

CATALOGUE OF A COLLECTION OF BIRDS MADE BY DOCTOR W. L. ABBOTT IN MADAGASCAR, WITH DESCRIPTIONS OF THREE NEW SPECIES.

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WITHIN THE last few months Doctor Abbott has forwarded to the United States National Museum another of his interesting collections, consisting of mammals, birds, ethnological material, and miscellaneous objects of natural history from Madagascar. In so far as the birds are concerned, this collection contains 217 specimens and 83 species, of which three appear to be new to science. One of the latter has been described in another connection,¹ and the other two are characterized in the accompanying catalogue.

The birds are very well prepared, as usual, fresh in appearance, and a number of the species are rare and of great interest.

On account of the unsettled condition of affairs in the island, Doctor Abbott was unable to procure any ammunition there or to have it sent him from African ports, and was thus obliged to discontinue his explorations, leaving the most attractive regions, the south and southwest, unvisited.

After a few months, February to July, 1895, spent in Madagascar, mainly on the east coast, Doctor Abbott returned to Kashmir, where he spent the winter, chiefly in the pursuit of large game and such material as he had not previously sent from that region.

Most of the references in the synonymy of the list have been carefully verified, with the result that in several cases they differ from the references in the British Museum catalogues.

Family COLYMBIDÆ.

1. COLYMBUS PELZELNII (Hartlaub).

P[odiceps] pelzelni, HARTLAUB, Fauna Madag., 1861, p. 83. (Madagascar.)

One specimen. Male adult, north of River Mangoro, May 8.

¹ Proc. Biol. Soc., Wash., X, March 14, 1896, p. 53.

Family LARIDÆ.

2. ? STERNA MEDIA, Horsfield.

Sterna media, HORSFIELD, Trans. Linn. Soc. Lond., XIII, 1820, p. 199. (Java.)

One specimen. Male adult, River Sakalés, east coast, May 13. This is the same as the species recently recorded by Mr. Ridgway from Gloriosa Island.¹

Family PROCELLARIIDÆ.

3. DAPTION CAPENSIS (Linnæus).

[*Procellaria*] *capensis*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 132. (Cape of Good Hope.)

Daption capenscs, STEPHENS, Shaw's Gen. Zool., XIII, Pt. 1, 1825, p. 241.

One specimen. Female adult, Mananjara, east coast, June 29.

Family ANATIDÆ.

4. PÆCILONITTA ERYTHORHYNCHA (Gmelin).

[*Anas*] *erythrorhyncha*, GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 517. (Cape of Good Hope.)

Pœcilonitta erythrorhyncha, EYTON, Monogr. Anat., 1838, p. 115.

Four specimens. Male adult, Namorona, east coast, June 3. Female adult, Namorona, June 3. Male adult, Faraony River, east coast, June 6. Female adult, Namorona River, east coast, June 25.

5. THALASSORNIS INSULARIS, new species.

Type.—No. 151139, U.S.N.M.; male adult, River Sakalés, east coast of Madagascar, May 15, 1895; collected by Doctor W. L. Abbott.

Similar to *Thalassornis leucanota*, of Africa, but much smaller; crown more intense black; abdomen darker; tail feathers darker and decidedly narrower; black markings everywhere more intense; buff color of sides of head, neck, and breast paler and grayer. The following measurements of a pair, obtained May 15, compared with a pair of *T. leucanota* collected by Doctor Abbott in Africa, May 10, 1889, will emphasize the differences in size:

Measurements of Thalassornis insularis and T. leucanota.

U.S.N.M. number.	Sex.	Locality.	Date.	Wing.	Tail.	Tar-sus.	Cul-men.	Depth of bill at the base.
151139	Male ...	River Sakalés, Madagascar.	May 15	<i>Inches.</i> 5.55	<i>Inches.</i> 1.88	<i>Inches.</i> 1.27	<i>Inches.</i> 1.36	<i>Inches.</i> 0.70
151138	Female ...	do	do	5.30	1.90	1.28	1.30	.67
117774	Male ...	Plains southwest of Kilimanjaro, Africa.	May 10	6.25	2.11	1.54	1.49	.78
117775	Female ...	do	do	6.10	2.17	1.47	1.45	.77

The name *Anas brevripennis*, of Lichtenstein, may possibly refer to this species, but I am not aware that any description was ever published.

¹ Proc. U. S. Nat. Mus., XVIII, No. 1079, p. 524.

6. NETTAPUS AURITUS (Boddaert).

Anas aurita, BODDAERT, Tabl. Plan. Enlum., 1783, p. 48. (Madagascar.)
N[ettapus] auritus, G. R. GRAY, List Gen. Birds, 1840, p. 73.

Three specimens. Male adult, River Sakalés, east coast, May 13.
 Two specimens. Female adult, same locality, May 15.

Family SCOPIDÆ.

7. SCOPUS UMBRETTA, Gmelin.

[*Scopus*] *umbretta*, GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 618. (Africa.)

Two specimens. Female adult, River Faraony, east coast, June 5.
 Female adult, Ambodiasy, River Faraony, June 12.

Family ARDEIDÆ.

8. BUTORIDES ATRICAPILLA (Afzelius).

Ardea atricapilla, AFZELIUS, Vet. Acad. Handl., 1804, p. 264. (Sierra Leone.)
 [*Butorides*] *atricapilla*, BONAPARTE, Consp. Avium, II, 1855, p. 129.

Three specimens. Female immature, Mahanoro, May 3. Male immature, Lohóloka, east coast, June 24. Female adult, Mananjara, July 3.

