

may perhaps be considered as a doubtful species: in the number of its abdominal and subcaudal scales it agrees pretty nearly with the *C. Constrictor*, which is also reported to be a destroyer of eggs.

SWIFT SNAKE.

Coluber Cursor. *C. virescens, striis duabus dorsalibus lineato-maculatis albis, lateribus abdomineque albidis.*

Greenish Snake, with two dorsal stripes of linear white spots, and whitish sides and abdomen.

La Couresse. *Cepede Ovip.* 2. p. 281. pl. 14. f. 2.

Abdominal scuta 185, subcaudal scales 105.

DESCRIBED by Cepede from a specimen in the Royal Cabinet at Paris: length near three feet: colour greenish above, with two longitudinal rows of small, longish, white spots: sides and abdomen whitish: head covered with large scales: tail of moderate length, and gradually tapering to the tip: said to be a remarkably timid and swift species, generally escaping with great rapidity when discovered: native of the island of Martinico.

HICKANELLA SNAKE.

Coluber Hickanella. *C. albus, caruleo guttatus, abdomine caruleo maculato.*

White Snake, speckled with blue above, and variegated with blue on the abdomen.

Serpens *Hickanella Americanus*. *Seb. 2. t. 75. f. 2.*

A BEAUTIFUL species: length about two feet and a half: thickness moderate: head oblong, large-scaled, white, with the sutures or divisions of the scales blue: remainder of the upper parts white, with numerous small blue spots, disposed in a rhomboid pattern: abdomen white, transversely tessellated in some parts with blue: tail rather short, gradually tapering to the tip: native, according to Seba, of South America, frequenting houses, and being very useful in destroying rats, &c.

BOAFORM SNAKE.

Coluber Boæformis. *C. albidus, fusco variegatus, abdomine albo, scutis brevissimis.*

Whitish Snake, with brown variegations, white beneath, with very short scuta.

Pedda Poda. *Russ. Ind. Serp. p. 27, 28, 30. pl. 22, 23, 24.*

Bora. *Russ. Ind. Serp. p. 44. pl. 39.*

Abdominal scuta 252, subcaudal scales 62.

LENGTH of the specimen described by Dr. Russel about two feet and a half, but supposed to grow much larger: habit thick and short, with

moderately large oblong-ovate head, covered with large scales, and short, sharp-pointed tail: colour of the upper parts very pale or whitish brown, variegated on the back and sides by large and small, irregularly formed, deep-brown patches and spots, those on the sides being mostly ocellated: body covered with very small scales, the three rows next the abdomen being much larger than the rest: abdomen white, the scuta being remarkably narrow or short, and furnished with reddish margins: the under part of the tail is variegated with black and white: native of India: an animal of great strength, wreathing round the arm, if held for a short time, in such a manner as to numb the hand: not poisonous; its bite producing no other effect than that of temporary pain,

VAR. ?

Bora. *Russ. Ind. Serp. pl.* 39.

THIS seems to be no other than the same species of a much larger size: disposition of scales and colours the same, but the ground-colour white, and the tail furnished beneath with several scuta or undivided lamellæ towards the tip, or after those immediately succeeding the vent; while the tip itself is again terminated by a few divided scales: but the number of the whole, taken together, amounts to the same, within a trifle, as in the first-mentioned kind. Found at Calcutta, where it is pretended that its bite is very soon fol-

lowed by eruptions on different parts of the body, though it does not prove fatal in less than ten or twelve days: but this is, in all probability, a mere popular error,

VAR. ?

Pedda Poda. *Russ. t.* 23, 24.

WITH the general habit, colour, &c. of the first-described species, but with larger scales in proportion: perhaps a sexual difference: vent, as in both the preceding, large, semilunar, and edged with a double row of small scales: on each side the vent is also a short, curved, spur-shaped, or horn-like process. This snake is said to grow to a very large size, having been seen of the length of nine or ten feet.

MUCOUS SNAKE.

Coluber Mucosus. C. caeruleus, capite angulato, labiis transversim nigro striatis.

Blueish Snake pale beneath, with angular head, and lips striped transversely with black.

Coluber mucosus. Lin. Syst. Nat. p. 388. *Mus. Ad. Frid. p.* 37. *t.* 23. *f.* 1.

Abdominal scuta 200, subcaudal scales 140.

THIS snake is described by Linnæus in the *Museum Adolphi Friderici*: it is not remarkable for any thing particular in its appearance, but seems to be rather a small species, measuring about a

foot and half in length, of which the tail measures a third part: the colour is blueish, paler beneath; the head angular, the eyes large, and the lips marked with black bars: it is a native of South America: it seems to be a species rather indistinctly described, and to demand farther examination.

CÆRULESCENT SNAKE.

Coluber Cærulescens. *C. cærulescens capite acuminato, abdomine plano.*

Cærulescent Snake, with pointed head and flat abdomen.

Coluber cærulescens. *Lin. Syst. Nat. p. 389. Mus. Ad. Frid. p. 37. t. 20. f. 2.*

Abdominal scuta 215, subcaudal scales 170.

WITH the general habit of *Ahatulla*: length a foot and half: colour blueish, paler beneath: abdomen flat: head ovate, and acuminate: tail round and about a fourth of the whole length, gradually tapering to the tip: native of South America. This also seems to be an obscure species.

SMOOTH SNAKE.

Coluber Austriacus. *C. griseo-cærulescens lævissimus, serie dorsali duplici macularum rufarum, lateribus abdomineque rufescentibus.*

Blueish-grey polished Snake, with a double dorsal row of rufous spots, and rufescent sides and abdomen.

Coronella Austriaca. *Laurenti Amph. p. 84. t. 5. f. 1.*

La Lisse. Cepede Serp. p. 158.

Abdominal scuta 178, subcaudal scales 46.

THIS snake, which in its general appearance and manners bears a considerable resemblance to the *Natrix*, seems to have been first described as a distinct species by Laurenti, who, in his work on the Amphibia, has distinguished it by the title of *Coronella Austriaca*, being common in the region round Vienna. It is also found in France and several other parts of Europe. Its principal mark of distinction from the *Natrix* is the perfect smoothness of its scales; those of the *Natrix* being somewhat carinated: its colour on the upper parts is blueish grey, inclining to rufous on the sides and abdomen: along the back runs a double row of alternate rufous spots: a few others, somewhat less distinct, appear along each side, and the abdomen is variegated with patches of a similar cast: the eyes are red, and through them, from the nostrils to the back of the cheeks, passes a narrow rufous stripe: two moderately large spots also appear at the back of the head, immediately beyond the large scales: in a young state the abdomen is often of a much brighter cast, or red:

while the colour of the upper parts is more obscure. This animal inhabits moist meadows, hedges, watry places, &c. It is of a fierce disposition in its wild state, biting with much eagerness such animals as happen to attack it, but is incapable of producing any injury, being unprovided with poisonous fangs, and is easily tamed, in which state it shows a considerable degree of attachment. It occasionally varies somewhat in colour, the upper parts having a strong tinge of rufous, and the abdomen of dusky brown or even blackish, while the sides have a cast of yellow or green.

CATENATED SNAKE.

Coluber Catenatus. C. albidus, supra maculis quadratis fuscis tessellatis, abdomine fasciis latis subfuscis distantibus.

Whitish Snake, tessellated above with square brown spots, and marked on the abdomen by very distant, broad dusky bands, Abdominal scuta 147, subcaudal scales 78.

LENGTH about two feet: colour pale or whitish: marked above by numerous square brown spots alternately disposed, and joining at the angles: abdomen pale or white, with six or seven very distant, broad, dusky, transverse bands, one of which is placed immediately beneath the throat: head small, white on the sides, and brown on the top, but marked by a white bar across the nose, joining with two large white marks over the eyes, and thus constituting a kind of reversed horseshoe-shaped white spot on the head: from behind each

eye proceed two dusky lines towards the back of the jaw: tail long, slender, and tapering to a point: described from a specimen in the British Museum.

CINEREOUS SNAKE.

Coluber Cinereus. C. cinereus, abdomine albedo, cauda supra fusco reticulata, subtus transversim lineata.

Cinereous Snake, with white abdomen, tail reticulated above with brown, and lineated transversly beneath.

Coluber cinereus. Lin. Syst. Nat. p. 388. Mus. Ad. Frid. p. 37.

Abdominal scuta 200, subcaudal scales 137.

HABIT of Natrix: length about two feet: colour cinereous: head ovate, convex: eyes large: lips marked by transverse black stripes: trunk covered by nineteen rows of small smooth scales: abdomen white, and slightly angular: tail more than a third of the whole; flattish beneath, with the scales edged with brown above, and appearing reticulated, and transversly lineated beneath: native of the East Indies.

HORSESHOE SNAKE.

Coluber Hippocrepis. *C. lividus fusco maculatus, occipite fascia lunulata reversa.*

Livid Snake, spotted with brown, with a reversed lunulated band on the hind part of the head.

Coluber Hippocrepis. *Lin. Syst. Nat. p. 388.*

Abdominal scuta 232, subcaudal scales 94.

A SMALL species : length little more than a foot : colour livid, with a row of pretty closely placed round brown spots down the back, and two or three rows of much smaller alternating ones down the sides : head of moderate size, marked by a transverse arcuated brown band between the eyes, and by a larger horseshoe-shaped band on the hind-head, the divisions pointing backwards : abdomen pale : tail of middling length, tapering gradually to the tip : native of America.

SCUTATED SNAKE.

Coluber Scutatus. *C. ater scutis latissimis.*

Black Snake, with extremely broad scuta.

Coluber scutatus. *Lin. Syst. Nat. Gmel. p. 1102. Pall. it. 1. p. 459.*

Abdominal scuta 190, subcaudal scales 50.

HABIT of Natrix : length near four feet : colour entirely black, except that the abdomen is marked alternately on each side with a row of smallish, square, yellowish white spots : scuta re-

markably wide, extending on each side in such a manner as to embrace near two thirds of the body: tail somewhat pyramidal, very long, and flattish beneath: this species was observed by Dr. Pallas about the borders of the river Yaik, occasionally frequenting both land and water.

MINERVA'S SNAKE.

Coluber Minervæ. *C. glaucus, fascia dorsali fusca, capite fasciatus.*

Glaucous Snake, with a brown band down the back, and three on the head.

Coluber Minervæ. *Lin. Syst. Nat. p. 388. Mus. Ad. Frid. p. 36.*

Abdominal scuta 238, subcaudal scales 90.

DESCRIBED by Linnæus in the Museum Adolphi Friderici: length about a foot and half: thickness greater than that of a swan quill: colour glaucous, with a broad, longitudinal, brown band down the back, and three longitudinal bands on the head, two which pass through the eyes: head oblong, ovate, convex, and smooth: eyes large: tail slender, and measuring about a third of the whole length: on each side the body, towards the tail, is a narrow dusky line: the scales on the whole animal are smooth: native of the East Indies. The Snake, being considered as the emblem of Wisdom, was consecrated to Minerva by the ancient Greeks, but the particular species it would be in vain to conjecture.

CASPIAN SNAKE.

Coluber Caspius. *C. supra alternatim fusco flavoque fasciatus, subtus flavus.*

Yellow Snake, marked above by alternate brown bands.

Coluber Caspius. *Lin. Syst. Nat. Gmel. p. 1112. Lepechin, it p. 317. t. 1.*

Abdominal scuta 198, subcaudal scales 100.

THIS snake is said to be found toward the shores of the Caspian sea, in low grounds, and bushy places: when disturbed, it first endeavours to escape, but if pursued or irritated, springs forwards on its assailant with great fury, though incapable of doing any injury by its bite: its colours are sufficiently described in the specific character: it is said to grow to the length of five feet or more.

DOMESTIC SNAKE.

Coluber Domesticus. *C. griseus, fusco maculatus, macula gemina nigra inter oculos.*

Grey Snake, spotted with brown, with a double black spot between the eyes.

Coluber Domesticus. *Lin. Syst. Nat. p. 389.*

Abdominal scuta 245, subcaudal scales 94.

THIS species is a native of Barbary, where it is said to be in a manner domestic, being very common in the houses of the inhabitants, and considered as a perfectly harmless, and even useful in-

mates, destroying the smaller kind of noxious animals: in its general appearance it is allied to the *Hippocrepis*, being of a pale grey colour, spotted with brown; its principal mark of distinction being a double black spot between the eyes.

HALF-SPOTTED SNAKE.

Coluber Reginae. *C. fusco-violaceus, subtus albus, scutis alternatim macula laterali semiorbiculata fusca notatis.*

Violaceous-brown Snake, white beneath, with the scuta marked alternately by a semiorbicular brown spot.

Coluber Reginae. *Lin. Syst. Nat. p. 378. Mus. Ad. Frid. p. 24. t. 13. f. 3.*

Abdominal scuta 137, subcaudal scales 70.

A SMALL species, about a foot in length: colour purplish brown above, and white beneath, the abdominal scuta marked alternately on one side by a pretty large dusky half-round spot: the tail is of moderate length, rather slender, and the scales beneath are plain or unspotted: native of India.

CARACARA SNAKE.

Coluber Caracara. C. cæruleus, squamis corporis antici elongatis, postici rhombeis, collo transversim nigro striato.

Blue Snake, with the scales on the fore part of the body elongated, of the hind part rhomboid, and the neck transversely striated with black.

Coluber Caracara. Lin. Syst. Nat. Gmel. p. 1117.

Serpens Caracara Brasiliensis singularis. Seb. 2. t. 78. f. 3.

Abdominal scuta 190, subcaudal scales 125.

AN elegant species, described and figured in the work of Seba: length about two feet and a half: habit moderately slender: head rather large and oblong; snout obtuse: from behind each eye a black streak: colour pale blue, the hinder part of the body being tinged with rose-colour: the scales on the fore parts of the animal are of a narrow, lengthened form, and on the hind parts rhomboid, or of the usual shape: neck and fore parts elegantly marked by numerous transverse black lines, the scales on that part being tipped at each end with black: tail rather long, and gradually tapering to the tip: native of Brasil.

VAR.?

IN this specimen, which is in the British Museum, the head is elegantly marbled with black variegations, and the whole upper parts are varied with black, though not in the same distinctly linear manner as on the fore part: the abdomen is perfectly plain or unspotted, and is marked by two

narrow, pale, distant lines running down the whole length, between which lines it is of a slightly flattened shape. The number of abdominal scuta in this specimen is 185, and of subcaudal scales 90.

QUILL SNAKE.

Coluber Calamarius. C. lividus, fasciis transversis punctisque linearibus fuscis, subtus albido fuscoque tessellatus.

Livid Snake, with transverse brown bands and linear points, and tessellated beneath with brown and white.

