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IX.—*Brief Notices of several new or little-known species of Mammalia, lately discovered and collected in Nepal*, by BRIAN HOUGHTON HODGSON, Esq. By T. HORSFIELD, M.D.

EARLY in the year 1853, B. H. Hodgson, Esq., late of the Bengal Civil Service, presented to the Museum of the East India Company, a large collection of prepared skins of Mammalia, chiefly from the higher regions of India, with duplicates of most species. Many of these have already been communicated to the public in a detailed catalogue prepared by Dr. John Edward Gray, chief Zoologist of the British Museum, with the title of "Specimens and Drawings of Mammalia of Nepal and Tibet, presented by B. H. Hodgson, Esq., to the British Museum, December 10th, 1845."

Since Mr. Hodgson's return to India in 1847, various new and interesting species of Mammalia have been discovered by him in Nepal, Darjeling, Tibet, and other parts of India near the Himalayan range, which are not contained in the catalogue above mentioned; of these a concise description is now given, with remarks on several other species hitherto imperfectly known.

Of the numerous duplicates liberal distribution has been made, under the orders of the Hon. Court of Directors of the India Company, agreeably to the recommendation of Mr. Hodgson, to the British Museum, the Derby Museum at Liverpool, to several other English museums of natural history, and also to the museums at Leyden, Frankfort and Heidelberg, on the continent of Europe.

Of the family of Vespertilionidæ the collection contains the following species:—

1. MEGADERMA SCHISTACEA, Hodgs. J. A. S. xvi. 589, with a figure.

Megaderma Lyra, Geoff. apud Kelaart, Prodr. Faunæ Zeylanicæ, Mammalia, p. 11.

This species was discovered by B. H. Hodgson, Esq., in 1847, in Sikim Tarai, and a very copious description of its form and habits is given in vol. xvi. of the Journ. As. Soc. Beng. It appears to be the representative of the *M. Lyra* in the higher regions of Bengal, and though very like that species, Mr. Hodgson considers it clearly distinct, on account of its slaty colour in the living state, and his figure represents it of that tint. When dry it can scarcely be distinguished from *M. Lyra*: this appears from the specimens set up in the Company's museum. Dr. Kelaart, who found it in Ceylon, introduces it

in his catalogue as a synonym of that species, while he remarks, that "none of the specimens examined by us were of the dimensions given by Mr. Hodgson."

Mr. Hodgson describes the colour of the fur for the most part of a clear, deep slaty-blue above, and sordid buff below, and that of the eye very dark. Females resemble males. The expanse of the wings is 1 ft. 6 in. The dimensions are given in detail at page 894.

2. RHINOLOPHUS PERNIGER, Hodgs. J. A. S. xii. 414, xvi. 896.

Rhinolophus perniger, Hodgs. apud Blyth, J. A. S. xiii. 484.

Discovered by Mr. Hodgson in the central regions of the Sub-Himalaya, and described in vol. xii. of the Journ. As. Soc. Beng.; also briefly noticed by Mr. Blyth. As yet a rare species in collections. According to comparisons made at the British Museum, it resembles the *Rh. trifoliatum*.

3. RHINOLOPHUS TRAGATUS, Hodgson.

First described in Journ. As. Soc. Beng. iv. 699; Gray, Cat. Mamm. Br. Mus. p. 22; Cat. Hodgs. Coll. p. 2; Blyth, Journ. As. Soc. Beng. xiii. 484. A new subject in the Company's museum.

4. HIPPOSIDEROS ARMIGER, Hodgs. J. A. S. iv. 699; Gray, Cat. Mamm. Br. Mus. p. 24; Cat. Hodgs. Coll. p. 3; Blyth, J. A. S. xiii. 488.

Although nearly allied to *Rh. (Hipposideros) nobilis* of Horsfield, it deserves the rank of a distinct species. It is larger than the Javanese species, and its peculiarities are pointed out by Hodgson and Blyth.

5. VESPERTILIO SILIGORENSIS, Hodgson.

Muzzle pointed, with a moustache on the upper lip. Ears oval, slightly emarginate and somewhat pointed; tragus elongate, acute. Wing-membranes arising from the base of the toes. Fur above uniform dark brown, below dark brown tipped with pale brown. Membranes brown. Fore-arm 1 in. 3 lines. Tibia $6\frac{1}{2}$ lines. Longest finger 2 in. 4 lines.

