?] Moluccan Kestrel. [C. t. *orientalis* a synonym.] Molucca Is. (Amboyna, Bouru, Ceram, Goram, Peling Is., Halmahera, Morotai, Ternate, Batchian).

Smaller; wing ♂ 7.85 (Celebes) -9.20 (Java), ♀ (Flores) 9 in.; paler, with more greyish cheeks and ear-coverts, much whiter under wing-coverts and lighter underside.

- 300a. *Cerchneis moluccensis occidentalis* A. B. Meyer & Wigglesw., *Abhandl. Ber. Mus. Dresd.* 1896-7, No. 2, p. 8. [*Celebes*.] Javan Kestrel. Celebes, Lesser Sunda Is. to Kan-gean; Java.

Size similar ; wing ♂ 9.3, ♀ 9.8 in. ; ♂ above pale rufous, almost unspotted ; head pale bluish grey, washed with rufous, and with black shaft-lines ; rump and tail blue-grey, latter with broad subterminal black band and white tips ; sides of face greyish white ; below buffish white, the chest tawny buff, that and sides with black shaft-stripes ; under wing-coverts white ; ♀ head and tail like back, the tail barred with black.

301. *Cerchneis cenchroides cenchroides* Vig. and Horsf., Trans. Linn. Soc., xv., p. 183 (1827). [*N. S. Wales.*] East Australia.
Nankeen Kestrel.

- 301a. *Cerchneis cenchroides milligani* Math., Nov. Zool., xviii., p. 253 (1912). [*Parry's Creek, N.W. Australia.*] N.W. Australia, Northern Territory.
Dusky Nankeen Kestrel.

Smaller ; below darker, decided cinnamon pink ; tail rusty cinnamon.

- 301b. *Cerchneis cenchroides unicolor* Milligan, Emu, iv., p. 1 (1904). [*Yalgoo.*] S.W. and Mid. W. Australia.
Westralian Nankeen-Kestrel.

Larger ; wing ♂ 11, ♀ 11.4 in. ; ♂ above tawny rufous, with broad cross-bars of black ; head uniform, but streaked with black ; rump and upper tail-coverts blackish, barred with fulvous ; tail ashy rufous, banded with black, the subterminal band broad, followed by a white tip ; primaries blackish brown, the inner ones mottled with rufous on inner webs and spotted on outer webs ; below dull tawny rufous, breast streaked with brown, flanks more heavily marked ; under wing-coverts white ; ♀ similar, but flanks more barred.

302. *Cerchneis rupicoloides rupicoloides* Smith, South Africa.
S. Afr. Q. Jnl., i., p. 238 (1830). [*Groene River, Little Namaqualand*, type in Brit. Mus.]
Larger African Kestrel.
- Smaller, much paler above.
- 302a. *Cerchneis rupicoloides fieldi* Elliott, Field Somaliland.
Columb. Mus. No. 2 Orn., p. 58 (1897).
[*Somaliland.*]
Somali Kestrel.
- Rather darker, tail with narrower black bars, the pale ones more blue grey.
- 302b. *Cerchneis rupicoloides arthuri* (Gurney). Brit. E.
List Diurn. Bds. Prey, p. 156 (1884). Africa
[*Mombasa.*]
East African Kestrel.
- Wing ♂ 10.6 in. ; plumage above and below fox red ; head narrowly and back and wing coverts more broadly streaked with black ; the greater wing-coverts with remains of bars ; primaries black, margined and tipped with paler red ; tail darker red, with about 15 bars of black ; throat unmarked, but rest of under surface with narrow central streaks of black.
303. *Cerchneis alopex alopex* (Heugl.) Syst. N. E.
Uebers., p. 10 (1856), and Ibis, 1861, p. 69, Africa,
pl. iv. [*prov. Galabat.*] (Bogosland
to Shoa) ;
Equat.
Africa
(Redjaf).
- 303a. *Cerchneis alopex deserticola* Reichenow, Togo Hin-
Orn. M.B., vii., p. 190 (1899). [*Mangu, terland ;*
Togo Hinterland.] Gold Coast
Hinter-
land ?
Desert Kestrel.

