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REPTILES and BATRACHIANS.

By G. A. Boulenger, Assistant in the Zoological Department, British Museum.

REPTILIA.

CHELONIA.

1. Testudo horsfieldii, Gray.

Testudo horsfieldii, Gray, Cat. Tort. &c. 1844, p. 7; Blanford, E. Pers. ii. p. 308.

12 specimens. Gulran, Badghis.

[Local names *Kashif, Kashaf, Sang-toti, Sang-pusht, Lach-pusht, Tosh-bakke, Shamshatu.*

Along the entire march from Quetta to Pahir (13th November, 1884) the remains of Tortoises were seen; at the latter place the first live specimen was got, living in a dry water-course, full of limestone débris, the disintegration of the surrounding rocks and hills, in a locality utterly devoid of vegetation, as far as I could see, and where I should never have expected to find any animal. On the 23rd February, in our march from a camp without name to Gulran, numbers of the empty shells of Tortoise eggs were seen lying on the sides of several streams, as if washed there by floods, the eggs in all probability having been emptied in the first place of their contents by rats.

Whilst at Gulran early in March, numbers were noticed wandering over the great rolling plains, the warmth of spring having enticed them from their winter-quarters, and there was herbage sufficiently grown to prevent their being easily detected. It is curious to note that out of the large number I saw and collected, I only got one species. I do not recollect, nor have I noted, ever having seen a single specimen in that part of Khorasan over which I travelled.—J. E. T. A.]

LACERTILIA.

2. Teratoscincus scincus (Schleg.). (Plate VIII. fig. 1.)

Teratoscincus keyserlingii, Blanford, *tom. cit.* p. 354.
Teratoscincus scincus, Boulenger, Cat. Liz. i. p. 12.

The specimen measures 200 millim., in which the tail enters for 77. Cream-coloured, with a few black spots on the back, and four brick-red longitudinal bands; three blackish vertical bars down the lips on each side.

[One specimen only of this rare Lizard was picked up, on the 17th May, 1885 (no. 325), amongst stones on the banks of the Hari-rud river near Tirphul. This would give as its known area the country between Lash-Jowain, Karman and Tirphul.—J. E. T. A.]

3. Stenodactylus lumsdenii. (Plate IX. fig. 1.)

Stenodactylus lumsdenii, Boulenger, Cat. Liz. iii. p. 479.

Snout much longer than the diameter of the orbit, or the distance between the latter and the ear; forehead very slightly concave; ear-opening vertically oval, one third the

diameter of the eye. The fore limb, stretched forwards, reaches the tip of the snout; the hind limb reaches the shoulder. Digits slender, shortly fringed laterally, with feebly tricarinate inferior lamellæ. Head covered with small granules, intermixed with enlarged ones on the vertex, the occiput, and the temples; rostral quadrangular, nearly as broad as long, with median cleft above; nostril pierced between the rostral, the first labial, and two nasals; ten upper and nine lower labials; mental trapezoid, broader than long; no chin-shields; gular granules minute. Back covered with small granules intermixed with oval, very feebly keeled tubercles, forming about twelve irregular longitudinal series. Ventral scales small, smooth, subhexagonal, imbricate. Tail cylindrical, slightly depressed, verticillate, with subequal feebly keeled scales. Sand-coloured above, with seven darker bands across the body, and dark brown bands across the tail; head marbled with dark brown; a dark brown band from the eye to above the ear; lower surfaces white.

	millim.		millim.
Total length	78	Fore limb	16
Head	12	Hind limb	21
Width of head	7	Tail	42
Body	24		

Nearest *S. orientalis*, Blanf., from which it differs by the much longer snout, longer limbs, larger and more numerous dorsal tubercles, smooth ventral scales, &c.

[One specimen only of this new species was collected in Northern Baluchistan between Nushki and the Helmand.—J. E. T. A.]

4. Alsophylax tuberculatus (Blanf.).

Bunopus tuberculatus, Blanford, *tom. cit.* p. 348.
Alsophylax tuberculatus, Boulenger, *op. cit.* i. p. 20.

[One specimen only was obtained on the march down the Helmand between Hadj-ali and the Hamun.—J. E. T. A.]

5. Agamura persica (A. Dum.). (Plate IX. fig. 2.)

Agamura persica, Blanford, *tom. cit.* p. 358; Boulenger, *tom. cit.* p. 51.

These specimens show the differences between *A. persica* and *A. cruralis*, Blanford, to be less important than was hitherto believed. The following notes are taken from the specimens collected by Dr. Aitchison:—

The fore limb being stretched forwards, the wrist reaches the tip of the snout, or halfway between the latter point and the eye; the hind limb reaches the ear, or halfway between the ear and the eye, or (in a young male) as far as the eye. Rostral twice or not twice as broad as high, completely divided into two, entering or not entering the nostril; 12 to 14 upper and 9 to 12 lower labials; mental not twice as broad as long, sometimes with a shield on each side between it and the second infralabial. The enlarged dorsal tubercles sometimes keeled and subtrihedral. Numerous enlarged tubercles on the hind limbs. Male without or with two præanal pores.

[Three specimens of this species were collected on our marches along the Helmand. Four specimens between the Hamun and Khusan, and one to the north of Herat. Blanford, at page 359, in distinguishing this species from *A. cruralis*, lays stress on its distribution, "found at a much greater height above the sea" . . . "at an elevation of at least 8000 feet"; my specimens were all collected at 2000 feet, if so much.—J. E. T. A.]