Obs.—Very nearly allied to, if not identical with, the *V. mystacinus* of Europe.

6. VESPERTILIO DARJELINGENSIS, Hodgson.

Very nearly allied to the former, but differing in having the ears more emarginate, with a distinct lobe at their base; in having the tibia somewhat shorter, with the fur of the upper

parts darker and tipped with chestnut, with a gloss somewhat as in *V. mystacinus*, but lighter*.

7. *SCOTOPHILUS COROMANDELICUS*, F. Cuv. sp.

Vespertilio coromandelicus, Lesch. & Cuv. Nouv. Ann. de la Mus. Schinz. Syst. Mamm. p. 171.

Examined by R. F. Tomes, Esq.

8. *MURINA SUILLUS*, Temm. sp.

Vespertilio suillus, Temm. Monogr. ii. 224. t. 56. f. 456.

Murina suillus, Gray, Ann. and Mag. Nat. Hist. 1842, 259.

Identified by R. F. Tomes, Esq.

9. *BARBASTELLUS DAUBENTONII*, Mém. Acad. Par. 1759, t. ii. p. 8; Bell, Brit. Quad.

Barbastellus communis, Gray, Mag. Zool. and Bot. ii. 13.

Examined by R. F. Tomes, Esq., who considers it identical with the European species, although somewhat darker in colour from its preservation in spirits.

10. *PLECOTUS HOMOCHROUS*, Hodgs. J. A. S. xvi. 894.

Mr. Hodgson, after giving a very copious description of this new species of *Plecotus*, which he discovered in the central regions of Sub-Himalaya, remarks: "Nearly allied to *auritus*, but differs therefrom by disunited ears, fewer molars, a flat inner ear, shorter fur and nude ears, besides its more uniform colour. The joints of the digits also differ, showing how little dependence can be placed upon this mark, which yet Cuvier, Geoffroy and Hamilton Smith make the corner-stone of the general classification of the family."

11. *PLECOTUS DARJELINGENSIS*, Hodgson.

Nearly allied to the former, but considered distinct by Mr. Hodgson. The dimensions are the same in all points; the colour is deeper, inclining to blackish. The lobes of the ear are spreading, with a small appendicule at the bases. The tragus is narrow. The specimens of this and of the former are few and not well preserved, and more materials are required for a satisfactory discrimination.

12. *LASIURUS PEARSONII*, Horsfield, Cat. Mamm. E. I. C. Museum, p. 36; Blyth, J. A. S. xx. 524.

Noctulinia lasiura, Hodgs. J. A. S. xvi. 896; fide Blyth, J. A. S. xxi. 343.

The specimen sent by Mr. Hodgson is not quite adult; in

* This and the preceding were examined and described at my request by R. F. Tomes, Esq.—T. H.

other respects it agrees with Mr. Pearson's specimen from Darjeling, from which the original description was made.

13. *NYCTICEJUS NIVICOLUS*, Hodgson.

Colour of the head and body above uniform light brown, with a slight yellowish shade; underneath, from the throat to the vent, dark grey with a brownish tint, lighter on the sides of the throat. Ears long, attenuated to an obtuse point, exceeding half an inch in length.

The fur has the character of that of *Lasiurus Pearsonii*, being delicate, very soft and silky both above and underneath. Entire length 5 in., of which the tail measures 2; brachium $1\frac{3}{8}$ in.; cubitus $2\frac{1}{2}$ in.; longest digit $4\frac{1}{4}$ in.; tibia $1\frac{1}{2}$ in.; foot and claws $\frac{5}{8}$ in.; ears $\frac{5}{8}$ in.; expanse 1 ft. 7 in.

This species resembles the *Nycticejus ornatus* described by Mr. Blyth in vol. xx. of the Journ. As. Soc. Beng. pp. 517, 518, but it is of larger dimensions, more uniform in its colouring, and altogether destitute of the white spots and bands indicated in the description of the *N. ornatus*, and of the tawny-red colour on the membranes of that species. It has also some affinity to the *Nycticejus Tickellii*, Blyth, Journ. As. Soc. Beng. xx. 157, 158, but its dimensions and proportions are different, and the brighter maroon colour which spreads over the membranes, as in *Kerivoula picta*, is entirely wanting in the *Nycticejus nivicolus*.