Coluber Calamarius. Lin. Syst. Nat. p. 275. Mus. Ad. Frid. p. 23. t. 6. f. 3.

Abdominal scuta 140, subcaudal scales 22.

A SMALL snake, described by Linnæus in the Museum Adolphi Friderici: length about a span: thickness that of a goose quill: colour above livid, with the whole surface scattered over with linear dusky points, and marked also by several narrow transverse dusky bars: abdomen pale, tessellated in an alternate manner with dusky squares: head very small, convex, and ovate: tail short, and terminating rather obtusely: native of America.

SCHOKAR SNAKE.

Coluber Shockar. *C. fusco-cinereus, vitta utrinque duplici longitudinali alba, abdomine albido, gula fusco punctata.*

Cinereous-brown Snake, with a double longitudinal white band on each side, whitish abdomen, and throat speckled with brown.

Coluber Schockar. *Lin. Syst. Nat. Gmel. p. 1115. Forsk. F. Arab. p. 14.*

Abdominal scuta 180, subcaudal scales 114.

DESCRIBED by Forskal: length about a cubit and half: thickness that of a finger: colour on the upper parts cinereous brown, with a double longitudinal white stripe on each side, and in the more advanced or older specimens, a narrow middle or dorsal stripe, consisting of small whitish spots: throat yellowish, spotted with brown: head ovate, obtuse, and covered with large scales: tail about a third of the whole length: native of the woody parts of Arabia.

 BEATAEN SNAKE.

Coluber Beataen. *Forsk. F. Arab. p. 15.*

A POISONOUS species, mentioned by Forskal, who, however, only tells us that it is black and white, and that its bite is immediately fatal, the body swelling in consequence.

HOELLEICK SNAKE.

Coluber Hoelleik. *Forsk. F. Arab.* p. 15.

ENTIRELY of a red colour: length about a foot: its bite causes an inflamed tumour; and its breath is said to excite an itching on the skin: native of Arabia.

 JARA SNAKE.

Coluber Jara. *C. niger, punctis linearibus geminatis albis, collari abdomineque flavescentibus.*

Black Snake, with double linear white specks, and yellowish collar and abdomen.

Jara Potoo. *Russ. Ind. Serp. p. 19, pl. 44.*

Abdominal scuta 175, subcaudal scales 56.

LENGTH about fifteen inches: colour black above, each scale marked by two minute white lines: round the back of the head a yellowish collar: abdomen of the same colour: tail very short, tapering suddenly to a point: native of India.

ARNEE SNAKE.

Coluber Arnensis. C. fusco-flavescens, fasciis angustis transversis nigricantibus albo marginatis, abdomine albido.

Yellowish-brown Snake, with narrow, blackish, transverse bands edged with white, and pale abdomen.

Russ. Ind. Serp. p. 43. t. 38.

Abdominal scuta 169, subcaudal scales 50.

LENGTH about a foot and half: colour above yellowish brown, with moderately distant, blackish or very deep brown transverse bands edged with white: abdomen pale: head small: tail rather short, and tapering to a sharp-pointed tip: native of the country of Arnee in the East Indies.

SAGITTATED SNAKE.

Coluber Sagittatus. C. fuscus, maculis dorsalibus sagittatis albidis nigro marginatis.

Brown Snake, with whitish sagittated dorsal spots edged with black.

Tar Tutta. *Russ. Ind. Serp. p. 20. pl. 15.*

Abdominal scuta 229, subcaudal scales 87.

LENGTH about two feet: habit slender: head rather large, round, obtuse, and covered with large scales: neck slender: colour of the upper parts yellowish brown, variegated on the back with a kind of continued chain of sagittated or triangular spots, the sides extending pretty much, and the tips pointing forwards: these spots are edged with black, and become fainter towards the tail, which

is slender, and gradually tapers to a point: abdomen yellowish white, the scuta marked by a dusky spot on each side: native of India.

STREAKED SNAKE.

Coluber Striatus. C. nigro-virescens, albo fasciato-maculatus, subtus albido-cærulescens.

Greenish-black Snake, with spotted white bands, and blueish white abdomen.

Gajoo Tutta. *Russ. Ind. Serp. p. 22. pl. 16.*

Abdominal scuta 174, subcaudal scales 40.

LENGTH about fourteen inches: colour above greenish black, marked by about twenty transverse fasciæ, each composed of a number of longitudinal, abrupt, white or yellowish white streaks, and along the sides of the body are interrupted rows of similar streaks: head plain, obtuse, and large-scaled: abdomen blueish white: tail very small, and tapering to a point: native of India.

FASCIOLATED SNAKE.

Coluber Fasciolatus. C. cinereus, fasciis transversis albidis, abdomine glauco.

Cinereous Snake, with whitish transverse bands and glaucous abdomen.

Nooni Paragoodoo. *Russ. Ind. Serp. p. 26. pl. 21.*

Abdominal scuta 192, subcaudal scales 62.

LENGTH about two feet: habit rather slender: colour grey-brown, marked with equidistant narrowish, transverse white bands spotted on the edges with black: head ovate, of moderate size, and large-scaled: tail slender, and tapering to a point: abdomen dusky pearl-coloured: native of India, where its bite is popularly believed to be mortal; but Dr. Russel's experiments on chickens prove this notion to be entirely erroneous, the animal being unprovided with fangs.

BIPED SNAKE.

Coluber Bipes. Lin. Syst. Nat. Gmel. p. 1099. Scop. Ann. Hist. Nat. 2. p. 39.

A SOMEWHAT doubtful species, mentioned by Scopoli as an inhabitant of the Tyrolese waters, and said to be furnished with two short processes or feet, and to have red eyes, elliptic dorsal scales, and the lateral ones spotted with white: scuta whitish, with a dusky spot in the middle: perhaps no other than a variety of the *Natrix*.

LINEATED SNAKE.

Coluber Lineatus. *C. caeruleo-virescens, lineis tribus vel quinque fuscis, intermedia latiore.*

Blueish-green Snake, with three or five brown linear stripes, of which the middle one is broadest.

Coluber lineatus. *Lin. Syst. Nat. p. 382. Mus. Ad. Frid. p. 30. t. 12. f. 1. and t. 20. f. 1.*

Serpens Ceylonica lineis subfuscis. *Sch. 2. t. 12. f. 3.*

Abdominal scuta 169, subcaudal scales 84.

THIS is a highly elegant species, but differs considerably in appearance, according to the different periods of its growth: its general colour is a pale and somewhat gilded blueish green above, marked throughout the whole length by five longitudinal narrow bands or stripes, of which the middle one is considerably broader than the others, and of a deep dusky green, with black edges and specks: on each side, at some distance, is a rather narrower stripe of similar colour, and beneath this on each side is a black line. In the small or younger specimens there are rarely more than three stripes; the appearance of the lower or narrow linear side-stripe being scarce apparent: the habit of the animal is long and slender or flagelliform, with a small head, a long, thin tail, and a flattish abdomen: the stripes on the head are continued to the tip of the snout, which is obtuse. It is a native of several parts of India, and is commonly about two or three feet in length. It is a perfectly innoxious species.

DART SNAKE.

Coluber Jaculatrix. *C. albidus lineis tribus nigricantibus, intermedia latiore.*

Whitish Snake, with three blackish stripes, the middle one broadest.

Coluber Jaculatrix. *Lin. Syst. Nat. p. 381.*

Serpens Americana *Xequipiles dicta. Seb. 2. t. 1. f. 9.*

Abdominal scuta 163, subcaudal scales 77.

MUCH allied to the *lineatus* in general appearance, but is a smaller species: colour whitish, with a tinge of blue; and marked by three longitudinal black or deep-brown stripes, of which the middle one is by much the broadest: abdomen pale or whitish: it appears to vary in colour, a specimen described by Seba being of a yellowish cast, with the stripes ferruginous: in the number of scuta and squamæ it very nearly resembles the *lineatus*: it is a native of Surinam, and is considered as a harmless animal.

SIBILANT SNAKE.

Coluber Sibilans. *C. caerulescens, lineis quinque nigricantibus, capite maculato.*

Blueish Snake, with five dusky lines, and spotted head.

Coluber Sibilans. *Lin. Syst. Nat. p. 383.*

Seb. Mus. 1. t. 109. f. 1. and 2. t. 56. f. 4. t. 107. f. 4.

Abdominal scuta 166, subcaudal scales 100.

MUCH allied in general appearance to the *lineatus*, being of a long slender habit, and marked

with five dark lines or longitudinal stripes on a blueish ground-colour: the chief or middle dorsal stripe is the broadest, and is nearly black, with a whitish speck on each of its component scales: at some distance from this are a pair of rather narrower stripes of similar appearance, and below these another pair of still narrower or more linear ones: the space between the second or lowermost pair is of a paler colour than the rest of the skin, or whitish: the abdomen is also of similar colour: the head is ovate, covered with large scales, and marked with several oblong, blue, and slightly angular spots with black edges: the middle or central spot is of a form somewhat resembling that of a horse-shoe, with the divisions pointing forwards: the interstices between the spots are of a pale or whitish colour: the tail is very long and slender. This species is of considerable size, sometimes measuring four feet in length: it occasionally exhibits a kind of gilded tinge on the skin, and the stripes are sometimes of a chesnut or reddish cast. It is an Asiatic species, and of an innoxious character.

SITULA SNAKE.

Coluber Situla. *C. griseus vitta longitudinali utrinque linea nigra marginata.*

Grey Snake, with a longitudinal dusky band bounded on each side by a black line.

Coluber Situla. *Lin. Syst. Nat. p. 385.*

Abdominal scuta 236, subcaudal scales 45.

Of this species little more is known than what may be collected from its specific character: it is a native of Egypt, and appears to have been first described by Hasselquist.

SAURITE SNAKE.

Coluber Saurita. *C. fuscus, vittis tribus caeruleo-virentibus.*

Brown Snake, with three blue-green stripes.

Coluber Saurita. *Lin. Syst. Nat. p. 385.*

Ribbon Snake. *Catesb. Carol. 2. t. 50.*

Abdominal scuta 156, subcaudal scales 121.

A SPECIES of considerable beauty: colour brown above, with three moderately broad longitudinal blueish-green or whitish stripes: abdomen pale blueish green: the brown colour has sometimes a ferruginous cast, and the blue-green exhibits a degree of iridescent variation: the head is rather small and slightly pointed; the whole habit long and slender, and the tail thin: it is said to be an animal extremely swift in its motions, frequenting trees, and inhabiting Carolina, and many other parts of North America: it is perfectly innocent, and is about three feet in length.

VITTATED SNAKE.

Coluber Vittatus. *C. albido-cærulescens, vittis tribus nigricantibus intermedia angustissima, abdomine albo, scutis fusco marginatis.*

Blueish-white Snake, with three blackish stripes, the middle one extremely narrow, and white abdomen with the scuta bordered with brown.

Serpens Rotang, &c. *Seb. 1. t. 35. f. 4.*

Coluber de Terragona. *Seb. 2. t. 60. f. 2, 3.*

Coluber vittatus. *Lin. Syst. Nat. p. 380.*

Abdominal scuta 142, subcaudal scales 78.

A MIDDLE-SIZED species, of a moderately slender habit, growing to the length of about two feet and a half: colour pale blue or whitish; marked down the whole length of the back by three black or deep-brown stripes, the middle one being much narrower than the others: between the middle and the side-stripes are also interposed a pair of extremely narrow or linear stripes, which are gradually lost or obliterated after passing some distance down the back: the head is rather small than large, of a longish form, but not sharp-snouted, covered with large scales, and marked above by black variegations, two narrow bands passing over the snout, a much broader one passing horizontally between the eyes, and being dilated behind into a large lobated patch on the top of the head, with two very small, oval, white spots in the middle: the hinder divisions of this patch are continued to some little distance on each side the neck into two or three ovate black spots, from the last of which commence the very narrow or linear

stripes before mentioned: the under parts of the animal are white, each scutum being very deeply margined with black or dark brown, thus forming so many transverse bands on the abdomen and tail, and affording a very characteristic mark of the species: the tail is of moderate length, slender, and gradually tapers to a fine point. This snake is a native of South America, and is considered as an innocuous species: it appears to vary sometimes in colour, Seba describing specimens in which the stripes were red instead of brown or black.

BLACK-BACKED SNAKE.

Coluber Melanotus. C. albidus vittis tribus approximatis nigris, intermedia latissima.

Whitish Snake, with three approximated black bands, the middle one very wide.

Serpens Africana Bonæ Spei eleganter lemniscata. Seb. 2. t. 62. f. 3.

Abdominal scuta 158, subcaudal scales 50.

A MIDDLE-SIZED, or rather smallish species: length about a foot and half or two feet: habit moderately slender: colour whitish, with three black or dark brown dorsal stripes, of which the middle one is very broad, and the others rather narrow: all pretty closely placed: head of moderate size, covered with large scales, and of a pale colour; neck sometimes marked on each side by a row of five or six roundish black spots, succeeded by the side stripes: abdomen white.

SIRTAL SNAKE.

Coluber Sirtalis. *C. fuscus, vittis tribus viridi-cærulescentibus.*

Brown Snake, with three blueish-green bands.

Coluber Sirtalis. *Lin. Syst. Nat. p. 383.*

Abdominal scuta 150, subcaudal scales 114.

OBSERVED by Kalm in Canada: a slender species, of a brown colour above, with three longitudinal blue green stripes: body said by Linnæus to be slightly striated.

TRISCAL SNAKE.

Coluber Triscalis. *C. glaucus, lineis tribus fuscis ad nucham conjunctis.*

Glaucous Snake, with three brown lines conjoined at the back of the neck.

Coluber Triscalis. *Lin. Syst. Nat. p. 385.*

Abdominal scuta 195, subcaudal scales 86.

A SMALL but beautiful species, measuring about a foot and half in length, and being of a sea-green colour, marked above by four rufous stripes which gradually unite into three, and afterwards into two, and at length, on the tail, form one single stripe: the head is covered with large scales, those on the other parts being smooth or not carinated: the tail measures about a fifth of the whole length: native of South America.

ELEGANT SNAKE.

Coluber Elegans. C. griseo-flavescens, fasciis tribus latis reticulatis nigricantibus, fascia abdominali latissima, capite fusco irrorato.

Yellowish-grey Snake, with three broad reticulated blackish bands, a very broad abdominal band, and head freckled with brown.

Serpens catenata ex Nova Hispania. *Seb. 2. t. 60. f. 1.*

Abdominal scuta 202, subcaudal scales 145.