6. Agama isolepis, Blgr. (Plate X. figs. 1–3.)

Agama isolepis, Boulenger, *tom. cit.* p. 342.
Agama agilis (non Oliv.), Blanford, *tom. cit.* p. 314.

5 specimens. Nushki to Helmand.
2 specimens. Helmand.
9 specimens. North of Herat.

[This Lizard was common along our route from Nushki to the Hari-rud, and was generally found to occur throughout the Badghis.

It was usually seen at the very end of a dry branch, the highest and most exposed it could find, never more than six feet from the ground; here it basked in the sun, and attracted insects towards it by the changes it produced in the coloration of its head and neck, the rest of its body resembling in colour the dry twig to which it clung. It was easily killed and collected if struck at the first blow; while dying it showed various patches of coloration from deep indigo-blue to violet and purple, over such parts of its body as were usually light-coloured.

I never met with it on the ground, although in trying to escape it always made for some hole at the root of the bush on which it was first seen.—J. E. T. A.]

7. Agama sanguinolenta (Pall.).

Agama sanguinolenta, Boulenger, *tom. cit.* p. 343.

[One specimen only of this species was collected, and that on the 14th of March, 1885, at old Gulran, and was given to me by Mr. Chapman.—J. E. T. A.]

8. Agama caucasica (Eichw.).

Stellio caucasicus, Blanford, *tom. cit.* p. 322.
Agama caucasica, Boulenger, *tom. cit.* p. 367.

[Two specimens of this very handsome species were obtained at Bezd, Khorasan. One at Chinkiloh, Afghanistan.—J. E. T. A.]

9. Phrynocephalus olivieri, D. & B. (Plate VIII. fig. 2.)

Phrynocephalus olivieri, Blanford, *tom. cit.* p. 327; Boulenger, *tom. cit.* p. 370.

2 specimens. Quetta to Nushki.
22 specimens. Nushki to Helmand.
6 specimens. Helmand.
2 specimens. Hamun to Khusan.

[Owing to this being a very bright-coloured species and common along our whole route from Quetta to Khusan, I was well supplied with specimens.—J. E. T. A.]

10. Phrynocephalus ornatus. (Plate VIII. fig. 3.)

Phrynocephalus ornatus, Boulenger, Cat. Liz. iii. p. 496.

12 specimens. Nushki to Helmand.
2 specimens. Helmand.

Forehead convex and slightly sloping, with scarcely enlarged keeled scales; occipitals very feebly enlarged; supraocular scales a little smaller than median dorsals, imbricate, feebly keeled; nostril directed forwards and upwards; nasals very large and in contact mesially. Dorsal scales homogeneous, small and granular on the sides, enlarged, flat, imbricate, and feebly keeled on the back. Gular, pectoral, and ventral scales smooth or indistinctly keeled. Scales on upper surface of limbs feebly keeled. Digital fingers moderately developed, stronger on the outer side of the fourth toe than on the inner. Tibia much longer than the skull. The hind limb reaches beyond the snout. Tail nearly twice as long as the distance from gular fold to vent, strongly depressed at the base, roundish-depressed through the greater part of its length; except on the basal portion of the tail, the scales are keeled. Yellowish or yellowish grey above, with small grey or blackish specks and symmetrical markings; usually a few rose-coloured, purple-edged spots on the anterior part of the back and smaller orange ones on the hinder part; head with one or two orange transverse markings; usually a blackish or purplish-grey, straight-edged or festooned lateral band, which may be edged above with a yellowish-white band; a grey band along the hinder side of the thighs. Tail sometimes with regular elliptical brown or orange spots, above separated by a yellowish-white chain. Lower surfaces white; tail usually lemon-yellow, constantly with four or five black spots.

	millim.		millim.
Total length	92	Fore limb	21
Head	9	Hind limb	37
Width of head	9	Tail	53
Body	30		

This new Lizard is allied to *P. caudivolvulus* (Pall.), from which it is easily distinguished, besides other points, by having the nasals in contact.

[This beautifully coloured small species was very common between Nushki and the Helmand, and along the Helmand on the gravel plains, and always near bushes, to the roots of which it ran for shelter. It was very difficult to catch.—J. E. T. A.]

11. Phrynocephalus maculatus, And. (Plate IX. fig. 3.)

Phrynocephalus maculatus, Blanford, *tom. cit.* p. 331; Boulenger, *op. cit.* i. p. 377.

[This species was met with on the great gravel plains between Nushki and the Helmand, on the more exposed parts, where there were neither bushes nor stones. They hid by lying flat pressed upon the small gravel and sand, hoping from their coloration to evade detection.—J. E. T. A.]

12. Phrynocephalus luteoguttatus. (Plate VIII. fig. 4.)

Phrynocephalus luteoguttatus, Boulenger, Cat. Liz. iii. p. 497.

10 specimens. Between Nushki and Helmand.
3 specimens. Helmand.

Head much depressed; forehead convex, not sloping; upper head-scales small, obtusely keeled, not enlarged on the occipital region; nostril directed forwards and upwards; nasals in contact mesially; three or four series of scales between the orbit and the upper labials; none of the chin-shields in contact with the mental or the lower labials. Sides of head and neck with series of erect pointed scales. A fold along the flanks. Dorsal scales rather large, rhomboidal, obtusely keeled, intermixed with enlarged, flat, obtusely keeled ones; lateral scales smaller, equal. Gular, pectoral, and ventral scales smooth or very feebly keeled, ending in a point; median gulars nearly as large as ventrals. Scales on upper surface of limbs keeled. Digits strongly fringed, the fringe extremely strong on the outer side of the fourth toe. Tibia longer than the skull. The adpressed hind limb reaches the eye. Tail about as long as head and body, depressed throughout; caudal scales keeled. Yellowish brown or rufous above, with black dots and round pale yellow spots; the sides sometimes blackish; frequently a blackish streak along the outer side of the tibia; eyelids salmon-coloured. Lower surfaces white, belly sometimes pink; tail salmon-coloured, usually black at the end and with one to three black spots.

	millim.		millim.
Total length	82	Fore limb	22
Head	11	Hind limb	35
Width of head	11	Tail	41
Body	30		

The nearest ally of this new species is *P. interscapularis*, Licht., which is at once distinguished by having uniform dorsal scales, and the nasals separated from each other.

