

OTOLICNUS GABONENSIS. (Fig. 6, skull.)

*Galago allenii gabonensis*, Gray, Cat. p. 82, f. 8 (teeth).

*Galago (Otolicnus) gabonensis*, Mivart, P. Z. S. 1864, p. 647.  
teeth.

*Hab.* Gaboon.

#### 16. EUOTICUS.

*Otogale* \*\* *euoticus*, Gray, Cat. Monkeys &c. p. 81.

Nose truncate in front. Tail with long hair. Skull very like *Otogale*, but with the nose much shorter and the orbits much larger. Skull, P. Z. S. 1863, p. 140; Cat. Monk. p. 82, f. 7.

EUOTICUS PALLIDUS.

*Otogale (Euoticus) pallida*, Gray, P. Z. S. 1863, p. 140, t. 10; Cat. Monk. p. 81, fig. 7 (skull).

*Hab.* Fernando Po.

17. OTOGALE, Gray, P. Z. S. 1863, p. 139; Cat. Monkeys &c. p. 78.

Nose truncate. Tail with long hair. Upper cutting-teeth nearly equal, large.

Skulls of two species figured, Gray, Cat. Monk. pp. 80, 81, 82.

Blainv. Ostéogr. *Lemur*, t. vii. (skull), *L. crassicaudatus*.

\* *Upper cutting-teeth in a nearly straight cross line.*

GALAGO CRASSICAUDATUS, Gray, Cat. Monk. p. 80; Blainv. Ost. *Lemur*, t. vii. (skull).

*Hab.* East and West Africa.

\*\* *Upper cutting-teeth in a slightly arched cross line.*

GALAGO GARNETTII, Gray, Cat. Monk. p. 79, fig. 4 (skull).

*Hab.* Port Natal.

GALAGO MONTEIRI, Gray, Cat. Monk. p. 80, fig. 5 (skull).

*Hab.* West Africa.

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December 3, 1872.

The Viscount Walden, F.R.S., President, in the Chair.

The Secretary read the following report on the additions to the Society's Menagerie during the months of October and November 1872:—

The total number of registered additions to the Society's Menagerie during the month of October 1872 was 60, of which 7 were by birth, 19 by presentation, 12 by purchase, 14 by exchange, and 8 were received on deposit. The total number of departures during the same period by death and removals was 130.









The most noticeable additions during the month of October were as follows :—

1. A Two-toed Sloth from Panama, purchased October 1st. On September 29th, 1869, we obtained a specimen of the same animal, which I referred somewhat doubtfully to *Cholopus hoffmanni*, Peters (see P. Z. S. 1869, p. 602). I am now able to state positively that the Two-toed Sloth of Panama is *Ch. hoffmanni*, having had an opportunity of examining the skeleton of the latter individual, which died on the 24th of December 1870, and of ascertaining that the cervical vertebræ are only six in number, as is always the case in this species.

As Hoffmann's Sloth is little known, the drawing now exhibited (Plate LXXII. fig. 1), in which the singular green colour of the head and nape is well shown, will be of interest. The second figure (Pl. LXXII. fig. 2) represents an example of the Common Two-toed Sloth (*Cholopus didactylus*) now living in the Gardens. It was presented to us January 11, 1871, by Capt. J. G. Hamlyn, and was stated to have been brought from Demerara.

2. An example of a large *Apteryx*, received in exchange October 10th. This bird appears to be really distinct from, although nearly allied to, the *Apteryx mantelli*, differing in its larger size, white bill and claws, and much softer feathers. Mr. Buller tells me this is the large species of the southern island of New Zealand, and should bear the name *australis*; and I must therefore ask leave to recant my lately expressed opinion on this subject (P. Z. S. 1871, p. 496), that *Apteryx australis* was not distinguishable from *A. mantelli*. We have now the following series of these three species of *Apteryx* living in the Society's Gardens :—

- (1) *Apteryx australis*. Received in exchange, Oct. 10, 1872.
- (2) *A. mantelli*. Presented by A. Lafone, Esq., May 20, 1871.
- (3) *A. mantelli*. Purchased, April 14, 1871.
- (4) *A. owenni*. Purchased, April 14, 1871.
- (5) *A. owenni*. Presented by the Acclimatization Society of Otago, July 28, 1867.
- (6) *A. owenni*. Received in exchange, Oct. 10, 1872.

3. A Mortier's Waterhen (*Tribonyx mortieri*, Du Bus), purchased October 21st of Mr. Bills, by whom it was brought from Otago, New Zealand. Mr. Bills states that this bird was certainly captured in the interior of the province—which is an interesting fact, as no such bird had been previously known to occur in New Zealand.

The present specimen exactly resembles that of the same bird previously received by the Society in 1867\*, presenting the distinct spots on the wing-coverts whereby *T. mortieri* may be distinguished from its ally, *Tr. gouldi*, Sclater (Ann. N. H. ser. 3, vol. xx. p. 122). It is therefore probable that New Zealand may be the correct habitat of *Tr. mortieri*, and Tasmania that of *Tr. gouldi*.

