the bill is black with a yellow tip, and the casque is not formed. The colouring of the soft parts of the young bird is noted by Mr. Everett as follows:—"S. Leyte, 2, September. Iris dark brown; bill black; orbital skin greenish yellow; gular skin yellow; legs and feet dark orange. b. S. Levte, Q, October. Iris grey-brown; bill jet-black, tip orange; feet dull orange."

The bill remains black after the bird has assumed the completely mature plumage and after the casque is almost perfectly formed.

	Dimensions.				Casque.		
	Wing.	Tail.	Tarsus.	Bill from gape.	Length.	Breadth.	Sides.
3	in. 15.80	in. 15:00	in. 2·20	in. 5.85	in. 4·90	in. 2·00	in. 3·35
of juv.	14·30 14·50	14·50 14·00	2·20 2·20	5·30 5·20	4·75 4·80	1·65 1·40	3.30

For this Hornbill I propose the title of Buceros semigaleatus.

9. Contributions to the Ornithology of the Philippines.— No. V. On the Collection made by Mr. A. H. Everett in the Island of Negros. By ARTHUR, Marquis of TWEED-DALE, F.R.S., President of the Society.

[Received January 30, 1878.]

Mr. Everett has been continuing his zoological researches in the Philippine Islands unremittingly, and, by the consignment of a collection of birds made during the month of August last in the neighbourhood of Nueva Valencia and Dumaguete, situated at the extreme south of Negros, has enabled me to continue these contri-

butions to the ornis of the archipelago.

"The southern extremity of Negros," Mr. Everett writes, "which is the most mountainous part of the island, and where I hoped to find accessible virgin forest, is simply one vast field of maize, sugar-cane, and hemp, perfectly cleared, even far up the steep sides of the mountains, and is a very poor district indeed for birds." Notwithstanding, Mr. Everett in the space of one month secured 56 distinct species, 24 of which are now recorded for the first time from Negros. Of these 24 there are 6 new to the Philippine area, 3 of which are new to science.

Species not hitherto known as being inhabitants of the Philippines :-

> Collocalia francica. Butalis latirostris. Limosa ægocephala.

Dasycrotapha speciosa. Zosterops nigrorum. Macropygia eurycerca.

The last three are new species.

The exact habitat of one previously recorded Philippine bird has been determined by Mr. Everett,

## Eudromias geoffroyi;

and there now remain 38 Philippine birds of which the precise habitat still continues undecided.

The number of species known to inhabit the island of Negros previous to the date of Mr. Everett's visit was about 59<sup>1</sup>; and to this number he has added 24, and raised the total of known Negros

species of birds to 83.

The remarkable species Dasycrotapha speciosa, a new type of Timeline genus, and the discovery of a second Philippine species of Collocalia are the most interesting results of Mr. Everett's ornithological researches in Negros.

#### 1. CACATUA HÆMATUROPYGIA (1).

[Valencia, &, August.]

### 2. TANYGNATHUS LUZONENSIS (3).

[Valencia, J, Q, August.]

Of two examples (3) shot in August, one has the crown and occiput blue, the other green; in both the uropygium is green.

#### 3. Loriculus regulus (6).

Loriculus regulus, Souancé; Rowley's Ornith. Misc. pt. vii. p. 238, pl.

[Dumaguete, &, &, August: bill orange-red; cere orange; feet lighter orange; claws black. & (juv.), August: feet dirty ochre-yellow.]

The series consists of eight examples, four marked as belonging to

males, and four to females.

The males are in the adult typical plumage of the species. Two of the females have the occiput faintly golden, and traces of the orange nuchal band. The two other females have the whole head green, and the crimson upper tail-coverts covering only half the length of the rectrices. No blue about the chin, cheeks, and throat.

The male, as figured by Keulemans (l. c.), only exhibits a red band across the throat, whereas the lower throat and breast possess

a large orange-red plastron.

## 4. LIMNAËTUS PHILIPPENSIS (14).

[Valencia, Q, August: iris pale brownish grey; bill black; lores and cere dull greenish; feet light dirty yellow; claws black.]