More specimens of this species are desirable to illustrate its true character.

14. *PTEROPUS EDWARDSII*, Geoffr. (Gray, Cat. Hodgs. Coll. p. 3), presents nothing peculiar.

Of the genus *Felis*, the collection contains, besides the more common species, the following:—*Felis Uncia*, Erxleb. Syst. Mamm. p. 508. *Leopardus Uncia*, Gray, Cat. Mamm. Br. Mus. p. 41; Cat. Hodgs. Coll. p. 5. *Uncia Irbis*, Ehrenb. sp. Gray, Ann. & Mag. Nat. Hist. N. S. xiv. 394*.

* Dr. J. E. Gray has recently proposed that the *Ounces*, or Tortoise-shell Tigers as they have been called, should form a particular group of Cats, to which the name of *Uncia* may be attached. They are easily characterized by the great length and thickness of their cylindrical or rather clavate tail, and the marbling of the colours on the fur. They are confined to Asia.

1. *Uncia Irbis*. *Felis Uncia*, Schreber. *F. Pardus*, Pallas. Tibet.
2. *Uncia macroscelis*, Temm. Sumatra.
3. *Uncia macrosceloides*, Hodgson. India.
4. *Uncia marmoratus*. *Felis marmorata*, Martin. *F. Diardii*, Jardine. Penang.
5. *Uncia Charltoni*. *F. Charltoni*, Gray. *F. Duvaucelli*, Hodgs. MSS. India, Himalaya.—Dr. Gray, Ann. Nat. Hist. 1854, xiv. p. 394.

15. *FELIS UNCIOIDES*, Hodgs. List of Mamm. presented to E.I.C. Mus.

The specimens received from Mr. Hodgson agree in all points with those from Tibet presented to the Museum of the East India Company by Capt. R. Strachey.

16. *FELIS MACROSCELOIDES*, Hodgs. Coll., Journ. N. H. iv. 286.

Felis macroscelis, Hodgs. J. A. S. xi. 275.

Felis, n. sp., Tickell, J. A. S. xii. with a figure.

Although nearly allied to *F. macroscelis*, Temm., of the Malayan Islands, Dr. J. E. Gray allows it the rank of a distinct species, on account of its smaller size and some difference in the markings. In a note on the specimen described by Mr. Hodgson in vol. xi. of the Journ. As. Soc. Beng. p. 276, Mr. Blyth remarks, "that this fine species originally discovered in Bengal should also inhabit Tibet is a remarkable circumstance."

Mr. Hodgson's specimen is from Tibet; that described by Lieut. Tickell is from the snowy range of Darjeling.

A figure of Mr. Hodgson's specimen will be found in the Illust. Proc. Zool. Soc. 1853.

17. *FELIS MURMENSIS*, Hodgs. Proc. Zool. Soc. 1832, p. 10, *varietas nigra*.

Mr. Hodgson has recently discovered a very beautiful variety, of a saturated brown or black colour, of which the collection contains several specimens. In size and external character it agrees exactly with the brown-red or bay species, first described in the 'Proceedings of the Zoological Society.' The lateral marks on the cheeks, forehead and thighs are the same, and also a slight whitish discoloration on the tip of the tail. It is a very beautiful variety.

18. *FELIS CHARLTONI*, Gray, Br. Mus.

Uncia Charltoni, Gray, Ann. & Mag. Nat. Hist. xiv. p. 394 (1854).

This is as yet a very rare species in collections. Besides the original specimen discovered by Col. Charlton, and that forwarded by Mr. Hodgson, none is enumerated in Catalogues of Natural History. It is from the higher regions.

19. *PARADOXURUS STRICTUS*, Hodgson.

General colour grey, with a slight rusty shade; two prominent white spots on each side of the head, one beneath the eye oblong, tending forward, one behind the eye larger, triangular, tending backward; five continuous stripes, regularly defined and straight, of a deep black colour, commencing on the neck, extend over the whole length of the body, having on each side beneath an

interrupted band of black spots. Abdomen grey. Tail exceeding the body in length; mixed grey and black at the base, the terminal portion black, the colour increasing in deepness towards the extremity. Legs black. Throat grey, with a medial black stripe. Ears developed.