4. A Schlegel's Civet, *Viverricula schlegeli*, Pollen (Schl. et Pollen, Recherches, pl. x.), from Johannah, Comoro Islands, presented

\* See Rev. Cat. Vert. p. 308, and P. Z. S. 1867, p. 816.



October 28th by Mr. C. E. Bewsher, of Mauritius. This species, which we have never previously received alive, appears to be closely allied to *V. indica*.

The total number of registered additions to the Society's Menagerie during November 1872 was 54, of which 2 were by birth, 17 by presentation, 14 by purchase, 10 by exchange, and 11 were received on deposit. The total number of departures during the same period by death and removals was 76.

The most noticeable additions were as follows:—

1. Two Starred Tortoises (*Testudo elegans*, Schœpf) from Ceylon, presented by Mr. W. Vincent Legge, R.E., C.M.Z.S., Nov. 2, 1872.

2. A young male Hippopotamus (*Hippopotamus amphibius*), born November 5th, as already announced\*, and now daily increasing in bulk and vigour.

3. A Nippon Ibis (*Ibis nippon*, Temm. Pl. Col. 551), presented by R. Swinhoe, Esq., F.Z.S., H.B.M. Consul at Ningpo, Nov. 9th, 1872.

4. A Chinese Tree-pie (*Dendrocitta sinensis*, Lath.), received from the same donor in company with the above. Both these birds are new to the collection.

5. A Red-fronted Lorikeet, *Chalcopsitta scintillata*, Temm., purchased November 22nd, likewise new to the Society's collection.

6. A Wied's Aracari, *Pteroglossus wiedi*, Sturm, purchased November 23rd, likewise new to the Society's collection.

The Toucans in the Society's Parrot-house now form a beautiful series, illustrating the following species:—*Rhamphastos toco*, *R. vitellinus*, *R. ariel*, *R. carinatus*, and *Pt. wiedi*.

Mr. Sclater exhibited a nest of the Tijereta (*Milvulus tyrannus*)†, containing one egg of that bird and nine of the parasitic *Molothrus bonariensis*, and, having called attention to Mr. W. H. Hudson's previous remarks on this subject (P. Z. S. 1870, p. 548 *et seq.*), read the following communication from the same correspondent respecting this nest and eggs:—

"I send you a nest of the '*Tijereta*,' found last summer on a low thorn tree, and at the extremity of a branch very much exposed to sight. The birds had not forsaken it, but hovered about anxiously when I removed it. I took the eggs out only to blow them, so that you will see the nest with all its contents, just as it was in the tree when I found it. There is in it but one egg of the *Milvulus*, easily known from its pointed shape, pale cream-colour, and chocolate spots; the other eggs are all of the *Molothrus bonariensis*. These eggs were all perfectly fresh; and as there were none that I could find on the ground beneath the nest, I believe that the *Milvulus* had as yet laid only one, and that many more eggs would have been laid

\* See *anteà*, pp. 795 & 819.

† In my Catalogue of American Birds, I have called the southern form of *Milvulus violentus* (Vieill.), following Bonaparte and Cabanis, but I now consider the southern and northern forms specifically inseparable.



in it by the Blackbirds, though, of course, only to be spoilt or broken. I seldom find a nest containing many Blackbirds' eggs without there being some pecked or broken ones amongst them, so that those still entire are often glued to the nest and to each other by the egg-matter spilt over them; I was therefore all the more glad on finding a specimen so exceptionally clean as this. The eggs in the nest I send differ so much in size and colour that you will perhaps find it difficult to believe them all of one species. I regret very much that when I returned to Buenos Ayres last summer the season was so far advanced that incubation had begun in almost every nest I found; otherwise I would have sent you half a hundred Blackbird's eggs in order to enable you to see how much they vary.

"Besides the Common Blackbird, the only species I positively know to lay sometimes in other birds' nests is the *Molothrus badius*; but its eggs are very easily distinguished from those of *M. bonariensis*. The eggs of the *M. rufo-axillaris* are larger than those of its two congeners, and white without any spots; and I have never yet detected it laying in other birds' nests. I have collected some facts additional to those contained in former letters on the Blackbird, but, as I have sent so much other matter by this mail, will not trouble you with them just at present."

"Buenos Ayres, August 6, 1872."