13. Ophisaurus apus (Pall.).

Pseudopus apoda, Blanford, *tom. cit.* p. 387.
Ophisaurus apus, Boulenger, Cat. Liz. ii. p. 280.

3 specimens. Bala-morghab.
2 specimens. Gulran.

[This snake-like Lizard was called by the natives Sag-mar (Dog snake) and Kor-mar (Blind snake). Although I collected few specimens, this Lizard was to be seen in any number during the whole summer all over the Badghis, the soft sandy loam of the country generally suiting it exactly, as well as the presence of numerous white ants which supplied it with food. I have seen it coiled near the exit of a white ants' nest devouring them as they came out, mouthful after mouthful; and as these ants were a little dilatory just as they were going to fly off, this was the opportunity for the *Ophisaurus* to sweep them into his gullet with his long tongue. The natives, though they know that it is innocuous, destroy it wherever they see it, as an "evil thing." I did not

collect it before we got to the Badghis, nor do I remember seeing it in the valley of the Hari-rud or in Khorasan. Lieut. Wright gave me my largest specimen at Balamorghab.—J. E. T. A.]

14. Varanus griseus (Daud.).

Psammosaurus caspius, Blanford, *tom. cit.* p. 359.
Varanus griseus, Boulenger, *tom. cit.* p. 306.

[Three specimens of this well-known and very handsome Lizard were collected, all in the valley of the Hari-rud. Two at Khusan and one at Buniad-khan.—J. E. T. A.]

15. Acanthodactylus cantoris, Gthr.

Acanthodactylus cantoris, Günth. Rept. Brit. Ind. p. 73; Blanford, *tom. cit.* p. 381; Boulenger, Cat. Liz. iii. p. 60.

6 specimens. Nushki to Helmand.
1 specimen. Helmand.

[This species was collected on the hillocks of pure sand, formed by drifting, that are so numerous in Northern Baluchistan, and on the route we traversed along the Helmand. —J. E. T. A.]

16. Eremias guttulata (Licht.).

Mesalina pardalis (non Licht.), Blanford, *tom. cit.* p. 377.
Eremias guttulata, Boulenger, Cat. Liz. iii. p. 87.

2 specimens. Quetta to Nushki.
2 specimens. Helmand.
1 specimen. Tirphul.

[From the above specimens the area of this Lizard would extend from Northern Baluchistan along the Helmand to the valley of the Hari-rud river.—J. E. T. A.]

17. Eremias velox (Pall.).

Eremias persica et *E. velox*, Blanford, *tom. cit.* pp. 370 & 374.
Eremias velox, Boulenger, *tom. cit.* p. 97.

2 specimens. Quetta to Nushki.
1 specimen. Helmand.
1 specimen. Toman-agha.
1 specimen. Gulran.

[This very bright and showily marked species seems to extend over a very varied condition of country and climate—from the sandy, stony, and barren soil and climate of Northern Baluchistan to the verdure-covered downs of the Badghis and its damper climate. In the latter country it is the prey of *Monticola saxatilis*.—J. E. T. A.]

18. Eremias fasciata, Blanf.

Eremias fasciata, Blanford, *tom. cit.* p. 374; Boulenger, *tom. cit.* p. 99.

[Only one specimen of this little-known species was collected on the Helmand.—J. E. T. A.]

19. Scapteira acutirostris. (Plate IX. fig. 4.)

Scapteira acutirostris, Boulenger, *tom. cit.* p. 114.

1 specimen (young). Nushki to Helmand.

Snout conical, acutely pointed; loreal region nearly vertical. Nasals slightly swollen, lower not reaching the rostral, upper forming a long median suture; frontal grooved anteriorly; three large supraoculars, forming sutures with one another; first supraocular in contact with the first supraciliary, the second loreal, the præfrontal, and the frontal; second and third supraoculars separated from the supraciliaries and from the frontal by a series of granules; two or three minute granules between the first and second supraoculars; a small, band-like posterior supraocular, separated from the others by granules; interparietal pentagonal; no occipital, parietals forming a suture behind the interparietal; no enlarged scales on the outer border of the parietals; temporal scales granular, smooth; no auricular denticulation; subocular not reaching the lip, resting on the fifth, sixth, and seventh upper labials; the three anterior pairs of chin-shields in contact; collar straight, the marginal scales feebly enlarged. Dorsal scales minutely granular, smooth, equal. Ventrals equilateral or longer than broad, in oblique longitudinal series; 35 transverse series, the longest of which contains about 20 plates. A very large præanal plate, about twice as broad as long. The adpressed hind limb reaches the posterior border of the orbit; foot as long as the distance between the arm and the anterior loreal; digits flattened, smooth or indistinctly keeled inferiorly, strongly fringed laterally; the ungual lamellæ much enlarged, forming a suboval disk; a series of large, transverse subtibial shields. 15–17 femoral pores. Upper caudal scales feebly keeled. Sand-coloured above, with blackish network; head with symmetrical black markings, lower surfaces white.

	millim.
From snout to vent	35
Head	10
Width of head	6·5
From end of snout to fore limb	15
Fore limb	14
Hind limb	25

This new species is allied to *S. grammica* (Licht.); differing by the large anterior supraocular, the absence of enlarged shield on the outer border of the parietals, the large præanal, and the much larger subtibial shields.