Length from the snout to the root of the tail 23 inches, of the tail 25 inches.

This species appears nearly allied to *Par. Palassii*, described by Dr. Gray in Proc. Zool. Soc. 1832, p. 67, but it has no resemblance to the figure of that species given in Gray and Hardwicke's Illustrations of Indian Zoology, ii. fig. 8. Its distinctive character requires further examination.

Five well-defined and regular black lines on the back are the chief characteristic of this species; hence the specific name. Mr. Hodgson considers it to be new; and from the comparison made by Dr. Gray at the British Museum, it appears to be distinct from *Par. Palassii*.

20. PARADOXURUS QUADRISCIPTUS, Hodgson.

General colour grey, with a slight rufous shade extending over the whole of the body, over one-half of the tail, over the forehead and the lower part of the ear. On the back and parts adjoining, four well-defined continuous black stripes pass from the neck to the rump, having a shorter interrupted band on each side; the bridge of the nose in the middle, a well-defined narrow streak from the canthus of the eye, the neck, the feet, and the terminal part of the tail are black; on the upper part of the neck the hairy covering is slightly variegated black and grey, the separate piles being grey at the base and black at the tip. The fur is soft, lengthened and straggling.

The entire length of this species is 50 inches; 26 of which are occupied by the head and body, and 24 by the tail.

This species resembles the *Paradoxurus Bondar* in habit and in the softness of its hairy covering, but differs essentially in colour and in the four strongly marked black lines on the back. The *Bondar*, according to the description of M. de Blainville (Desm. Mamm.), is of a yellowish colour, with one prominent black line on the back: the *Par. hirsutus* of Hodgson, which is identical with the *Bondar* of Dr. Buchanan Hamilton, described in vol. xix. of the 'Asiatic Researches,' is of a yellow colour, and without lines on the body. According to the notice of Dr. Gray, this species is not contained in the British Museum*.

* Dr. Gray states in Proc. Zool. Soc. 1853, p. 191:—"I cannot see any difference between these specimens and the *P. musanga*."

21. *HYÆNA STRIATA*, Zimm.

The collection contains two imperfect skins, marked by Mr. Hodgson "*Hyæna virgata*, List of specimens presented to the East India Company." In Mr. Ogilby's memoir on the Mammalogy of the Himalayas, in Royle's Illustrations, &c., is the following remark: "the Hyæna of India (*Hyæna virgata*), a native of the plains, sometimes ascends even to Simla." The skins have been compared with specimens of the striated species at the British Museum and at the East India House, but present no character to warrant a specific distinction. The multifarious specific names with which this species is enumerated in books on zoology have greatly perplexed its synonymy.

Besides the common Indian species of *Vulpes bengalensis*, *montanus* and *ferrilatus*, the collection contains a specimen commonly indicated as *Vulpes laniger*, which is, however, a true *Lupus*.

22. *LUPUS LANIGER*, Hodgson.

The entire length of the specimen from the nose to the root of the tail is 4 feet 4 inches; of the tail only 11 inches remain, and its length cannot be determined accurately. The general colour above is fulvescent inclining to sordid, deeper on the back, which is slightly variegated by the admixture of black-tipped hairs; underneath pale grey. On the back the pelage is close and formed into small tufts, on the sides dense and shaggy, in accordance with the cold regions which it inhabits; on the head and nose it is greyish. The ears are large, pointed, and covered externally with a dense brownish fur. The form of the head is that of a common European wolf, rounded posteriorly and tapering to the nose.

This animal must be considered specifically distinct from the *Canis Lupus* of Elliot (Madr. Journ. Lit. x.), and from the *Canis pallipes* of Sykes (Proc. Zool. Soc. 1831), to which the name of Wolf is also assigned. It is a larger animal, and the hairy covering is of a different character, besides other distinctions which appear from the descriptions. The black lines on the front of the fore feet are observed in both species. Mr. Blyth's remarks in his Report for September 1847, afford a useful illustration of the Tibetan Wolf.

23. *MUSTELA STRIGIDORSA*, Hodgson.

A new species discovered by Mr. Hodgson in the Sikim Hills of Tarai, and thus described by himself:—Snout to vent 12 inches; head $2\frac{3}{4}$ in.; tail only $5\frac{1}{2}$ in.; tail and hair $6\frac{1}{2}$ in. Palma $1\frac{3}{4}$ in., planta 2 in. Weight $7\frac{1}{2}$ to 8 ounces. Intense brown, with the

lips, head and neck inferiorly, and a dorsal and ventral stripe, yellowish-white or pale aureous.