HABIT long and slender: length about two feet: head long, obtuse, large scaled, and of a grey colour, freckled with innumerable dusky points: on the back a broad, rich chain or stripe formed by four or five reticulated black lines on a blueish or glaucous ground: on each side the body a similar stripe, but narrower, and consisting only of two black lines: the colour of the body between the stripes is yellowish grey; and between the stripes and abdomen yellowish white: the abdomen itself is marked by a very broad reticulated and punctated stripe of a greyish colour with dusky variegations: the tail is very long and narrow. This snake is well figured in Seba, who represents it as a native of South America. In the British Museum are specimens preserved in spirits: in the living animal the colours are probably much more brilliant than in the above description.

TÆNIATED SNAKE.

Coluber Tæniatus. C. glaucus, fasciis duabus nigris latissimis, lateribus nigro maculatis, scutis utrinque macula semiorbiculata nigra.

Glaucous Snake, with two very broad black bands, the sides spotted with black, and the scuta marked on each side by a semiorbicular black spot.

Abdominal scuta 148, subcaudal scales 67.

Size and proportion of *Berus*: general colour glaucous; abdomen paler: along the back, from head to tail, an extremely broad and conspicuous pair of black fillets, leaving a whitish space in the middle: sides of the body below the fillets blue and spotted, as in the *ringed snake*, with black marks, scuta marked on each side at a small distance from their commencement, by a smallish semi-orbicular black spot: head obtuse, covered with large scales, and marked by a dilated blackish spot and a sharp-pointed white line pointing towards the snout: tail slender, and gradually tapering to a point. Described from a specimen in the British Museum.

DECOROUS SNAKE.

Coluber Decorus. *C. cæruleo-virescens, fascia utrinque duplici nigra, collo utrinque nigro maculato.*

Blueish-green Snake, with a double lateral black band, and the neck spotted on each side with black.

Abdominal scuta 170, subcaudal squamæ 132.

HABIT slender and flagelliform: length about two feet and a half: colour pale, blueish, gilded green, with iridescent variegations: beneath paler or more inclining to white: on each side the body, near the abdomen, a double black stripe: head longish, large scaled, unspotted, and marked on each side, through the eyes, by a broadish black stripe broken into spots, and which, passing to some little distance along the neck, becomes divided, and forms the double lateral stripe before mentioned: eyes large: tail very long, slender, and gradually tapering to a fine point. Described from a specimen in the British Museum.

BILINEATED SNAKE.

Coluber Bilineatus. *C. rufus, fasciis duabus luteis.*

Rufous Snake, with two gold-yellow stripes.

La Double-Raie. *Cepede Serp. p. 220. pl. 10. f. 2.*

Abdominal scuta 205, subcaudal scales 99.

THIS is described by the Count de Cepede, who informs us that it is a beautiful species, measuring about two feet one inch in total length,

the tail measuring six inches and six lines: the colour of the upper parts is rufous, each scale bordered with yellow, and down the back, from the back of the head to the end of the tail, run two bright gold-yellow stripes: the head is furnished with large scales, and those on the body are smooth or uncarinated: its native country is unknown.

BUGLE SNAKE.

Coluber Gemmatus. C. caeruleus, fascia media nigra albo-maculata, lateralibus albis.

Blue Snake, with a black middle-stripe spotted with white, and two lateral white stripes.

Le Chapelet. *Cepede Serp. p. 246. pl. 12. f. 1.*

Abdominal scuta 166, subcaudal scales 103.

A BEAUTIFUL species: length about fifteen or sixteen inches: colour of the upper parts blue, with three narrow equidistant stripes from head to tail, the two lateral stripes being white, the middle one black, marked by a row of small white specks alternately oblong and round, representing a small string of beads and bugles: head large-scaled and marked on each side by three or four spots forming a band across the eyes, the top spotted with pale blue marks bordered with black: the abdomen is white, each scutum being marked at its edge, near the body, with a small black speck, forming two rows down the abdomen: native country unknown: described by Cepede from a specimen in the Royal Cabinet.

EIGHT-LINED SNAKE.

Coluber Octolineatus. C. subferrugineus, lineis octo nigris.

Subferruginous Snake, with eight black lines.

Abdominal scuta 185? subcaudal scales 65?

A SMALL Snake, about the size of a middling earthworm: colour pale ferruginous, marked by eight distinct black lines or stripes from head to tail; the two principal ones running down the top of the back, and the rest, which are narrower, down the sides: head scarce larger than the neck, large-scaled, blunt-nosed, and marked over the snout by a transverse black band passing through the eyes: the two principal or dorsal stripes unite in a sharp point on the top of the head: abdomen white: tail short, measuring about an inch and half, and tapering pretty suddenly. Described from specimens in the British Museum, having the appearance of very young animals: native country unknown.

 INTestinal SNAKE.

Coluber Intestinalis. C. subferrugineus, supra lineis tribus albis, dorsali super caput bifurca, abdomine albo nigroque vario.

Subferruginous Snake, marked above by three white lines, the dorsal one forked on the head, the abdomen variegated with black and white.

Serpentula gracilis longa Guineensis. Seb. 2. t. 2. f. 7.

A SMALL, slender species, described and figured by Seba, measuring about a foot and half in

length: colour above pale ferruginous marked by three narrow white lines, of which that on the back is continued to the top of the snout, where it divides into two streaks: abdomen whitish variegated with transverse black bars: head rather large, and, so far as appears from Seba's figure, covered with small scales: native of Guinea.

DIONE SNAKE.

Coluber Dione. *C. caeruleus, fusco maculatus, lineis tribus albidis.*

Pale blue Snake, spotted with brown, with three whitish lines.

Coluber Dione. *Lin. Syst. Nat. Gmel. p. 1106. Pall. it. 2. p. 717.*

Abdominal scuta 190, subcaudal scales 66.

HABIT slender: length about two feet: head small, tetragonal, and commonly reticulated with blackish sutures: colour of the whole upper parts pale blue, with three paler or whitish lines, the intermediate spaces being marked with a row of dusky alternate, and sometimes subconfluent spots or patches: abdomen pale, freckled with minute livid spots interspersed with red specks: tail about a sixth part of the whole length. This species is a native of the salt deserts towards the Caspian sea, and of the hilly regions near the river Irtysh, and was first described by Dr. Pallas.

TRIFASCIATED SNAKE.

Coluber Trifasciatus. C. fasciis tribus latis nigris, intermedia linea alba divisa, abdomine lineis tribus punctatis.

Snake with three broad black stripes, the middle one divided by a white line, and three spotted lines down the abdomen.

A SMALL species, measuring about a foot in length, and being rather thick in proportion: colour above black, formed by three broad stripes, of which the middle one itself is parted down the middle by a very narrow white line: abdomen white, marked by three rows of black spots: head rather small than large, blackish, with white or pale sutures: described from a specimen in the Museum of Dr. William Hunter.

STOLATED SNAKE.

Coluber Stolatus. C. glaucus, fasciis duabus albidis, maculis subquadratis transversis fuscis interjectis.

Glaucous Snake, with two whitish stripes, and squarish transverse brown spots between.

Coluber stolatus. Lin. Syst. Nat. p. 379.

Seb. Mus. 2. t. 14. f. 1, 3.

Abdominal scuta 143, subcaudal scales 76.

OF middling size, measuring from a foot and half to two feet or more in length: habit rather slender: colour above blueish grey, with a pair of moderately distant white lines down the back, and a continued series of brown transverse, equidistant

zones : abdomen pale or white, each scutum being marked on each side by two small black specks : head large-scaled, pale or blueish above, and of moderate size : tail rather short, and tapering to a point. Native of India : mistakenly marked in the *Systema Naturæ* as a poisonous species.

TRILINEATED SNAKE.

Coluber Trilineatus. C. rufus, lineis tribus nigris.

Rufous Snake, with three black lines.

La Trois-Raies. Cope de Serp. p. 254.

Abdominal scuta 169, subcaudal scales 34.

LENGTH about a foot and half : colour above rufous, marked throughout the whole length by three black lines or narrow stripes : head covered with large scales : tail about two inches and three quarters long : native of Africa : described by the Count de Cope.

BOCHIR.

Serpens Ægyptiaca Bochir dicta. Seb. 2. t. 38. f. 3.

SIZE and general habit of the Viper, but the head covered in front with moderately large scales : the head is also very short, and variegated with red spots : colour of the whole animal cinereous yellow, marked along the upper part by five deep rufous stripes or lines from head to tail : ab-

domen speckled with black points: tail shortish, and gradually tapering to a sharp tip: native of Egypt, according to Seba.

AURORA SNAKE.

Coluber Aurora. *C. croceus, fascia dorsali abdomineque flavis.*
 Orange-coloured Snake, with yellow dorsal band and abdomen.
 Coluber Aurora. *Lin. Syst. Nat. p. 379. Mus. Ad. Frid.*
p. 25. t. 19.

Serpens Acontias, &c. *Seb. 2. t. 78. f. 3.*

Abdominal scuta 179, subcaudal scales 37.

LENGTH about two feet and a half, and moderately thick in proportion: colour dull orange, with a broad dorsal line of pale yellow: head rather large, and covered with very large scales: those on the body are also of considerable size: abdomen yellow: tail rather short, and tapering to an obtuse point: native of South America.

IBIRACOA.

Serpens Brasiliensis *Iberacoa* dicta. *Seb. 1. t. 87. f. 1, 2, 3.*

Serpens *Xaxalhua.* *Seb. Mus. 2. t. 63. f. 2.*

A BEAUTIFUL snake, figured in the work of Seba: length about two feet: colour pale or whitish yellow, tinged with red, blue, &c. and marked above by several parallel longitudinal rows of black linear spots, the middle or broadest range consisting rather of broadish spots, more espe-

cially towards the head, which is of a lengthened form, white on the top, speckled with black, covered with large scales, and marked along each cheek by a broad black band united at the beginning of the neck by a transverse bar, from the back of which proceed a pair of abrupt streaks down the sides of the neck: tail moderately slender, tapering to a fine point: abdomen white: native of South America. In the kind called *Xavahlua* by Seba, figured at pl. 63 of vol. 2. the head is yellow with the black cheek stripes, and the body white, with four narrow lines along the upper part, the two middle ones being black, and the two exterior red: perhaps, after all, these snakes may be no other than varieties of some of the Linnæan lineated species, which are known to vary considerably in their colours, and in the disposition of their marks.

 PALE SNAKE.

Coluber Pallidus. *C. griseus, fusco punctatus, lineis utrinque duabus lateralibus interruptis nigris.*

Grey Snake, speckled with brown, with a double, interrupted, black line on each side.

Coluber Pallidus. *Lin. Syst. Nat. p. 381. Mus. Ad. Frid. p. 31. t. 7. f. 2.*

Serpens Americana lemniscata. *Seb. 2. t. 11. f. 3. ff*

Abdominal scuta 156, subcaudal scales 96.

DESCRIBED in the *Amoenitates Academicæ*.
Habit slender: length a foot and half: thickness that of a swan quill: back slightly angulated on

each side: head roundish, much thicker than the neck, covered with large scales: a double black line beyond the eyes, and which, in passing along the sides of the body, is occasionally interrupted: ground-colour pale, variegated with scattered grey spots and points: tail very slender towards the tip, so that the scales are with difficulty counted on that part: native of India: varies considerably in the number of scuta, &c.

LONG-SNOURED SNAKE.

Coluber Mycterizans. *C. gracilis viridis, naso subtetragono elongato acuminato, linea utriusque abdominali flava.*

Slender green Snake, with subtetragonal lengthened sharp-pointed snout, and a yellow line on each side the abdomen.

Blueish-green Snake. *Catesb. Carol. 2. t. 47.*

Abdominal scuta 192, subcaudal scales 167.

COLOUR grass-green, with a yellow line on each side the abdomen: habit remarkably slender, measuring about three feet and a half in length, and about half an inch in diameter: head moderately large, long, and very sharp-snouted, the upper jaw running far beyond the lower, and being of an obscurely tetragonal form: sometimes this species varies in having an additional pair of yellow abdominal lines, running down the middle of that part: it is an innoxious snake, though erroneously marked as poisonous in the *Systema Naturæ*, owing to the fang-like appearance of its large and long teeth in the upper jaw. It is a native of

many parts of North America, where it is principally seen on trees, moving with great velocity in pursuit of insects, on which it is said principally to feed.

VAR. ?

A SUPPOSED variety of this Snake is described and figured in Dr. Russel's work on Indian Serpents, differing from the above in the colour of the under parts, which, instead of being green, are of a cinereous pink-colour, elegantly freckled with very numerous minute black and yellowish dots, the margins of the scuta being edged with dull yellow: the skin of the neck also, when the animal is irritated, exhibits, by the dilatation of the skin on that part, a beautiful variegation of black and white reticular marks, which disappear when at rest: this variety, if such it be, is of an apparently ferocious nature, hissing violently and snapping at any thing opposed to it, but producing no other effect by its bite, than that of temporary pain in consequence of mere puncture: it is known by the name of *Botla Passeriki*. See Russel's Indian Serpents, pl. 13. The number of abdominal scuta is 174, and of subcaudal squamæ 148. Another snake, agreeing with the above, except in having the abdomen pale green, is also figured in Dr. Russel's work, under the name of *Passeriki Pam*: its abdominal scuta are 178, and the subcaudal scales 166. The Coluber Mycteri-

zans, in all its states, appears to vary considerably in the number of these parts.

COLUBER NASUTUS.

*Serpens viridis ore acuminato ex Java, Aspidis species. Seb. 2.
t. 57. f. 4.*

COLOUR a beautiful grass-green, with a yellow lateral line at the edges of the abdomen, as in the *Mycterizans*: general length about three feet: habit moderately slender: head rather large, and covered in front with very large scales, and sharp-pointed, the upper jaw projecting considerably beyond the lower: tail long and slender: well figured in the work of Seba: so nearly allied to the *Mycterizans* as to be scarce distinguishable by a specific character, but seems to have a somewhat larger head in proportion, and to be somewhat less slender in the body: native, according to Seba, of Java.

PURPURASCENT SNAKE.

Coluber Purpurascens. *C. violaceo-virescens, linea utrinque abdominali pallida.*

Violaceous-green Snake, with a pale line on each side the abdomen.

Serpens canora purpurea Cæcuba. *Seb. 2. t. 82. f. 3.*

Abdominal scuta 212, subcaudal scales 182.

EXTREMELY resembling the *nasutus* and *mycterizans* in general habit, except in the article of the pointed snout, the head in this being of an ovate form, with a moderately tapering, but not pointed upper jaw : its colour is an obscure green, with a very strong cast of violet purple : the skin about the neck and back appearing and forming in some parts a kind of reticular variegation as in the *ahatulla*, *mycterizans*, &c. on each side the abdomen is a white or whitish-yellow stripe, and in some specimens two other stripes of similar colour pass along the middle of that part.

IRIDESCENT SNAKE.