Pure white underneath, the thigh-coverts being very faintly barred

<sup>&</sup>lt;sup>1</sup> Dr. Steere added 21 species to the 38 recorded by me (Tr. Z. S. ix. p. 252) as known from Negros. Dr. Steere collected partly in North Negros, and partly at Dumaguete in the South; but, from the general term "Negros" being frequently all that is given as the locality by Mr. Sharpe (Tr. L. S. 2nd Series, Zool. vol. i.), it is impossible in many cases to determine the exact part of the island in which Dr. Steere's specimens were obtained.

with irregular lines of pale fulvous. Head and neck pure white, a few feathers with brown terminal drops. Back brown, each feather narrowly margined with pale tawny rufous. Uropygium and upper tail-coverts pale earthy brown, some of the coverts tipped with pure white. Minor wing-coverts brown, edged with dirty white. Major coverts pale earthy brown, with paler margins and white terminal edges. Quills dark brown, more or less blotched with paler brown and white. Rectrices above rich brown, with five or six very narrow cross dark brown irregular bands, a broader dark brown subterminal band. Shafts pure white for three fourths of their length. Rectrices underneath albescent, the brown bands being more conspicuous than above.

Wing 15:20 inches, tail 12:00, tarsus 3:50, culmen 1:50. Nuchal crest-plumes dark brown, tipped with white; length 3:30.

5. Haliastur intermedius (17).

[Valencia, Q, August.] In full plumage.

6. Merops Philippinus (35).

[Valencia, &, Q, August. Dumaguete, Q, August.]

The series (7) consists of examples ranging from first plumage to that of the almost adult. None are in full plumage.

7. MEROPS BICOLOB (36).

[Valencia, &, Q, August.]

In a series of five examples, one is in perfect plumage, the remaining four represent different stages of immaturity.

8. Eurystomus orientalis (37).

[Dumaguete, 2, August.]

9. Entomobia gularis (44).

[Valencia, &, August. Dumaguete, Q, August.]

10. SAUROPATIS CHLORIS (47).

[Valencia, 2, August. Dumaguete, 2, August.]

11. XANTHOLÆMA ROSEA (51).

[Valencia, &, August.]

12. COLLOCALIA FRANCICA.

Hirundo francica, Gm. S. N. i. p. 1017; Walden, Ibis, 1874, p. 132. no. 70.

[Valencia, ♂, ♀, August.]

Mr. Everett's researches enable me to make known the existence in the Philippines of a second species of Collocalia. He has sent five examples. Underneath they are mouse-grey; above fuliginous brown, faintly tinged with bottle-green. The wings and tail darker brown than the back, showing a greenish gloss on the new feathers.

I can find no character whereby to separate these Negros individuals from those inhabiting Malacca, the Andamans, Sikim, Ceylon, the Neilgherries, the Mauritius, and the Fiji Islands. Wing 4:50. Formerly (l. c.) I referred by implication C. troglodytes to the C .francica section of the genus; but a reexamination of a considerable series of C. troglodytes shows that it more properly belongs to the section of which true C. esculenta may be taken as being the type.

# 13. Centrococcyx viridis (64).

[Valencia, &, August. Dumaguete, &, August.]

# 14. Penelopides panini (68)?

[Valencia, Q, August: iris dull chestnut-brown; orbital and other bare skin white faintly tinged bluish; bill brown with olivegreen tinge; feet dark lead-grey with a faint greenish cast; nails black.

The single example sent wears the dress of the mature female of P. panini; but the bill is smooth, without lateral plates, grooves, or casque. The upper tail-coverts are ferruginous and not black. It may belong to a distinct representative form.

# 15. ARTAMUS LEUCORYNUS (73).

[Dumaguete, &, Q, August.]

## 16. Graucalus striatus (74).

[Dumaguete, &, August. Iris crimson. Valencia, 2, August.

Iris crimson; bill black; legs grey-black.]

Of four examples three ( &) have the throat and upper breast uniform slate-colour, the remainder of the lower plumage, the uropygium and upper tail-coverts being broadly banded with black and white. One example (marked 2) differs by having the entire lower plumage banded with black and white.

# 17. VOLVOCIVORA? CÆRULESCENS (75)?

[Valencia, &, August: iris dark chocolate; bill black; legs

blackish grey.]