Remark.—Is a fourth larger than the *Kathia* or *auriventer*, and differs from it by the dorsal stripe and also by the ventral, the latter in the *Kathia* being much wider and its colour richer.

Hab. Sikim (Hodgson MS.).

The specimen sent to the Museum agrees generally with this description; the brown colour has a shade of chestnut, and the under part of the head, neck and breast are nearly white, with a slight isabelline discoloration*.

24. MELES LEUCURUS, Hodgson.

Taxidea leucurus, Hodgs. J. A. S. xvi.

Tümphá of the Tibetans.

Tibetan Badger.

This interesting animal was first brought to the notice of Mr. Hodgson by the receipt of a specimen from the neighbourhood of Lassa, and a very copious description of it is given in vol. xvi. of the Journ. Asiat. Soc. Beng., with a figure of the animal, and details of its skull and feet comparative with the allied quadrupeds. A specimen in a tolerable state of preservation, with a separate skull quite perfect, has been presented to the Museum. The comparison of this skull with one of the European Badger has afforded the means of determining its true generic character. The result of the examination made by Dr. J. E. Gray, which illustrates this point, is given in a short notice published in vol. xii. of the Ann. & Mag. Nat. Hist. N. S. xii. 221†.

The specimen sent agrees generally with Mr. Hodgson's

* See also description by Dr. Gray in Proc. Zool. Soc. 1853, p. 191.

† *The Tibetan Badger of Hodgson.*

"Mr. Hodgson having sent to the India House a specimen with its skull of his *Taxidea leucurus* (Journ. Asiat. Soc. xvi. 763, 1847), I have compared the skull with that of the various Badgers in the Brit. Mus. Collection. I find all the Old-World Badgers (*Meles*) have a moderate-sized triangular flesh-tooth, and a very large four-sided oblong tuberculous grinder in the upper jaw, which is rather longer than broad, and the skull is rounded behind. The nose of the Tibetan Badger or Tumpka, *Meles leucurus*, is rather more tapering and more compressed than that of the European Badger (*Meles Taxus*), which it most resembles. The Japanese Badger (*Meles Auakuma*) differs from both in having a much shorter skull and a short, rather broad nose.

"The American Badgers (*Taxidea*, Waterh.) have a very large triangular flesh-tooth, and an equally triangular tubercular grinder in the upper jaw not exceeding the flesh-tooth in size. The skull is also much broader, more depressed and truncated behind. Of this genus I only know a single species, *T. Labradoria*."—J. E. Gray, Ann. Nat. Hist. N. S. xii. 221. See also Proc. Zool. Soc. 1853, p. 191.

original description. The upper parts are of a greyish-white colour, with a fulvescent shade which is deeper on the extremity of the tail. The chin, throat, breast and extremities are entirely black. In the hairy covering on the back, the separate piles are nearly 3 inches long, white at the base one-half of their length, with a black extremity, widely diffused and straggling, giving the animal a rough and shaggy appearance. It bears a great resemblance to the European Badger.

Mr. Hodgson has proposed that it should be formed into a genus under the name of *Pseudomeles*.

In the Report to the Bengal Society for September (1854), Mr. Blyth communicates some remarks on Indian Badgers. He mentions the Tibetan Badger with reference to Mr. Hodgson's description and figure in vol. xvi. of the Journ. Asiat. Soc.; while he indicates what he considers to be a distinct species, with the name of *Meles albogularis*: comparatively with the European Badger "it has smaller and much less tufted ears, a shorter and much less bushy tail, and the fur shorter and coarser."

The subject of Indian Badgers requires further examination. An Indian Badger resembling the *Meles leucurus* is described by Pennant in vol. ii. of Hist. of Quad. p. 16 (*Ursus indicus*): "Badger with a small head and pointed nose; scarcely any external ears; only a small prominent rim round the orifice, which was oval; colour of the nose and face, a little beyond the eyes, black; crown, upper part of the neck, the back, and upper part of the tail, white inclining to grey; legs, thighs, breast, belly, sides, and under part of the tail black. Five toes on each foot, the inner small; claws very long and straight. Length from nose to tail about 2 feet; tail 4 inches long; hair short and smooth."