9. DEMIGRETTA GULARIS (Bosc).

Ardea gularis, BOSCH, Actes Soc. Hist. Nat. Paris, I, 1792, p. 4.
 [*demigretta*] *gularis*, WALDEN, Ibis, 1873, p. 320.

One specimen. Male adult, River Namorona, east coast, June 25.

10. ARDEOLA RALLOIDES (Scopoli).

Ardea ralloides, SCOPOLI, Ann. I. Hist. Nat., 1769, p. 88.
 [*Ardeola*] *ralloides*, BOIE, Isis, 1822, p. 559.

One specimen. Male immature, Mananjara, July 4.

11. BUBULCUS IBIS (Linnæus).

[*Ardea*] *ibis*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 141. (Egypt.)
 [*Bubulcus*] *ibis*, BONAPARTE, Consp. Avium, II, 1855, p. 125.

One specimen. Male adult, Ambodivongo, Ankay Valley, March 29.

12. ARDEA CINEREA, Linnæus.

[*Ardea*] *cinerea*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 143. (Europe.)

One specimen. Male adult, Vohimaso, River Faraony, east coast, June 23. "Length, 43 inches."

13. ARDEA PURPUREA, Linnæus.

[*Ardea*] *purpurea*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 236.

Two specimens. Immature, River Sakalés, east coast, May 15. Female immature, Marohita, east coast, June 2. "Length, 38½ inches;

bill black above, greenish yellow beneath; feet, tarsi, and upper surface of toes black; tarsi behind and under surface of toes greenish yellow; irides yellow."

14. HERODIAS INTERMEDIA (Wagler).

[*Ardea*] *intermedia*, WAGLER, Isis, 1829, p. 659. (Java.)

[*Herodias*] *intermedia*, BLYTH, Cat. Birds Mus. Asiat. Soc., 1819, p. 279.

One specimen. Female adult, River Faraony, east coast, June 6.

Family RALLIDÆ.

15. RALLUS CUVIERI, Pucheran.

Rallus cuvieri, PUCHERAN, Rev. et Mag. Zool., 1815, p. 279.

Two specimens. Female adult, River Sakalés, east coast, May 13. "Length, 13 inches." Male adult, Marohita, east coast, June 27. "Bill dull black, base of lower mandible livid purple; feet blackish brown; irides chestnut brown; length, 13 $\frac{3}{4}$ inches; extent, 19 inches."

16. PORPHYRIO PORPHYRIO (Linnæus).

[*Fulica*] *porphyrio*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 152.

Porphyrio porphyrio, SHARPE, Cat. Birds Brit. Mus., XXIII, 1894, p. 195.

Two specimens. Female adult, River Sakalés, east coast, May 15. Female adult, Marohita, east coast, June 26.

17. GALLINULA PYRRHORRHOA, A. Newton.

Gallinula pyrrhorrhoa, A. NEWTON, Proc. Zool. Soc. Lond., 1861, p. 19. (Mauritius.)

Two specimens. Male, adult, Mahanoro, April 26. Male adult, River Sakalés, east coast, May 13.

Family RECURVIROSTRIDÆ.

18. HIMANTOPUS HIMANTOPUS (Linnæus).

[*Charadrius*] *himantopus*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 151. (Southern Europe.)

"*Himantopus himantopus*, BRUSINA."

Three specimens. Male adult, River Faraony, east coast, June 6. Female adult, same date and locality. Male adult, same locality, June 24. The tarsus in these examples appears to be a trifle shorter than in northern birds.

Family CHARADRIIDÆ.

19. ÆGIALITIS BIFRONTATA (Cabanis).

Charadrius (Ægialites) bifrontatus, CABANIS, Ornith. Centralbl., 1882, p. 14. (Madagascar.)

One specimen. Female adult, Vatomasa, River Faraony, east coast, June 24. "Bill fleshy at base, tip black; feet fleshy, claws black; irides pale brown; orbits bright red."

20. *ÆGIALITIS TENELLA* (Hartlaub).

Ch[aradrius] tenellus, HARTLAUB, Fauna Madag., 1861, p. 72. (Madagascar.)
Egialitis tenellus, SHELLEY, Ibis, 1888, p. 305.

Four specimens. Male adult, River Sakalés, May 13. Female adult, Mananjara, east coast, May 28. "Bill black; legs dusky flesh color; toes black." Male adult, Mananjara, May 29. Male adult, Lohóloka, east coast, June 24.

The legs and feet in these specimens are dark; not yellow, as shown in Seebohm's plate.¹

21. *ÆGIALITIS VARIA* (Vieillot).

Charadrius varius, VIEILLOT, Nouv. Dict., XXVII, 1818, p. 143. (Africa.)
Egialitis varius, HARTING, Ibis, 1873, p. 261.

One specimen. Female adult, Lohóloka, east coast, June 3.

22. *ÆGIALITIS THORACICA*, Richmond.

Egialitis thoracica, RICHMOND, Proc. Biol. Soc. Wash., X, 1896, p. 53 (March 14).
 (East coast Madagascar.)

Three specimens. Female adult, mouth of river Fanantara, east coast, May 18. Female adult, Lohóloka, east coast, June 3. Two specimens.

The description of this species is here repeated for the benefit of those who are unable to consult the original.

Type.—Female adult, 151174, U.S.N.M., Lohóloka, east coast of Madagascar, June 3, 1895. Doctor W. L. Abbott, collector.