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Mr. H. E. Dresser, F.Z.S., exhibited a large series of skins of Eagles (*Aquila*), and made the following remarks:—

"Mr. W. E. Brooks, of Etawah, forwarded to me some time ago a splendid series of Indian Eagles, and requested me to carefully compare them with our European birds, and to report the result. I have also been intrusted with a large series of Eagles from the collections of Canon Tristram, Lord Walden, Lord Lilford, Mr. J. H. Gurney, and Mr. Howard Saunders, together with those from Mr. Brooks, numbering nearly ninety specimens; and Lord Walden, Mr. J. H. Gurney, and Mr. Blanford have kindly met and carefully examined the series with me, Mr. Gurney and Lord Walden in particular having spent much time in thoroughly investigating the matter. The result at which we have arrived is as follows:—

"*Aquila bifasciata*, Gray, is, we make out, a perfectly distinct and good species, differing in all stages from *Aquila mogilnik*. It never attains a dark blackish brown plumage, nor does it assume the white scapulars. It is at all times of an earth-brown colour, varying in shade according to age. The tail forms also a fair distinctive character, being but indistinctly barred, whereas *Aq. mogilnik* has the tail very strongly marbled with dark brown on a greyish ground to two thirds of its length from the base, the remaining third being dark brown narrowly tipped with light buff. *Aquila bifasciata* appears also to have at all stages the upper tail-coverts more or less white, in one specimen almost pure white; whereas in *Aquila mogilnik* they are dark, tipped with dull buff. In one example the abdomen is distinctly barred, much the same as in *Circaëtus gallicus*, which I am inclined to think is a very adult bird; for were this a



phase of the immature plumage, specimens thus marked would more often be met with.

“The range of this species appears to be restricted to India.

“*Aquila mogilnik*, Gm. (Imperial Eagle.) This species has a very extended range, being found in India and Siberia, and thence extending into Eastern Europe, Asia Minor, and North-east Africa. I have examined specimens from the Danube, Asia Minor, Abyssinia, and a large series from India, and Mr. Gurney has seen examples from China, all of which agree closely. In the immature plumage this Eagle is strongly striated, and in the fully adult livery it has the scapulars alone white, never the shoulder. Otherwise in the adult plumage it does not differ from the Spanish bird, except that the basal portion of the tail is rather lighter in colour.

“*Aquila adalberti*, Brehm. The White-shouldered Imperial Eagle, so far as is at present known, occurs only in Spain and on the opposite side of the Mediterranean, in Morocco, where Major Irby observed it; but I have not yet been able to examine a specimen from there. It is a very distinct species from the Imperial Eagle of Eastern Europe and India, and differs in being light buff in the young plumage, without the characteristic striations in the Eastern bird. From this it moults by degrees into the dark mature plumage, in which it differs from the Eastern species in having the entire shoulder marked with white, whereas in this latter the scapulars alone are white. The German naturalists generally concur in referring *Aq. adalberti* of Brehm\* to *Aquila nævioides*, Cuv.; and Lord Walden is of this opinion. Should this prove to be the case this present species has no name, and I would propose to call it *Aquila leucolena*.

“*Aquila orientalis*, Cab., is the name under which the Eastern Spotted Eagle should, according to Mr. Gurney, be known, as Pallas clearly confounded it and *Aquila nævia* in describing his *Aquila clanga*. It is found in Eastern and Southern Europe and Asia Minor. I have examined a large series of specimens in immature and adult plumage from the Volga, the neighbourhood of Smyrna, Palestine, and Greece. Not having had specimens from Siberia, I am unable to state whether it ranges thus far to the east, or whether the Siberian bird is a distinct species.

“The Spotted Eagle of India is distinct from our European *Aq. nævia*, Gm., and will, I take it, stand as *Aquila vittata*, Hodgson. In size it approaches nearer to *Aquila orientalis*, Cab., than to *Aq. nævia*; but, as will be seen from the specimens now exhibited, the adult of *Aq. vittata* is a much darker bird than *Aq. orientalis*.

“*Aquila nævia*, Gmelin. The European Spotted Eagle in the fully adult plumage is not to be distinguished from the adult of *Aquila hastata*, Less., but in the immature plumage differs very widely from the young of that species in the arrangement of the markings, clearly showing that they cannot be referred to the same species. This species is found during the breeding-season in Northern and

\* See “Bericht über d. XIII. Versammlung d. Deutsch. orn. Gesellschaft zu Stuttgart,” p. 61.—ED.



Central Europe, ranging during the winter season down into Northern Africa. To the eastward it is replaced by *Aquila orientalis*.

"*Aquila hastata*, Lesson, is as yet only known from India; and until Messrs. W. E. Brooks and A. Anderson lately sent over the specimens now exhibited it was a bird scarcely known in our European museums; and even now but little is known about its range. The six birds now exhibited are in different stages of plumage, from the peculiarly spotted and striated young dress, in which it widely differs from our *Aquila nœvia*, to the fully adult plumage, in which it cannot be distinguished from our European Spotted Eagle. It is the bird figured by Gray and Hardwicke as *Aquila fusca*; and if, as is strongly suspected, the bird described by Lesson as *Morphnus hastatus*, prove not to be this bird, it will have to stand as *Aq. fusca*, Gr. I may mention that Mr. J. H. Gurney is at present carefully investigating this question.