Dr. Shaw in his 'General Zoology' adds the following remark: "Mr. Pennant is the first and only describer of this species, which was brought from India, and was in the possession of the late Mr. John Hunter. (It remains to be determined whether all the Badgers hitherto indicated do not constitute local varieties of the same species?—T. H.)

Of the genera *Lutra* and *Aönyx*, the collection contains the following representatives:—

25. *LUTRA CHINENSIS*, Gray, Mag. Nat. Hist. 1836; Cat. Mamm. B.M. 71?

Lutra tarayensis, Hodgs. J. A. S. viii. 819; Gray, Cat. H. C. p. 14.

26. *AÖNYX SIKIMENSIS*, Hodgson.

This Mr. Hodgson considers to be a new species. It differs

chiefly from the common *Aönyx* of India, which is found in Bootan and Afghanistan, by a more clear brown colour, inclining to chestnut, but the specimen is not sufficiently perfect to afford the means of an accurate description.

In the "Summary Description of four new species of Otter," Journ. Asiat. Soc. viii. 319, Mr. Hodgson remarks: "One of the most remarkable features of the mammalogy of Nepal is the great number of distinct species of Otter characterizing it. There are at least seven species, I believe, though not one of them is numerous in individuals,—at least not in comparison of the common Otter of commerce, which is produced in the neighbourhood of Dacca and Sylhet."

In the "Summary" Mr. Hodgson describes four species; most of these are rare in collections. In the Catalogue of Hodgson's collection, Dr. Gray enumerates four species from Nepal: *Lutra aurobrunnea*, *Lutra chinensis*, *Lutra monticola*, and *Aönyx indigitatus*.

27. SOREX MURINUS, Zimmerman.

Sorex myosurus, Pallas.

The Museum contains specimens of this species from Nepal, Bootan, and other Indian localities; among these are several very perfect specimens presented by Capt. R. C. Tytler. One of these, as well as a single specimen of Mr. Hodgson's last collection, are of comparatively larger dimensions, of a cærulescent greyish colour, agreeing with the description of *Sorex cærulescens* of authors; while two specimens of a former collection, received from Mr. Hodgson in 1845, are of a darker colour, brown, and not cærulescent, resembling the *S. murinus* described by authors. Much uncertainty still exists in the discrimination of the species of *Sorex*, and the real character of many species enumerated by authors remains doubtful, until, for instance, *cærulescens*, *murinus*, *myosurus*, *serpentarius*, *nemorivagus*, *soccatus*, &c., be subjected to a careful examination of specimens in a perfect state.

28. SOREX SATURATION, Hodgson.

Colour uniform deep brown, inclining to blackish, with a very slight rufescent shade. Fur short, with an admixture of a few lengthened piles; when adpressed to the body smooth, but reversed somewhat rough and harsh. Tail cylindrical, long, and gradually tapering to the point. Snout elongate, regularly attenuated. Ears moderate, rounded.

Very nearly allied in habit and dimensions to *Sorex Griffithii*, Horsf. Cat. Mamm. E. I. C. Mus. p. 134, the more lengthened

and cylindrical tail forming the chief distinction. The character of the fur is the same in both species.

Length from the tip of the snout to the root of the tail $5\frac{1}{2}$ inches, of the tail 3 in.

29. *SOREX CAUDATUS*, Hodgs. Ann. & Mag. Nat. Hist. N. S. iii. p. 203; Cat. Mamm. E. I. C. Mus. p. 135.

Corsira? caudata, Blyth, Mem. on Indian Shrews, J. A. S. 1855, p. 37.

A true *Sorex*, as appears from the examination of the skull. Judging from the number of specimens sent to the Museum, this species appears to be common on the hills.

30. *SOREX? NEMORIVAGUS*, Hodgs. Ann. & Mag. Nat. Hist. xv. 269; Coll. J. N. H. iv. 288; Gray, Cat. H. Coll. p. 10.

Sorex nemorivagus, ap. Blyth, Mem. on Ind. Shrews, J. A. S. 1855, p. 31.

A species by no means clearly determined. The specimens sent defective.

31. *SOREX PYGMÆUS*, Hodgs. Ann. & Mag. Nat. Hist. xv. 269; Gray, Cat. H. Coll. p. 16.