Smaller ; wing ♂ 7.4 , ♀ 8.2 in. ; ♂ above, including head and neck, light rufous, streaked on head and neck and arrow-headed on scapulars and wing-coverts with black ; rump and upper tail-coverts dark bluish grey with more or less of black arrow-head markings ; tail bluish grey banded with black, the subterminal band very broad ; forehead, sides of head and under parts creamy white, tinged with rufous on chest, which is marked with elongated black spots, becoming more oval on breast and flanks ; under wing-coverts white, streaked with black ; ♀ similar.

304. *Cerchneis newtoni* Gurney, Ibis, 1863, p. 34, pl. 11. [*Madagascar.*] Madagascar Kestrel.

Size similar ; wing ♂ 7, ♀ 7.6 in. ; above dull foxy rufous, with rather broad bars of black ; head with blackish shaft-stripes ; tail deep bay, with 6 bands of black ; below white, with large oval spots of brownish black, smaller and more longitudinal on flanks ; ♀ similar.

305. *Cerchneis punctata* Temm., Pl. Col., i., pl. 45 (1823). [*Isle de France.*] Mauritius Kestrel.

Smaller ; wing ♂ 5.6, ♀ 6.3 in. ; ♂ above maroon-chestnut, with a few black shaft-lines and spots, chiefly on wing coverts and scapulars ; rump, upper tail-coverts and tail bluish grey, latter with broad subterminal and 4 other black bands ; head dark bluish grey ; sides of face paler ; below isabelline fawn colour, unspotted ; ♀ scarcely differs.

306. *Cerchneis gracilis* (Less.) Traité, p. 93 (1831). [*Seychelles.*] Seychelles Kestrel.

Size small ; wing ♂ 9.10-9.70, ♀ 9.10-9.80 in. ; ♂ head, hind neck, rump, upper tail-coverts and tail blue grey, latter tipped with white and with broad subterminal black band ; rest of upper parts cinnamon rufous, unspotted ; greater wing-coverts and inner secondaries blue grey, shaded with rufous externally ; primaries dark brown ; throat whitish ; chest and breast pale cinnamon, marked with small black spots, larger on the flanks, abdomen and under tail-coverts yellowish white ; ♀ more like that of *C. t. tinnuncula*, but smaller and distinguished by its white claws.

- 307 *Cerchneis naumanni naumanni* Fleischer, Sylvan, 1817-18, p. 174 (1818). [*S. Germany and Switzerland.*]
Lesser Kestrel.

Mediterranean countries, from Spain to S. Russia, also N.W. Africa ; Asia Minor, Cyprus and S.W. Asia ; in winter to Africa ; cas. in Central Europe and Brit. Isles.

Size similar ; wing ♂ 9.6 in. ; darker above and below, and without spots below when adult, or with minute spots on sides when less mature ; wing-coverts almost entirely blue-grey, only innermost ones slightly washed with rufous.

- 307a. *Cerchneis naumanni pekinensis* Swinh., P.Z.S., 1870, p. 442. [*Pekin.*]
Chinese Lesser Kestrel.

N. China ; Himalayas?

Slightly smaller; wing ♂ 9 in.; above with red of mantle very much paler; below paler fawn colour and uniform without spots, except a few on sides in less mature birds.

- 307b. *Cerchneis naumanni turkestanicus* Zarudny, Mess. Orn., 1912, p. 114. [*Russian Turkestan.*] Turkestan; S. in winter to Somaliland.*

Length ad. 10-11, wing 7.50-8.00 in., tail 5-6 in.; head slaty, crown usually rufous; above rufous, more or less barred with black (according to age); tail with subterminal band of black and white tips; outer feathers more or less white, with one or more extra partial bands of black on inner webs (according to age); below buffish white, the chest pale cinnamon fawn, more or less finely spotted with black on sides of body (according to age). [Specific distinctions: crown generally rufous; chest washed with rufous; sides spotted.]†

* I have described this form from a presumed typical ♂ from Samarkand, May 1st, 1908, alt. 2,000 ft., D. Carruthers coll., in the Brit. Mus. coll. An example in the Brit. Mus. coll. from Somaliland, very pale and unspotted below, is as pale above as the Samarkand bird and is evidently referable to this form; the line of migration to N.E. Africa being a quite natural one. Examples from Central and S.E. Africa are however *C. n. naumanni*.