"*Aquila nœvioides*, Cuv. (Tawny Eagle), has only quite lately been discovered to inhabit India; and Mr. Brooks has sent over several specimens, two of which I have had the opportunity of examining and comparing with Abyssinian and South-African examples. It is common in Abyssinia and South Africa, and has at least on one occasion been observed and procured in Spain. One of the specimens which I now exhibit is a Spanish bird, from the collection of Lord Lilford. *Aquila fulvescens* of Gray and Hardwicke is the same bird.

"*Aquila vindhiana*, Frankl., is the *Aquila fulvescens* of Jerdon and other Indian authors, and is probably also the *Aquila albicans*, Rüpp. It ranges from India westward into Abyssinia, where it is found together with *Aquila nœvioides*, which is the so-called *Aquila fulvescens* figured by Gray and Hardwicke.

"Thus I may briefly summarize the results as follows:—Of Imperial Eagles there are three good species, *Aquila bifasciata*, Gray, *Aq. mogilnik*, Gm., and *Aq. adalberti*, Br.; of Spotted Eagles there are two species in Europe, *Aquila nœvia*, Gmelin, and *Aquila orientalis*, Cab., and two, *Aquila vittata*, Hodgs., and *Aquila hastata*, Less., in India; and of Tawny Eagles two, *Aquila vindhiana*, Frankl., and *Aquila nœvioides*, Cuv., common to both the east and west, being found in India as well as Africa, and the latter as a straggler to Europe. It will thus be seen that Mr. Brooks is correct in his views as to the distinctness of *Aq. bifasciata* from *Aq. mogilnik*, the latter being called by him *Aq. crassipes* (P. Z. S. 1872, p. 502)—and that he was misled as to the Indian Imperial Eagle not occurring in Europe, only owing to his having compared the Spanish bird with the Indian species."

Professor Owen, F.R.S., read the fourth of a series of memoirs on the osteology of the Marsupialia. The present communication treated of the bones of the trunk and limbs of the Wombats (*Phascolomys*), the skull having been spoken of in a previous paper on the same subject (the third of the series).

This paper will be printed entire in the Society's 'Transactions.'



The following papers were read :—

1. Contributions to the Ornithology of Madagascar.—  
Part III. By R. BOWDLER SHARPE, F.L.S., F.Z.S., &c.

[Received October 14, 1872.]

(Plate LXXIII.)

Mr. Crossley still continues his labours in this island\*; and the small collection which forms the subject of the present essay has been, as before, submitted to me by Mr. Cutter, of Great Russell Street, while at the same time I must express my obligations to Mr. C. Ward for allowing me to view and describe the collection in its entirety.

The present consignment comes from the country to the south-east of Antananarivo, which has not been explored before for the purposes of collecting; but unfortunately the inhospitable and barren nature of the country has seriously interfered with Mr. Crossley's arrangements, and the last collection has not proved so productive of novelties as his former ones.

#### Family TIMALIIDÆ.

##### OXYLABES MADAGASCARIENSIS. (Plate LXXIII.)

*Oxylabes madagascariensis*, Sharpe, P. Z. S. 1870, p. 386, et Cat. Afr. B. p. 20.

This species was procured at Voolaly; and Mr. Crossley now sends what I take to be the young bird. This is represented in plate LXXIII. fig. 2. It differs from the adult (fig. 1) in having the crown much paler and more dingy chestnut, the under surface of the body olive-brown, inclining to yellowish along the centre of the breast, while the throat is yellowish instead of white; the upper mandible is dark horn-brown, the lower one yellowish: the white eye-mark is wanting.

##### MYSTACORNIS CROSSLEYI.

*Mystacornis crossleyi*, Sharpe, P. Z. S. 1870, p. 392, pl. xxix., et Cat. Afr. B. p. 20.

These birds were procured to the south of the capital, in February 1872. Mr. Crossley has sent over several examples, which show us the gradual change of the young male from the plumage of the old female, by the gradual assumption of the black throat, without a moult.

#### Family TURDIDÆ.

##### COPSYCHUS PICA.

*Copsychus pica*, Pelz.; Hartl. Faun. Madag. p. 38 (1862); Verr. in Vins. Voy. Madag. Ann. B. p. 2 (1865); Schl. P. Z. S. 1866, p. 422; Schl. & Poll. Faun. Madag., Ois. p. 95, pl. 29 (1867); Grand. Rev. Zool. 1867, p. 358.

\* See P. Z. S. 1870, p. 384; 1871, p. 313.





J. Smit. lith.

M & N. Hanhart imp.

OXYLABES MADAGASCARIENSIS







The collection contains an adult pair and one immature bird of this species. The young one is somewhat Robin-like in plumage, though generally resembling the old hen bird. It has, however, the upper plumage mottled with rusty, while the under surface is mottled with dull fulvous, the centre of the abdomen being yellowish white, and the thighs entirely white. The gape has the usual yellow flesh peculiar to young birds.

