

from it in the form and length of the head, in the markings on the head and neck, and in having a more depressed shell.

This Terrapin (*Emys fuliginosa*) differs so much in the form of the jaws, that it is necessary to consider it the type of a new genus, characterized by the depth and length of the groove of the upper jaw, and the sharp simple edge of the lower jaw. It may be called

MAUREMYS.

The head elongate, covered with a smooth skin; nose with the nostrils near the upper edge; crown flat; eyes lateral, large, and very prominent; pupils circular.

Upper beak high, lower edge slightly arched, with an acute notch in the centre.

Lower beak convex, rounded below in front, scarcely reaching the angle of the mouth.

Palate slightly concave; inner nostrils near the middle of the palate, oblong, with a concavity behind each; alveolar edge of the upper jaw with a deep groove, with a strong acute ridge on the underside, extending nearly the whole length of the margin. The alveolar edge of the lower jaw sharp and narrow, broader, shelving inwardly in front.

(1) MAUREMYS FULIGINOSA.

Emys fuliginosa, Gray, Proc. Zool. Soc. 1860, p. 223, t. xxx.

(2) MAUREMYS LANIARIA.

4. Report on two Collections of Indian Reptiles.

By Dr. ALBERT GÜNTHER, F.R.S., F.Z.S.

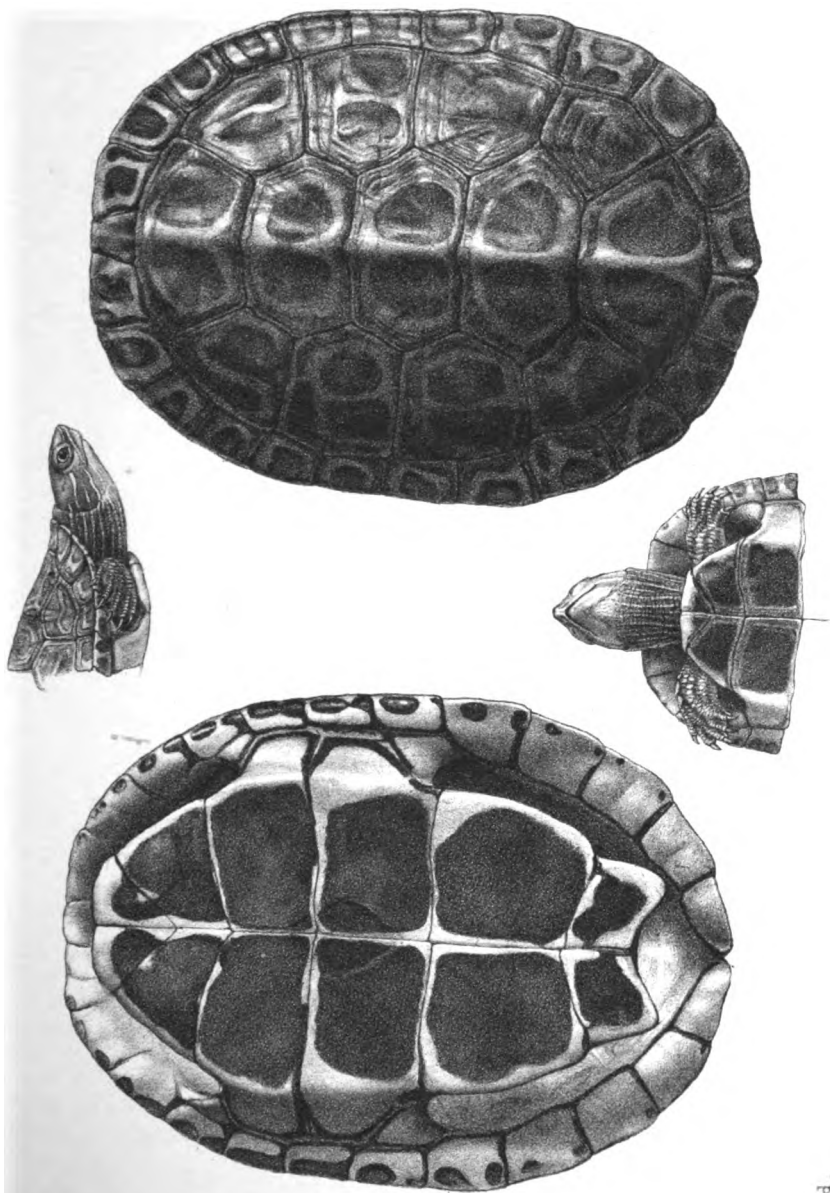
(Plates XXXVIII., XXXIX., XL.)