20. Ablepharus brandtii, Strauch.

Ablepharus brandtii, Strauch, Bull. St. Pétersb. xii. p. 367; Blanford, *tom. cit.* p. 391; Boulenger, *tom. cit.* p. 351.

[One specimen only of this species was collected on the Helmand. This extends

the range of this Scink from near Busrah *, "on the banks of the Shat-el-Arab" (the union of the Tigris and Euphrates), to the Helmand.—J. E. T. A.]

21. Eumeces schneideri (Daudin).

Eumeces pavimentatus, Blanford, *tom. cit.* p. 387.
Eumeces schneideri, Boulenger, *tom. cit.* p. 383.

[Of this species only two specimens are in my collection, one from the Helmand and the other got at Shore-kaltegai in the Badghis. The latter specimen was collected living with several others in hollows of rapidly disintegrating sandstone amongst the sand that lies at the bottom of these hollows. They are simply long rolls of fat, extremely inert, and what they can possibly get to live upon in the hollows they inhabit I cannot imagine. A fine series I had secured in the Badghis were lost.—J. E. T. A.]

22. Ophiomorus tridactylus (Blyth).

Sphenocephalus tridactylus, Blanford, *tom. cit.* p. 395.
Ophiomorus tridactylus, Boulenger, *tom. cit.* p. 394.

[Of this curious Lizard I only obtained one specimen, which was killed by Dr. Wier and given to me by Major Durand. It was found at an old fort called Nadir Ali, between De-kamran and De-doda on the Helmand, living in a sand-drift, into which it at once began to burrow on being aware of danger. The natives said that these Lizards are collected and eaten; but I doubted their being numerous enough for that.—J. E. T. A.]

OPHIDIA.

23. Typhlops persicus.

Typhlops persicus, Blanford, *tom. cit.* p. 399.

[Only one specimen of this little *Typhlops* was obtained, the exact locality for which is rather doubtful. I believe it was got in our camp at Chinkilok, north of Herat; if not there, certainly between that and the Sang-khotal pass. The latter locality is more like Blanford's, viz. hills, north-east of Sarjan, at 8000 ft. elevation.—J. E. T. A.]

24. Eryx jaculus (L.).

Eryx jaculus, Strauch, Schlang. d. Russ. Reichs, p. 29; Blanford, *tom. cit.* p. 401.

6 specimens. Bala-morghab.
1 specimen. Robat-i-turk.

[A very common species throughout the Badghis. Most of the specimens I kept were dug out of their winter-quarters in holes, in ridges between irrigation-channels, on the margins of fields. Occasionally several were found nestled together.—J. E. T. A.]

* Blanford, *t. c.* p. 393.

25. ZAMENIS RAVERGIERI (Mén.).

Zamenis ravergieri, Strauch, *tom. cit.* p. 127 ; Blanford, *tom. cit.* p. 417.

1 specimen. Tirphul.
1 specimen. Gulran.
1 specimen. Chinkilok.

26. ZAMENIS VENTRIMACULATUS (Gray).

Zamenis ventrimaculatus, Günth. Cat. Col. Sn. p. 105 ; Blanford, *tom. cit.* p. 414.

[One large specimen of this species was got at Bezd, Khorasan. The body was greatly injured, only the head and tail were therefore preserved.—J. E. T. A.]

27. ZAMENIS KARELINII (Brandt).

Zamenis karelinii, Strauch, *tom. cit.* p. 110.
Zamenis ventrimaculatus, part., Blanford, *tom. cit.* p. 414.

1 specimen. Helmand.
1 specimen. Tirphul.
1 specimen. Chinkilok.
1 specimen. Kilki.

28. ZAMENIS RHODORACHIS, Jan.

Zamenis rhodorachis, De Fil. Viag. in Persia, p. 356.
Zamenis ventrimaculatus, part., Blanford, *tom. cit.* p. 414.

[One very fine specimen of this Snake, splendidly marked with a bright red broad line down its back, was obtained at our second Gulran encampment, Badghis.—J. E. T. A.]

29. ZAMENIS DIADEMA (Schleg.).

Zamenis diadema, Günth. Rept. Brit. Ind. p. 412 ; Blanford, *tom. cit.* p. 412.
Zamenis cliffordii, Strauch, *tom. cit.* p. 106.

2 specimens. Quetta to Nushki.
1 specimen. Nushki to Helmand.
1 specimen. Tirphul.

[This very handsome Snake seems to be common from Northern Baluchistan to the valley of the Hari-rud.—J. E. T. A.]

30. LYTORHYNCHUS RIDGEWAYI. (Plate XI. fig. 1.)

Lytorhynchus ridgewayi, Boulenger, Ann. & Mag. N. H. (5) xx. 1887, p. 413.

2 specimens. Chinkilok.