#### Family MUSCICAPIDÆ.

##### TERPSIPHONE MUTATA.

*Terpsiphone mutata* (L.), Sharpe, P. Z. S. 1870, p. 389.

One specimen shot in March 1872. This bird is in very interesting plumage—as it is gaining the full black back, but still retains traces of its former rufous dress. It is difficult, however, even with a long series before us, to understand these different changes; but it seems pretty clear that, after gaining its rufous plumage and white-marked wing, it moults into its black-and-white dress, which becomes perfected by the assumption of white all over the back and on the tail.

#### Family LANIIDÆ.

##### XENOPIROSTRIS POLLENI.

*Vanga polleeni*, Schl. Faun. Madag. Ois. p. 174; Gray, Hand-l. of B. i. p. 396.

“Kinkimauro, February 1872.”

This seems to be an excellent species, distinguished by the glossy blue-black of the throat, which also occupies the entire fore part of the neck, extending to the chest.

#### Family PARADISIIDÆ.

##### PHILEPITTA CASTANEA.

*Philepitta castanea* (Müll.), Sharpe, P. Z. S. 1870, p. 397, et Cat. Afr. B. p. 54.

The three specimens now sent by Mr. Crossley represent the old male and female of this species, and a young male assuming the black plumage. This appears to be gained by a direct moult, the black feathers, however, retaining a yellow tip, which gradually wears off before the fully black livery is perfected.

#### Family CAPRIMULGIDÆ.

##### CAPRIMULGUS ENARRATUS.

*Caprimulgus enarratus*, Gray, Ann. N. H. (4) viii. p. 428 (1871).

The single specimen sent in the present collection differs from the typical one in the British Museum in being everywhere much duller in colour. The collar round the head is buff instead of white; and the tail is deep ferruginous scantily vermiculated and irregularly crossed with narrow black bars. The bird, however, is moulting;



and the new feathers which are appearing in the tail agree with those of the one first described. It is therefore probable that the specimen now sent is a young bird.

#### Family CYPSELIDÆ.

##### CYPSELUS GRACILIS.

*Cypselus gracilis*, Sharpe, P. Z. S. 1871, p. 315.

"Chiden-Chiden. February 3, 1872. Iris brown."

The specimen now sent by Mr. Crossley is younger than the typical examples in my collection, and exhibits the remains of obsolete fulvous markings on the feathers of the upper parts, and of rusty margins to the under tail-coverts.

#### Family ALCEDINIDÆ.

##### ISPIDINA MADAGASCARIENSIS.

*Ispidina madagascariensis*, Sharpe, P. Z. S. 1870, p. 398.

Mr. Crossley sends several specimens of this pretty little Kingfisher, some of which are immature. The young birds, however, seem only to differ from the adults in being paler and more orange in colour, and in having the beak yellowish horn-colour, with the base of the culmen and lower mandible black.

#### Family FALCONIDÆ.

##### ACCIPITER FRANCESI.

*Nisus francesii* (Smith), Hartl. Faun. Madag. p. 20 (1861); Schl. P. Z. S. 1866, p. 420; Schl. & Poll. Faun. Madag. Ois. p. 36, pl. 14 (1868).

*Nisus madagascariensis* (Verr.), Hartl. Faun. Madag. p. 20 (1861); Roch and Newton, Ibis, 1862, p. 268; E. Newt. Ibis, 1863, p. 337.

*Micronisus madagascariensis*, A. Newt. P. Z. S. 1865, p. 833.

*Accipiter francesii*, Verr. in Vins. Voy. Madag. Ann. B. p. 1 (1865); Grand. Rev. et Mag. de Zool. 1867, p. 320.

*Accipiter madagascariensis*, Verr. in Vins. Voy. Madag. Ann. B. p. 1 (1865).

One specimen in immature plumage killed in the country to the west of Mananzara in February 1872. The iris is stated to be yellow.

#### Family STRIGIDÆ.

##### SCOPS RUTILUS.

*Scops rutilus*, Puch.; Sharpe, P. Z. S. 1870, p. 399.

*Scops menadensis*, Grand. Rev. et Mag. de Zool. 1867, p. 321.

Two specimens.

#### Family RALLIDÆ.

##### RALLUS GRISEIFRONS.

*Canirallus griseofrons*, Gray, Hand-l. of B. iii. p. 67.

*Rallina kioloides*, Schl. & Poll. Faun. Madag. Ois. p. 135, pl. 39 (1868); Schl. P. Z. S. 1866, p. 425.











*Canirallus kioloides*, Hartl. Faun. Madag. p. 80 (1861); Verr. in Vins. Voy. Madag. Ann. B. p. 4 (1865).

*Porzana kioloides*, Grand. Rev. et Mag. de Zool. 1868, p. 4.

One specimen, which Mr. Crossley notes as having a brown iris. Native name "*Vorun boama*." February 1872.