Crown, back, scapulars, tertials, and wing-coverts hair brown, the feathers edged with pale or deep buff, those of the greater wing-coverts edged and tipped with white; primaries, secondaries, rump, median upper tail coverts, and middle rectrices dark clove brown; shafts of primaries (including the third) with white on terminal half; primary coverts brownish black, tipped with white; lateral upper tail-coverts white; inner primaries narrowly bordered on inner web and tipped with white; base of outer webs white; secondaries tipped with white, which becomes broader toward the innermost. Forehead, lores, cheeks, throat, axillars, under wing coverts, sides of body, and flanks white; a line from upper mandible to lower anterior border of eye, continued posteriorly through and including ear-coverts, black, meeting a narrower black band extending across lower border of nape, and a broad black pectoral band, the latter more extensive on sides of chest; an interocular crescent-shaped black band borders the white forehead and separates it from a white line over eyes, ear-coverts, and passing across nape as a conspicuous nuchal band (leaving the dark crown patch entirely surrounded by a white ring, and the latter isolated from other white markings); a white band below the black pectoral one passes abruptly into cinnamon buff on the abdomen and under tail-coverts, that of the former extending up on sides of body to the black pectoral band,

¹ Geogr. Distrib. Charad., pl. VII.

intercepting the white. Three outer tail feathers white, with more or less dusky markings, especially on the two inner ones; next inner pair (fourth) dusky, with white tips; fifth pair hair brown, becoming black subterminally, with a deep buff tip. Bill, legs, and feet black in dried skin. Wing, 4 inches; tail, 1.72; tarsus, 1.20; exposed culmen, 0.69. In another female the wing measures 4.20 inches.

This species is apparently most nearly related to *E. varia* of Africa and Madagascar, but differs from it mainly in the presence of a black pectoral band and the absence of a wholly black shaft in the third primary; the white line posterior to the black crescent between eyes is more pronounced, and the lesser wing-coverts and primary coverts are not decidedly blackish. There is also a slight difference in size. *E. thoracica* has heretofore been identified with *E. varia* by the French authors, the explanation being that the adults have a black chest band not present in the younger birds, but it is also admitted that black-chested birds have not been found in Africa. Both species are apparently found together on the east coast of Madagascar, where, at Loholoka, on June 3, Doctor Abbott obtained a specimen of each.

Family JACANIDÆ.

23. PHYLLOPEZUS ALBINUCA (St. Hilaire).

[*Tarra*] *albinuca*, St. HILAIRE, Mag. Zool., 1832, pl. vi. (Madagascar.)

[*Phyllopezus*] *albinucha*, SHELLEY, Birds Africa, 1896, p. 187.

Three specimens. Male adult, Mahanoro, April 26. Female adult, same locality and date. Two specimens.

Family PHASIANIDÆ.

24. MARGAROPERDIX MADAGARENSIS (Scopoli).

Tetrao (madagarensis), SCOPOLI, Del. Flor. et Fann. Insubr. Pt. 2, 1786, p. 93.

[Madagascar.]

Margaroperdix madagascariensis, HARTERT, Kat. Mus. Senckenb., 1891, p. 195.

Two specimens. Male adult, Andrangolsaka, Imerina, March 28. Male adult, 30 miles northwest of Mahanoro, April 18. "Length, 10 $\frac{3}{4}$ inches."

25. NUMIDA MITRATA, Pallas.

Numida mitrata, PALLAS, Spic. Zool., I, Pt. 4, 1767, p. 18.

One specimen. Male adult, Mahanoro, May 30.

Family TURNICIDÆ.

26. TURNIX NIGRICOLLIS (Gmelin).

[*Tetrao*] *nigricollis*, GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 767. (Madagascar.)

Turnix nigricollis, VIEILLLOT, Nouv. Dict., XXXV, 1819, p. 45.

Four specimens. Male adult, Andrangolsaka, Imerina, March 27. Female adult, Mahanoro, May 1, 2. Two specimens. Female adult, Masomeloka, east coast, May 9.

Family TRERONIDÆ.

27. VINAGO AUSTRALIS (Linnæus).

[*Columba*] *australis*, LINNÆUS, Mantiss., 1771, p. 526. (Madagascar.)

[*Vinago*] *australis*, CUVIER, Règne Animal, I, 1817, p. 457.

Four specimens. Female adult, Mahanoro, May 1. Male adult, Mananjara, east coast, May 19. "Irides blue, feet yellow." Two specimens. Female adult, same locality and date.

28. ALECTRÆNAS MADAGASCARIENSIS (Linnæus).

[*Columba*] *madagascariensis*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 283. (Madagascar.)

Alectrænas madagascariensis, REICHENBACH, Syn. Av., Columbariæ, 1847, p. 2.

Two specimens. Male adult, valley of River Faraony, east coast, June 8. Male adult, Ambodiasy, valley of River Faraony, June 14.

Family COLUMBIDÆ.

29. TURTUR PICTURATUS (Temminck).

Columba picturata, TEMMINCK, Pig. et Gallin., I, 1813, pp. 315, 480. (Ile de France.)

Turtur picturatus, BLYTH, Cat. Birds Mus. Asiat. Soc., 1849, p. 236.

Six specimens. Female adult, Mahanoro, May 1, 2. Three specimens. Male adult, Mananjara, east coast, May 25. Male adult, Ambodiasy, valley of River Faraony, east coast, June 16, 20. Two specimens.

Family FALCONIDÆ.

30. MILVUS AEGYPTIUS (Gmelin).

[*Falco*] *aegyptius*, GMELIN, Syst. Nat., I, Pt. 1, 1788, p. 261. (Egypt.)

Milvus aegyptius, J. E. GRAY, List Birds Brit. Mus., I, Accipitres, 1848, p. 44.

One specimen. Male adult, River Faraony, east coast, June 5.

31. ACCIPITER MADAGASCARIENSIS, Verreaux.

Accipiter madagascariensis, J. VERREAUX, S. Afr. Q. Journ., 1833, p. 80. (Madagascar.)