A single example of a bird (marked of) which I provisionally refer to the above species is sent from Negros by Mr. Everett. It differs from every example in my series ex Luzon and Zebu in having a longer and larger bill, in being dark ashy grey above, without any dark brown almost black margins to the feathers, the uropygium and upper tail-coverts being of still paler grey, in being below pale grey and not dark iron-grey, in having the major wingcoverts pure white and the tertiary quills broadly margined with pure white, and in having the two outer pairs of rectrices broadly tipped with white and some of the other rectrices slightly white-tipped. The under tail-coverts are also almost pure white. The general dimensions are about equal in all. The adult males of V. cærulescens are jet black; the adult females are dark plumbeous grey (conf. P. Z. S. 1877, p. 759. no. 23), while this bird is pale-coloured. V. cærulescens is as

yet only known to inhabit Luzon and Zebu; and this may possibly belong to a representative form. But as it may also be V. cærulescens in first plumage, I refrain from bestowing on it a distinct title.

18. LALAGE DOMINICA (76).

[Valencia and Dumaguete, &, Q, August.]

19. DICRURUS MIRABILIS (81).

[Valencia, J, Q, August.]

20. PHILENTOMA ALBIVENTRIS.

Philentoma albiventris, Sharpe, Tr. L. S. 2nd series, Zool. i. p. 325. no. 49, "Guimaras" (Nov. 16, 1876).

[Valencia, &, August.]

A single example is sent by Mr. Everett; and it seems to belong to a species distinct from *P. cyaniceps*, and Mr. Sharpe appears to have been justified in separating it, notwithstanding the doubt he expresses (l. c.). Besides the lower breast and abdomen being pure white, the dimensions of the rectrices and wings, when compared with those of an adult Luzon male, are longer; tail 4·12 as against 3·50; wing 3·25 as against 2·87. These, however, are larger dimensions than those given by Mr. Sharpe of his type.

21. LEUCOCERCA NIGRITORQUIS (83).

[Valencia, &, August. Dumaguete, Q, August.]

22. CYORNIS PHILIPPINENSIS.

Cyornis philippinensis, Sharpe, Tr. L. S. 2nd series, Zool. i. p. 325.

[Valencia, & (juv.), August: iris dark brown; bill black; legs

bluish grey. Dumaguete, August.]

The young birds (of which a series of five are sent) have their plumage, with the exception of the remiges and rectrices, which are brown, washed with blue or greenish blue, marked with large pale rufous spots. In one the whole of the body-plumage is so marked; in another the abdomen and throat are white; in another several of the uniform blue dorsal feathers have come in, and the breast is turning to pure rufous. The throat-plumes are the last to change to the adult colouring, while full maturity is indicated by the intensity of the rufous on the throat and breast.

23. Hypothymis azurea (85).

[Valencia, & (not adult), August: iris dark brown; bill black; legs dark grey. Dumaguete, &, August.]

24. BUTALIS LATIROSTRIS.

Muscicapa latirostris, Raffles, Tr. L. S. xiii. p. 312; Walden, Ibis, 1873, p. 308.

[Valencia, Q, August.]

A single example in first plumage, with pale rufous spots on the

sides of the neck and margins to the secondary and tertiary quills and major coverts; wing 2.56.

### 25. Broderipus acrorhynchus (90).

[Valencia, Q (juv.), August: bill dark sepia-brown. Dumaguete,

of (juv.), August: bill dark vandyke-brown.]

Judging by the series Mr. Everett sends (seven) and other examples of the Negros Oriole I have examined, it would appear that the extent of the yellow on the forehead is more restricted in the Negros and Guimaras forms than in examples from any of the other Philippine islands.

#### 26. MEGALURUS RUFICEPS.

Megalurus ruficeps, Tweeddale, Ann. & Mag. Nat. Hist. ser. 4, vol. xx.; P. Z. S. 1877, p. 94.

[Valencia, \( \text{?} \), August: iris light clay-brown.]

Males from the same locality are of equal dimensions. New to Negros.

#### 27. DASYCROTAPHA SPECIOSA.

Dasycrotapha speciosa, Tweeddale, P. Z. S. 1878, pl. ix. p. 114. [Valencia, &, August: iris crimson; bill orange-yellow.]

28. IXUS GOIAVIER (99).

[Valencia and Dumaguete, 3 and 2, August.]
A series of five, with ear-coverts and sides of head brown.

## 29. Hyspipetes Philippinensis (102).

[Valencia and Dumaguete, Q, August.]

30. Copsychus mindanensis (105).

[Valencia, & and Q, August. Dumaguete, Q, August.]

31. CISTICOLA, sp.?

[Valencia, &, August: iris light grey-brown; bill brown; legs

pale tinged with brown.