Head small, distinct from neck ; snout pointed, strongly projecting. Rostral very large, four-sided, the lower side longer than the upper, deeply concave, the lateral sides angularly emarginate, concave, with a trace of a short longitudinal cleft ; the posterior angle wedged in between the pair of frontonasals, which form a short suture. A single præfrontal, twice and a half as broad as long. Frontal large, pentagonal, a little longer

than broad, its straight anterior border twice as long as the greatest width of the supraoculars. Parietals slightly longer than the frontal. The nostril is very indistinct; but, by pressing, fluid is expelled from the upper half of the oblique suture between the two nasals; of the latter shields the anterior is more than twice as large as the second. A small loreal. Three præoculars, upper largest and in contact with the frontal; a subocular; two or three postoculars. Seven upper labials, none in contact with the eye, three posterior largest. Two anterior temporals, upper smallest; three or four temporals in contact with the parietal. Six infralabials on each side in contact with the chinshields, the posterior pair of which is the smallest and separated by two pairs of scales. 19 rows of scales. Ventrals 174; anal divided in one specimen, single in the other; subcaudals 46 pairs. Upper surfaces pale buff, with brown, black-edged, symmetrical markings. An anchor-shaped marking on the head, the crescentic portion extending from one angle of the mouth to the other, passing through the eye and crossing the frontal and præfrontal; the longitudinal branch expands in a large spot on the middle of the parietals, and bifurcates on the nape. Large transverse spots disposed at regular intervals on the body and tail, and alternating with smaller ones on the flanks. Lower parts uniform white. Total length 425 millim.; tail 70.

[The only two specimens collected of this new species were obtained at Chinkilok on the 27th and 29th May, 1885.—J. E. T. A.]

31. Psammophis leithii, Gthr.

Psammophis leithii, Günth. Proc. Zool. Soc. 1869, p. 505; Blanford, *tom. cit.* p. 421.

2 specimens. Helmand.
3 specimens. Hamun to Khusan.

[This is a curious Snake in its habit, as it lives amongst the upper branches of bushes; the only specimens I collected were first noticed in that position.—J. E. T. A.]

32. Taphrometopon lineolatum, Brandt.

Taphrometopon lineolatum, Strauch, *tom. cit.* p. 185; Blanford, *tom. cit.* p. 422.

4 specimens. Tirphul.
1 specimen. Zindijan.

[Obtained only in the Hari-rud valley.—J. E. T. A.]

33. Naia oxiana (Eichw.). (Plate XI. fig. 2.)

Naia oxiana, Strauch, Bull. St. Pétersb. xiii. p. 81; Nikolsky, Tr. St. Petersb. Soc. Nat. xvii. 1886, p. 405.

? *Naja*, sp., Blanford, *tom. cit.* p. 426.

2 specimens. Chinkilok.
1 specimen. Kara-bagh.

An adult specimen, four feet long, and two heads I regard as belonging to this rare Snake, as well as a young specimen from Gilgit presented to the British Museum by

Major Biddulph in 1880, which has been reported upon by Blanford *. Whether *N. oxiana* deserves specific distinction from *N. tripudians* appears to me extremely doubtful, as the temporal scutellation of the latter is liable to a greater amount of variation than was believed by Strauch. Figures are given of the heads of the four specimens before me. The adult are uniform brown above, without spectacle-mark. The young show traces of the transverse bands represented on Eichwald's figure.

The adult specimen recently obtained by Nikolsky near the Russian post of Giarmak, near Geok-Jepe, is described as slaty grey, without any markings.

[Owing to the great size of this Cobra, and believing that it was the ordinary Indian species, I only preserved one entire specimen and two heads. This, with *Vipera obtusa*, is considered very destructive to Camels; both are equally called "Shutar-mar."—J. E. T. A.]

34. Vipera obtusa, Dwig.

Vipera euphratica, Strauch, *tom. cit.* p. 221.
Vipera obtusa, Blanford, *tom. cit.* p. 428.

1 specimen. Shore-kaltegai.
1 specimen. Sang-hadji.
1 specimen. Sang-kotal.
1 specimen. Kilki.

[This Viper is said to be very common on the sandstone rocks of the Badghis, and also in the valley of the Hari-rud. The last specimen I preserved was obtained to the south of Mt. Do-Shakh, at Kilki. It causes much mortality amongst Camels; owing to its extremely sluggish habits it will not move out of the way, trusting to its colouring to escape detection; hence it is apt to be trampled upon, the result, of course, proving fatal to the trampler. It is called, as already stated, "Shutar-mar" by the natives, an honour divided between it and the Cobra of these parts. The largest one that I measured was 5 feet in length, and 6 inches in circumference at its greatest girth. The country round Chil-gaz was regarded as highly favourable to Snakes: in one night one horse died, and a second had its head so swollen up from a poisoned wound, considered to have been caused by the bite of a Snake, that the head of the poor beast looked more like that of a hippopotamus than anything else to which I could liken it. The animal lingered for several days, and I believe would have recovered, but rubbing its head, it broke the skin and flies settled on it.—J. E. T. A.]

35. Echis arenicola, Boie.

Echis arenicola, Strauch, *tom. cit.* p. 228.
Echis carinata, Blanford, *tom. cit.* p. 430.

1 specimen. Nushki to Helmand.
1 specimen. Tirphul.
1 specimen. Chil-gaz.

* Journ. As. Soc. Beng. i. 1881, p. 241.

[This Viper, called Dusha, was common from Quetta along our whole route to Khusan, specimens being daily brought to me by the camp-followers; except one specimen, I never came across it in the Badghis. The natives say that it is common near their dwellings.—J. E. T. A.]

BATRACHIA.

ECAUDATA.

1. Rana esculenta, L., var. ridibunda, Pall.

Rana esculenta, Blanford, *tom. cit.* p. 432.