The British Museum has lately received two most valuable collections of Indian Reptiles. One was presented by Dr. A. H. LEITH, who collected for a number of years at several localities, of which the following require notice:—

1. Deesa, a military station in Ghozerat.
2. Matheran, a hill 2500 feet high, thirty miles east of Bombay.
3. Mahabuleshwur, 4500 feet above the level of the sea, some fifty miles south of Bombay.
4. Kotree, on the western bank of the Indus, opposite to Hyderabad.

This collection contained, beside several of the most common Reptiles, sixty-four species (most of them in numerous examples), which are enumerated in the following list. Four are undescribed.

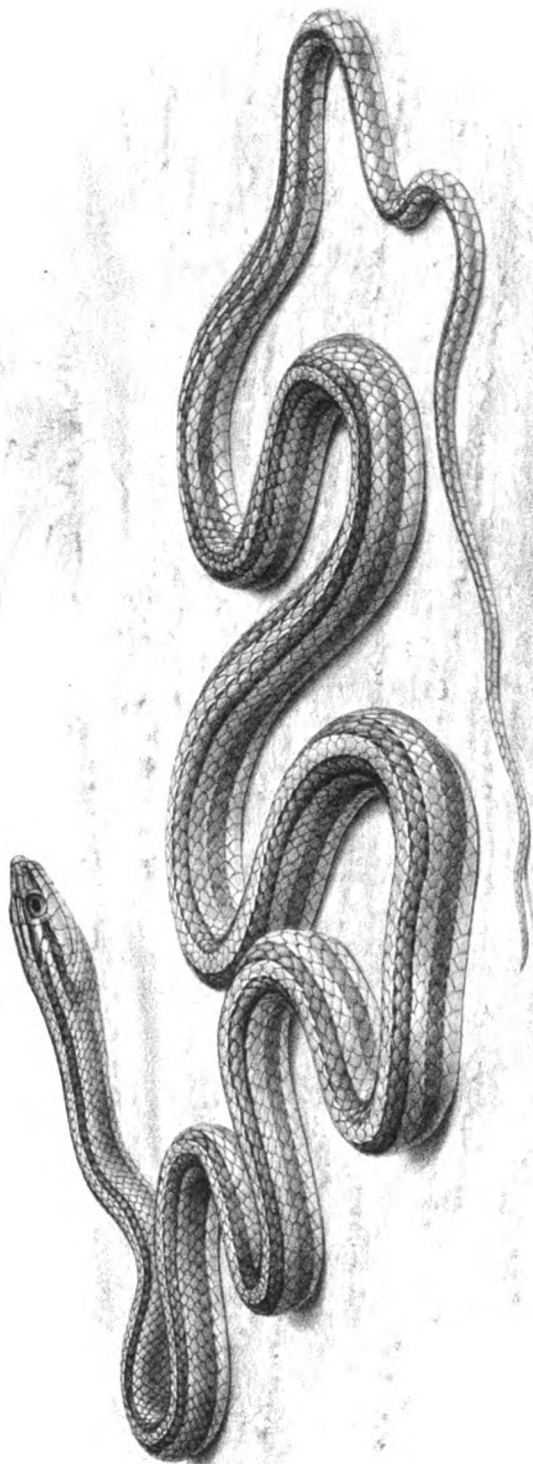
The second collection was made by R. H. BARNES, Esq., in Ceylon. I do not give a list, as it would not advance our previous knowledge



Emys grayi.