Mr. Everett's note, above quoted, refers to a single example of the genus Cisticola which I am unable to determine. The example is in perfect plumage and belongs evidently to an adult; but the great variations in plumage the members of the genus exhibit make it possible that it belongs to some described species; and I refrain from bestowing what may be a useless title. Its dimensions are smaller than those of any species known to me. Wing 1.62, culmen 0.31, tarsus 0.62. The first primary is relatively long and broad, 0.53. Underneath the general colouring yellow-white, with a rufous tinge on the breast; flanks, under tail-coverts, wing-lining, and thigh-coverts pale ferruginous. Above the colouring is pale ferruginous-brown, each feather dark centred with brown; the nape is uniform pale ferruginous-brown, the upper tail-coverts being brighter ferruginous; the quills are brown margined with the

same pale ferruginous as the upper plumage. Rectrices above pale brown, underneath much paler, with bold subterminal dark brown almost black spots, which show through on the upper surface as brown marks; the inner margins of the quills are pale ferruginous.

This Negros bird differs from N.-Mindanao, Celebes, and Bangkok (Siam) examples of *C. grayi* in its smaller dimensions and longer and broader first primary, and in the absence of the pure uniform

rufo-fulvous cap.

The description of *C. semirufa*, Cab., is too meagre for identification, and no dimensions are stated; but it is probably the same bird as *C. grayi*. *C. ruficeps*, Gould (Sclater, P. Z. S. 1877, p. 98), belongs to *C. grayi*, the only difference Dr. Brown's example exhibits being the absence of the rufous tinting of the breast and under surface generally.

32. ORTHOTOMUS CASTANEICEPS (113).

[Valencia, ♂ and ♀, August.] New to Negros and not separable from the type, which inhabits the island of Guimaras.

33. Corydalla lugubris (117). [Dumaguete, ♂ and ♀, August.]

34. Parus elegans (118). [Valencia, ♂ and ♀, August.] New to Negros.

35. Zosterops nigrorum, n. sp.

[Valencia, & and & August.]

Male and female. Above light olive-green; whole under plumage light greenish-yellow, almost pure yellow; closed wing like the back, outer quill-margins paler; space before the eye almost pure yellow; axillaries and under wing-coverts very pale yellow; a narrow black mark margins the white feathers of the underside of the orbit; rectrices pale brown edged with olive-green. Wing 2.18, tail 1.87, tarsus 0.62, culmen 0.44.

Closely allied to Z. austeni, Walden, ex Karen-nee, this Negros species differs in being of a darker shade of green above and a

lighter yellow underneath.

36. DICÆUM НЕМАТОЯТІСТИМ.

Dicæum hæmatostictum (Sharpe, 'Nature,' August 1876, p. 297; Tr. L. S. ser. 2, Zool. i. p. 339).

[Valencia, &, August.]

37. NECTAROPHILA SPERATA (122). [Valencia, ♂ and ♀, August.]

38. ARACHNECTHTHRA JUGULARIS (123). [Valencia, ♂ and ♀, August.]

#### 39. ÆTHOPYGA MAGNIFICA.

Æthopyga pacifica (Sharpe, 'Nature,' August 1876, p. 297; Tr. L. S. ser. 2. Zool. i. p. 342; Shelley, Monogr. Cinnyridæ, pt. 3, pl.

[Valencia, of and Q, August.]

In one example (3) the uropygium is deep orange and not vellow.

#### 40. Anthothreptus Chlorogaster.

Anthreptes chlorogaster (Sharpe, Tr. L. S. ser. 2, Zool. i. p. 342. no. 107, "Negros," (1876).

[Valencia, Q, August: iris indian-red.]

#### 41. Corvus Philippinus (125).

[Dumaguete, &, \, August.]

The disproportion between the dimensions of sexes in the Philippine Crow exhibits itself in the Negros examples sent by Mr. Everett, the wing of the male measuring 12 inches, as against 11 in the female; culmen of male 2.37, of female 2.12.

#### 42. CALORNIS PANAYENSIS (128).

[Dumaguete, &, Q, August.]

43. SARCOPS CALVUS (129).

[Dumaguete, J, Q, August.]

## 44. Munia jagori (132).

[Valencia, &, Q, August. Dumaguete, &, Q, "breeding,"

August.

May not Meyen's Fringilla minuta (Walden 133) be M. jagori in first plumage, before the black feathers come in? Otherwise it is remarkable that a species stated by Meyen to occur in numberless troops in the Luzon sugar-plantations has not, since he wrote (1834), been recognized.