† Opinions differ greatly as to the specific and subspecific value of the American Kestrels, but I think it desirable to give specific rank to the typical race of each of the three groups of forms, and I have pointed out the principal characters on which I base these species. Some ornithologists appear to me to have failed to grasp the most important factors in determining the subspecies of these groups of forms, and to have attached undue importance to tail markings and the spotting of under parts, characters which vary with maturity and require to be considered with great caution. The spotting below is common to the less mature birds of all three groups, but disappears with age entirely in the *isabellina* group and varies in the other two, while the rufous on crown is likewise common to all three when immature, but disappears in the *isabellina* and *cinnamomina* groups, yet is usually retained in the *sparveria* group. The markings of the outer pair of tail feathers and the width of the subterminal tail band are most unreliable characters in themselves, as a series of old and young of both sexes in my collection from one district in Venezuela shows.

308. *Cerchneis sparveria sparveria* Linn., S.N., i., p. 90 (1758). [*"America,"* ex. Catesby = *Carolina.*] American Kestrel. United States, E. of Rocky Mtns. ; S. in winter to Florida and Gulf States.

Smaller ; wing ♂ 7.50, tail 5.25 in. ; appreciably paler ; tail relatively longer and paler ; wing-coverts less spotted ; rufous crown patch appreciably larger ; below with larger, rounder and more numerous black spots ; chest cinnamon fawn.

- 308a. *Cerchneis sparveria phalæna* (Lesson), Echo du Monde Savant, Ann. 12, June 19, p. 1086 (1845). [*Mexico.*] Western Kestrel. Western North America, from E. Brit. Columbia and W. Montana to N.W. Mexico ; in winter S. to Mexico and Guatemala

Smaller ; wing ♂ 6.50, ♀ 6.75 ; paler ; with rufous crown patch ; subterminal tail band wide (25 mm.) ; below buffish white, well marked with black.

- 308b. *Cerchneis sparveria peninsularis* (Mearns), Auk., ix., p. 267 (1892). [*Lower California.*] Lower Californian Kestrel. Southern Lower California.

Smaller ; wing ♂ 7-7.50 in. ; under parts nearly immaculate in old birds, the ground colour either cinnamon fawn or nearly white ; throat white.

- 308c. *Cerchneis sparveria paulus* Howe and King, Florida,
Contr. N. Amer. Orn., i., p. 28 (1902). Peninsula ;
[Florida.] Bahama
Florida Kestrel. Islands.?^{*}

Size small ; wing ad. 6.9 in. ; above more heavily banded with black, the tail barred broadly with black even when mature, but bars obsolete on central feathers in some examples ; below creamy white, chest washed with fawn, with large black spots on breast and sides.

- 308d. *Cerchneis sparveria caribbæarum* Gmel., Lesser
S.N., i., p. 284 (1788). [ex. Briss. "An- Antilles
tilles," type loc. sugg. *Dominica*.] (St. Lucia,
Antillean Kestrel. Dominica,
Guada-
loupe,
Antigua,
Montserrat,
Anguilla,
Virgin
Gorda, St.
Thomas) to
Porto
Rico.†

Wing ♂ 6.80 in. ; head slate, usually without rufous on crown, and black bands on back nearly absent ; below white,‡ unspotted in oldest birds, or with a few black spots on sides in less mature ; inner webs of primaries white, the black bars nearly obsolete ; ♀ with bands above narrower than in typical form ; below much whiter, slightly streaked on sides of breast with pale brown.

* I am unable to say definitely what race inhabits the Bahama Islands, not having seen examples.