Coluber Ahætulla. C. viridi-cæruleus nitidissimus, abdomine pallido, fascia oculari n'gra.

Bright blue-green iridescent Snake, with pale abdomen and black streak across the eyes.

Coluber Ahætulla. Lin. Syst. Nat. p. 387. Mus. Ad. Frid. p. 35. t. 22.

Serpens ornatissima Amboinensis Boiguatrara dicta. Seb. 2. t. 82. f. 1.

Abdominal scuta 163, subcaudal scales 150.

ONE of the most beautiful of the whole serpent tribe, and, in general, easily distinguished by its blue-green gilded tinge, accompanied by iridescent hues: its habit is long and slender, measuring about three feet and a half, or four feet, in length, and about half or three quarters of an inch in diameter: the skin, between the scales, is blackish, and in some parts gives an additional beauty to the general colour: across the cheeks, passing through the eyes, is a jet black streak: the head is covered above with large scales, and the snout is slightly elongated, but by no means pointed: the abdomen is pale and flattish, as in the *mycterizans* and some others of this tribe, and the tail is angular, thin, and of very considerable length. This species is entirely innocent, and is a native of several parts of India.

SUMMER SNAKE.

Coluber Æstivus. C. viridi-cæruleus gracilis rostro obtuso, abdomine virescente.

Blue-green slender Snake, with obtuse snout, and pale-green abdomen.

Green Snake. *Catesb. Carol. 2. pl. 57.*

Abdominal scuta 155, subcaudal scales 144.

HABIT long and flagelliform as in the *Ahætulla*: general length about three feet: head obtuse; colour of the whole upper parts blue-green, with a slight purplish cast in some specimens: abdomen pale blue-green: tail very long and slender: native of many parts of North America, residing on trees, and preying on flies and other insects. *Catesby* affirms that it is easily reclaimed from its natural wildness, becoming tame and familiar, and adds, that some people will carry it in their bosoms.

 FILIFORM SNAKE.

Coluber Filiformis. C. angustissimus niger, subtus albus.

Extremely slender black Snake, white beneath.

Coluber filiformis. Lin. Syst. Nat. p. 388. Mus. Ad. Frid. p. 36, t. 17, f. 2.

Abdominal scuta 165, subcaudal scales 158.

DESCRIBED by *Linnæus* in the *Museum Adolphi Friderici*: length about a foot; thickness scarcely that of a goose quill: colour black above, appearing like a broad dorsal stripe: beneath

white: head ovate, twice the diameter of the body, black above, and white beneath: tail above a third of the whole length, very slender, and sharp-pointed: native of India. Linnæus observes that it is not quite certain that it may not be a snake in a young or unadvanced state.

BLACK-TAILED SNAKE.

Coluber Melanurus. C. fusco-flavescens, capite maculisque duabus caudalibus nigris.

Yellowish-brown Snake, with black head and two black spots on the tail.

Russ. Ind. Serp. p. 12. pl. 8.

Abdominal scuta 241, subcaudal scales 32.

A SMALL species, of a slender habit: length about ten or eleven inches; thickness scarcely that of a goose quill, and nearly of equal diameter from head to the tip of the tail: colour light yellowish brown, with a dotted black line running from head to tail along the middle of the back; and a few fainter fillets on the sides: the head is small, ovate, black, and covered with large scales: the tail is very short, scarce measuring more than an inch in length, and at its origin is marked, on the upper part, by a large rhomboid black spot, edged with white, and having a white speck in the middle: the tip of the tail is also marked by a similar black spot: the abdomen is of a pale orange-colour, but the under part of the tail is white, speckled and variegated with black. This

little snake is a native of India, and is described and figured in Dr. Russel's work on the Indian Serpents: its bite is said to be painful; but, from the experiment of Dr. Russel on the subject he examined, it appeared not to be poisonous to a chicken whose breast it was provoked to bite, and to which it adhered firmly for nearly a minute: the mouth, however, when closely examined, appears to be furnished with fangs.

COLLARED SNAKE.

Coluber Torquatus. C. supra niger, subtus ruber, collari albo.

Small Snake, black above, red beneath, with a white collar round the neck.

Little black and red Snake. *Edw. p. 349.*

Another small Snake? *Edw. Glean. 3. p. 291.*

A SMALL species, less than an earthworm: head and upper parts of a polished jet-black colour: abdomen bright red: round the neck a white collar: head rather large, and covered with large scales: eyes flame-coloured: native of Pennsylvania, where it inhabits the crevices of rocks, old walls, &c. feeding on insects, and seldom appearing abroad.

VAR. ?

CHESNUT-COLOURED above, and deep yellow beneath; the two colours being divided by a blue-and-black speckled line: round the neck a collar of yellow spots: native of Pennsylvania.

HYDRUS. WATER-SNAKE.

Generic Character.

<i>Corpus</i> antierius gracile, sensim crassescens, squamosum.	<i>Body</i> slender in front gradually thickening, scaled.
<i>Cauda</i> anceps.	<i>Tail</i> compressed.

THE genus *Hydrus* is of late institution, and comprehends those Serpents which naturally inhabit the water, whether fresh or salt, without ever making their appearance on land, except when driven there by accident. In their general appearance they are most allied to the Angues, and are particularly distinguished by having laterally compressed or flattened tails. This genus was first instituted by Mr. Schneider, who has, however, admitted into it two species which seem more properly to belong to the genus *Acrochordus*, and which the reader will find so stationed in the present work.

Sea, or Water-Serpents, as Mr. Schneider observes, appear to have been known to the ancients; since they are mentioned by the Greek writers; Ælian quoting a passage from an anonymous author relative to snakes of very large size and with

flat tails, produced in the Indian sea. They are also mentioned by Arrian in the *Periplus Maris Erythræi*, &c. &c. Aristotle observes, that serpents are either of land or fresh water, or else of the sea, and that these latter have a resemblance in most particulars to Land-Snakes, but have a head like a Conger. It is probable, however, that some of the *Murænæ* were confounded by the ancients, as they are even by some of the moderns, with the real or proper Sea-Snakes.

COLUBRINE HYDRUS.

Hydrus Colubrinus. *H. plumbeus cingulis nigris.*

Lead-coloured Hydrus, with black surrounding bands.

Hydrus colubrinus. *Schneid. Amph. 1. p. 238.*

Coluber laticaudatus. *Lin. Syst. Nat. p. 383. Mus. Ad. Frid. p. 31. t. 16. f. 1.*

THIS species, which is much more nearly allied to the genus *Coluber* than any of the rest, is a native of the Indian and American seas, and is frequently seen towards the coasts of the southern islands in the Pacific. Its general length is about two feet and a half, but it probably grows to a much larger size: the head is covered with large scales: the body is cylindric, the tail terminating in a flattened and moderately dilated tip: along the whole length of the under parts is a series of scuta and of subcaudal scales, as in the genus *Coluber*, except that they are somewhat less distinctly continued under the compressed part of the tail: the colour of the whole animal is

THE SNAKE



a strong plumbeous or livid blue, with numerous, moderately broad, deep brown or blackish bands from head to tail, each completely surrounding the body, but being rather paler beneath than above: a slight tinge of yellow is also diffused along the abdomen and over the front of the head. This is a poisonous Serpent, but the fangs are remarkably small for the size of the animal.

CASPIAN HYDRUS.

Hydrus Caspius. *"H. dorsi maculis nigris orbiculatis, cauda nigricante mucrone gemino, uno supra alterum posito. Schneid. Amph. fasc. 1. p. 244.*

Olivaceo-cinereous Hydrus, paler beneath, with black orbicular spots quincuncially disposed in four series down the back, and the tail terminated by a double point.

Coluber Hydrus. *Linn. Syst. Nat. Gmel. p. 1103. Pall. it. 1. p. 459.*

DESCRIBED by Dr. Pallas, and said to be found in the Rhine and the Caspian sea: length about three feet; colour olivaceo-cinereous, with four rows of orbicular black spots disposed in a quincuncial series down the back: abdomen yellowish, tessellated with black: a black band on each side the neck, meeting in a point behind the head, and accompanied by two oblong blackish spots: tail almost entirely black, and terminated by a small double point, one beneath the other: has the general habit of an *Anguis*, having a small head, small eyes with a yellow circle, two rows of small teeth, and a very long, black tongue.

GREAT HYDRUS.

Hydrus Major. *H. lividus, fasciis decurrentibus fuscis, squamis hexagonis abrupte carinatis.*

Livid Hydrus, with brown decurrent bands, and hexagonal abruptly carinated scales.

THIS is a large species, which does not appear to have been yet distinctly described. Its length is more than three feet: its colour pale or livid, marked throughout the whole length of the back by a series of large transverse, semi-decurrent dusky bands: the tail banded more deeply, or so as to shew less of the ground-colour: it is much strictured at the beginning, or place of the vent and thence very considerably widens towards the tip, which is obtusely pointed: the length of the tail is about four inches, and the scales which cover it are of a somewhat square or lozenge form, and so disposed as to resemble in some degree those of a fish: they are all marked by an abrupt middle carina; the scales on the body are chiefly hexagonal, and are carinated in the same manner: those on the head large and angular: along the lower part of the abdomen runs a pretty strongly marked carina; the scales being not dilated into any appearance of scuta, but merely marked by a middle line of division on the very edge of the carina: the vent is surrounded by a row of large, strong, lengthened scales; and in one specimen are two strictures at the commencement of the tail, viz. at the place of the vent, and at about



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three quarters of an inch beyond it, the latter being terminated by a long, aculeated scale. This is a marine species, but its particular history seems to be unknown: it appears to be furnished on each side the upper jaw with a row of small teeth, one of which on each side is much larger than the rest, and on being examined with a lens, is evidently tubular, the slit towards the point being much longer in proportion than in that of the Rattle-Snake, and even forming a continued furrow along the greater part of the tooth. Native of the Indian seas.

VAR. ?

A SPECIMEN somewhat less than the former, is of a brown colour, the dorsal bands appearing much less distinct: but as both animals appear to have been long preserved in spirits, too much dependence should not be placed on this particular. These snakes are preserved in the British Museum, as is also another, which, in general form, length, &c. is allied to the preceding, but seems to have differed considerably in pattern and colour, the bands being yellow, decurrent, and becoming alternato-confluent beneath, so as to leave large round side-spots of the white ground-colour.

SLENDER HYDRUS.

*Hydrus Gracilis. H. corpore antèrius gracillimo squamis ovatis
 lœvibus, posterius crassiore squamis hexagonis abrupte truncatis.*

Hydrus with the fore part of the body very slender, and covered with smooth ovate scales; the hind part thicker and covered with abruptly-carinated hexagonal scales.

LENGTH about two feet: head very small, or not of greater diameter than the neck, and covered with large scales: neck and fore part of the body very slender, not more than about a fifth of an inch in diameter, and cylindric for the distance of about seven inches, when it begins to enlarge and flatten into a carina on the upper part, which is continued to the end of the tail. The slender part above mentioned is covered with ovate smooth scales; the remainder of the animal with hexagonal ones, each marked with an abrupt central carina: the tail is about an inch and three quarters long, flat, and obtusely-acuminated, but not so broad as the thickest part of the body: its lower edge is less carinated than the upper, the row of hexagonal scales of the abdomen being continued on this part to the tip. The colour of the whole animal is now grown pale, but appears to have been banded all along the upper parts from head to tail with numerous, equidistant brown and somewhat obtusely pointed bands reaching almost to the abdomen, those on the small or cylindric part of the body being continued into annuli: the stricture or contraction at the place

of the vent is not so strongly marked as in the great Hydrus, to which this species appears allied in some particulars. It is preserved in the British Museum.

BLUEISH HYDRUS.

Hydrus Cærulescens. H. cærulescens, fasciis decurrentibus cæruleis, abdomine albo.

Blueish Hydrus, with dusky-blue decurrent bands, and white abdomen.

LENGTH two feet: habit resembling that of the Great Hydrus, but the abdomen has a single and perfectly undivided row of hexagonal scales, from the throat to the beginning of the tail, of about the tenth of an inch in diameter, and forming a flat carina on that part: back marked by a carina also, but the scales not differing in shape from those on the rest of the body, being hexagonal, with an abrupt middle carina: head not broader than the neck, and covered with large scales: tail two inches and a quarter long, and of the usual form in this genus, being moderately broad, but, as in the preceding animal, not equalling the thickest part of the body. Colour pale livid blue above, and white beneath, but marked throughout its whole length, as in the preceding species, by decurrent fasciæ of a deeper blue, and which dip on the white of the sides: they commence immediately from the head, the top of which is of a simi-

lar colour. It is an East-Indian species, and is preserved in the British Museum.

SHORT HYDRUS.

Hydrus Curtus. *H. flavesceus curtus, fasciis decurrentibus subacuminatis fuscis, supra subconfluentibus.*

Yellowish short Hydrus, with dusky decurrent subacuminated bands somewhat confluent above.

LENGTH about a foot: body compressed, and considerably thicker in proportion to its length than in any of the preceding: head flattish, covered with large scales: neck or fore part but little thinner than the rest of the body: tail about an inch long, and of the usual form: scales on all parts hexagonal, and small for the size of the animal: back carinated; abdomen more obtusely so, having a row of hexagonal scales: colour pale yellow, with a pretty close series of deeply decurrent dusky bands from head to tail, and so placed as to appear alternately confluent on the top of the back, more especially near the head. An East-Indian species. Preserved in the British Museum.

FASCIATED HYDRUS.

Hydrus Fasciatus. *H. niger, fasciis ascendentibus flavidis.*

Black Hydrus with ascendent yellowish bands.

Anguis laticauda. *Lin. Mus. Ad. Frid. 2. p. 43.*

Hydrus fasciatus. *Schneid. Amph. 1. p. 240.*

Tatta Pam. *Russel's Ind. Serp. pl. 44.*

THE Fasciated Hydrus is described and figured by Mr. Vosmaer, in his work on some of the rarer species of animals, as well as by Dr. Russel, in his publication on the Indian Serpents. It appears, from the account of Mr. Schneider, to arrive at a considerable size, though the specimen figured by Dr. Russel scarcely measures two feet in length: it is of a long and slender habit, and is of a black colour, fasciated throughout its whole length by pretty closely placed yellowish white pointed bands, rising upwards from the abdomen, and almost meeting at their tips on the ridge of the back: the head is small, or not broader than the neck, and is covered by large scales: the neck cylindric: the back carinated, the sides declining, and the belly roundish: the scales on the trunk, tail, and belly, orbicular, close, and not imbricated: the tail, which does not much exceed the diameter of the body, terminates obtusely, yet tipped with a point: the teeth are small; a marginal and two palatal rows appearing in the upper jaw; and, therefore, according to the general rule, it may be supposed not poisonous: Mr. Schneider, however, in the larger specimens which he exa-

mined, observed a large curved fang-like tooth on each side, hid, as it were, in a sheath. This serpent is a native of the Indian seas: the specimen described by Dr. Russel was found on the sea beach at Vizagapatam, in August 1788, and appeared very alert in its motions; yet, when put into a vessel of sea water, in order to be kept for experiments relative to its bite, it very soon died.