#### CORETHRURA INSULARIS.

*Corethrura insularis*, Sharpe, P. Z. S. 1870, p. 400, et P. Z. S. 1871, p. 315.

One specimen from Chepipp, February 1872. Native name *Chemate*.

#### Family PODICIPIDÆ.

##### PODICEPS PELZELNI.

*Podiceps pelzelni*, Hartl. Orn. Madag. p. 83 (1861); Roch & Newt. Ibis, 1863, p. 175; Sel. P. Z. S. 1863, p. 165; Verr. in Vins. Voy. Madag. Ann. B. p. 4 (1865); Grand. Rev. et Mag. de Zool. 1866, p. 6; Schl. & Poll. Faun. Madag. Ois. p. 151, pl. 40.

One specimen.

#### 2. On the Fossane of D'Aubenton (*Fossa d'aubentonii*).

By Dr. J. E. GRAY, F.R.S. &c.

[Received October 16, 1872.]

(Plate LXXIV.)

The British Museum has received from Mr. Crossley from Madagascar two specimens of this animal complete and a skeleton. They are very interesting, as showing that they are true *Viverræ* as regards the hairiness of the hinder tarsus; and though they are spotted like the Rasse and the Genets, they differ from them both in having no lunate bands on the throat, in having only spotted tails, and their backs not crested like the Malacca Weazel, *Viverricula*.

A specimen of the Fossane was obtained in Madagascar by M. Poivre, who sent it to the Academy of Sciences at Paris in 1761. It was afterwards sent to the Museum of the Jardin des Plantes, where I have searched for it two or three times when I have been in Paris without being able to discover it; and no zoologist has given a more modern description of it; I fear the original specimen has been lost. I consider the rediscovery of the animal quite as important as the finding of a new species.

Buffon and D'Aubenton gave a very accurate description and figure of M. Poivre's specimen. I was so satisfied, from their description and figure, that it was distinct from all other known *Viverræ* that in the P. Z. S. for 1864, I established a genus for it, under the name of *Fossa*; and this is repeated in the 'Catalogue of Carnivorous, Pachydermatous, and Edentate Mammalia in the British Museum,' p. 62; but Dr. Peters and various zoologists have regarded this as a mistake.



The soles of the feet are entirely covered with hair, as in the true *Viverrinæ*; and therefore it should be placed in that tribe, and not, as I have placed it in the Catalogue, in the tribe *Genettinæ*.

#### FOSSA.

Head long, tapering; muzzle acute. Lower side of the nose with a central furrow. Body elongate, back not crested. Throat pale, without any lunate bands. Back spotted. Tail about as long as the back, covered with uniform hair, subcylindrical, and marked with dark spots on each side of the upper surface, which are closer and give it the appearance of being ringed at the end. Legs equal, slender; the soles of the hind feet covered with uniform short hair. Toes short, webbed at the base; claws 5.5, conical, compressed, partly retractile, elevated from the ground and acute.