One specimen. Female adult, valley of River Faraony, east coast, June 9. "Length, 15½ inches." In this example the under tail coverts are barred.

32. ACCIPITER FRANCESII, Smith.

Accipiter francesii, SMITH, S. Afr. Q. Journ., II, 1834, p. 280. (Madagascar.)

Five specimens. Female immature, River Faraony, east coast, June 4, 7. Three specimens. Male immature, same locality, June 21. Female immature, Vohimaso, River Faraony, June 22. "Bill horn blue, tip black, cere greenish yellow; feet yellow, claws black; irides golden yellow; length, 12½ inches."

All of these specimens are in the immature plumage, with barred under parts, but there is much individual variation shown among them. Two, a male and female, are apparently younger than the others, and have a fulvous tinge on the light markings of the under parts, inner webs of tail feathers, and under side of wings; the throat pale buff, with longitudinal spots and streaks of dark brown, instead of white with fine gray transverse bars. The bars on the under parts of these younger birds are also broader, browner, and with wider interspaces than in the others; the upper parts are browner, without any slate color on the head. There is also a superciliary stripe of mixed buff and brown.

33. BUTEO BRACHYPTERUS, Hartlaub.

B[uteo] brachypterus "v. Pelz.," HARTLAUB, *Fauna Madag.*, 1861, p. 15. (Madagascar.)

Four specimens. Female adult, 80 miles northwest of Mahanoro, April 5. "Length, $19\frac{1}{4}$ inches. Crop contained a rat." Male adult, Namorona, east coast, June 3. Female adult, River Faraony, east coast, June 5. Male adult, same locality, June 6.

34. FALCO MINOR, Bonaparte.

Falco minor, BONAPARTE, *Rev. et Mag. Zool.*, 1850, p. 484. (Cape of Good Hope.)

Two specimens. Male adult, Ambodivongo, Ankay, March 30. Female adult, Marohita, near Mananjara, east coast, June 27. "Bill horny black at tip; base of lower mandible greenish yellow; cere greenish yellow; feet lemon yellow, claws black; irides dark brown; length, $19\frac{1}{4}$ inches."

Captain Shelley does not include Madagascar in the range of this species, although it has been recorded from there on more than one occasion.

35 FALCO NEWTONI (Gurney).

Tinnunculus newtoni, GURNEY, *Ibis*, 1863, p. 34. (Madagascar.)

Falco newtoni, SCHLEGEL, *Proc. Zool. Soc. Lond.*, 1866, p. 120.

Five specimens. Male adult, Antananarivo, February 8 (rufous phase). Female adult, Andrangolsaka, Imerina, March 25. "Length, $11\frac{1}{2}$ inches." Female adult, same locality, March 26. Female immature, Ambodivongo, Ankay Valley, March 30. "Length, $11\frac{1}{4}$ inches." Female adult, 60 miles northwest of Mahanoro, April 12 (rufous phase). No two of these specimens are exactly alike, but one pair are in the rufous and the others in the light phase. Of the latter, two appear to be fully adult, while the third is an immature bird, with broad black bars on the back, buffy tips on the primaries, secondaries, greater wing-coverts, and primary coverts; upper tail-coverts barred with rufous and black; under parts, nape, and sides of head tinged with light fulvous. It is beginning to molt, and two or three gray and black feathers appear on the upper tail-coverts; on the back a few dark rufous feathers, with small black shaft spots, are replacing the broad-

barred feathers of the worn plumage. From an inspection of this series it is difficult to believe the dark rufous phase represents the immature birds, and the light one adults; I am inclined, on the other hand, to think that this species has two phases of plumage, independent of age, sex, or season; a dark rufous one, and a light one with whitish under parts, with white, spotted under wing-coverts.

36. POLYBOROIDES RADIATUS (Scopoli).

Fultur (radiatus), SCOPOLI, Del. Faun. et Flor. Insubr., 11, 1786, p. 85. (Madagascar.)

P[olyboroides] radiatus, G. R. GRAY, List Gen. Birds, 1840, p. 5.

Five specimens. Male adult, Andrangolsaka, Imerina, March 29. Female adult, 60 miles northwest of Mahanoro, April 5. Male immature, Mahanoro, May 1. Female immature, Ambodiasy, River Faraony, June 12. Male adult, River Faraony, east coast, June 21.

Family STRIGIDÆ.

37. STRIX ALUCO, Linnæus.

[*Strix*] *aluco*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 93. (Europe.)

One specimen. Male adult, River Faraony, east coast, June 21. Not typical *S. aluco*, but just what name it should bear I am not now able to say.

Family PSITTACIDÆ.

38. CORACOPSIS VASA (Shaw).

Psittacus rasa, SHAW, Gen. Zool., VIII, Pt. 2, 1811, p. 528. [Madagascar.]

C[oracopsis] rasa, BONAPARTE, Consp. Avium, I, 1850, p. 7.

Three specimens. Female adult, Mangoro River, April 2. Male adult, valley of River Faraony, east coast, June 9. "Length, 19½ inches." Female adult, Ambodiasy, valley of Faraony, June 20.

39. CORACOPSIS NIGRA (Linnæus).

[*Psittacus*] *niger*, LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 99. (Madagascar.)

C[oracopsis] nigra, WAGLER, Monogr. Psitt., 1832, p. 680.

Four specimens. Male adult, Mahatsara, River Mangoro, April 1. Male adult, 50 miles northwest of Mahanoro, April 13. Female adult, River Sakalés, east coast, May 16. Female adult, Ambodiasy, valley of Faraony, June 15.