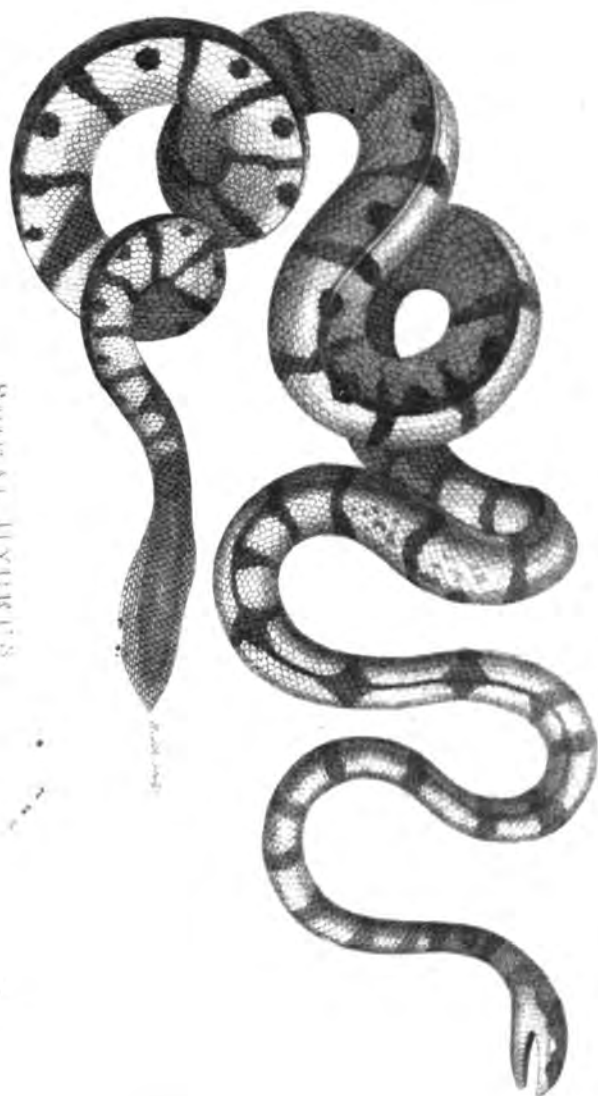
SPIRAL HYDRUS.

Hydrus Spiralis. H. flavescens fusco fasciatus, fasciis subtus in longitudinem confluentibus, corpore spiraliter contorto.

Yellowish Hydrus with brown bands, longitudinally confluent beneath, and spirally contorted body.

THE present highly elegant species appears to have been hitherto unnoticed: its length is about two feet, and its habit slender: the body much compressed throughout; the back rising into a very sharp carina; the abdomen being also carinated, but having a flattened edge of scales somewhat wider than the rest, and measuring about the fifteenth of an inch in diameter: the head is small, and covered with large scales: the mouth wide; the scales on the whole animal moderately small, ovate, and slightly carinated: the ground colour is yellow, barred in a beautiful manner from head to tail with deep chesnut-brown or blackish fasciæ, each widening on the abdomen, and thus forming a highly distinct and handsome pattern when viewed on each side,

S. P. 11. 11. 11. 11. 11.



seeming to constitute so many large, round, yellow spots on a blackish ground: the back, at about the middle, is marked, along its upper part, with a row of rather large, round, blackish spots situated between the fasciæ, and so placed as to be in some parts on one side, and in others on the opposite side of the dorsal carina, while some few are seated on the middle of the ridge itself: this variegation is continued to the tail, which is about an inch and three quarters long, black or deep brown, with a few yellow patches towards its beginning: it is remarkably broad for the size of the animal, and very thin on the edges, so as to be semitransparent on those parts. The most remarkable circumstance in this snake is the singular obliquity of its form; the body in different parts being alternately flatter on one side than the other, and the pattern completely expressed on the flattened side only; the other or more convex side being unmarked by the round spots, and lying as it were beneath; thus constituting several alternately spiral curves: this snake seems of an unusually stiff and elastic nature, and the carina on the back is so sharp as to surpass in this respect every other species of serpent. The specimen is in the British Museum, but its particular history seems to be unknown.

BLACK-BACKED HYDRUS.

Hydrus Bicolor. *H. capite oblongo, corpore supra nigro, infra flavido, cauda maculosa.*

Hydrus with oblong head, body black above and yellowish beneath, with spotted tail.

Hydrus bicolor. *Schneid. Amph. 1. p. 240.*

Anguis Platura. *Lin. Syst. Nat. p. 391.*

Nixboa Quaquecolla, seu serpens rara Mexicana cauda lata,
Sch. 2. p. 80. t. 77. f. 1.

Nalla Wahlagillee Pam. *Russ. Ind. Serp. p. 47. pl. 41.*

THIS species is readily distinguished by the remarkable distribution of its colours; the head and upper parts being of a deep black, the lower parts pale yellow, and the tail spotted: along the sides runs a row of smaller scales than the rest, and of a brighter yellow: the head is black, and is of an elongated form in front, bulging behind, subconvex above, and a little compressed laterally: it is covered with large scales: the mouth is wide; the teeth small and numerous, there being a marginal and two palatal rows in the upper jaw: the body is compressed, and the back highly carinated: the scales orbicular and very minute: the general length about two feet and a half; the tail about three inches. It is a native of the Indian seas, and is said to be common near the coasts of the island of Otaheitee, where it is called by the name of *Etoona-toree*, and is used as an article of food.



DARK-BLUE HYDRUS.

Hydrus Atrocæruleus. *H. atrocæruleus, abdomine flavescente, linea media cærulea.*

Dark-blue Hydrus, with yellowish abdomen marked by a middle line of blue.

Mutta Pam. *Russ. Ind. Serp. p. 35, pl. 30.*

Hydrus Enydris. *Schneid. Amph. Fasc. 1. p. 245.*

LENGTH one foot eight inches: colour a very dark changeable blue; abdomen yellowish white, with a dark blueish line along the middle: head small, and covered with large scales: fore part of the body slender; circumference of the trunk, in the thickest part, about two inches and a quarter: tail short, small, taper, and compressed. This snake, which is described by Dr. Russel, was taken in an Indian lake called *Ankapilly*, in one of the traps employed for catching eels: it appeared to be harmless; having in the upper jaw a marginal and two palatal rows of small reflex teeth.

CINEREUS HYDRUS.

Hydrus Cinereus. *H. cinereus, rostro subtruncato, abdomine sub-flavescente.*

Ash-coloured Hydrus, with subtruncated snout, and abdomen tinged with yellow.

Hydrus Rynchops. *Schneid. Amph. 1. p. 246.*

Karoo Bokadam. *Russ. Ind. Serp. p. 23, pl. 17.*

LENGTH near three feet and a half: thickness near the head about three inches: middle of the

trunk four inches and a half: head somewhat broader than the neck, yet appearing small in proportion to the trunk: rather convex above, compressed on the sides, and projecting into a short obtuse or subtruncated snout, which is covered with smallish laminæ of various sizes: the remainder of the head, as well as of the whole upper parts, with ovate or suborbicular carinated scales, smallest on the head: eyes small and vertical: mouth not large: teeth close set, not regular, small, and reflex; a marginal and two palatal rows in the upper jaw. Colour of the scaly part of the snout pale cinereous; the rest of the animal very deep grey or ash-colour: abdomen tinged with yellow: tail a little compressed, eight inches in length, moderately tapering, and terminating in an obtuse point. Sent to Dr. Russel from *Ganjam* in July 1788: the particulars of its history unknown: placed in this genus by Schneider from its habit and alliance with the preceding.

FISHING HYDRUS.

Hydrus Piscator. *H. fusco-flavescens, maculis rotundatis nigris lineisque connectentibus.*

Brownish-yellow Hydrus, with rounded black spots joined by connecting lines.

Hydrus Piscator. *Schneid. Amph. p. 247.*

Neeli Koea. *Russ. Ind. Serp. p. 38. pl. 33.*

LENGTH about two feet nine inches: circumference three inches and a half: head rather

broad, ovate, somewhat depressed, and laterally compressed; covered with large scales: tail eleven inches in length, slightly carinated, tapering very gradually, and terminating sharply: head dusky; rest of the animal yellowish brown, with numerous round black spots joined by narrow fillets regularly disposed in oblique rows, a few scales of light yellow being interspersed: abdomen yellowish white. Native of India, frequenting wet paddy fields, and commonly reckoned a water-snake: moves swiftly, and carries its head high, with a menacing air, in its progression, but when provoked did not either hiss or snap at a stick presented to it: was not provoked to bite a chicken, though pecked several times by the animal: during the time of this experiment it threw up a pretty large fish, which appeared to have been but a short time in the stomach: is not a poisonous species, the teeth resembling those of other innocuous serpents: does not very properly belong to this genus.

 MARSH HYDRUS.

Hydrus Palustris. *H. fusco-flavescens, maculis rhombis fuscis lineisque interjectis, abdomine perlaceo.*

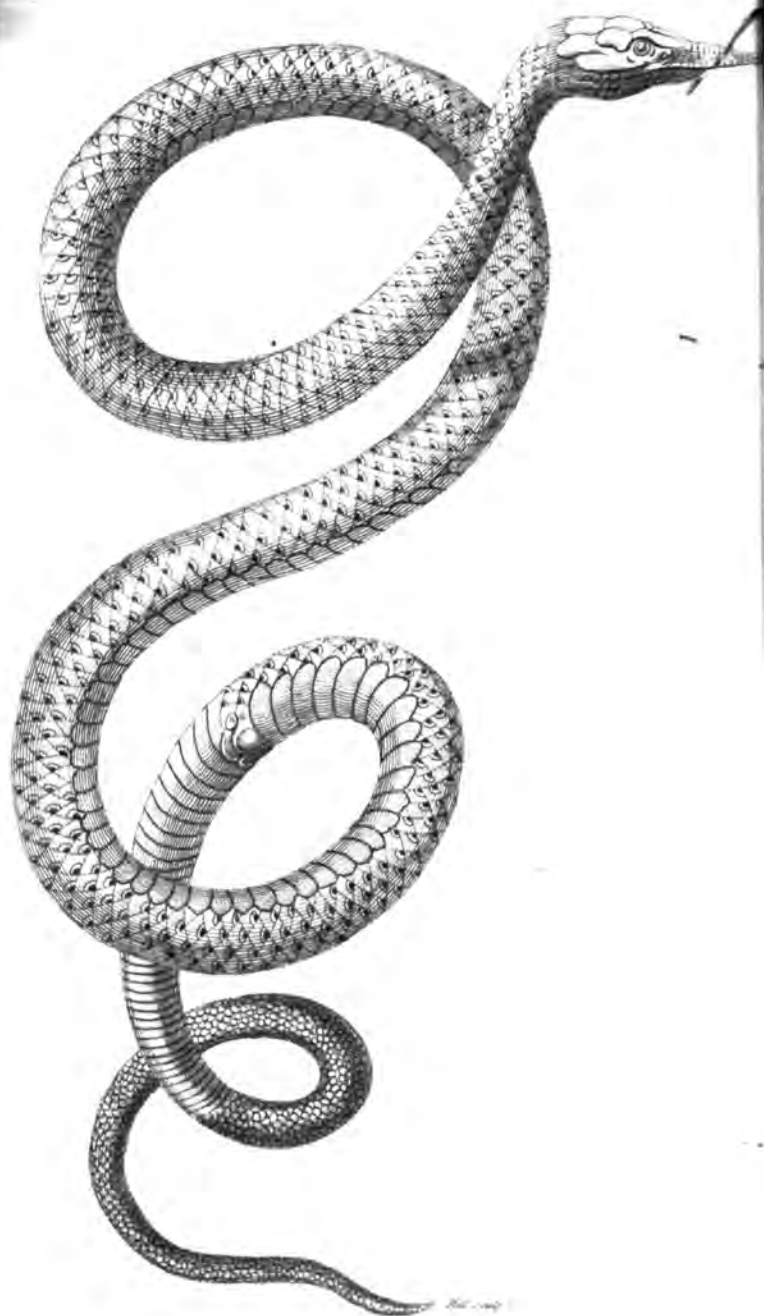
Brownish-yellow Hydrus, with rhomboid brown spots and interjected lines, and pearl coloured abdomen.

Hydrus palustris. *Schneid. Amph. p. 249.*

Paragoodoo. *Russ. Ind. Serp. p. 25. pl. 20.*

ALLIED to the preceding species: length more than two feet: trunk round; swelling and dimi-

nishing in a gradual manner: head broadish, oblong, covered with large scales: tail round, about five inches and a half long, and very taper: colour of the animal on the upper parts yellowish brown, beset with oblique rows of rhomboid brown spots with black borders, and between each range of spots runs a ferruginous line: the whole forming a decussated pattern of spots and lines: scales oblong and carinated: tail plain or unspotted: abdomen pearl-coloured. This species, according to Dr. Russel, is not uncommon in India, frequenting damp grounds, and the borders of tanks, and growing to a size much larger than that of the specimen above described: it is not a poisonous species: in reality it is not very properly stationed in the present genus, having neither flattened tail, nor carinated abdomen.



SPOTTED LANGAYA

LANGAYA. LANGAYA.

Generic Character.

Scuta abdominalia.

Annuli caudales.

Squama terminales.

|| *Abdominal Plates.*

|| *Caudal Rings.*

|| *Terminal Scales.*

SNOUTED LANGAYA.

Langaya Nasuta. L. maxilla superiore rostrata.

Langaya with the upper jaw produced in form of a snout.

Langaha. Bruguier. Journ. de Physique, 1784. Cepede Ovip.
2. p. 469.