G. H. Ford.

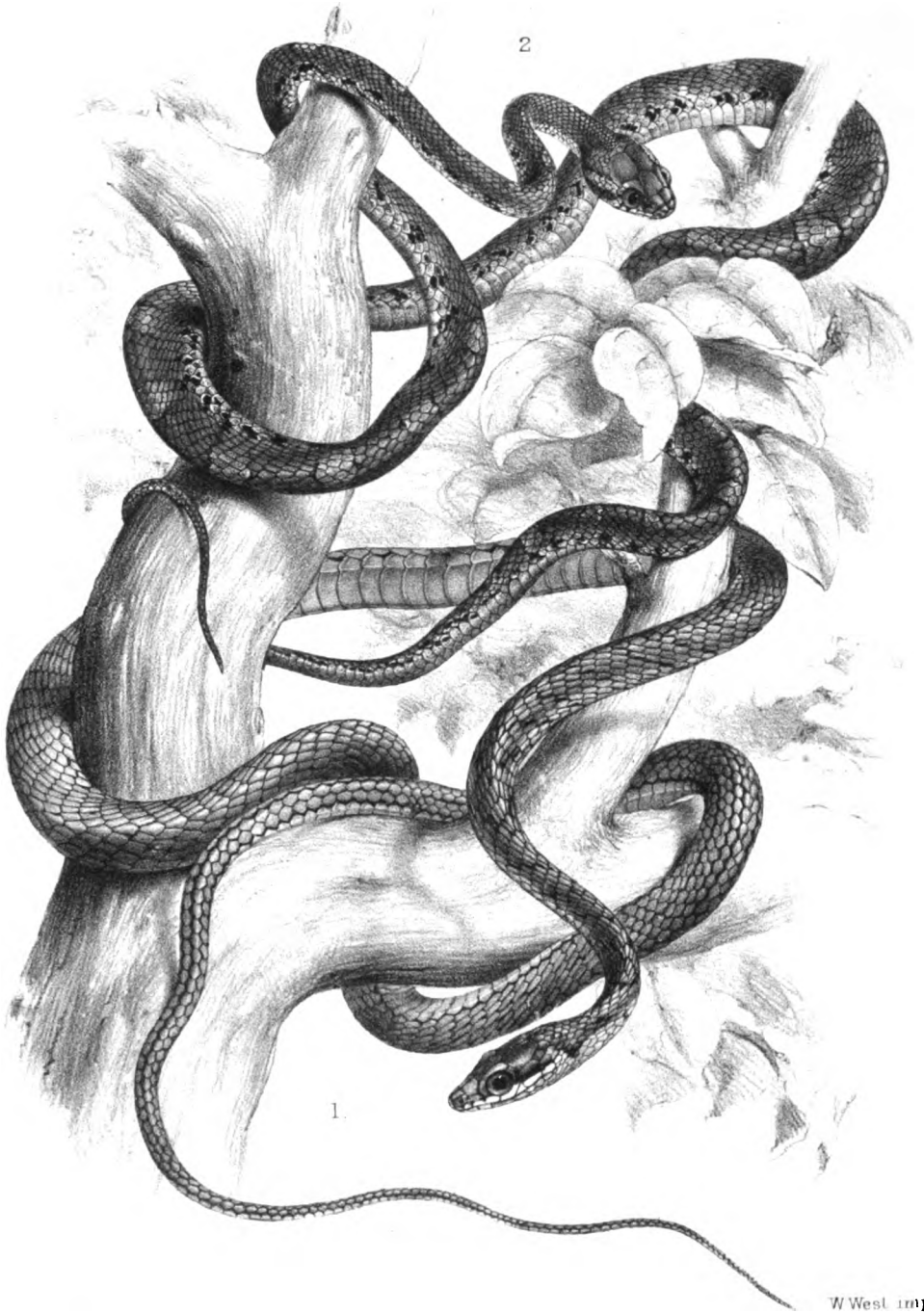
West. rep.



C. H. Ford lith.

Psammophis leithii.

W. West imp.



G H Ford

1. *Dendrophis caudolineolata*.
2. *Dipsas barnesii*.

of the geographical distribution of known species. Singularly enough two of the Snakes proved to be undescribed, showing that the zeal of a collector is rewarded even in localities apparently well explored.