“Structure typical, save that no odorous glands were detected, nor had the animal any musky smell.”—Hodgs. *loc. cit.*

32. *SOREX LEUCOPS*, Hodgson.

In Mr. Hodgson's list, accompanying his present, this is marked as a new species.

Colour uniform blackish-brown; tail very slender and tapering, exceeding in length the body and head together, terminating with a whitish tip of half an inch long. It is named White-lipped, but this character does not appear in the specimen sent. It appears to be a distinct species, but further specimens and examinations are required to determine its rank.

Length of the body and head 3 inches, of the tail $3\frac{1}{4}$ in.

The distinguishing character is the comparative length of the tail and its white tip. It resembles the *caudatus*, but the colour is darker, and the single specimen examined is not furnished with the delicate hairs on the sides of the snout which exist in the *S. caudatus*.

Note.—The *Sorex sikimensis*, Hodgs. Ann. & Mag. Nat. Hist., N.S., vol. iii. p. 203; Cat. Mamm. Mus. E. I. C. p. 136, has, on a more accurate examination of its skull and other characters, been determined to be identical with *Corsira nigrescens*, Gray, Ann. & Mag. Nat. Hist. x. 261. In the Catalogue of Hodgson's Coll. p. 17, Dr. Gray gives the following synonyms of this species:—*Sorex? soccatus*, Hodgs. Ann. & Mag. Nat. Hist. xv. 270, and

Cat. Journ. Nat. Hist. iv. 288; and *Sorex aterrimus*, Blyth, Journ. As. Soc. Beng. vol. xii. 1843, p. 928? The latter species is not enumerated in Blyth's Memoir on Indian Shrews, J. A. S. B. 1855; but the *Corsira nigrescens* is defined here as *Soriculus nigrescens*, Blyth, with the synonym of *Corsira nigrescens* and *Sorex sikimensis*. The *Sorex soccatus* of Hodgson, Ann. & Mag. Nat. Hist., is enumerated by Mr. Blyth as a distinct species.

33. *MUS TARAYENSIS*, Hodgson.

Nearly allied to *Mus brunneusculus*, Hodgson, Ann. & Mag. Nat. Hist. xv. 267.

Colour of the body and head above dark brown, delicately variegated with blackish and rufous hairs; a very slight gloss on the surface. Outer sides of the extremities rather darker. Under parts from the chin to the vent, and inner parts of the extremities greyish-brown, with a rusty shade. Tail shorter than the body, tapering to an abrupt tip. Head lengthened and compressed; muzzle gradually tapering to an abrupt tip.

Distinguishing character.—A dark brown surface with a slight gloss. Head lengthened. Tail shorter than the body. Underneath rusty-grey.

Mr. Hodgson's collection contains only a single specimen, and further observations are required to confirm the distinctness of this species.

34. *MUS FLURIMAMMIS*, Hodgson.

Colour above brown, with a rufescent shade; fur soft, consisting of brown and rufous hairs intermixed in equal proportions, forming a uniform upper surface; a rather obscure band extending from the gape over the cheek, terminating under the ears, and the abdomen and adjoining parts rufous-grey. Head proportionately short, muzzle abrupt; ears moderate. Tail equal in length to the body, tapering to a sharp point, and minutely annulated.

Length of the head $2\frac{1}{2}$ inches, of the body from the neck to the vent $5\frac{1}{2}$ in.; of the tail the same.

The distinguishing character, according to Mr. Hodgson, rests on the number of teats, exceeding that of other species.

35. *MUS MORUNGENSIS*, Hodgson.

Hairy covering of the body above minutely striated with black and rufous hairs, nearly equally mixed, giving the animal a blackish rufous aspect; abdomen and extremities paler, rufescent-grey. Body proportionately robust and stout; head large

and thick; muzzle short and abrupt; ears large and rounded; tail cylindrical, gradually tapering to the point and delicately annulated, equal in length to the body and head together. Fur above soft; hairs more lengthened than in *Mus plurimammis*, rufous and brown intermixed, the former predominant.

Dimensions.—Head $1\frac{1}{2}$ inch; body 3 inches; tail $4\frac{1}{2}$ in.

Distinguishing character.—A large truncated head, robust body, long, tapering and minutely annulated tail. General colour rufescent-black.