## 45. OSMOTRERON AXILLARIS (136).

[Valencia, &, August. Dumaguete, Q, August.]

## 46. Leucotreron gironieri (137)?

[Valencia, &, August.]

A single example of a Pigeon much resembling L. gironieri, ex Luzon and Guimaras, and probably representing an immature stage of its dress, is sent by Mr. Everett. It differs from all the phases of plumage described by me (l. c.) in having the throat, breast, and abdomen pale ashy white, much stained pale verdigris green. The crown and nape rich green like the back. A purple pectoral band is indicated by a few isolated plumes. The first primary is not abruptly attenuated; but perhaps the attenuated first quill is only produced later. The species has not heretofore been recorded from Negros.

47. CARPOPHAGA ÆNEA (141).

[Dumaguete, &, Q, August.

48. IANTHŒNAS GRISEIGULARIS (145).

[Valencia, &, August: iris orange; orbital region and basal half of bill dark crimson; apical half of bill pale yellow; feet dull carmine; nails yellowish grey.]

49. MACROPYGIA EURYCERCA, sp. n. (146, partim).

[Valencia, &, August: iris yellow, with outer ring crimson; orbital region and base of bill crimson; bill light brown; feet car-

mine.

Mr. Everett sends a single example, which agrees in every respect with the example obtained in Negros by Dr. B. Meyer, and described by me (Tr. Z. S. ix. p. 218. no. 146) when writing on *M. tenui-rostris*. A recomparison made with Luzon examples leaves no doubt that the Negros bird is specifically distinct.

50. Turtur dussumieri (147).

[Valencia, &, August. Dumaguete, &, August.]

51. CHALCOPHAPS INDICA (150).

[Valencia, &, August.]

52. Eudromias Geoffroyi (161).

[Dumaguete, Q, August: bill black; legs very pale greenish grey; feet darker grey.]

53. RALLINA EURYZONOIDES.

Gallinulæ euryzonoides, Lafresn. Rev. Zool. 1845, p. 368; Tweeddale, P. Z. S. 1877, p. 767.

[Valencia, &, August.]

New to Negros. The Luzon (Manilla) bird (Tr. Z. S. ix. p. 231. no. 175) has to be compared; for it is doubtful whether it does not rather belong to this species than to R. fasciata.

54. HYPOTÆNIDIA TORQUATA (177).

[Valencia, ♀, August.] New to Negros.

55. LIMOSA ÆGOCEPHALA.

Scolopax ægocephala, Linn. S. N. i. p. 246. no. 16. [Valencia, August.]

56. NYCTICORAX MANILLENSIS (198).

[Dumaguete, &, August: iris golden yellow; bill black, the base, greater part of lower half, and bare orbital skin bright yellow-green; legs and feet light yellow-green, clouded with olive-green in front, and on the upper surface of toes.]

In first plumage.

#### March 5, 1878.

### Prof. Newton, F.R.S., V.P., in the Chair.

The Secretary read the following report on the additions to the

Society's Menagerie during the month of February 1878 :-

The total number of registered additions to the Society's Menagerie during the month of February was 63, of which 27 were acquired by presentation, 17 by purchase, 4 by exchange, 6 were bred in the Gardens, and 9 were received on deposit. The total number of departures during the same period, by death and removals, was 93.

The most noticeable additions during the month of February

were

A pair of Leopards (Felis leopardus), obtained from Capt. Phillips, of the S.S. 'Mesopotamia,' February 18th. These Leopards, which were brought from the Persian Gulf by Capt. Phillips on his last voyage, are remarkable for their long hairy coats, bushy tails, and pale body-colour, which reminds one rather of the Ounce (Felis uncia). They are probably from some part of the mountainous district of Persia.

Mr. Sclater exhibited a second collection of birds from Duke-of-York Island, New Britain, and New Ireland, which he had received from the Rev. G. Brown, C.M.Z.S. These were mostly duplicates of the collection brought before the Society on the 19th of February last year<sup>1</sup>, and consisted of examples of the following species:—

1. Rhipidura setosa.

2. Monarcha alecto.

3. Dicranostreptus megarhynchus.

4. Nectarinia aspasia.

5. — frenata.

