## NOTE VIII.

## HAPALEMUR SIMUS.

BY

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Dec. 1879.

The late Director of the British Museum, Dr. J. E. Gray in establishing this species, (Catalogue of Monkeys, London, 1 Dec. 1870, p. 133) assigns to it the following characteristics:

"Back iron-grey, with a rufous tinge; the hairs black, with a subapical rufous band, and the lower part leadcoloured; throat whitish; patch on rump at base of tail yellowish. - Hapalemur griseus, Schlegel et Pollen, Faune Madagasc. p. 6, t. 3 et 7, fig. 4. (skull without upper cutting-teeth) — Habits Madagascar. — This may be Hapalemur olivacea; but that species is very imperfectly described, and it is said to have a different form of the hinder part of the lower jaw; but what the difference is, is not mentioned; and I do not see any difference in the hinder part of the lower jaws of the two species. The front of the jaw in H. griseus is very much more slender and weak than in H. simus. The colour of the fur is exactly similar to that of H. griseus; only there is a pale spot on the rump at the base of the tail, which may be accidental, or caused by the manner in which it was confined in its cage."

Other observations by the same author on this subject Notes from the Leyden Museum, Vol. II. are contained in the Proceedings of the Zoological Society, London 1870, p. 828. We think is necessary to repeat these also:

"Notes on Hapalemur simus, a new species living in the Gardens of the Society. By Dr. J. E. Gray, F. R. S. etc.

"(Plate 52)."

"Every day, as the Osteology of the species is more studied, brings to our knowledge the fact that Mammalia which are so alike in external appearance as not to be distinguishable, prove on the examination of the bones. and especially of the skulls, to belong to very distinct species; and some even, as in the leafnosed Bats and American Tapirs, prove to be very distinct genera. The animal I am about to bring before the Society is an example of this kind among the Lemuridae. Mr. Bartlett during the autumn brought to the British Museum a Lemur, which had died in the Society's Gardens to be determined, that its name might be entered in the list of recent accenssions; and I agreed to purchase it for the collection. On the casual inspection of the animal in its dead state, I believed it to be a large specimen of Hapalemur griseus. The preserved specimen and skull were exhibited on November the first. On examining the animal before it was placed in the public room of the British-Museum collection. I was convinced, that it was of a very distinct species from Hapalemur griseus, then in the Museum, and I have therefore sent to the Society the following notes, showing the distinction of the two species.

"I. Nose tapering, narrow in front. Skull — nose tapering narrow in front; palate dilated behind; series of grinders converging in front; lower jaw broad and strong in front, with a long symphysis. Hapalemur.

"Hapalemur griseus.

"Hapalemur griseus, Sclater, Proc. Zool. Soc., 1863, p. 161; Mivart, ibid., 1864, p. 613, fig., skull (copied, Catal. Monkeys etc. B. M., p. 77)."

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"II. Nose broad and truncated. Skull — nose very broad, square, truncated in front; palate scarcely wider behind; series of grinders wide apart and nearly parallel; lower jaw weak and narrow in front, with a short symphysis. Prolemur.

""Hapalemur simus, sp. nov. (Pl. 52) B. M."

"Back iron-grey, with a rufous tinge; the hairs black, with a subapical rufous band, and the lower part lead-coloured; throat whitish; spot on rump at base of tail yellowish."

""Hab. Madagascar."

"This may be Hapalemur olivaceus; but that species is very imperfectly described, and it is said to have a different form of the hinder parts of the lower jaw; but what the difference is, is not mentioned, and I do not see any difference in the hinder part of the lower jaws of the two species. The front of the jaw in H. griseus is very much more slender and weak than in H. simus.

"The skull rather solid; nose broad, truncated in front: palate slightly concave, nearly as broad before as behind, the teeth series being nearly parallel: cutting-teeth &; the upper subcylindrical, close by the front side of the canine; inner rather the smallest; lower shelving, in two groups, the four inner much compressed: canines \( \frac{1}{4} \cdot \frac{1}{4} \); upper triangular, conical; lower rather compressed, with a conical lobe on the front edge.

"The animal on which the species is established is full-grown but the state of the hinder grinders shows that it had not reached adult age; it shows no sign of sexual organs, but is most probably a female."

"It died soon after its arrival at the Gardens, and unfortunately had not had time to recover the effects of its confinement on the voyage."

"The tips of the long hairs of the fur of the greater part of the body have been worn off, leaving only a lead-coloured cottony wool. The head, neck, and outside of limbs, where the tips of the long hairs remain, are

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exactly the same colour as the fur of the British Museum specimen of Hapalemur griseus, not showing the slightest reason for believing that one would be called H. griseus and the other H. olivaceus."