40. AGAPORNIS MADAGASCARIENSIS (Boddaert).

Psittacula madagascariensis, BODDAERT (*ex* BRISSON), Tabl. Plan. Enlum., 1783, p. 49. (Madagascar.)

Agapornis madagascariensis, SIBREE, Ibis, 1891, p. 214.

Three specimens. Female adult, 60 miles northwest of Mahanoro, April 12. Male adult, Mahanoro, May 1. Female adult, Mahanoro, May 2.

Family CUCULIDÆ.

41. CUCULUS ROCHII, Hartlaub.

Cuculus rochii, HARTLAUB, Proc. Zool. Soc. Lond., 1862, p. 224. (Madagascar.)

One specimen. Male immature, 50 miles northwest of Mahanoro, April 16.

42. CENTROPUS TOULOU (Müller).

Cuculus toulou, MÜLLER, Syst. Nat., Suppl., 1776, p. 90. (Madagascar.)

Centropus tolu, ILLIGER, Abhandl. k. Akad. Wiss. Berlin, 1816, p. 224.

Four specimens. Male immature, Andrangolsaka, Imerina, March 26. "Length, 16½ inches; irides brown." Male adult, 50 miles northwest of Mahanoro, April 14. Female adult, Mahanoro, May 1. Female adult, Mananjara, July 3.

43. COUA CÆRULEA (Linnæus).

[*Cuculus*] *carulens*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 171. (Madagascar.)

C[oua] carulea, G. R. GRAY, Gen. Birds, II, 1846, p. 454.

Three specimens. Male adult, 60 miles northwest of Mahanoro, April 6. Male adult, same locality, April 12. Female adult, Ambodiasy, valley of Faraony, June 20.

44. COUA REYNAUDII, Pucheran.

Coua reynaudii, PUCHERAN, Rev. Zool., 1845, p. 51.

One specimen. Male adult, 80 miles northwest of Mahanoro, April 5.

45. COUA CRISTATA (Linnæus).

[*Cuculus*] *cristatus*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 171. (Madagascar.)

C[oua] cristata, G. R. GRAY, Gen. Birds, II, 1846, p. 454.

Two specimens. Male adult, Mahanoro, May 9. Male adult, River Sakalés, east coast, May 16.

Family CAPRIMULGIDÆ.

46. CAPRIMULGUS MADAGASCARIENSIS, Sganzin.

Caprimulgus madagascariensis, SGANZIN, Mem. Soc. Hist. Nat. Strasb., 1810, p. 28. (Madagascar.)

Three specimens. Male adult, Mananjara, east coast, May 26. Female adult, same locality and date. Immature, Ambodiasy, valley of Faraony, east coast, June 13.

Family CORACIIDÆ.

47. EURYSTOMUS GLAUCURUS (Müller).

Coracias glaucurus, MÜLLER, Syst. Nat., Suppl., 1776, p. 86. (Madagascar.)

[*Eurystomus*] *glaucurus*, G. R. GRAY, Hand-list Birds, I, 1869, p. 76.

Two specimens. Female adult, Andrangolsaka, Imerina, March 27; 4,500 feet. Female adult, 60 miles northwest of Mahanoro, April 11.

Family LEPTOSOMATIDÆ.

48. LEPTOSOMUS DISCOLOR (Hermann).

Cuculus discolor, HERMANN, Tabl. Affin. Anim., 1777, p. 186. (Madagascar.)
Leptosomus discolor, CABANIS and HEINE, Mus. Hein., IV, Pt. 1, 1862, p. 57.

One specimen. Female adult, 60 miles northwest of Mahanoro, April 11.

Family MEROPIDÆ.

49. MEROPS SUPERCILIOSUS, Linnæus.

[*Merops*] *superciliosus*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 183. (Madagascar.)

Two specimens. Male adult, 50 miles northwest of Mahanoro, April 13. "Bill black; irides dark red; length, 10 $\frac{3}{4}$ inches." Female adult, Mahanoro, May 1.

Family ALCEDINIDÆ.

50. CORYTHORNIS CRISTATA (Linnæus).

[*Alcedo*] *cristata*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 178. [Madagascar.]
Corythornis cristata, SHARPE, Proc. Zool. Soc. Lond., 1870, p. 398.

Four specimens. Female adult, Mahanoro, April 26. Male adult, Mananjara, east coast, July 3. Three specimens.

Family MICROPODIDÆ.

51. TACHORNIS GRACILIS (Sharpe).

Cypselus gracilis, SHARPE, Proc. Zool. Soc. Lond., 1871, p. 315. (Madagascar.)
Tachornis gracilis, HARTERT, Cat. Birds Brit. Mus., XVI, 1892, p. 461.

Three specimens. Male immature, Mahanoro, May 7. Male adult, Masameloka, May 9. Two specimens.

Family PHILEPITTIDÆ.

52. PHILEPITTA CASTANEA (Müller).

Turdus castaneus, MÜLLER, Syst. Nat., Suppl., 1776, p. 143. (Madagascar.)
 [*Philepitta*] *castanea*, G. R. GRAY, Hand-list Birds, I, 1869, p. 297.

Two specimens. Male immature, River Mangoro, April 2. Male adult, Ambodiasy, valley of Faraony, June 17.