1 (Tadpole) specimen. Quetta to Nushki.
2 specimens. Turbat.

2. Bufo viridis, Laur.

Bufo viridis, Blanford, *tom. cit.* p. 434; Boulenger, *tom. cit.* p. 297.

1 specimen. Quetta to Nushki.
2 specimens. Bala-morghab.
Numerous specimens from Tirphul, Karez-badak, Kishmaru.
Numerous Tadpoles from streams at base of Mt. Do-Shakh.

[At Puza-gish I found the Frogs suffering from Leeches attached to them; this Leech, Mr. Jeffrey Bell tells me, is the common one of our own lakes, *Aulostomum gulo* (*A. nigrescens*), and that the presence of this species in Lake Baikhal has been already signalized by Grube (Sitzungsb. Schles. Gesell. xlix. p. 55), but he does not know that it has ever been reported to attach itself to Frogs.

The above localities extend the area of this species of *Bufo* from Northern Baluchistan to the valley of the Hari-rud, Badghis, and Khorasan.—J. E. T. A.]

EXPLANATION OF THE PLATES.

Plate VIII.

Fig. 1. *Teratoscincus scincus*, Schleg.
Fig. 1 *a*. „ „ Upper view of end of snout, enlarged.
Fig. 1 *b*. „ „ Side „ „ „
Fig. 1 *c*. „ „ Chin, enlarged.
Fig. 2. *Phrynocephalus olivieri*, D. & B., male.
Fig. 2 *a*. „ „ female.
Fig. 3. *Phrynocephalus ornatus*, Blgr. Adult, upper view.
Fig. 3 *a*. „ „ „ lower view.
Fig. 3 *b*. „ „ „ upper view of head, enlarged.
Fig. 3 *c*. „ „ Half-grown, upper view.
Fig. 4. *Phrynocephalus luteoguttatus*, Blgr. Adult, upper view.
Fig. 4 *a*. „ „ „ lower view.
Fig. 4 *b*. „ „ „ upper view of head, enlarged.
Fig. 4 *c*. „ „ Half-grown, upper view.

PLATE IX.

Fig. 1. *Stenodactylus lumsdenii*, Blgr.
Fig. 2. *Agamura persica*, A. Dum. Female.
Fig. 2 *a*. „ „ „ ; chin, enlarged.
Fig. 2 *b*. „ „ Male.
Fig. 2 *c*. „ „ „ ; chin, enlarged.
Fig. 3. *Phrynocephalus maculatus*, And.
Fig. 4. *Scapteira acutirostris*, Blgr.
Fig. 4 *a*. „ „ Side view of head, enlarged.
Fig. 4 *b*. „ „ Upper „ „
Fig. 4 *c*. „ „ Lower view of posterior part of body, enlarged.

PLATE X.

Agama isolepis, Blgr. Male, female, and young.

PLATE XI.

Fig. 1. *Lytorhynchus ridgewayi*, Blgr. With enlarged views of head.
Fig. 2. *Naia oxiana*, Eichw. Side views of heads of four specimens.

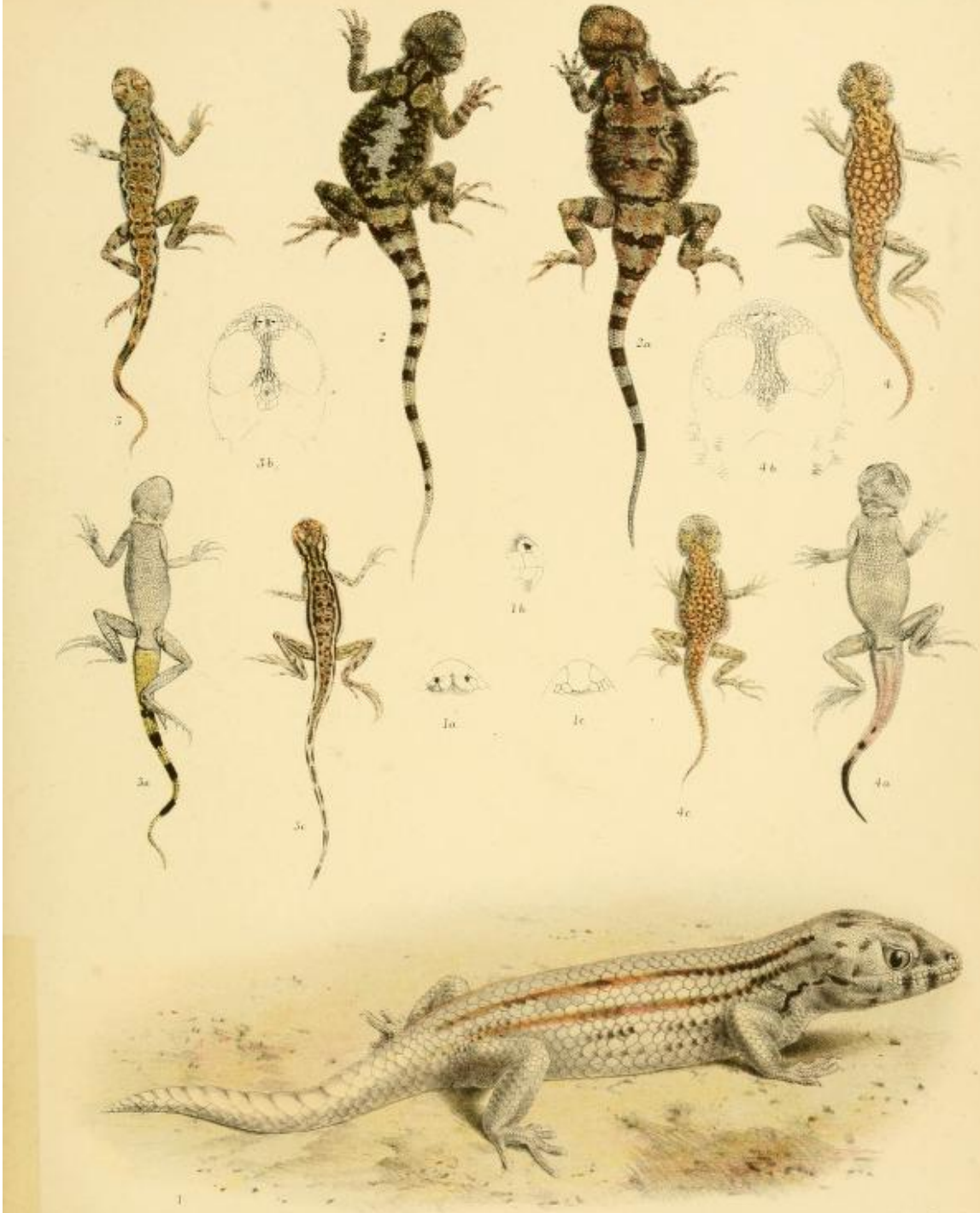
FISHES.