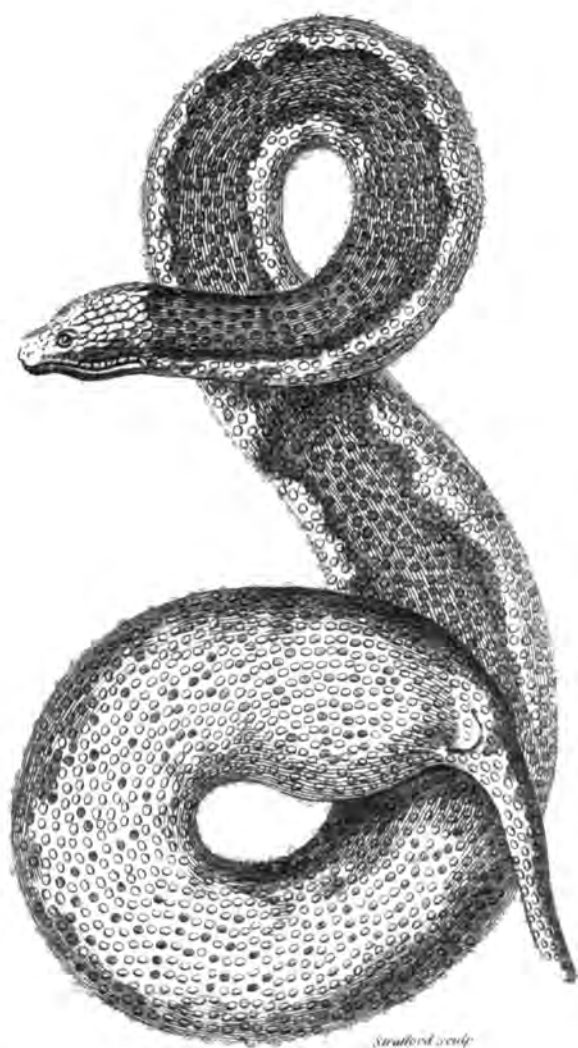
Abdominal scales 184, caudal rings 42.

THE genus *Langaya*, consisting of a single species only, differs from all the rest of the serpent tribe in having the upper part or beginning of the tail marked into complete rings or circular divisions resembling those on the body of the *Amphisbæna*, while the extreme or terminal part is covered with small scales, as in the genus *Anguis*.

The *Langaya nasuta*, or Long-snouted *Langaya*, is a native of Madagascar, and appears to have been first described by Mons. Bruguier of the Royal Society of Montpellier, whose account of it is inserted in the *Journal de Physique* for the

year 1784, The length of the individual described was about two feet eight inches, and its greatest diameter about seven lines: the head is covered with large scales, but the snout, which is extremely long and sharp, projecting to a considerable distance beyond the lower jaw, is covered with very small scales: the teeth, in shape and disposition, resemble those of a Viper: the scales on the upper parts of the body are rhomboidal, of a reddish colour, and each marked at the base by a small grey circle, with a yellow spot in the middle: the under parts are pale or whitish: the number of abdominal scuta, as well as of circles on the tail, is observed to vary in this snake, as is also the colour, which in one individual was violet, with darker coloured specks on the back. The natives of Madagascar are said to hold the Langaya in great dread, considering it as a highly poisonous serpent.

JAVAN ACROCHORDUS.

*Stratford sculp.*

ACROCHORDUS. ACROCHORDUS.

Generic Character.

Corpus caudaque undique ver- || *Body and tail completely co-*
tucosa. || *vered with warts.*

JAVAN ACROCHORDUS.

Acrochordus Javanicus. A. nigricans, subtus albidus, lateribus fusco maculatis.

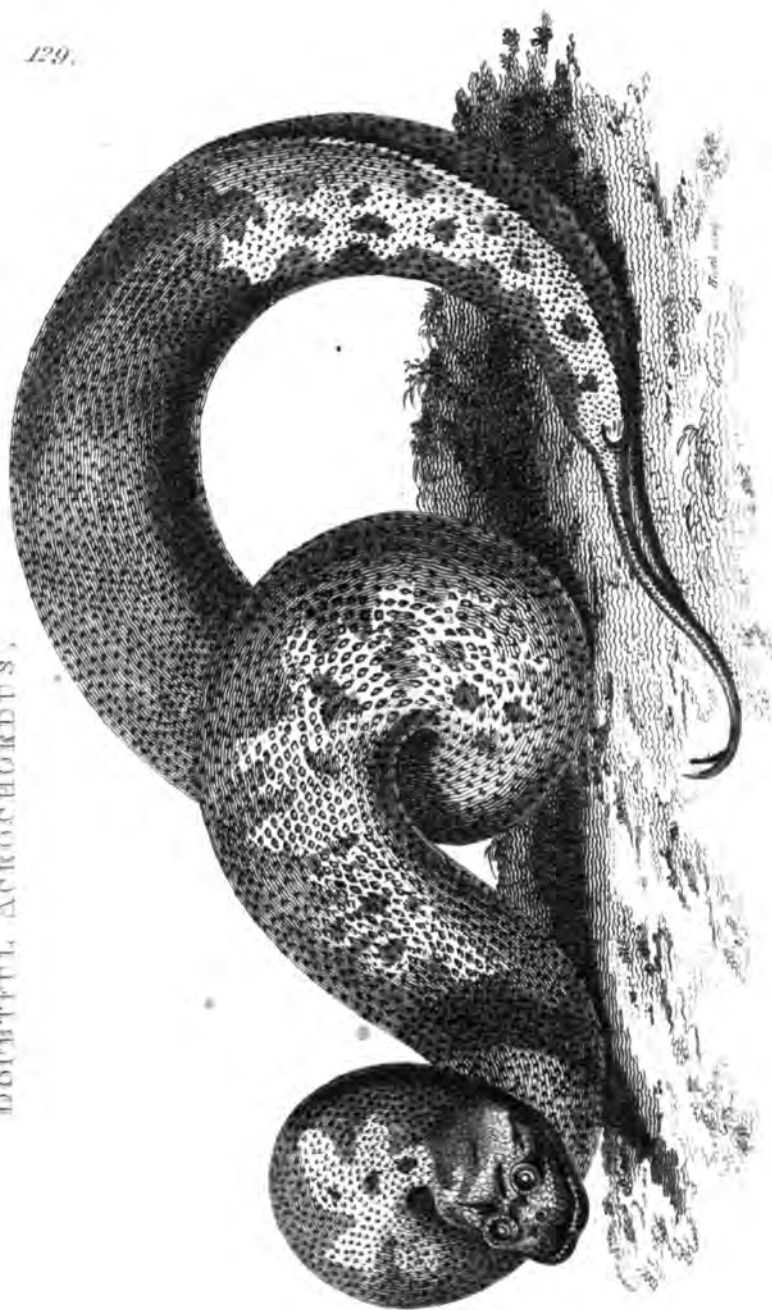
Blackish *Acrochordus*, whitish beneath, with the sides marked by dusky spots.

Acrochordus Javanicus. Hornst. Act. Stockholm. 1787.

THE remarkable snake which gave rise to the institution of this new genus, is a native of the island of Java, and was first described by Mr. Hornsted in the Swedish Transactions for the year 1787, and in the Journal de Physique for the year 1788. It was found in a large pepper-ground near Sangasan, in the year 1784, and measured about eight feet in length; the thickness of the neck being six inches, that of the largest part of the body ten inches, and that of the tail an inch and half: the colour of the upper part of the animal was blackish, and of the under part whitish; the sides marked with dusky spots: the head trun-

cated, depressed, and scaly: the jaws equal, the superior being emarginated beneath; the inferior curved: the eyes lateral, on the fore part of the head; the irides livid: the nostrils circular, small, approximated, and situated above the tip of the snout: the rictus or gape rather small for the size of the body: the teeth in both jaws subulate, very sharp, and reversed, without any appearance of fangs, and accompanied by a double row of very small teeth in the palate: the tongue thick at the base, the forked part black and slender: the body entirely covered, as well as the tail, with rough tricarinated warts: the vent small, the body very suddenly tapering towards the tail. This snake was secured by a Chinese, by means of a split bamboo applied over its neck, and thus carried to Batavia, where, on being skinned and opened, exclusive of a quantity of indigested fruit, were found five completely formed young, measuring nine inches each: the flesh of the animal was eaten by the Chinese people, who affirmed that it was excellent food, and the skin, being preserved in spirits, was brought over to Europe by Mr. Hornsted, and deposited in the Museum of the King of Sweden.

BOUETTII, ASCOCHORDUS.



DOUBTFUL ACROCHORDUS.

Acrochordus Dubius. *A. fuscus, abdomine carinato, lateribus nigro-maculatis.*

Brown Acrochordus, with carinated abdomen, and sides spotted with black.

IN its general appearance and proportion so very nearly does the present serpent resemble the preceding or Javan species, that one description might almost serve for both, except that the head in this is covered with very minute rough or warted scales, differing in size alone from those on other parts of the animal, whereas, if we may rely on the accuracy of Mr. Hornsted's description and figure of the Javan Acrochordus, that part is covered with flat, ovate scales, and of a far different appearance from the mucronated or wart-like scales on every other part. The size of the present specimen also falls much short of the former, measuring only about three feet in length: its colour is an obscure brown, with some ill-defined clouds and patches of a darker colour dispersed along the sides and abdomen: the shape of the vent, thickness of body, and sudden contraction at the beginning of the tail, as well as the comparative size and shape of that part are exactly similar: the abdomen, however, in this serpent is slightly carinated beneath towards the tail, which is a circumstance not particularized in Mr.

Hornsted's description of the Javan species. The present specimen is in the British Museum, and the highly accurate engraving which accompanies this article will shew in the most satisfactory manner the resemblances and discrepancies between this and the former animal. Its native place is not particularized.

FASCIATED ACROCHORDUS.

Acrochordus Fasciatus. A. fuliginosus, abdomine carinato, fasciis lateralibus ascendentibus albidis.

Fuliginous *Acrochordus*, with carinated abdomen, and whitish ascendent lateral bands.

Hydrus granulatus. H. corpore scabro fuliginoso, fasciis albis in ventre latioribus cineto. Schneid. Amph. Fasc. 1. p. 243.

THIS is so much allied to the preceding, that it may perhaps be doubted whether it really differs in any other respect than age, size, and cast of colours, measuring about eighteen inches in length, and being of a dusky-brown colour, with several paler fasciæ which take their rise from the abdomen, and ascend on the sides: the abdomen is carinated, as in the former. This is certainly the *Hydrus granulatus* of Mr. Schneider, who, in his work on the *Amphibia*, describes it as a water-snake, though, seemingly, without any other foundation than its having a carinated abdomen; its other characters by no means agreeing with

PASCIANERU ACCHUC'HOORI 3.



those of the genuine Hydri. Mr. Schneider observes its near affinity with the Hornstedian Acrochordus, but mentions nothing particular relative to its native place. The specimen is in the British Museum, and is very accurately represented on the annexed plate.

ANGUIS. SLOW-WORM.

Generic Character.

Squamæ abdominales et sub- || *Scales* both on the abdomen
caudales. || and beneath the tail.

THIS genus is easily distinguished by having the abdomen and under part of the tail covered with scales of similar appearance to those on the rest of the animal, except that in some few species they are rather larger: to this may be added, that the body is of a shorter and more uniformly cylindric form than in the genus *Coluber*, and that the eyes are, in general, small, and the tail rather obtuse: no poisonous species of *Anguis* has yet been discovered. To the English generic title, *Slow-Worm*, some objection may perhaps be made, and it is not to be imagined that all the animals of this genus are remarkably slow in their motions; though, from the want of scuta, they perhaps may be allowed to move with less rapidity than the generality of Snakes.

COMMON SLOW-WORM.

Anguis Fragilis. *A. griseo-rufescens, dorso fusco-striato, abdomine plumbeo.*

Rufous-grey Slow-Worm, with the back striated with brown, and lead-coloured abdomen.

Anguis fragilis. *Lin. Syst. Nat. p. 923. Lur. t. 5. f. 2.*

Cecilia. *Aldr. Gesn. Raj. Jonst. &c.*

Blind-Worm. *Penn. Brit. Zool. 4. p. 23. pl. 4.*

Long-Cripple. *Borl. Cornu. p. 284. pl. 28. mala.*

Abdominal scales 135, subcaudal 135.

THIS species is found in almost all parts of Europe in similar situations with the common Snake, and is a perfectly innoxious animal, living on worms and insects: its usual length is from ten to twelve inches, and sometimes even more: its colour is pale rufous brown above, with three narrow longitudinal dorsal streaks or lines of a darker cast; and beneath a deep lead-colour: the head is rather small, and covered in front with large scales, as in most other innoxious serpents: the eyes are very small: the tail measures more than half the length of the animal, and terminates pretty suddenly in a slightly acuminate tip. The Slow-Worm is a viviparous animal, and sometimes produces a very numerous offspring: like other serpents, it varies in intensity of colours at different periods, and the young are commonly of a deeper cast than their parent: the general motions of this animal are rather slow than otherwise, except when endeavouring to escape; and the young seem to move more slowly than

the full grown ones: Slow-Worms can, however, occasionally exert a considerable degree of swiftness, and can readily penetrate the loose soil, in order to conceal themselves from pursuit: they are often found in considerable numbers, during the winter season, at some depth beneath the surface; retiring on the approach of winter, and lying in a state of torpidity, and again emerging from their concealments on the approach of spring, when they cast their skin, and recover their former liveliness. It is observed of this species, as well as of some others, that if struck with any degree of violence, the body not only breaks abruptly on the struck part, but even sometimes at different places: the skin is remarkably strong, and the animal, when handled or irritated, has a way of stiffening itself by stretching to its utmost length, in which state, if any part of the skin be injured, the separation soon takes place in consequence of this rigidity, instead of yielding like the more limber bodies of the snakes.

Var.?

ABERDEEN SLOW-WORM.

Anguis Eryx? *Lin. Syst. Nat. p. 923. Penn. Brit. Zool. 3. p. 33.*

Abdominal scales 126, subcaudal 136.

THIS seems to be no other than a variety of the *A. fragilis*, differing merely in being something larger, and of rather darker colours: found in

some parts of Scotland, and, according to Linnæus, in America also.

SPECKLED SLOW-WORM.

Anguis Meleagris. *A. griseo-rufescens, undique fusco-punctata.*

Rufous-grey Slow-Worm, speckled on all sides with brown.

Anguis Meleagris. *Lin. Syst. Nat. p. 390.*

Serpens Carcilia seu Scytale. *Seb. 2. t. 21. f. 4.*

Abdominal scales 165, subcaudal 32.

THIS, according to Seba's figure quoted by Linnæus, appears so nearly allied to the common Slow-Worm that it might almost be considered as the same animal, differing in the want of the dorsal streaks, and in having the whole upper surface freckled with minute deep-brown specks, the tip of each scale being of that colour: it is a native of the East Indies.

PAINTED SLOW-WORM.

Anguis Scytale. *A. fulva, fasciis alternis nigris.*

Fulvous Slow-Worm, with alternate black bands.

Anguis Scytale. *Lin. Syst. Nat. p. 923. Mus. Ad. Frid. p.*

21. t. 6. f. 2.

Merian Surin. t. 69.

Abdominal scales 240, subcaudal 13.