I. *List of the Species collected by Dr. Leith.*

1. *Testudo elegans*, Schoepff. Sindh.
2. *Testudo leithii*, sp. n. Sindh.
3. *Emys thurgi*, Gray. Indus.
4. *Emys grayi*, sp. n. Bussora.
5. *Emys trijuga*, Schweigg.
6. *Pangshura tecta*, Gray. Deesa.
7. *Pangshura smithii*, Gray. Indus.
8. *Emyda granosa*, Schoepff. Bombay.
9. *Aspilus carinatus*, Gray. Poona.
10. *Gavialis gangeticus*, Gm. Indus.
11. *Varanus dracena*, Shaw. Matheran, Goozerat.
12. *Euprepes rufescens*, Shaw. Bombay.
13. *Eumeces punctatus*, L. Matheran, Belgaum, Bombay.
14. *Eumeces hardwickii*, Gray. Matharan, Belgaum, Bombay.
15. *Chiumela lineata*, Gray. Matharan, Belgaum.
16. *Hemidactylus sykesii*, Gthr. Matharan, Poona.
17. *Hemidactylus coctæi*, D. et B. Bombay.
18. *Hemidactylus leschenaultii*, D. et B., var. Poona.
19. *Hemidactylus maculatus*, D. et B., var. Bombay.
20. *Gymnodactylus deccanensis*, Gthr. Matharan.
21. *Eublepharis hardwickii*, Gray.
 Var. *hardwickii* (Gray). Kandesh.
 Var. *fasciolata* (Gthr.). Sindh, Kurrachee.
22. *Calotes rouxi*, D. et B. Matheran.
23. *Calotes versicolor*, Daud. Sindh, Belgaum.
24. *Teratolepis* (g. n.) *fusciata*, Blyth. Sindh.
25. *Onychocephalus acutus*, D. et B. Matheran, Belgaum, Bombay.
26. *Typhlops braminus*, Daud. Matheran.
27. *Typhlops exiguus*, Jan*. Belgaum.
28. *Stenostoma macrorhynchum*, Jan*. Sindh.
29. *Silybura macrolepis*, Ptrs. Matheran.
30. *Silybura elliotti*, Gray. Bombay.
31. *Oligodon subgriseus*, D. et B. Kurrachee, Sindh.
32. *Oligodon fasciatus*, Gthr. Matheran.
33. *Simotes russellii*, Daud. Bombay, Deesa.
34. *Ablabes humberti*, Jan. Bombay, Matheran.
35. *Cyclophis nasalis*†, Gthr. Matheran.
36. *Cynophis malabaricus*, Jerdon. Matheran.
37. *Ptyus mucosa*, L. Bombay.
38. *Zamenis ventrimaculatus*, Gray. Busheer, Kurrachee, Sindh.
39. *Zamenis diadema*, Schleg. Kotree (Sindh).
40. *Tropidonotus quincunciatus*, Schleg. Bombay.

* I am indebted to Prof. Peters for the determination of these two species.

† One præocular only, but ventrals 150-160.

41. *Tropidonotus stolatus*, L. Bombay.
42. *Tropidonotus plumbicolor*, Cant. Poona, Matheran.
43. *Psammophis condanarus*, Merr. Kotree.
44. *Psammophis leithii*, sp. n. Sindh.
45. *Dendrophis picta*, Gm. Matheran.
46. *Passerita mycterizans*, Gray. Matheran, Mahabuleshwur.
47. *Dipsas forsteni*, D. et B. Matheran.
48. *Dipsas trigonata*, Schneid. Bombay, Kurrachee.
49. *Dipsas ceylonensis*, Gthr. Bombay Presidency.
50. *Lycodon aulicus*, L. Matheran, Bombay.
51. *Gongylophis conica*, Schneid. Sindh.
52. *Eryx johnii*, Russ. Belgaum.
53. *Bungarus cæruleus*, Schneid. Bombay, Matheran, Sindli.
54. *Hydrophis cærulescens*, Shaw. Bombay.
55. *Hydrophis fasciata*, Schneid. Bombay.
56. *Pelamys bicolor*, Schneid. Bombay.
57. *Trimeresurus gramineus*, Shaw. Matheran.
58. *Hypnale nepa*, Laur. Belgaum.
59. *Daboia russellii*, Shaw. Bombay.
60. *Echis carinata*, Schneid. (= *arenicola*, Boie). Sindli, Kurrachee, Mahabuleshwur, Deesa; Bushire.
61. *Rana cyanophlyctis*, Schneid.
62. *Diplopelma ornatum*, D. et B.
63. *Hylorana malabarica*, D. et B. Matheran.
64. *Polypedates maculatus*, Gray. Matheran, Bombay.

II. Descriptions of New Species discovered by Dr. Leith.

TESTUDO LEITHII.