"I have retained the name of H. griseus for the specimens we received from Dr. Meller, which Mr. Sclater determined in the "Proceedings" of this Society to be of that species, but which have the fur much more fit to be called olivaceus than grey.

"P.S. — I have to day (Dec. 9th) been able to obtain from the Society "Pollen and van Dams Faune de Madagascar", and I see clearly that the animal that I have described as Hapalemur simus is the Hapalemur griseus of those authors (p. 6, tab. 3); for at tab. 7 fig. 4 they figure the skull, showing the truncated form of the nose and the wide palate. They consider it the same as the Hapalemur griseus of Geoffroy St. Hilaire, and also Hapalemur olivaceus of Isidore Geoffroy, observing, "le crâne avec ses dents ne s'éloigne en aucune manière de celui du soi-disant Lemur griseus; mais cette partie présente, suivant les individus, des différences très sensibles par la forme des orbites, tantôt orbiculaires, tantôt un peu elliptiques, par les nasaux tantôt saillants, tantôt rentrants, par le manque ou l'existence d'incisives à la mâchoire supérieure, et par d'autres traits de moindre importance."

"I had no doubt of H. simus being quite distinct from what we had called H. griseus in England. The upper cutting teeth of the Museum skull of H. simus are as distinct as they are in H. griseus."

The reader may judge by the foregoing pages, which contain an exact copy of all the notes, published by Dr. Gray about Hapalemur simus, how much this zoologist was puzzled with a subject, simple in its kind, indeed.

In his search for osteological characteristics, where there exist none, in his anxiety of furnishing the species with a precise diagnosis, he falls in a network of repetitions, and spreads confusion when he tries to elucidate.

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I, at least, when I published, in 1876, my monographical review of the order of Simiae, by the want of a specimen of Hapalemur simus, did not deem it seasonable to adopt this species. I saw, of course, myself obliged to speak of the species in the following terms (see my article of Hapalemur griseus, l. c. p. 316).

»Hapalemur simus, Gray, Cat., p. 133; Pr. Z. S. L., 1870, p. 828, pl. 52: figure peu reconnaissable, mais que Gray lui-même dit être identique avec celle du Hapalemur griseus, publiée par nous dans la Faune de Madagascar. Gray prétend, du reste, que le Hapalemur griseus du Musée Britannique appartient à une autre espèce. Je ne comprends rien à cette distinction, vu que notre individu figuré dans la Faune de Madagascar ne diffère nullement de l'individu type du Hap. griseus, cédé par Is. Geoffroy a notre Musée, c'est notre N°. 1."

The fact of the matter is, that Gray, as is proved by his Catalogue, at the time did not possess at all the true Hapal. griseus, that he considered Hapal. olivaceus, Is. Geoffr. which is a slight individual variety of Hapal griseus, as different, and that his specimen of Hapal. simus, having lived for a considerable time in captivity, had its hairs considerably damaged, and that the specimen in general was rather in an unfavorable state.

A comparison between the two species of the subgenus Hapalemur shows that they agree in form, proportions, in the dentition, and in general colour of the fur, but that they differ widely from each other by the following characteristics.

Hapalemur simus is a considerably larger animal than Hapalemur griseus, as will be shown by the comparative measurements of the two species. It has the ears fringed by greyish white hairs almost as long as the ears themselves, whereas the hairs bordering the ear of Hapalemur griseus are not longer than in the other parts of these organs. Another very conspicuous characteristic is presented by a large spot of an uniform very pale yellowish rusty colour

occupying the end of the rump and the upper part of the base of the tail, exactly similar to what we observe in the Avahi (Avahi laniger), and of which there is no trace in Hapalemur griseus. The muzzle greyish in Hapalemur griseus, with a narrow longitudinal blackish stripe between the eyes, is, in Hapalemur simus blackish and this colour occupies also the whole space between the eyes. The chin and throat are tinged with brown in H. simus and not greyish as in H. griseus.

## Measurements (French feet).

			H. simus.	H. griseus.
Total length				
Tail		•	1 f. 5 inch.	1 f.
Length of skull .			3 inches.	2 i. 4 l.
Breadth of skull .	•	•	2 i. 3. l.	1 i. 8 l.

It appears that Hapalemur simus is a very rare species. Our traveller, Mr. Audebert, although exploring for several years the country surrounding the large bay of Antongil situated on the N. E. Coast of Madagascar, a region where the Hapalemur griseus abounds, could procure no more than one specimen of Hapalemur simus and it was altogether not met with on the western part of the island where H. griseus is by no means a rare species.