36. *ARCTOMYS TIBETANUS*, Hodgs. J. A. S. xii. 409.

In presenting this animal to the Museum, Mr. Hodgson gave us personally the following remark respecting the two species of this genus described by him, and their respective specific names and localities:—"The *Bobac*, *Arctomys himalayanus*, Hodgs., *A. Bobac*, Schreb., is found only in the higher regions of Tibet, while the *A. tibetanus*, Hodgs., inhabits exclusively the lower regions of Himalaya; but inadvertently the respective locality of the two species has been alternated in my descriptions."

Among the Squirrels sent by Mr. Hodgson there are several specimens of the *Sciurus M'Clellandii*, Horsfield, Proc. Zool. Soc. 1839, p. 152, which was discovered by J. M'Clelland, Esq., in his visitation to Assam as a member of the deputation on the Tea-plant, and described in the Report of his contributions of Mammalia and Birds to the Company's Museum. It is thus described:—

SCIURUS M'CLELLANDII, Horsfield. Supra fuscus fulvo tenuissime irroratus notæo saturatiore; subtus ex sordido fulvo-canescens; dorso summo linea recta atra; linea insuper utrinque laterali fusca læto fulvo marginata, antice saturatiore, ad oculos extensa, postice obsoleta in uropygio utrinsecus approximata; cauda mediiori subcylindrico-attenuata nigro fulvoque variegata; auriculis atris barba nivea lanuginosa insigni circumscriptis; vibrissis longis nigris.

In the specimens contained in Mr. Hodgson's collection, the colour on the upper parts is brownish-grey, with a slight rufescent shade, rather deeper on the back, minutely grizzled with brown and blackish hairs; all the under-parts are fulvescent-yellow: on the middle of the back from the neck to the rump is a deep black stripe, and somewhat lower a brownish-black stripe of the same extent, adjoining which, on each side, is a yellowish-white stripe, commencing at the tip of the nose and extending along the sides to the rump, gradually narrower towards its termination. Ears large, black exteriorly, delicately

fringed with white on the posterior border. Tail tapering, variegated with black and rufescent hairs. Whiskers long and black.

Dimensions.—Head $1\frac{1}{2}$ inch; body 3 inches; tail 3 in.

This species, although provisionally arranged in the genus *Sciurus*, resembles in its external habit, markings, attenuated tail, and minutely fringed ears, the American genus *Tamias*, and it remains for naturalists in the higher regions of India, who may examine living specimens, to determine whether it has cheek-pouches, by which *Tamias* is distinguished from *Sciurus*.

Mr. Hodgson's collection contains a large supply of most of the Indian UNGULATA: many of these have been discovered, and first described by himself, and are known to naturalists chiefly by the copious details given in the Journal of the Asiatic Society of Bengal, and by Dr. J. E. Gray's Catalogue of the collection presented to the British Museum. Among the subjects as yet rare in collections may be mentioned *Poëphagus grunniens*, Linn., adult and one calf., *Porcula salvania*, Hodgs., and *Budorcas taxicolor*, Hodgs.* Of the latter, Mr. Hodgson has some three specimens, on the whole in good preservation; one of these is exhibited in the Museum of the East India Company, one has been presented to the British Museum, and one to the Museum at Leyden. A very perfect specimen of the *Cervus affinis* of Hodgson has also been sent, and is mounted in the Museum. Whether this be really a distinct species from *Cervus Wallichii* of Cuvier remains still to be determined; the horns of both agree in structure and subdivisions. Dr. Gray has given most copious details regarding the various, multifarious synonyms with which they are enumerated by authors (Cat. Mamm. Brit. Mus. Part iii. Ungulata furcipes, pp. 197 & 199).

X.—On the *Assiminia Grayana* and *Rissoa anatina*.

By WILLIAM CLARK, Esq.

To the Editors of the *Annals of Natural History*.

GENTLEMEN,

Exmouth, 26th June 1855.

I BEG to present descriptions of two testaceous Gasteropoda, which could not be obtained during the passage through the press of my volume on the British Marine Testaceous Mollusca. One of them, the *Assiminia Grayana*, is of peculiar interest, and has caused much discussion and difference of opinion

* These three interesting animals have been figured in the Illustrations of the Proc. Zool. Soc. for 1853.