The latter is in slightly worn dress, velvety black, with yellow edges to the feathers of lower breast, abdomen, rump, and crown, with traces on tertiaries, wing-coverts, and some other parts of the plumage. The fleshy lobes are well developed. In the specimen called immature male, the plumage is fresh, and the molt not quite completed. The color is velvety black, but almost every feather on the bird is more or less strongly edged with yellow, this so marked on the abdomen as to almost entirely obscure the black. There are no prominent fleshy

lobes, but a close examination reveals the anterior and posterior horns making their appearance. Scattered over the upper back, head, and sides of neck are a few worn olive-green feathers not yet molted, and two secondaries in each wing are olive-green, similar to those of the female. Another adult male in very worn plumage, in the National Museum collection, shot in January, is practically black, with very slight traces of yellow edges on the feathers of the forehead, under wing-coverts, and sides of body. With these three males before me I would argue that the yellow tips or edges of the feathers are *not* signs of immaturity, as supposed by Doctors Selater, Sharpe, and others. Unless *Philepitta* is very extraordinary in its manner of molting we would expect the changes to be about as follows: First a nestling plumage, succeeded, in the case of the male, by a plumage very much like, if not identical with, that of the female. This would be the *immature* plumage. At the next molt the adult black livery would be assumed, all the feathers edged with yellow, and the fleshy ornaments over the eyes would put forth. As the plumage becomes worn, and the yellow edges disappear to a great extent, we have the "adult" plumage. According to this theory we would find the old birds in "immature" plumage immediately after every succeeding molt. I should like to see adult birds in molting condition, with new feathers lacking the yellow edges.

Family ALAUDIDÆ.

53. MIRAFRA HOVA, Hartlaub.

M[irafra] hora, HARTLAUB, Jour. für Orn., 1860, p. 106. (St. Augustin Bay, Madagascar.)

Three specimens. Male adult, Andrangolsaka, Imerina, March 26, 27. Two specimens. Male young, Loholoka, east coast, June 24.

Family MOTACILLIDÆ.

54. MOTACILLA FLAVIVENTRIS, Hartlaub.

M[otacilla] flaviventris, HARTLAUB (*ex* VERREAUX), Jour. für Orn., 1860, p. 94. (Madagascar.)

Two specimens. Female adult, Mahanoro, April 29. Male adult, Loholoka, east coast, June 24.

Family TIMALIIDÆ.

55. COPSYCHUS INEXSPECTATUS, new species.

Type.—Male adult, No. 151279, U.S.N.M., mouth of River Fanantara, east coast of Madagascar, May 18, 1895; Doctor W. L. Abbott, collector. Upper parts, chin, throat, breast, and sides of body, glossy blue black; abdomen and under tail-coverts pure white; thighs black, the feathers tipped with white; tail and wings black, with a slight greenish gloss,

the feathers narrowly edged on outer webs with glossy blue black; outer lesser and middle wing-coverts glossy blue black; greater wing-coverts and primary coverts black, with a greenish gloss; inner wing-coverts white, forming a prominent white patch; innermost secondary conspicuously edged with white on outer web; under wing-coverts and axillaries mottled black and white; edge of wing glossy blue black; legs and feet dark plumbeous (in dried skin), claws lighter. Wing, 2.82 inches; tail, 2.65; tarsus, 1.05; culmen, 0.60. The female seems to differ from the description of *C. albo-specularis*, mainly in having the chin and breast gray, like the throat. The gray of chin and throat is somewhat lighter than that of the breast; the abdomen is white. Doctor Abbott notes on the label of one of the females, "bill black; feet leaden blue."

This species is doubtless closely related to *C. albo-specularis*, but the pure white abdomen and under tail-coverts of the male will at once distinguish it from that species. Of the three males sent, the type only is fully adult. One of the others is nearly so; its wings are black without any brownish edging, but the sides of body are sooty gray, with a blackish wash pervading the feathers; the under tail-coverts and a few feathers of the sides are fulvous. The rest of the plumage is exactly that of the adult.

The remaining male is still younger; the sides are lighter, brownish gray; the wing feathers are dark brown, with broad russet edgings on the outer webs of some of the primaries, and narrower, brownish edgings on the rest of the wing feathers; the glossy feathers of the rump are tipped with rusty; the tail feathers are brownish black. In other respects this example is like the adult.

In the only two examples of *C. albo-specularis* accessible to me, both males, the plumage is apparently not quite adult; the feathers on the abdomen, wings, tail, and under tail-coverts are more or less tipped or edged with rusty brown, evidently a sign of immaturity, but there is no white on the abdomen, which, in the species just described, is as prominent and extensive in the immature as in the adult.

The localities represented by the five specimens sent by Doctor Abbott are: Mouth of river Fanantara and Mahela; Mananjara; and Ambodiasy, valley of the Faraony, all on the east coast.

To those who recognize *Gerraisia* as a genus, the species will of course stand as *Gerraisia inexpectata*.

56. HYPSSIPETES MADAGASCARIENSIS (Müller).

Turdus madagascariensis, MÜLLER, Syst. Nat., Suppl., 1776, p. 139. (Madagascar.)

Hypsipetes madagascariensis, SCHLEGEL, Proc. Zool. Soc. Lond., 1866, p. 422.

Three specimens. Male adult, Andrangolsaka, Imerina, March 26. "Length, $9\frac{3}{4}$ inches." Female adult, same locality and date. "Length, $9\frac{1}{2}$ inches." Female adult, 40 miles northwest of Mahanoro, April 17.

57. TYLAS EDUARDI, Hartlaub.

Tylas eduardi, HARTLAUB, Proc. Zool. Soc. Lond., 1862, p. 152. (Madagascar.)

Two specimens. Male adult, Andrangolsaka, Imerina, March 26. Male immature, same locality, March 27. "Bill black; irides pale yellow brown."

The adult has a white chest and under tail-coverts, and the rest of the under parts are so pale, with a normally colored feather here and there, that a little bleaching would transform it into a typical *T. alfredi*. The mantle is quite bluish slate. The other specimen is a true *T. eduardi*, and was obtained at the same place a day later.