Form.—Shell broadly ovate, broader posteriorly than anteriorly, very convex above, especially on the hinder half; the lateral margins straight, slightly convergent. Its greatest width is rather more than its greatest depth, which is one-half of its length. *The convexity of the upper shell extends to the caudal plate only, which is almost flat and inclined outwards, so that the outline between the last vertebral and the caudal is concave. The upper shell is deeply notched anteriorly.* The sternum is truncated in front, and has a shallow, obtuse-angular incision behind. Posterior margin of the shell slightly serrated.

Plates.—The plates are rather smooth, with the concentric striae distinct. The areolæ of the three anterior vertebral plates are near the posterior margin. Nuchal plate triangular, pointed in front. The last vertebral as broad as the caudal. The two gular plates together broader than long, the sum of their posterior angles being nearly equal to a right angle. Abdominals as long as pectorals, postgulars, and gulars together. The suture between the anal plates as long as their posterior margin. Inguinal and axillary plates of moderate size.

Tail formed by twenty-two vertebrae.

Feet.—Claws 5/4, obtuse. The front of the forearm is covered

Fig. 1.



Fig. 2.

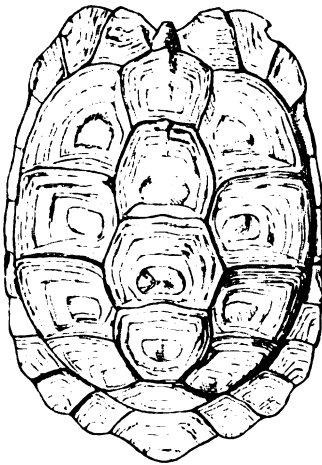


Fig. 3.

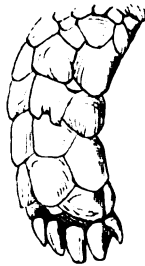
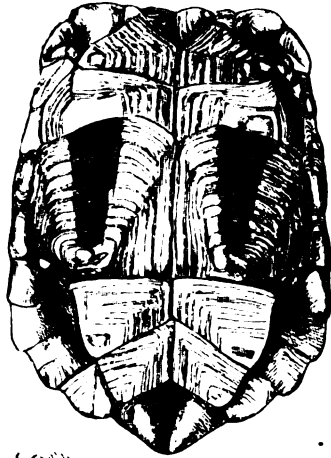


Fig. 4.

Testudo leithii.

- Fig. 1. Side view; half nat. size.
 2. Upper view; half nat. size.
 3. Lower view; half nat. size.
 4. Fore foot; nat. size.

by about fifteen large, smooth, imbricate, obtusely pointed scales, in five transverse series of three each.

Colour yellow, each of the vertebral and costal plates with a black margin in front and on the sides, but without black on the hinder margin. Each marginal plate with a black margin in front. Sternum entirely yellow, with a broad cuneiform longitudinal black band in the middle of each abdominal plate.

The shell of the single specimen, obtained in Sindh, is $4\frac{3}{4}$ inches long. Also the limbs and the skull are preserved.

EMYS GRAYI. (Plate XXXVIII.)

Form.—Shell much depressed, with an obtuse median ridge along all the vertebral plates; no costal ridge (in the adult). The upper shell is subtruncated anteriorly, and provided with a very small notch posteriorly. Lateral margins slightly reverted, posterior not serrated. Width of the sternum between the axillary and inguinal incisions equal and more than one-half of its length. Sternum truncated in front, and with a deep, obtuse-angular incision behind.

Plates.—The areolæ have di-appeared, but there is still a large fontanelle visible in the middle of the sternum. Nuchal plate broad, quadrangular, broader behind than in front. All the vertebrae broader than long; the first quadrangular, with the front margin convex, and with the hinder straight. Caudal plates nearly square. Gulars longer than broad, the suture between them being much longer than that between the postgulars. Postgulars, pectorals, and abdominals nearly equally long, but much shorter than præanals. The suture between the anals is rather shorter than their posterior margin. Axillary and inguinal plates large.

Colour.—Upper parts chestnut-brown, each vertebral and costal plate with an 8-like yellow figure; each marginal plate with a yellow 0-like figure, the enclosed brown spot lighter in the centre. The flat portion of the sternum brownish black, each plate with a narrow yellow margin. Each marginal plate with a narrow black margin on the lower side, and with a larger or smaller round black spot.