By Dr. A. GÜNTHER, F.R.S.,
Keeper of the Zoological Department, British Museum.

1. CIRRHINA AFGHANA, sp. n. (Plate XII. fig. C.)

D. 13–14. A. 10. L. lat. 40. L. transv. 7/3–4.

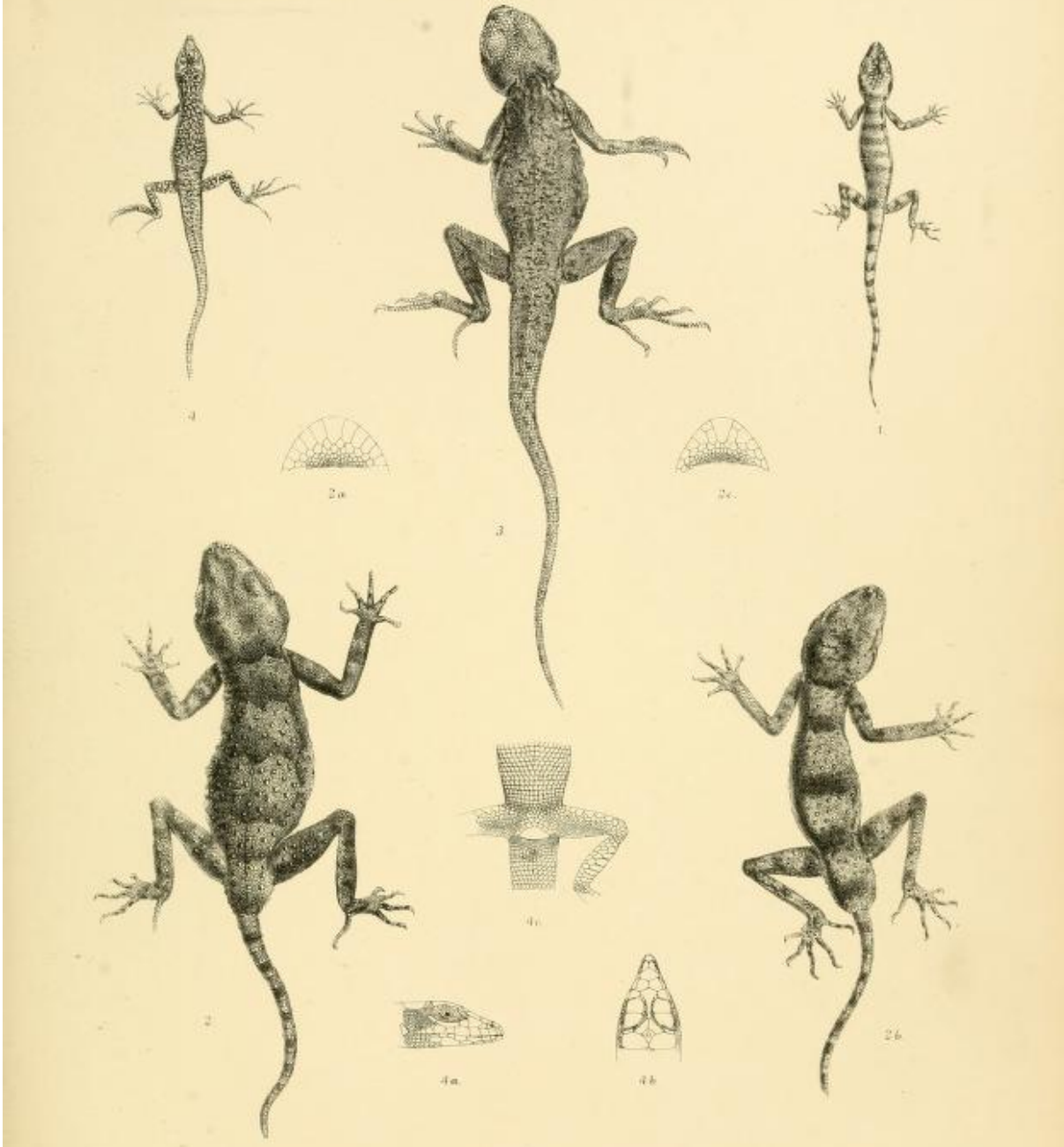
One pair of barbels only at the angle of the mouth, which are shorter than the eye. Lower lip transverse, generally covered with a horny substance which forms a sharp edge; the snout is rather obtuse and rounded. Dorsal fin commencing in front of the ventrals, its origin being equidistant between the end of the snout and the root of the caudal fin, and opposite to the twelfth scale of the lateral line; its longest single ray is scarcely longer than the branched rays, but found to be distinctly serrated along its basal portion after the investing skin has been removed. Anal fin narrow and high, extending nearly to the caudal when laying backwards. Caudal fin deeply cleft. There are three or four longitudinal series of scales between the lateral line and the ventral fin, but sometimes the lowermost is not developed; in fact the whole of the abdominal surface, from the isthmus to the vent, is naked or covered with small rudimentary scales only on the sides. The height of the body is contained from three times and four fifths to four times and one third in the total length without caudal; the length of the head rather more than four times. Coloration uniform.