58. BERNIERIA MADAGASCARIENSIS (Gmelin).

[*Muscicapa*] *madagascariensis*, GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 940. (Madagascar.)

[*Bernieria*] *madagascariensis*, HARTLAUB, Fauna Madag., 1861, p. 53.

One specimen. Female adult, 80 miles northwest of Mahanoro, April 5.

59. BERNIERIA ZOSTEROPS, Sharpe.

Bernieria zosterops, SHARPE, Proc. Zool. Soc. Lond., 1875, p. 76. (Central Madagascar.)

Two specimens. Male adult, 60 miles northwest of Mahanoro, April 6.

Family MUSCICAPIDÆ.

60. PRATINCOLA SIBILLA (Linnæus).

[*Motacilla*] *sibilla*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 337. (Madagascar.)

[*Pratincola*] *sybilla*, BONAPARTE, Consp. Avium., I, 1850, p. 304.

Three specimens. Male adult, Andrangolsaka, Imerina, March 25, 27; 4,500 feet. Two specimens. Female adult, same locality, March 25.

61. NEWTONIA BRUNNEICAUDA (A. Newton).

Erythrosterna (?) *brunneicauda*, A. NEWTON, Proc. Zool. Soc. Lond., 1863, p. 180. (Near Fenerive, Madagascar.)

Newtonia brunneicauda, SCHLEGEL, Proc. Zool. Soc. Lond., 1866, p. 422.

Five specimens. Male adult, Andrangolsaka, Imerina, March 26. Male adult, 80 miles northwest of Mahanoro, April 5. Female adult, 60 miles northwest of Mahanoro, April 6. Female adult, River Sakalés, east coast, May 16. Male adult, Ambodiasy, valley of Faraony, east coast, June 13. "Bill black; feet fleshy brown; irides pale yellow white."

These specimens are all *N. brunneicauda*, but I find a specimen of Reichenow's recently described *N. amphichroa* in the United States National Museum, collected by Reverend W. Dean Cowan, at Ankafana, March 8, 1881.

Doctor J. Büttikofer appears to have redescribed this latter species under the name *Newtonia olivacea*.¹

¹ Notes Leyden Mus., XVIII p. 199.

62. TERPSIPHONE MUTATA (Linnæus).

[*Muscicapa*] *mutata*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 325. (Madagascar.)
Terpsiphone mutata, FINSCH and HARTLAUB, Vög. Ostaf., 1870, p. 306.

Four specimens. Male immature, Ambodivongo, Ankay Valley, March 30. Male adult, Mahanoro, May 9. Male immature, Mananjara, east coast, May 28. Female adult, Ambodiasy, valley of Faraony, east coast, June 14.

Family TURDIDÆ.

63. ELLISIA TYPICA, Hartlaub.

Ellisia typica, HARTLAUB, Jour. für Orn., 1860, p. 92. (Madagascar.)

Five specimens. Female adult, Andrangolsaka, Imerina, March 27. Female adult, Ambodivongo, Ankay, March 30. Male adult, same locality and date. Female adult, 60 miles northwest of Mahanoro, April 7. "Feet leaden; irides brown; upper mandible black; lower mandible pale brownish flesh; length, 7 inches." Female, river Sakalés, east coast, May 14.

64. EROESSA TENELLA, Hartlaub.

Eroessa tenella, HARTLAUB, Proc. Zool. Soc. Lond., 1866, p. 219. (Madagascar.)

Three specimens. Female adult, Mahanoro, April 29. Male adult, river Sakalés, east coast, May 11. Adult, same locality and date.

65. EROESSA VIRIDIS, Sharpe.

Eroessa viridis, SHARPE, Cat. Birds Brit. Mus., VII, 1883, p. 152. (Ankafana, Betsileo, Madagascar.)

One specimen. Adult, Mahatsara, River Mangoro, April 3.

66. CISTICOLA CHERINA (Smith).

Drynoica cherina, SMITH, Illus. Zool. S. Afr., Aves, 1843, pl. LXXVII, fig. 2. [Madagascar.]

Cisticola cherina, SHARPE, Layard's Birds S. Afr., 2d ed., 1876, p. 278.

Five specimens. Female immature, Andrangolsaka, Imerina, March 25; 4,800 feet. Male adult, same locality and date. Female adult, same locality and date. Female immature, same locality and date. Female adult, Faraony River, east coast, June 5.

Family HIRUNDINIDÆ.

67. CLIVICOLA COWANI (Sharpe).

Cotile cowani, SHARPE, Jour. Linn. Soc., Zool., XVI, 1882, p. 322. (Ankafana, Betsileo, southeast, Madagascar.)

Two specimens. Female adult, Andrangolsaka, Imerina, March 28. Female immature, Mahatsara, River Mangoro, April 1.

Family CAMPEPHAGIDÆ.

68. GRAUCALUS CINEREUS (Müller).

Muscicapa cinerea, MÜLLER, Syst. Nat., Suppl., 1776, p. 171. (Madagascar.)
Graucalus cinereus, SHARPE, Cat. Birds Brit. Mus., IV, 1879, p. 28.

Three specimens. Female adult, 50 miles northwest of Mahanoro, April 13. Male adult, same locality, April 14. Female? adult, Mahanoro, May 3.

Family DICRURIDÆ.

69. DICRURUS FORFICATUS (Linnæus).

[*Lanius*] *forficatus*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 134. (Madagascar.)
Di[crurus] *forficatus*, STEPHENS, Gen. Zool., XIII, Pt. 2, 1825, p. 138.

Three specimens. Female adult, 50 miles northwest of Mahanoro, April 13. Male immature, 40 miles northwest of Mahanoro, April 17. Male adult, Ambodiasy, valley of Faraony, east coast, June 20.