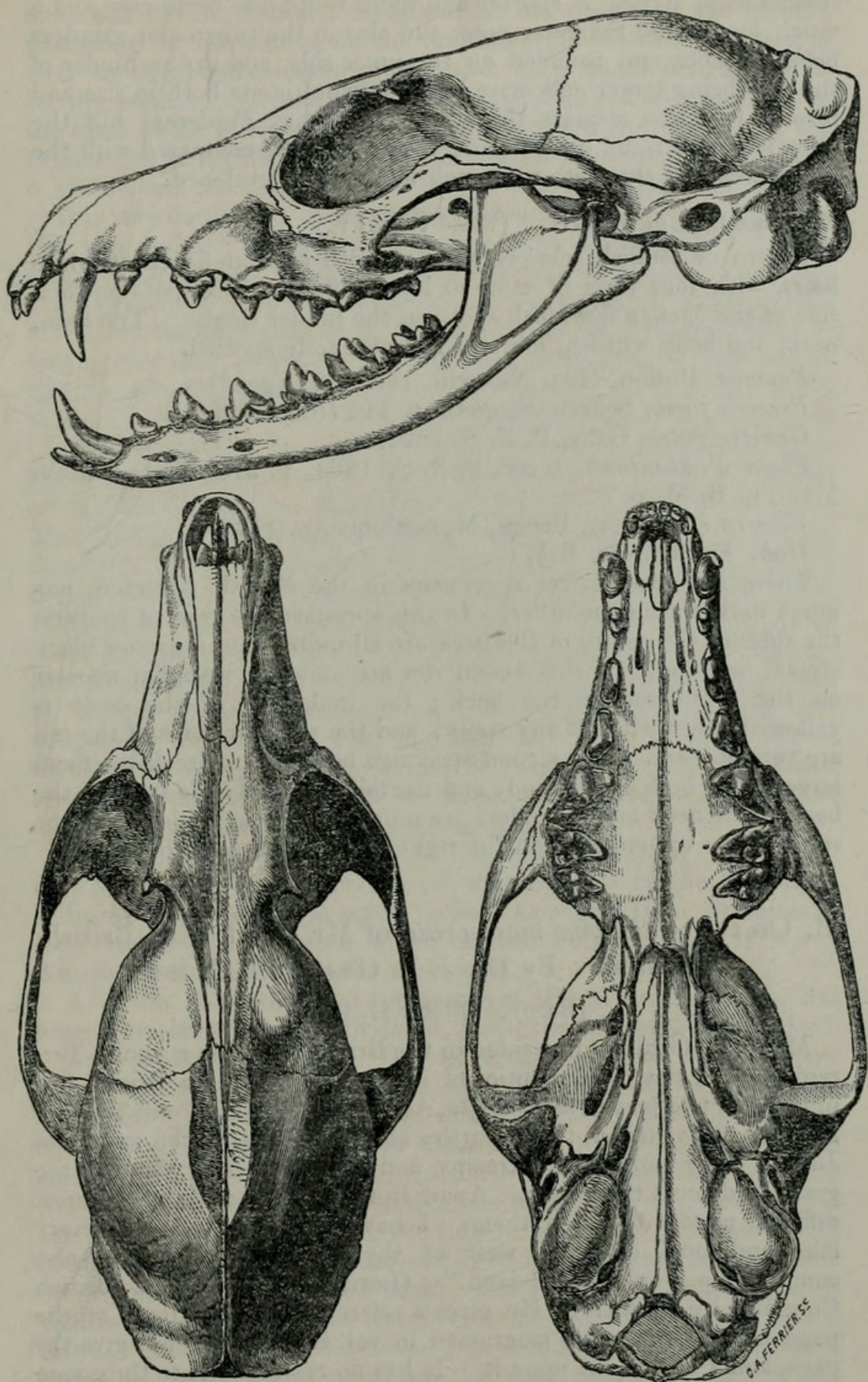
Skull slender, elongate; brain-case ovate, much contracted in front of the forehead. Forehead flat. Nose elongate, slender, tapering in front, twice as long as the diameter of the orbit, rather convex on the sides over the canines. Orbit very incomplete behind for two thirds of its diameter. Zygomatic arch slender, flattened on the sides. Auditory bullæ vesicular, well developed. Palate very narrow in front, dilated behind. Internal nostrils with a rounded front edge. Lower jaw elongate, slender, regularly arched below; hinder angle produced into an elongate cylindrical lobe, extending beyond the condyle.

Teeth:—Cutting  $\frac{6.6}{6.6}$ , the upper in a close arched series nearly equal, the hinder on each side being the longest, the lower uniform in an arched series, the outer ones, which are quite close to the canines, the longest. Canines  $\frac{2.2}{2.2}$ , elongate, cylindrical, gradually tapering, acute, and slightly curved. Grinders  $\frac{6.6}{6.6}$ , the three front upper compressed, the front simple, subconical, the second and third with a triangular centre and a slight lobe on the front and hind collaret. The fourth or carnivorous tooth triangular, placed obliquely; front edge broad, with a small lobe on the outer and a large conical lobe on the inner side; central lobe most prominent, triangular, hinder end compressed. Fifth and sixth, or tubercular teeth, oblong, angular, transverse, broader than long on the front edge; outer side with two pair of small tubercles, inner side rounded at the end, with a high central conical tubercle.

The cutting-teeth of the lower jaw all compressed; first small, conical, recurved, the second, third, and fourth triangular, erect, with one lobe on the front and two on the hinder edge, which are most distinct in the hinder teeth, the fifth tooth much the largest and broadest, with three large conical tubercles, the outer being the largest, and one smaller tubercle on the outer side of the hinder edge. The sixth or last tooth similar, but much smaller, with three higher tubercles in the front half and two small tubercles behind.

This skull differs from that of the Civets and Genets in being much





Skull of *Fossa d'aubentoni*.



slenderer, in having a shorter and more ventricose brain-case and a much longer and slenderer nose, and also in the tubercular grinders being broader and rounded on the inner side, and in the hinder of the two being larger and more like the penultimate both in size and form. In some respects the skull approaches *Eupleres*; but the nose is broader and not so slender, and small as compared with the brain-case, and the teeth are much more fully developed.

FOSSA D'AUBENTONII. (Plate LXXIV.)

Brown or reddish, closely grizzled with an abundance of white hairs, with four rows of more or less confluent black spots on each side of the back, a few black spots on the hinder thighs. The chin, neck, and belly whitish, more or less obscurely spotted.

*Fossane*, Buffon, Hist. Nat. viii. 163, f. 21 (good).

*Viverra fossa*, Schreb. Säugeth. t. 114 (from Buffon).

*Genetta fossa*, Gray, P. Z. S. 1822.

*Fossa d'aubentonii*, Gray, P. Z. S. 1864, p. 518; Cat. Carniv. Mam. in B. M. p. 52.