† I am unable to separate the Porto Rico race [*Cerchneis sparveria loquacula* Riley, Smith. Coll., xlvii., p. 284, 1904 ; *Vignes I.*] as so far as the scanty material available shows it is not distinguishable from *caribbæarum*.

‡ Almost dead white in Cuban birds, with scarcely any colour on chest, but two San Domingo examples seen have a strong cinnamon shade on chest ; as they show one or two spots on sides they are apparently younger birds.

- 308e. *Cerchneis sparveria dominicensis* Gmel., S. Domingo and Cuba.
S.N., i., p. 285 (1788). [*S. Domingo*].
St. Domingo Kestrel.

Wing ♂ 7.25 ; tail 5.25 in. ; above darker than *C. s. phalæna*, especially tail ; back more heavily banded with black ; tail band slightly broader ; head darker slate, either without rufous, or with a small and indistinct nape patch ; below creamy white, including the chest, and much more heavily striped on chest and spotted on breast and sides with large black spots ; thighs and vent unspotted.

- 308f. *Cerchneis sparveria guatemalensis** subsp. nov. [♂ *Capetillo, Guatemala*, J. J. Rodriguez, in coll. H. Kirke Swann ; ♂ *Huehuetenango, Guatemala*, June, 1897, W. B. Richardson, in coll. Brit. Mus., Reg. No. 98, 12, 1, 91.]
Central American Kestrel.
- Central America :
Guatemala, Brit.
Honduras, Honduras,
Nicaragua, Costa
Rica ;
Mexico
(cas. ?).

Larger ; length ad. about 11 in. ; wing ♂ av. 7.80, tail 5.50 in. ; ♂ with no rufous on crown ; ♀ usually with partial crown patch ; ♂ tail with one narrow (av. 13 mm.) black subterminal band and white tips mixed with rufous ; the tips of central pair and inner webs of outer pair of feathers rufous ; below white, chest with decided tinge of fawn, and with large black rounded spots on sides ; ♀ with much narrower (almost linear) bands on

* The Central American form here designated is the resident form, and I have added a co-type in the Brit. Mus. coll. obtained in June as my own type is without date. It is true that North American migrants (principally of the western form, *phalæna*) occur commonly in Central America, but I regard the birds with heavily marked under-parts, little or no colour on chest, and little or no red on crown, as quite distinct and forming the resident race in Central America.

tail-coverts and tail, which is much paler ;
below whiter with narrower and paler
stripes [Specific distinctions: ♂ slate
crown without rufous, pale chest, and
spotted under parts ; ♀ narrower and more
regular bars on tail-coverts and tail.]

309. *Cerchneis cinnamomina cinnamomina* Southern
Swains., Animals in Menag., p. 281 (1838). S. America :
[Chile.] Chile ;
Cinnamon Kestrel. Argentina
(except
N.E.)* ;
S. Peru,
W. of
Andes (?) ;
Patagonia
to Straits
of Magellan

Slightly smaller ; wing ♂ av. 7.10, tail
5 in. ; tail with the subterminal black
band appreciably wider (av. 22 mm.) ;
sides moderately spotted with black ;
♀ tail darker red, and with broader,
straighter and more complete cross-bars,
the subterminal one broader ; below with
broader and darker brown stripes.

- 309a. *Cerchneis cinnamomina australis* Ridgw., Brazil,
Pr. Acad. Nat. Sci. Philad., 1870, p. 149. N. to
[Paraguay, type in U.S. Nat. Mus. ; new Amazon
name for *Falco gracilis* (nec Lesson) River (?),
Swains., Anim. in Menag., p. 281, 1838, S. to N.
Bahia, Braz., type in Brit. Mus.] Argentina.
Brazilian Kestrel. E. to
Paraguay
and the
eastern
slopes of
Andes in
Bolivia and
Peru.

* Line of demarcation in Paraguay, Bolivia and S. Peru uncertain.