THE Painted Slow-Worm is a species of singular beauty: its general length is about a foot and half or two feet, and its diameter moderate in

proportion: the ground-colour is a rich yellow-ferruginous or orange, on which are disposed, throughout the whole length of the animal, numerous, moderately broad, equidistant, jet-black transverse bands, not continued entirely round the body, but alternating with each other, and terminating in rounded extremities: the scales on the intermediate parts are generally tipped with brown, exhibiting more or less of a speckled appearance on the skin: when this animal, however, has been preserved for any considerable length of time in spirits, the orange-colour fades into white, in consequence of which, the specimens usually seen in Museums appear variegated only with black and white: the head is small, and the tail very short, viz. not above one twentieth of the whole length, and terminating obtusely: this species is a native of South America and some of the West-Indian islands.

CORAL SLOW-WORM.

Anguis Corallina. A. rubescens, sanguineo-variatus.

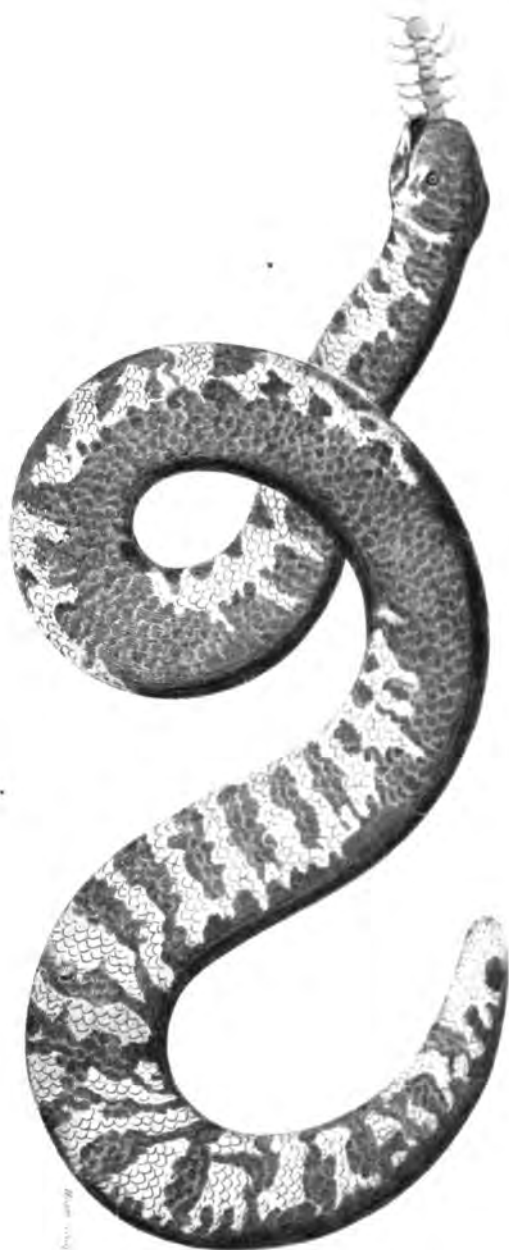
Pale-red Slow-Worm, with blood-red variegations.

Anguis corallinus. Lin. Syst. Nat. Gmel. p. 1123.

Serpens coralloides Brasiliensis rubra. Seb. 2. t. 73. f. 2.

A LARGE and highly elegant species: length about a foot and half: thickness very considerable: ground-colour pale red, with very broad alternating fasciæ and variegations of deep coral red: the scales are moderately large, and of a

COBRA - SLOW - WORM



Reynolds



BLACK-BANDED NUCOMIS WORM

Head angle

Fig.

rounded form, and the head and tail are remarkably obtuse. This beautiful animal is a native of South America, where it is said to be found in woods, and to prey on the larger insects, as scolopendræ, &c. &c. : in colour it sometimes varies, a mixture of black being blended with the red on the sides, and the bands more numerous in some specimens than in others.

BLACK-BANDED SLOW-WORM.

Anguis Ater. *A. albus nigro fasciatus.*

White Slow-Worm, with black bands.

Anguis Ater. *Lin. Syst. Nat. Gmel. p. 1123.*

Amphisbæna Ceylonica foemina. *Seb. 2. t. 73. f. 3.*

MUCH allied in general appearance to the preceding, but differing in colour, being white with black bands: the abdominal scales, according to Seba's figure, on the authority of which this species is given, are somewhat dilated, so as to approach in some degree to those in the genus *Coluber*: native of South America.

GLASS SLOW-WORM.

Anguis Ventralis. *A. nigro-virescens, flavo punctatus, abdomine brevissimo flavo, sulco laterali.*

Blackish-green Slow-Worm, speckled with yellow, with very short yellow abdomen, with a lateral furrow.

Anguis ventralis. *Lin. Syst. Nat. p. 923.*

Glass Snake. *Catesb. Carol. 2. pl. 59.*

Abdominal scales 127, subcaudal 222.

THIS is a moderately large and handsome species: general length about a foot and half or two feet: colour greenish brown, elegantly mottled with small pale yellow and black freckles: the under parts pale yellow: the head small: from the corners of the mouth to the vent, along each side of the body, runs a deep furrow, separating the abdomen, which is remarkably short, from the upper parts: the tail is more than twice the length of the abdomen, and terminates somewhat more acutely than is usual in this genus: the body is marked above by several rows of slightly elevated striae, which give the animal a general resemblance, except in colour, to the remarkable lizard termed *Lacerta apoda*. This species is a native of North America, and is not uncommon in Carolina, where it is known by the name of the Glass Snake. Catesby informs us that “a small blow of a stick causes the body to separate, not only at the place struck, but at two or three other places, the muscles being articulated quite through the vertebrae.”

SPOTTED SLOW-WORM.

Anguis Maculata. A. flava, tania dorsali alternato-fasciata nigra.

Yellow Slow-Worm, with an alternately-fasciated black dorsal band.

Anguis maculata. Lin. Syst. Nat. p. 391. Mus. Ad. Frid. p. 21. t. 21. f. 3.

Tucuman, &c. dicta Serpens ex Paraguaja. Seb. 2. t. 100. f. 2.

Serpens Amphisbæna orientalis. Seb. 1. t. 53. f. 7.

Abdominal scales 200, subcaudal 12.

LENGTH about a foot and half or two feet: thickness moderate: colour yellow or orange, with a black dorsal line, on each side of which are numerous, narrow, alternating, transverse bands of the same colour, continued throughout the whole length: the abdomen is traversed by less numerous but broader bands of a dusky colour: native of South America.

VAR.?

WITH red instead of black variegations.

BLACK-SPOTTED SLOW-WORM?

Anguis? leucomelas. A. albus, serie triplici vel quadruplici macularum dorsalium nigrarum.

White, Slow-Worm? with a triple or quadruple dorsal series of black spots.

Vipera Brasiliensis Tetzauhcoatl dicta. Seb. 2. t. 78. f. 2, 3.

A BEAUTIFUL serpent; figured in the work of Seba: length about two feet: colour above milk-white, with a triple row of black spots down the upper part, the middle range being divided by a narrow fillet of the white ground-colour: sides and abdomen tinged with yellow: head white, large-scaled, and minutely speckled with black: tail rather short, and terminating somewhat obtusely: this species has the habit of a *Coluber* in some degree, and is said by Seba to be smooth, round, and plump, with an obtuse tail.

 RUFOUS SLOW-WORM.

Anguis Rufa. A. tota cupreo-rufa.

Slow-Worm entirely of a coppery rufous colour.

Amphisbæna Amboinensis, squamis rubicundis obducta. Seb. 2. t. 7. f. 4.

LENGTH about a foot and half: thickness moderate: colour a uniform high rufous or coppery brown, with a white spot near the tip of the tail: scales of moderate size, rounded, and each marked by a dusky central speck: native of Amboina.

RETICULATED SLOW-WORM.

Anguis Reticulata. *A. rosea, squamis rhombeis cute interjecta alba reticulatis.*

Rose-coloured Slow-Worm, with rhomboid scales, reticulated by the interstitial white skin.

Amphisbæna Amboinensis, corio quasi reticulato conspicua.
Seb. 2. t. 7. f. 3.

OF similar size and habit with the preceding, but of a strong or deep rose-colour, covered with rhomboid scales, so placed as every where to leave decussations of white between the several rows, the skin appearing through the interstices: along the sides are a few oblong white patches, which form a kind of fasciæ as they approach the tail, the tip of which is white: the head is also obscurely surrounded by a white zone: native of Amboina.

 SNOUTED SLOW-WORM.

Anguis Nasuta. *A. atrovirens, subtus flava, naso elongato.*

Greenish-black Slow-Worm, yellow beneath, with elongated snout.

Anguis rostratus. *C. L. Weigel Mem. des Curieux de la Nature de Berlin, 3. p. 190.*

Abdominal scales 218, subcaudal 12.

DESCRIBED by Mr. Weigel in the Berlin Memoirs: length about a foot: colour greenish black above, and yellow beneath, extending in some parts a little way up the sides: upper lip consider-

ably longer than the lower, and marked on the tip by a yellow spot: tail terminated by a horny tip, and marked by a yellow spot and two oblique yellow bands: native of Surinam.

JAMAICA SLOW-WORM.

Anguis Jamaicensis. A. subargenteo-fuscescens, corpore sensim incrassato, cauda abrupte subacuminata.

Silvery-brownish Slow-Worm, with the body gradually thickening, and the tail abruptly subacuminate.

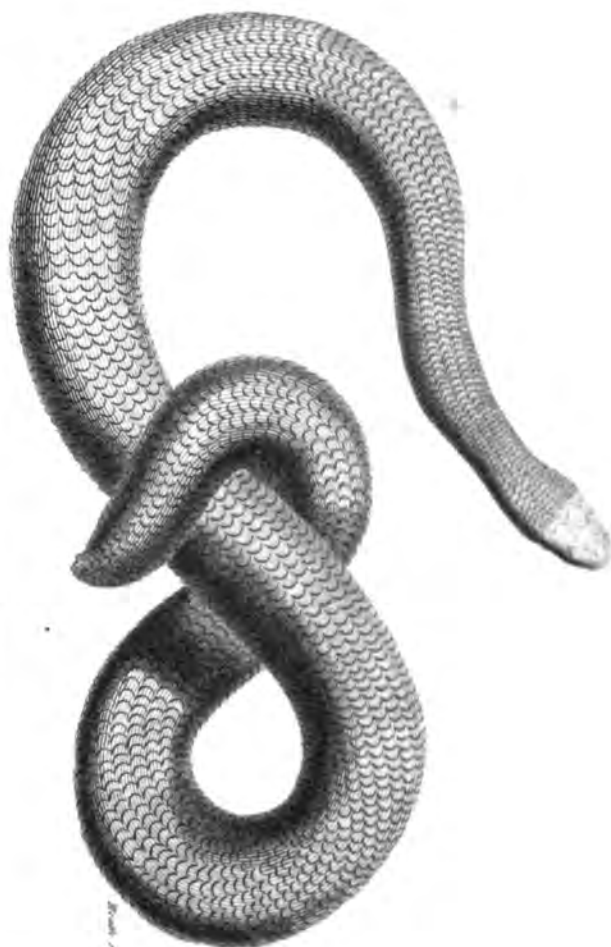
Amphisbæna subargentea. Silver Snake. *Brown Jam. p. 460. pl. 44. f. 1.*

Serpens Cæcilia ex Mauritania. Seb. 1. t. 87. f. 2.

Anguis lumbricalis? *Lin. Syst. Nat. p. 391.*

THE length of this species, according to Brown, in his History of Jamaica, seldom exceeds sixteen inches, and the diameter of the animal gradually increases from the snout to the tail, which is extremely short, and terminates in a slightly pointed extremity: it is found about the roots of decayed trees, near ants' nests, &c. and though popularly considered as poisonous, is entirely innocuous: its colour is a uniform pale brown, with a kind of silvery gloss on the scales, which are extremely smooth, resembling in some degree those of the Scink.

JAMAICA SLOW WORM.



PUNCTULATED SLOW-WORM.

Rondoo Talooloo Pam. *Russ. Ind. Serp. p. 48. pl. 43.*

A SMALL species, about six inches in length, and of the diameter of a hen quill, cream-coloured, and powdered with innumerable black dots: tail most extremely short and subacuminate. This species is described in Dr. Russel's work on the Indian Serpents: it is common in *Vizagapatam*, and is vulgarly considered as mischievous: it moves with incredible swiftness, and a specimen immersed in spirits remained alive more than ten minutes.

Dr. Russel describes and figures a larger species under the same name, which seems to be no other than a variety of the *A. Meleagris*, differing in having a longer tail than usual.

CLIVIAN SLOW-WORM.

Anguis Clivica. A. ex cinereo fusca, frontis scuto majori cordato.
Cinereous-brown Slow-Worm, with a large cordated frontal scale.

Anguis Clivicus. Lin. Lyst. Nat. Gmel. p. 1122. Gen. Serp. p. 69.

Abdominal scales 177, subcaudal 37. *Gronov.*

SAID to be frequent in the Dutchy of Cleves, but seems a species not yet completely described.

SEBAN SLOW-WORM.

Scytalæ Americanæ. Seb. 2. t. 2. f. 1, 2, 3, 4.

A SMALL species, figured and slightly described in the work of Seba: length about ten inches: general proportions those of the common Slow-Worm: colour very pale yellowish brown, thickly speckled with pale blue, brown, and black spots: head in some specimens reddish, in others blue: native of South America.



WHITE APPIBEN.

AMPHISBÆNA. AMPHISBÆNA.

Generic Character.

Corpus teres, æquale.

Annuli trunci caudæque.

|| *Body* cylindric, equal.

|| *Annular divisions* both on
body and tail.

WHITE AMPHISBÆNA.

Amphisbæna Alba. *A. tota alba*.

Amphisbæna entirely white.