*Viverra rasse*, var., Peters, Mozambique, p. 113?

*Hab.* Madagascar, B.M.

There are two perfect specimens in the British Museum, one much darker than the other. In this specimen the rows of spots on the sides of the centre of the back are all united into a narrow black streak, and those of the second row are united in a similar manner on the first half of the back; the underside of the body is yellowish grey without any spots; and the spots or rings of the tail are very obscure. The second specimen has much more distinct and larger spots both on the body and the tail; but only the spots of the back of the neck and shoulders are united on the left side, while the spots of the upper series on the right side are united in lines.

3. On the *Actinemys marmorata* of Mr. Lord, from British Columbia. By Dr. J. E. GRAY, F.R.S. &c.

[Received October 17, 1872.]

Mr. J. K. Lord has presented to the British Museum a young Terrapin, which has been mentioned in his 'Naturalist in British Columbia' as "*Actinemys marmorata*, Agass., the Western Pond-Turtle." He says, "I obtained these Turtles at Walla-walla, in the month of June. They had left the streams, and were wandering about in the grass to deposit their eggs. Apart from the egg-season it is a most difficult matter to catch them. I have seen them in nearly every lake and pool east and west of the Cascades. They are also common on Vancouver Island." (Lord's 'Naturalist in British Columbia,' ii. p. 301.) He gives a reference at the bottom of the page as if it were also mentioned in vol. i., but does not give the page, and I cannot hit upon it. It has no resemblance to the young specimen figured by Professor Agassiz as *Actinemys marmorata* (t. 3. figs. 5-8), and certainly is not the *Emys nigra* figured and



described by Dr. Edward Hallowell in his report on the reptiles discovered in the survey for the railroad-route from the Mississippi river to the Pacific Ocean (1859, p. 3, t. 1), which is supposed to be the adult of *Actinemys marmorata*, and which most probably is the same as *Emys olivacea* (previously described and figured in my 'Catalogue of Shield Reptiles in the British Museum,' 1855, p. 30, t. xii. c), and *Redamia olivacea* (Suppl. Cat. Sh. Rep. 1870, p. 36).

It is very doubtful if the *Actinemys marmorata* and *Emys nigra* are the same animal, as the latter is a true water-Terrapin, and Agassiz arranges *Actinemys* among the more terrestrial *Emydoidæ*. Mr. Lord's specimen is the *Chrysemys oregonensis* figured by Agassiz (t. iii. f. 1-3) on the same plate as *A. marmorata*; but he only gives the following very short description. "The back with numerous yellow lines upon a greenish ground, the sternum with irregular blotches in the form of a lyre all over its surface." He figured it from a specimen in the Smithsonian Institution, "which received its specimens from Port Snelling, Minnesota, in the Yellow-Stone River, Nebraska, and among the Guadeloupe Mountains in Texas;" and he observes that Dr. Holbrook's original specimen, now in the Museum of the Academy of Natural Sciences in Philadelphia, exactly agrees with a living specimen that had been brought from the White-Bear Lake, Minnesota. He has great doubts about the accuracy of the statement that this species had been found in Oregon. (Amer. Testud. part ii. p. 440.) Lord's specimen was received from further north. It is the young of *Emys bellii*, Gray, Syn. Rep. p. 31, and *Chrysemys bellii*, Gray, Cat. Sh. Rep. p. 33, and *Emys speciosa*, Clift. Cat. Mus. R. Coll. Surg. No. 1525, p. 525. The *Emys oregonensis* of Harlan and Holbrook, and the *Chrysemys oregonensis* of Agassiz, appear to be the same species.

The young Tortoise figured as *Chrysemys belli*, Ag. t. vi. f. 9, may be a variety, but it has a much smaller mark on the sternum.

In my later work I am much inclined to regard these Tortoises as local varieties of *C. picta*, which extends over all parts of North America from the east to the west coast.

As I am not aware that the young of this Western Tortoise has been previously described in detail, I add the following description.

Animal blackish olive. The head, crown olive, with a very narrow central yellow line, and a similar line on each side over the eyebrows. The upper jaw, edge with a distinct yellow line, sides of the head and throat with four black-edged streaks, the upper one curved on the side of the nape, the lower one on the side of the throat. The two lower ones on one side united behind; on the other side they are continued along the side of the neck. The throat with six yellow lines, the two broadest united in front, and forming a line on the middle of the lower beak. The front legs olive, with three continuous white lines in front, extending along the toes to the claws. Outer side of the hinder legs with a yellow marginal band, and a very thin yellow streak on the upper side extending to the toes. Tail elongate, slender, with regular continued yellow lines. Shell broad, oblong, rather depressed, olive-green, the outer margin





Tweeddale, Arthur

Hay,

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. 1872. "December 3, 1872." *Proceedings of the Zoological Society of London* 1872, 860–879. <https://doi.org/10.1111/j.1469-7998.1872.tb00498.x>.

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