Size similar ; wing ♂ 7-7.50 in. ; tail 5.25 ;
 ♀ wing 7.25-7.5 in. ; ♂ head much darker,
 blackish slate ; above darker rufous ;
 tail band 18-22 mm. (central widest,
 northern and southern narrowest) ; below
 much deeper cinnamon ; spots on sides
 fewer (except in less mature birds) ; ♀
 above (including tail) and below much
 darker cinnamon rufous ; wing quills
 washed with rufous on inner webs, the
 black bars much narrower and white inter-
 spaces 6 mm. wide ; tail bands narrow
 and regular as in *C. s. cinnamomina*, but
 underside much less white and bars
 appearing much narrower, with no black
 terminal band.

- 309b. *Cerchneis cinnamomina equatorialis* Mearns, Ecuador.
 Auk., 1892, p. 269. [♂ "Guayaquil," errore N. to West
 =interior of Equador, type No. 101, 309 in Colombia
 coll. U.S. Nat. Mus.] (W. slope
 of central
 and
 northern
 Andes).
 [*C. c. caucæ* Chapm. and *C. c. andina*
 Cory, synonyms.]*
 Andean Kestrel.

Slightly larger ; wing ♂ 7.50 in. ; more
 deeply coloured and more heavily marked ;
 vent and under tail-coverts clear buff ;

* I think that the absence of exact locality for Mearns's type cannot be held to disqualify his name, as it seems certain the example came from some part of Ecuador, and I accept "interior of Ecuador" as a sufficient locality, since I am unable to distinguish four (?) separate races for Ecuador as set forth by Cory (Field Mus. Pub. Orn., Ser. i., pp. 319-23). *C. c. caucæ* appears to me to be a northern extension of this dark form, reducing in size slightly ; *C. c. andina* appears to rest on the largest and darkest birds, with fewest spots on sides, and presumably the most mature, judging by the description and by presumed examples I have seen. His *C. c. peruviana*, being the paler southern examples, is in my opinion untenable, as most Peruvian birds can be referred either to *cinnamomina* or *australis*. There are only two groups of forms in South America, the larger *cinnamomina* and the smaller *isabellina*. If a bird is of fair size and has spotted sides when quite adult it must belong to the former, and if small, with unspotted sides when adult, it must belong to the latter. To treat both as forms of *sparveria*, as Cory does, is confusing. It cannot be too strongly emphasised that the spotting in the *isabellina* group is immaturity ; in *cinnamomina* it remains in the adult, but must vary as we get away from the typical race. *Andina* by its size appears to belong to the *cinnamomina* group, and according to Cory's description the spots are not entirely absent.

spots below larger and more numerous ;
 ♀ under parts (except throat) much deeper,
 in some specimens dull rufous, obscurely
 streaked and spotted with blackish ; vent
 and thighs clear buff.

- 309c. *Cerchneis cinnamomina fernandensis* Juan
 Chapm., Bull. Am. Mus. N.H., xxxiv.,
 p. 379 (1915). [*Masatierra I., Juan Fer-*
nandez Is., type in Am. Mus. N.H.]
 Juan Fernandez Kestrel.

Juan
 Fernandez
 Islands,
 off Chile.

Smaller and paler ; ♂ length 9.50; wing 7 ;
 tail 5 in. ; head and nape bluish slate,
 without rufous when fully ad. ; above ru-
 fous, with only one or two small specks of
 black ; wing-coverts slate blue, slightly
 spotted with black ; primaries with black
 bars more or less obsolete, not extending
 across webs ; tail with black subterminal
 band 15-25 mm. wide, and white tips ;
 outer web of outer feather white, inner
 rufous ; below light pinkish cinnamon,
 unspotted (except in less mature birds) ;
 thighs and vent white ; ♀ below isabelline,
 with a few fine streaks and spots of pale
 brown on chest and sides of breast ; nape
 often with rufous patch or tinge. [Specific
 distinctions : small size, slate crown, and
 unspotted under parts.]

310. *Cerchneis isabellina isabellina* Swains.,
 Anim. in Menag., p. 281 (1838). [*Demarara,*
type in Brit. Mus.]
 Isabelline Kestrel.