The shell of a single example, $3\frac{5}{8}$ inches long, was obtained at Bussora*.

TERATOLEPIS, g. n.

Form of the head geckoid, covered with small non-imbricate scales. Apparently no external ear. Trunk somewhat depressed, covered with imbricate scales, those on the back being keeled, of moderate size, and about twice as large as those on the abdomen. Legs well developed; five clawed toes in front and behind; each toe

* Whilst this paper was passing through the press, Dr. Gray directed my attention to a young example in the British Museum obtained on the Euphrates Expedition. It is preserved in spirits, the shell being $1\frac{1}{4}$ inch long. The shell is coloured as in the adult, but provided with a distinct costal ridge. Neck with numerous parallel yellow longitudinal bands, some of which advance along the side of the head to the tip of the snout. Legs and tail (which is $1\frac{1}{4}$ inch long) with yellow stripes. Toes broadly webbed.

dilated, with a double series of rounded lamellæ below, the last phalanx being free. Tail about as long as the trunk, thick and flattened at the base, and tapering behind; it is covered with imbricate irregular scales, those on the upper surface being very large, much larger than the under ones.

TERATOLEPIS FASCIATA.

Homonota fasciata, Blyth, Journ. As. Soc. Beng. xxii. p. 468.

Back grey, with five brown longitudinal bands, which at regular intervals are interrupted by white spots, the spots of the same level forming a cross band; there are seven of those cross bands on the neck and trunk. Tail brown above, with whitish transverse spots. Lower parts whitish, tail with brown spots below.

Length of the head $\frac{1}{2}$ inch, of trunk 1 inch, of tail 1 inch, of fore leg $\frac{5}{8}$ inch, of hind leg $\frac{6}{8}$ inch.

Unfortunately there is one example only in Dr. Leith's collection, from Sindh; and this is in a very bad condition, having the head crushed, and having been dried before it was put in spirits. However, the imbricate scales and the white cross bands are characters by which the example could be determined as a Lizard referred by Mr. Blyth* to *Homonota*, a South-American genus with narrow toes and without the double series of lamellæ. It could be predicted that *Homonota* was not the correct place for this Lizard; but as the author did not mention anything about the structure of the toes, it was not possible to assign it to its proper place. It is one of those aberrant Geckoid forms with imbricate scales of which two other genera have been described within the last few years (*Teratoscincus* of Strauch, and *Geckolepis* of Grandidier); from both it is readily distinguished by important structural characters.

CYNOPHIS MALABARICUS.

A specimen was found by Dr. Leith, 51 inches long; it is much less beautifully coloured than younger examples, the white spots having disappeared, and only the black markings remaining.

PSAMMOPHIS LEITHII. (Plate XXXIX.)

Body slender; head rather narrow and pointed, distinct from neck; eye of moderate size. Rostral shield as high as broad; anterior frontals small, subtruncated in front; posterior frontals rather longer than broad. Vertical narrow, elongate, bell-shaped; nasal?; loreal large, elongate. One concave præocular, which reaches the vertical; two postoculars. Eight upper labials, the fourth and fifth entering the orbit. Temporals 1+2+3. Scales lanceolate, smooth, in seventeen rows. Ventrals 168, not keeled; anal entire; subcaudals 98. Ground-colour of the upper parts light reddish olive; trunk with four brown longitudinal bands edged with black; the two middle (dorsal) bands extend forwards to the end of the snout, run-

* I have to apologize to Mr. Jerdon for having assigned the determination and description of "*Homonota fasciata*" to him instead of to Mr. Blyth, who intercalated it into a paper of Mr. Jerdon's (Rept. Brit. Ind. p. 99).

ning along the occipital and supraocular shields; a narrow brown line along the median line of the vertebral shield and occipital suture. The dorsal bands of the trunk are confluent into one on the tail. The lateral band runs from the nostril along the loreal, through the eye, occupying the second outer series of scales and the adjacent halves of the nearest series; it gradually disappears on the tail. The lower half of the outermost series of scales and the abdomen white; lower labials, throat, and foremost ventrals slightly marbled with blackish.

A single example, with the head much damaged, has been obtained in Sindh; it is $26\frac{1}{2}$ inches long, the tail being $8\frac{1}{2}$ inches, and the head $\frac{3}{4}$ inch.