6. Philemon cockerelli.

7. Calornis nitida.

8. Gracula kreffti.

9. Corvus orru.

10. Dendrochelidon mystacea.

11. Halcyon sanctus.

12. Centropus ateralbus.

13. Eclectus polychlorus.

14. Nasiterna pusio.

15. Lorius hypænochrous.

16. Carpophaga rubricera.

17. — van-wycki.

18. Œdirhinus insolitus.

19. Chalcophaps stephani.

20. Calænas nicobarica.

21. Megapodius eremita.

22. Tringoides hypoleucos.

23. Tringa acuminata.

Mr. Sclater called special attention to the following specimens, and read the subjoined notes on them:—

## 6. PHILEMON COCKERELLI (l. c. p. 104).

Two additional examples of this *Philemon*, both from New Britain, are in the collection. The species is exactly of the same form as *P. plumigenis* (*Tropidorhynchus plumigenys*, G. R. Gray, P.Z.S.

<sup>&</sup>lt;sup>1</sup> See P. Z. S. 1877, p. 96; also Mr. Ramsay's notes on the same collection, Proc. Linn. Soc. New S. Wales, vol. i. p. 369.

1858, p. 174) of the Ké Islands, but is a larger and stronger bird, darker on the head, and paler on the throat and belly.

#### 10. DENDROCHELIDON MYSTACEA (l. c. p. 105).

Five skins from Duke-of-York Island.

### 12. CENTROPUS ATERALBUS (l. c. p. 106).

Three examples of this Coucal from New Britain. In one the head is black, and back of the neck partly so; in the second the neck is white; and in the third the head is also white,—showing that, as I suggested (l. s. c.), there is much variation in colour in this species.

## 13. ECLECTUS POLYCHLORUS (l. c. p. 106).

Of twenty skins of this species, mostly labelled "Duke-of-York Island," but without indication of sex, fifteen are males (green) and five females (red).

## 18. ŒDIRHINUS INSOLITUS (l. c. p. 110).

Of this singular Fruit-pigeon, until lately supposed to be so excessively rare, there are no less than nineteen skins from Duke-of-York Island. The sexes are not marked; but there is no variation in their plumage; so we may consider them identical in this respect. Some of the specimens have the frontal knob much more developed, and are probably males.

In Part viii. of his 'Ornithological Miscellany' (pl. lxvi.) Mr.

Rowley has given us an excellent figure of this species.

## 21. MEGAPODIUS EREMITA, Hartlaub, P. Z. S. 1867, p. 830.

Count T. Salvadori informs me that he has satisfied himself that Megapodius hueskeri of Cabanis and Reichenow, as I had called this bird, l. s. c., is identical with the species previously described by Hartlaub under the name above given. He further assures me that my Megapodius rubrifrons from the Admiralty Islands (P. Z. S. 1877, p. 556) is undistinguishable.

## 23. TRINGA ACUMINATA, Horsf.

One skin of this species, which was not represented in the first series, from New Ireland.

Mr Sclater took this opportunity of exhibiting the specimen recorded by him (P.Z.S. 1869, p. 123) as Athene variegata, and subsequently described and figured by Mr. Sharpe (P.Z.S. 1876, p. 673, pl. lxii.) as Ninox solomonis. Mr. Sclater had compared this specimen with the type of Noctua variegata of Quoy and Gaimard, and had ascertained that his identification was correct, and that there was therefore no need of Mr. Sharpe's new name for the specimen.

Mr. Sclater exhibited a stuffed Coot belonging to the Museum of Science and Art at Edinburgh and believed to be the typical specimen of Fulica gallinuloides of King (Zool. Journ. iv. p. 96), and showed that it was really an example of Fulica leucoptera, Vieillot, and not of Fulica armillata, as he and Mr. Salvin (P. Z. S. 1868, p. 465 et Ex. Orn. p. 115), misled by Capt. King's imperfect description, had supposed.

Professor Newton, M.A., F.R.S., V.P.Z.S., exhibited a stone sent

him by Mr. Caldwell, C.M.Z.S., and remarked:-

"The veracity of the earliest writer who treated at any length of the Solitaire (Pezophaps solitaria) affords a pleasing contrast with that of the latest. Many of the statements put forth by Leguat concerning that bird have already been curiously confirmed; and I have much pleasure in laying before the Society what appears to be another proof of his accuracy. Writing of the hen Solitaires he

says:-

"'On leur trouve toûjours dans le gésier (aussi bien qu'aux mâles) une pierre brune de la grosseur d'un Oeuf de poule; elle est un peu raboteuse, platte d'un côté & arrondie de l'autre, fort pesante, & fort dure. Nous avons jugé que cette pierre naît avec eux; parce que quelque jeunes qu'ils soient, ils en ont toûjours, & n'en ont jamais qu'une; & qu'outre cela, le canal qui va du jabot au gésier, est trop étroit de moitié pour donner passage à une pareille masse. Nous nous en servions préférablement à aucune autre pierre, pour aiguiser nos couteaux'1.