Guiana
 and E.
 Venezuela
 (E. to
 Caracas,
 S. to Rio
 Branco,
 N. Brazil).

Length ♂ 9 in. ; wing 7-7.25 ; tail 5 in. ;
 ♀ wing 7.50-7.70, tail 5.25 in. ; ♂ above
 darker rufous, with only a few black spots
 and bars ; head blackish slate with no
 rufous patch when adult ; primaries

barred right across inner webs; tail with broader black subterminal band (25-30 mm.); below decided rufous cinnamon, unspotted in ad. (less mature with a few black spots on sides); ♀ and juv. ♂ isabelline rufous below with dark brown streaks and spots; crown with more or less rufous.

- 310a. *Cerchneis isabellina ochracea* Cory, Field Mus. Pub. Orn. Ser., i., p. 298 (1915). [Colon, Tachira, W. Venez., type in Field Mus.]
Venezuelan Kestrel.
- Venezuela,
(Merida,
Colón,
Valle,
Ohama,
Montana de
la Sierra,
Cutata,
Margarita
I.); N.E.
Colombia;
Andes
region of
Colombia.*

Wing shorter; ♂ av. 6.50, ♀ 6.90 in.; similar to last form but with a greater tendency to banding above and to heavy black spotting below in less mature birds; ad. ♂ below isabelline rufous unspotted; tail band av. 25 mm. [Barely separable form.]

- 310b. *Cerchneis isabellina brevipennis* Berl., J.f.O. 1892, p. 91. [Curacao.]
Curacao Kestrel.
- Curacao,
Bonaire,
Aruba Is.,
off
Venezuela.

* *C. i. intermedia* Cory (Field Mus. N. H. Orn., i., p. 325 (1915), seems to be non-separable. The average wing of his examples is the same as the measurement of his type of *ochracea*; the narrower band on the tail seems scarcely a reliable distinction, while the white spotting on outer webs of primaries is a very variable character. *C. i. margaritensis* Cory (T. c., p. 297), I am also unable to distinguish, as examples with the paler under parts occur in the Merida district along with the darker birds. His *C. i. perplexa* (t. c., p. 327) I am unable to distinguish, dark and pale-breasted birds occurring together as I have before pointed out; while *C. i. distincta* (t. c., p. 297) is most certainly typical *isabellina*, the principal character, the obsolete bars on inner webs of primaries, being present in Brit. Guiana examples.

Wing ♂ 7.7-7.25, ♀ 7.40-7.55 in. ; head, neck, back and wing-coverts slaty blue ; with a tinge of rufous on interscapular region ; rump, upper tail-coverts and tail deep bay, the tail tipped with white and with a broad subterminal bar of black ; throat and sides of face whitish ; below chestnut-fawn, paler on vent, and shaded with greyish on flanks, with one or two spots of black.

311. *Cerchneis sparveroides* Vig., Zool. Jnl., iii., p. 436 (1828). [*Cuba*]. Cuba ; cas. Florida ?
Cuban Kestrel.

Gen. LXXXVII. DISSODECTES Sclat. (1864).

With the characters of *Cerchneis* but with a more or less constant double-toothed mandible, and plumage not rufescent.

Wing ♂ 8.9 ; general plumage slaty grey (paler below) with dark shaft-lines to the feathers ; tail with whitish bands on inner webs ; throat and sides of face whitish.

312. *Dissodectes ardosiacus* Bonn. et Viell., Enc. Meth., iii., p. 1238 (1823). [*Senegal*]. W. Africa (Senegambia to Angola) ; N.E. Africa, Equatorial Africa.
Slate-coloured Kestrel.

Smaller ; wing ♂ 8.3 ; head and neck whitish ashy, with distinct blackish shaft-stripes ; rest of upper parts blackish brown, the primaries darker and banded on inner webs with white ; rump and upper tail-coverts white, shaded with grey ; tail greyish white, banded with black, the subterminal band broad ; throat whitish ; under parts ashy brown.

313. *Dissodectes dickinsoni* Sclat., P.Z.S., 1864, p. 248. [*Shiré River.*] Zambesi River, Nyasaland, Angola.
Dickinson's Kestrel.