III. *Descriptions of Species discovered by Mr. Barnes.*

DENDROPHIS CAUDOLINEOLATA. (Plate XL. fig. 1.)

This is the Ceylonese representative of *D. caudolineata*. Scales in thirteen rows, those of the vertebral series conspicuously larger than the others. Head as in *D. picta*; eye rather large. Loreal longer than high. The præorbital touches the vertical; occipitals obtusely rounded behind. Two postoculars. A large temporal shield in contact with the postoculars. Eight upper labials, the fourth and fifth entering the orbit. Ventrals 149, strongly keeled; anal bifid; subcaudals 125. Brownish, with green metallic lustre; sides of the anterior part of the trunk with oblique narrow black streaks; every second and third ventral shield with a blackish line on the upper margin; these markings are confluent into a black line on the hinder part of the trunk and tail; a pair of similar dorsal lines make their appearance in the same region as the lateral, running along the back of the tail; a black line along the meeting edges of the subcaudals, and indistinctly continued for some distance along the median line of the abdomen. A horizontal black temporal streak.

Mr. Barnes obtained one example, 24 inches long; and a second smaller one was purchased for the British Museum a short time ago.

DIPSAS BARNESII. (Plate XL. fig. 2.)

Body much compressed and very slender; head broad, depressed, short; neck very slender; eye rather large. Palatine teeth not enlarged; the last maxillary tooth feeble but grooved. Loreal as high as long; three præoculars, the uppermost not reaching the vertical; two postoculars. Eight upper labials, the fourth and fifth entering the orbit. Temporals numerous, scale-like. Scales in nineteen rows, those of the vertebral series not quite twice the size of those in the series adjoining. Ventrals 219; anal entire; subcaudals 98. Dark grey, finely powdered with brown; irregular brown band-like markings on the back, and irregular black spots along the lower part of the sides; abdomen finely mottled with brown. Head dark brown above; a dark band from the eye to the angle of the mouth; throat white.

One example, 23 inches long, was obtained by Mr. Barnes.

CALOTES NEMORICOLA, Jerdon.

An example brought by Mr. Barnes from Ceylon agrees well with the description given by Mr. Jerdon, who obtained his examples from the Nilgherries.

5. Note on *Ailurus fulgens*.

By B. SIMPSON, M D.

(Plate XLI.*).

Ailurus fulgens is called by the Bhoteahs *Wook Dongka*, and by the Lepchas *Sincün*; but the name "*Wah*," by which it is usually known to naturalists, I have never heard applied to it. Possibly this may be the Nepalese term, though I have never been able to ascertain it. It might be worth while to consult Mr. Hodgson on the point, as I believe he has described the animal. It is usually found at an elevation of about 7000 to 9000 feet above the sea, and lives chiefly in trees in dense forests. I have never succeeded in getting the specimens which I had to eat animal food in any shape. They were fed chiefly on milk and rice, and browsed freely on grass and bamboo-leaves. Rose-leaves and peaches seemed also to be a favourite food with them. They drank the milk much more eagerly if a little sugar were mixed with it.

As far as I have been able to ascertain, this animal is unknown in the Himalayas of the North-west—but to my certain knowledge extends to the extreme east of the range, as in the beginning of 1868, when on the north-east frontier, I saw several natives (*Mishmees*) whose caps were made of the skin of the *Ailurus*. Dr. J. Anderson also informs me that skins were brought to him by the inhabitants of the countries through which he passed on his way to Bhamo, showing that it exists in those regions also. The animal's cry is very peculiar. When attacked or angry, it rises on its hind legs like a bear and emits a sound which can be very easily imitated by opening the mouth and drawing in the breath through the nose several times in quick succession; in fact it is a series of *snorts*, if I may use the expression. The usual cry of the animal, however, is quite different; it is very like the chirping of a bird, or a series of short whistles. The only other particular regarding the animal which I will here mention is its power of emitting a strong odour of musk when excited.

6. Additional Notes on the Genus *Ceyx*.

By R. B. SHARPE.

As I stated in my recent paper on this genus (P. Z. S. 1868, p. 587), I had been in correspondence with Count Salvadori, of

* The figure is taken from Mr. Wolf's drawing of the individual brought home by Dr. Simpson, and now living in the Society's Gardens (Nov. 11th).—P. L. S.