Family LANIIDÆ.

70. XENOPIROSTRIS POLLENI (Schlegel and Pollen).

Vanga polleni, SCHLEGEL and POLLEN, Faun. Madag., 1868, p. 174. (Madagascar.)
Xenopirostris polleni, HARTLAUB, Vög. Madag., 1877, p. 193.

Two specimens. Male adult, Mahanoro, May 1. Male adult, River Sakalés, May 16. "Betsimisarka name *Angávosika*."

71. VANGA CURVIROSTRIS (Linnæus).

[*Lanius*] *curvirostris*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 135. (Madagascar.)
Vanga curvirostris, CUVIER, Règne Anim., I, 1817, p. 339.

Two specimens. Female adult, Ambodiasy, valley of Faraony, June 17. Male adult, Marohita, near Mananjara, east coast, June 27.

72. ARTAMIA LEUCOCEPHALA (Gmelin).

[*Lanius*] *leucocephalus*, GMELIN, Syst. Nat., I, Pt. 1, 1788, p. 307. (Madagascar.)
Artamia leucocephala, LAFRESNAYE, Diet. Univ., II, 1843, p. 166.

One specimen. Male immature, River Mangoro, April 2. The cross bars are present only on the lower chest, and here very faint.

73. ABBOTTORNIS¹ CHA-BERT (Müller).

Lanius cha-bert, MÜLLER, Syst. Nat., Suppl., 1776, p. 72. (Madagascar.)

Three specimens. Female adult, Mahanoro, May 2, 9; two specimens. Male adult, Mananjara, east coast, May 26.

¹*Abbottornis*, new generic name for *Leptopternis*, BONAPARTE, 1850 (nec *Leptoptera*, BOISDUVAL, 1842).

74. CALICALICUS MADAGASCARIENSIS (Linnæus).

[*Lanius*] *madagascariensis*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 137. (Madagascar.)

Calicalicus madagascariensis, BONAPARTE, Comp. Rend., XXXVIII, 1854, p. 535.

Three specimens. Female adult, Imahatsara, River Mangoro, April 3. Male adult, Mananjara, east coast, May 25; two specimens.

Family CORVIDÆ.

75. CORVUS SCAPULATUS, Daudin.

Corvus scapulatus, DAUDIN, Traité, II, 1800, p. 232. [Africa.]

One specimen. Male adult, River Namorona, east coast, June 25.

Family STURNIDÆ.

76. HARTLAUBIUS AURATUS (Müller).

Turdus auratus, MÜLLER, Syst. Nat., Suppl., 1776, p. 140. (Madagascar.)

Two specimens. Female adult, Mahanoro, May 3. Female adult, Mananjara, east coast, May 28.

Family MELIPHAGIDÆ.

77. ZOSTEROPS MADERASPATANA (Linnæus).

[*Motacilla*] *maderaspataka*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 334. (Madagascar.)

Two specimens. Male adult, Andrangolsaka, Imerina, March 28. Female adult, Imahatsara, River Mangoro, April 3.

Family NECTARINIIDÆ.

78. NEODREPANIS CORUSCANS, Sharpe.

Neodrepanis coruscans, SHARPE, Proc. Zool. Soc. Lond., 1875, p. 76. (Madagascar.)

One specimen. Female adult, 60 miles northwest of Mahanoro, April 12.

79. CINNYRIS NOTATUS (Müller).

Certhia notatus, MÜLLER, Syst. Nat., Suppl., 1776, p. 99. (Madagascar.)

Cinnyris notatus, SHELLEY, Monogr. Nect., 1876, p. 195.

Five specimens. Male immature, Ambodivongo, Ankey Valley, March 29. Male adult, Mahanoro, May 1, 3; three specimens. Female adult, Mahanoro, May 1.

80. CINNYRIS SOVI-MANGA (Gmelin).

[*Certhia*] *sovi-manga*, GMELIN, Syst. Nat., I, Pt. 1, 1788, p. 471. (Madagascar.)

[*Cinnyris*] *soui-manga*, BONAPARTE, Consp. Av., I, 1850, p. 407.

Seven specimens. Male immature, Imahatsara, River Mangoro, April 3. Male immature, 60 miles northwest of Mahanoro, April 12.

Female adult, Mahanoro, May 1. Male adult, Mahanoro, May 9. Male adult, River Sakalés, east coast, May 11. Male adult, same locality, May 16; two specimens.

Family PLOCEIDÆ.

81. SPERMESTES NANA (Pucheran).

Pyrrhula nana, PUCHERAN, Rev. Zool., 1845, p. 52.

[*Spermestes*] *nana*, BONAPARTE, Consp. Av., I, 1850, p. 451.

Three specimens. Male adult, Andrangolsaka, Imerina, March 26; two specimens. Female adult, same locality and date.

82. NELICURVIUS NELICOURVI (Scopoli).

Parvus (nelicourri), SCOPOLI, Del. Faun. et Flor. Insubr., II, 1786, p. 96. (Madagascar.)

Nelicourvius nelicourvi, BARTLETT, Proc. Zool. Soc. Lond., 1879, p. 771.

Three specimens. Male immature, Ambodiasy, valley of Faraony, June 15. Female adult, same locality and date. Female immature, same locality, June 17.

83. FODIA MADAGASCARIENSIS (Linnæus).

[*Loria*] *madagascariensis*, LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 300. (Madagascar.)

[*Fodia*] *madagascariensis*, BONAPARTE, Consp. Av., I, 1850, p. 445.

Four specimens. Male adult, Andrangolsaka, Imerina, March 26, 27; 4,500 feet; two specimens. Male immature, same locality and dates; two specimens.