Wing ♂ 8.75, ♀ 9.1 in. ; above ashy grey with black shaft-stripes, paler and bluer grey on rump and upper tail-coverts ; scapulars and wing-coverts barred with greyish black ; primaries blackish, barred with rufous or whitish on inner webs ; tail black, all but the 2 central feathers barred with greyish white ; forehead and throat whitish, streaked on throat and barred below with ashy brown.

314. *Dissodectes zoniventris* (Peters), Sitz. k. Pr. Akad. Wiss. Berl., 1853, p. 7. [*Madagascar.*] Madagascar Grey Kestrel.

Sub. Order III. PANDIONES.

Gen. LXXXVIII. PANDION Savigny (1809)

Plumage very close and compact, wanting the accessory plumule ; no facial disk ; eyes placed laterally in the head ; nostrils generally not concealed by bristles ; tarsus reticulated ; toes devoid of feathers, the under surface rough, covered with small pointed scales ; the outer toe reversible.

Size large ; length ad. about 24 in. ; wing 19-20.90 in. ; head white, the crown striped with blackish brown ; nape feathers elongated and lanceolate ; ear-coverts and stripe through eye blackish brown ; above dark brown, with paler margins to most of feathers ; tail dark brown, inner webs barred with dark brown and whitish ; below white, the breast varied with pale brown centres to the feathers ; bill black ; feet blue.

315. *Pandion haliaëtus haliaëtus* (Linn.), S.N., i., p. 91 (1758). [*Europe = Sweden.*] Common Osprey. Europe, from Lapland (and formerly Scotland) to the Mediterranean and Coasts of N. Africa and Red Sea ; S. Arabia ; N. Asia to Japan and Kamtschatka.

Size similar ; dark markings of head blacker ; above darker and richer brown ; less marked on under side.

- 315a. *Pandion haliaëtus carolinensis* Gmel., S.N., i., p. 263 (1789). [*Carolina.*] American Osprey. N. America N. to Newfoundland and Alaska ; S. in winter to Central America ; S. America. S. to Peru and Paraguay.

Similar to typical race, but smaller ; wing ad. 16.50-18.25 in. ; head much whiter ; feet bluish white.

- 315b. *Pandion haliaëtus cristatus* (Vieill.), N.D., iv., p. 481 (1816). [*Tasmania.*] Whiteheaded Osprey. Australia ; Tasmania ; Moluccas ; New Guinea ; Philippines ; Sunda Is.

- [Not seen]. Smaller. ?
 315c. *Pandion haliaëtus microhaliaëtus* Brasil, New
 Rev. Franc. Orn., 1916, p. 201. [*New Caledonia.*
Caledonia.]

Gen. LXXXIX. POLIOAETUS Kaup (1850).

- Wing ♂ 18, ♀ 20.4 in. ; above brown, darker on wings, the primaries blackish ; head and neck all round ashy grey ; tail white, with broad terminal bar of brown ; breast brown ; belly white ; under side of wing leaden brown, with a white spot at base of primaries ; feet yellowish white.
316. *Polioaëtus ichthyaëtus ichthyaëtus* Horsf., Indian
 Tr. Linn. Soc., xiii., p. 136 (1822). [*Java.*] Peninsula ;
 White-tailed Fishing Eagle. Ceylon ;
 Burma ;
 Peninsula
 Malay
 and
 Archipel.
- Smaller ; wing ♀ 16.2 in. ; above ashy brown, back and wings darker ; tail pale brown at base, blackish brown subterminally, the tip white ; throat, breast and under wing-coverts ashy brown ; belly white ; feet bluish white.
- 316a. *Polioaëtus ichthyaëtus humilis* Müll. and Burma ;
 Schl. Nat. Gesch. Zool. Aves, p. 47, pl. 6 Malay
 (1839-44). [*Sumatra.*] Peninsula ;
 Malayan Fishing Eagle. Sumatra ;
 Borneo ;
 Java ;
 Celebes.

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