"When Mr. H. H. Slater was appointed by the Royal Society Naturalist to the Transit-of-Venus Expedition in Rodriguez, I especially drew his attention to this statement; but I have understood from him that, notwithstanding his careful examination of the caves of that island, he never found any thing bearing out Leguat's assertion. Shortly after his return, our Corresponding Member, Mr. Caldwell, of Mauritius, visited Rodriguez, as the Society is already aware (Proc. Zool. Soc. 1875, pp. 644-647). He was, as he has told us, more fortunate, and obtained three or four of what he believes to be the stones mentioned by Leguat. One of these he has been so good as to give to my brother, Mr. Edward Newton; and on behalf of both those gentlemen I now exhibit it. You will see that in most respects it agrees closely with the description of Leguat. It is brown, somewhat rough, heavy and hard. It is hardly, however, flattened on one side; and in connexion with that fact I may remark that the bird with whose remains it was associated appears to have been young. Its mineralogical nature has yet to be determined; but before it is cut up for that purpose I thought the Members of the Society would like to see it. Its weight is a little over  $1\frac{3}{4}$  oz.

"Mr. Caldwell has also been so kind as to furnish me with some remarks on this and the other specimens he obtained; but his state-

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<sup>&</sup>lt;sup>1</sup> Voyages et Avantures de François Leguat &c. Londres: MDCCVIII, vol. i p. 100.

ments respecting them will possibly be more advantageously published as an appendix to the account of this bird which, as most (though apparently not every one) of our Members are aware, was drawn up more than twelve months ago, at the request of the Royal Society, by Mr. J. W. Clark and Mr. Edward Newton."

Mr. T. J. Parker exhibited and made remarks upon the stridulating organ of the Common Rock-Lobster (Palinurus vulgaris). He stated that the apparatus in question was produced by a peculiar modification of the antennulary sternum and of the basicerite or second joint of the antenna. The antennulary sternum forms a projecting vertical keel, with a rounded anterior border, and slightly convex sides; the anterior border is grooved in the middle line, the groove being bounded on each side by a strong smooth ridge; each lateral surface is marked with a shallow groove; and between this groove and the border, to which it is parallel, the surface is so smooth as to have the texture of polished ivory. The basicerite is uncalcified along a slit-like space on its inner surface; this space is filled up with a thick chitinous membrane, which is produced superiorly into a large flap, projecting outwards from the surface of the joint. Immediately beneath this flap the chitin becomes thickened, takes on the form of an oval area or pad, about \frac{1}{3} inch long by \frac{1}{4} inch wide, and marked by a number of fine parallel ridges. In relation with the inferior edge of this pad is a small calcified tubercle. When the antenna is in place, the flap works over the ridge on the corresponding side of the anterior border of the antennulary sternum, the tubercle fits into the groove on its lateral surface, and the ridged pad is closely applied to the smooth space between the groove and the border. Under these circumstances, when the antenna is moved upwards the friction of the pad against the smooth surface produces a loud grating noise, the principle being similar to that of the sound produced by the friction of india-rubber against The apparatus can at any time be thrown out of gear, and the antenna moved noiselessly, by slightly abducting the latter. In November last, Mr. Saville Kent remarked in 'Nature' upon the "shrill squeaking sound" emitted by living specimens of Palinurus when handled, this sound being due, according to Mr. Kent, to the friction of the abdominal somites; and Mr. Parker suggested that the noise referred to may possibly have been produced by the apparatus described. He stated further that the apparatus was possessed by both sexes, although in the two specimens examined the noise produced was far louder in the male; and he also remarked upon the fact that, notwithstanding the great perfection of the stridulating organ, the auditory organ of Palinurus is in a very imperfect condition.



Tweeddale, Arthur Hay,

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. 1878. "Contributions to the Ornithology of the Philippines.-No. V. On the Collection made by Mr. A. H. Everett in the Island of Negros." *Proceedings of the Zoological Society of London* 1878, 280–292.

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