Peter Smit. del.

Mintern Bros. Chromo.

1. TERATOSCINCUS SCINCUS. 2. PHRYNOCEPHALUS OLIVIERI.
3. PHRYNOCEPHALUS ORNATUS. 4. PHRYNOCEPHALUS LUTEOGUTTATUS.



Peter Smit del. et lith.

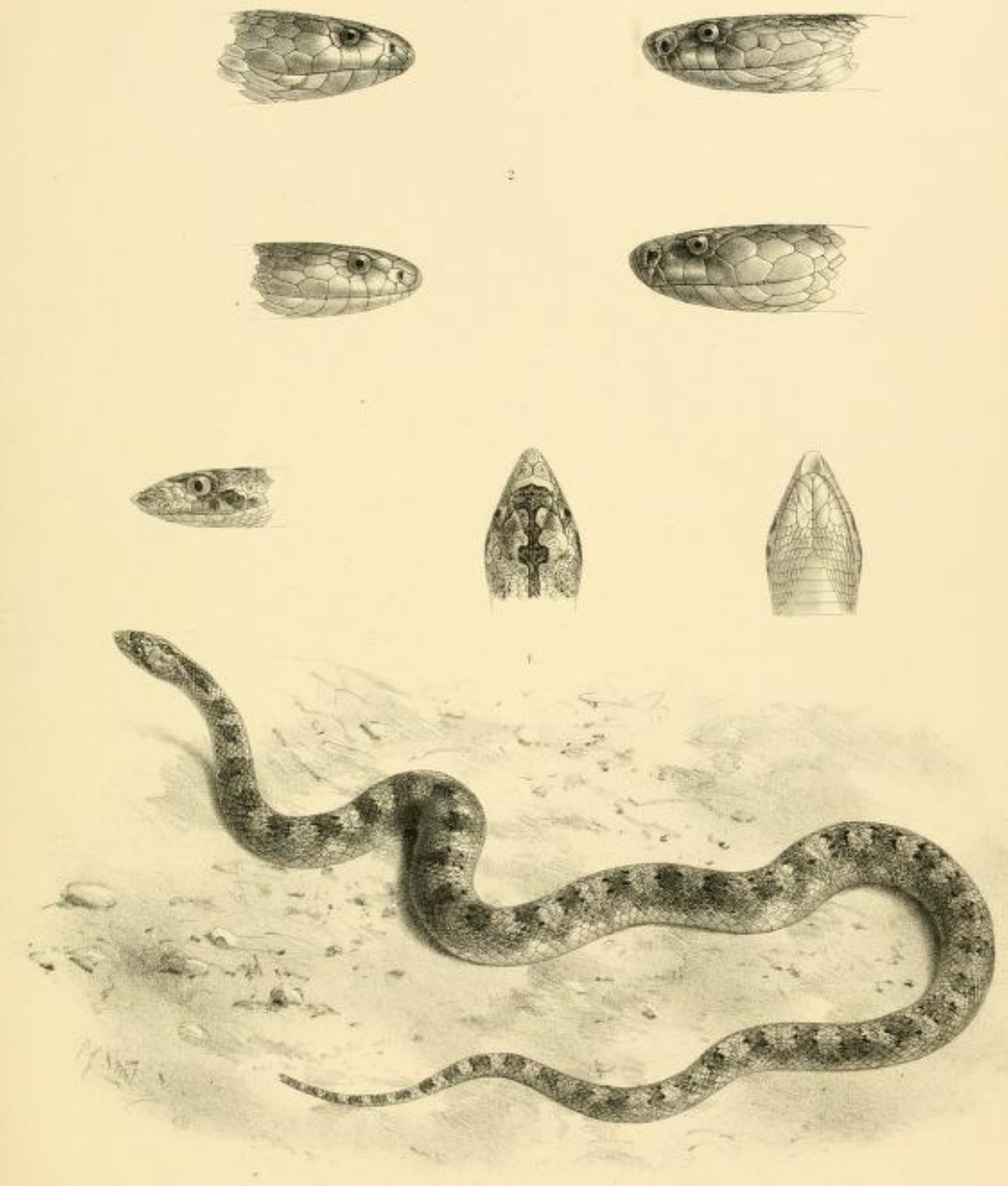
Mintern Bros. imp.

1. STENODACTYLUS LUMSDENII. 2. AGAMURA PERSICA.
3. PHRYNOCEPHALUS MACULATUS. 4. SCAPTEIRA ACUTIROSTRIS.

Peter Smit. del. et lith.

Mintern Bros. imp.

AGAMA ISOLEPIS



1. LYTORHYNCHUS RIDGEWAYI. 3. NAIA OXIANA.