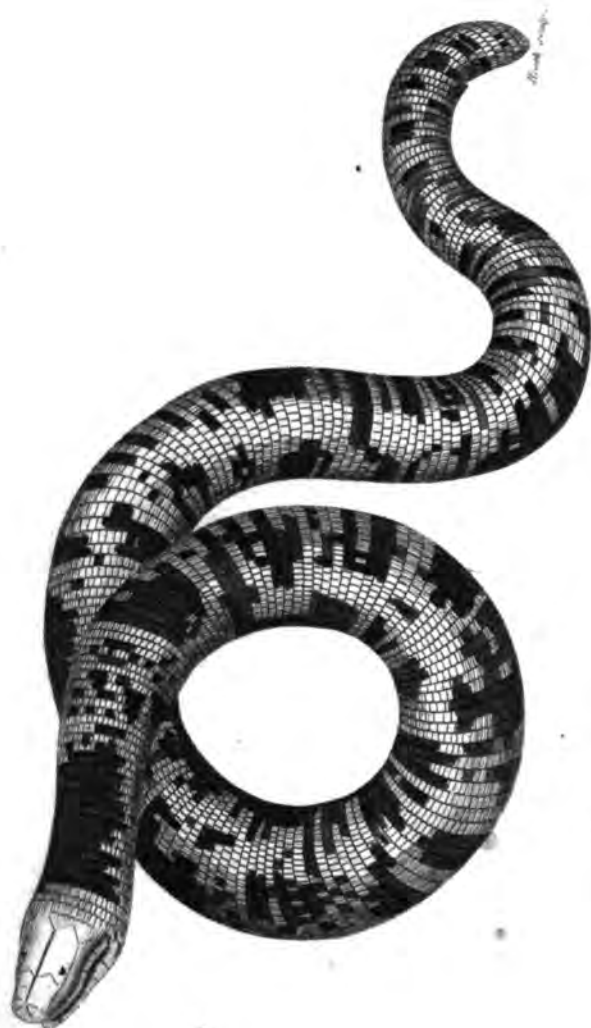
Amphisbæna alba. *Lin. Syst. Nat.* p. 393. *Mus. Ad. Frid.*
p. 20. t. 6. f. 2.

Serpens Cæcilia Americana. *Seb.* 2. p. 25. t. 24. f. 1.

THE remarkable genus *Amphisbæna*, much allied to that of *Anguis*, and even, in some degree, to that of *Lacerta*, is very readily distinguished by the manner in which the exterior surface of its skin is marked into well-defined numerous circles or rings completely surrounding the body, and divided in a longitudinal direction by still more numerous strait lines; thus forming so many square or parallelogrammic scales. Only two species of this genus have hitherto been discovered, of which the present is the largest, measuring from fifteen or eighteen inches to two feet

or more in length, and being of a considerable thickness in proportion: its form is equally cylindric throughout; the head, which is covered with large scales, being of scarce greater diameter than the body, and the tail, which is very short, terminating in a rounded extremity. The colour of this species is white, but in some specimens tinged with pale rose-colour, while in others the head and back incline to a pale yellowish or brownish cast: the head is very short, the eyes very small, the snout obtuse, the mouth of moderate width, the teeth short, strong, not very sharply pointed, and constituting a single row of about fourteen or sixteen in each jaw: the tongue is very large, broad, thick, flattish, and bifid only at the tip, the surface of the base appearing scaly: the tail, in specimens of about two feet, is scarcely more than two inches * in length: the usual number of circles in this snake is observed to be about two hundred and twenty-three on the body, and sixteen on the tail. It is a native of South America, where it is found in woods, preying on insects, worms, &c. It is a harmless animal, but it is said that on handling it for some time the skin becomes affected with a slight itching, accompanied by small pustules, owing to an acrimonious moisture, exsuding from the animal.

* In the Museum Adolphi Friderici the tail of this species is mistakenly said to be a sixth part of the whole length instead of a twelfth.



Python amurensis

FULIGINOUS AMPHISBÆNA.

Amphisbæna Fuliginosa. *A. albo nigroque varia.*

Amphisbæna with black and white variegations.

A. fuliginosa. *Lin. Syst. Nat.* p. 923.

Amphisbæna, *Apamea*, &c. &c. *Seb.* 1. t. 88, and 2. t. 118.
22. 24. 73. 100, &c.

THIS, which seems rarely to equal the preceding in size, is at all times readily distinguished by its colours; the general cast being a purplish or blackish-brown, variegated in an irregular manner on all sides by scattered and broken patches of yellowish white, the outlines or divisions of each variegation being always rectangular: the general form is the same as in the preceding species, but the head is rather longer in proportion: the skin is very strong, and the divisions both of the annuli and scales extremely distinct or strongly marked: sometimes it varies in its colours, exhibiting pretty vivid variegations of yellow on a purple or violet ground-colour; and at other times an equally remarkable contrast of black and white: it is probable that in the living animal there is always a cast of purple or violet in the ground-colour, and of yellow in the variegations. It is by no means uncommon in many parts of South America, resembling the former species in its manners, and being equally innoxious. The Count de Ceppe observes, that above the vent is a row of small perforated papillæ, similar to

those in many of the Lizard tribe. The skin of the Amphisbænæ is remarkably strong and tenacious, and of a smooth or glossy surface, and it is probable that they are enabled with great facility to perforate the ground somewhat in the manner of earthworms, in order to obtain occasional supplies of food.



Both sides.

EEL-SHAPED COECILIA.

After Jan. in London. Published by G. Kearley, Fleet Street.

CÆCILIA. CÆCILIA.

Generic Character.

<i>Corpus</i> teres, æquales.	<i>Body</i> cylindric, equal.
<i>Rugæ</i> laterales trunci caudæque.	<i>Wrinkles</i> on the sides both of body and tail.

EEL-SHAPED CÆCILIA.

Cæcilia Tentaculata. *C. anguilliformis, rugis distantibus, rostro tentaculato.*

Eel-shaped *Cæcilia*, with distant wrinkles and tentaculated snout.

Cæcilia tentaculata. *Amoen. Acad.* 1. p. 498. t. 13. f. 1.

L'Ibiare. Cepede Ovip. p. 466. pl. 21.

THE length of this species is about a foot, and its general appearance that of a small Eel: its colour is a livid brown, the abdomen paler or whitish: the head is not larger than the beginning of the trunk, and it is of a somewhat taper form, the upper lip projecting beyond the lower: the eyes are extremely small: the nostrils seated at the tip of the snout, and immediately beneath each is an extremely small cirrus or beard: the mouth is furnished in each jaw with a row of very small sharp teeth: across the sides of the body, from

head to tail, run numerous, semi-annular, and pretty distinct furrows or wrinkles, which are about a hundred and thirty-five in number; those on the upper parts being moderately distant from each other, but becoming more close or numerous as they approach the extremity, almost immediately beneath which is situated the vent, there being, properly speaking, no distinct tail: the skin of the whole body when closely inspected, is found to be covered with extremely minute papillæ or granules. This animal seems to have been first described and figured in the *Amoenitates Academicæ*. It is a native of South America, and is said to be of an innoxious nature. The specimen in the British Museum measures at least eighteen inches in length, the wrinkles on the sides being a fifth of an inch distant from each other: those near the extremity the tenth or twelfth of an inch.

WHITE-SIDED CÆCILIA.

Cæcilia Glutinosa. *C. fusca, rugis confertissimis, linea laterali albida.*

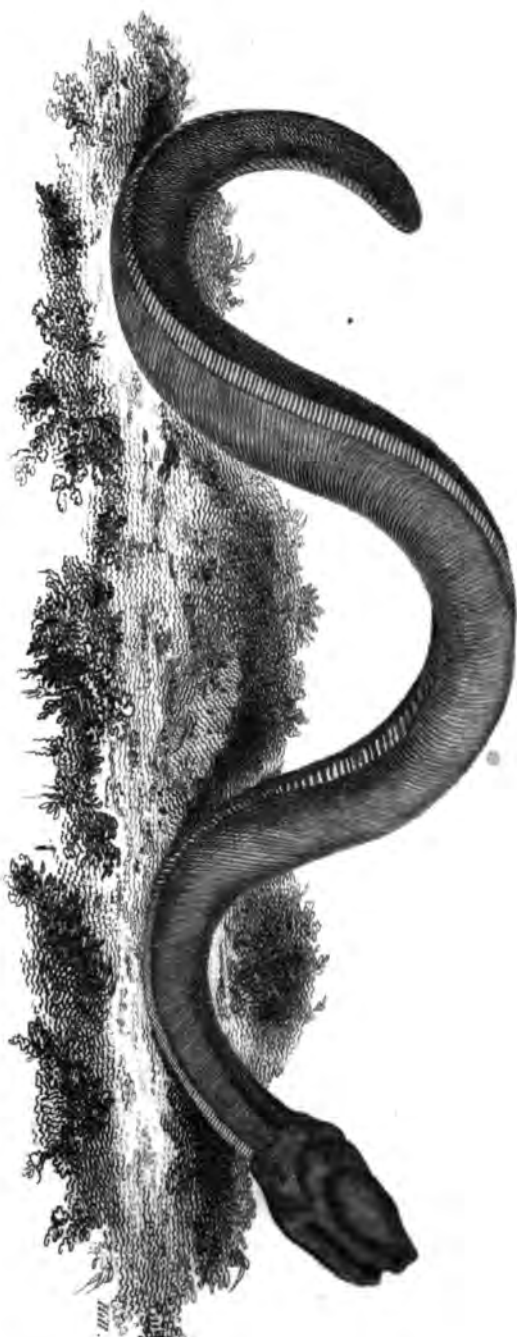
Brown Cæcilia, with extremely close wrinkles, and whitish lateral line.

Serpens Cæcilia Ceilonica. *Seb. 2. p. 26. t. 25. f. 2.*

Cæcilia glutinosa. *Lin. Syst. Nat. p. 393. Mus. Ad. Frid. p. 19. t. 6. f. 1.*

This, which was first described by Seba, is about the same length and diameter with the former, but has a large, tumid head, and wider nostrils, with-

WHITE-SIDE'D GECKIA.



out any appearance of tentacula: the colour of both head and body is deep brown, and along each side runs a broad whitish stripe; the wrinkles are extremely close and numerous, and disposed in such a manner as to form a slight carina along the sides on the white stripe. It is a native of South America: the individual described by Linnaeus in the Mus. Ad. Frid. is said to have had a small head, but in every other respect appears to have resembled Seba's specimen.

SLENDER CÆCILIA.

Cæcilia Gracilis. *C. fusca, lumbriciformis.*

Brown Cæcilia, resembling an earth-worm in shape.

Cæcilia tentaculata. *Mus. Ad. Frid. p. 19. t. 5. f. 2.*

LENGTH thirteen inches and three quarters: diameter, which is perfectly equal throughout, one fifth of an inch: skin smooth, but when closely examined appearing most minutely granulated: rugæ lateral, semi-annular, not strongly marked, and about the tenth of an inch distant from each other: head not perceptibly larger than the body, and obtusely tapering at the mouth: upper jaw longer than the lower, the mouth being placed somewhat beneath; about the eighth of an inch wide: teeth not distinctly visible, but may be felt in both jaws by means of a pin: nostrils small, rather distant, and seated at the tip of the snout on

each side: at a small distance between these are two minute papillæ or tentacula: vent immediately beneath the tip of the tail, small, and by its outline forming eight or nine crenatures round the foramen: rugæ for about an inch before the end closer than on the rest of the body: skin of the head perfectly smooth, or without the minute granulations dispersed over all the rest of the animal: no appearance of eyes: colour of the whole an uniform dull brown. It is supposed to be a native of South America*.

I CANNOT conclude the enumeration of the Serpent tribe without observing, that this branch of Natural History still requires much elucidation, and is, perhaps, of all others, the most liable to errors and uncertainties. The Linnæan characters of these animals, in the *Systema Naturæ*, are, from their extreme brevity, but ill calculated for general information, nor can it be surprising that they should now be considered as constituting little more than a mere series of memorandums relative to abdominal and subcaudal scales; while many of the most remarkable serpents in the works of Scheuchzer and Seba, seem to have been entirely neglected, apparently for no other reason than that the number of these parts could not be ascer-

* In the Museum Adolphi Friderici it is figured under the name of *C. tentaculata*, and appears to be confounded with that species.

tained: as if the external form and colours of the animals were of no importance in the specific character. On this subject the observations of Mr. Schneider appear to be perfectly just.

“ *Ingenia curiosorum primus acuit Linnæus ad investigandas corporum naturalium atque animalium notas; verum postquam accedente philosophia et zootomia pomoeria scientiæ naturalis multo latius promota fuerunt, raro curiosorum lectorum desiderio satisfaciunt breves amphibiorum notationes singulis speciebus in systemate Linnæano appositæ.*”

Mr. Schneider goes on to observe, that, unless a more ample mode of description be adopted, there is reason to apprehend that the authority of the Linnæan characters of the Amphibia, and of Serpents in particular, will become entirely obsolete.

“ *Aucto enim amphibiorum cognitorum numero, plures formæ notas cum pluribus speciebus communicari fuit necesse, quas ille, quibusdam proprias putaverat; plures etiam omisisse illum probabile est obscuras in exemplis junioribus vel vinaceo liquore nimis maceratis, vel contempsisse adeo velut inutiles, dum ipse nimis scutorum numero confidebat, quas deinde in adultis et recte cognitis exemplis eminentiores observavit curiosorum diligentia, vel assumere investigatas coegit dubitatio et criteriorum Linnæanorum cognita vanitas. Quod nisi fit, prope adest, ut verear, ne*

brevi omnis Linnæani Systematis auctoritas in enarranda serpentium historia naturali plane ut in metallorum historia factum est, evilescat. Compages quidem totius fabricæ jam omnes in postrema editione solutas esse video, atque ipsa fundamenta eo inclinare mihi videntur, ut ruina ædificii sit timenda."



HELL-BROTHERED SIREN.

From the original drawing by the artist, Mr. J. J. J.

APPENDIX.

DUBIOUS AMPHIBIA,

OR

WHOSE REAL NATURE IS NOT COMPLETELY
UNDERSTOOD.

SIREN.

EEL-SHAPED SIREN.

Siren Lacertina. *S. bipes*, corpore anguillæformi, branchiis ramosis.

Two-footed Siren, with eel-shaped body, and ramified branchiæ.

Siren Lacertina. *Lin. Amoen. Acad.* 7. p. 311. *Syst. Nat.* vol. 1. pt. 2. *Addend.*

Muræna Siren. *Lin. Syst. Nat. Gmel.* p. 1136.

Amphibious Bipes, or Mud Inguana. *Ellis Phil. Trans.* vol. 56. p. 189.

Siren Lacertina. The Siren. *Nat. Misc. pl.* 61.

THIS species stands eminently distinguished in the list of animals by the ambiguity of its characters, which are such as to have induced the great Linnæus to institute it for a new order

of Amphibia, under the title of *Meantes**; an order, however, which does not stand among the rest of the Amphibia in the *Systema Naturæ*, but is mentioned in a note at the end of the second part of the first volume of that work.

The genus with which the Siren has evidently the greatest possible affinity, is the *Lacerta* or Lizard. It even very much resembles the larva, or first state of a *Lacerta*; and it is still doubtful whether it may not really be such: yet it has never been observed in any other state, having two feet only, without any appearance of a hind pair: the feet are also furnished with claws, whereas the larvæ of all the *Lacertæ* are observed to be without claws; or, in the Linnæan phrase, *digitis muticis*: the mouth has several rows of smallish teeth: the body is eel-shaped, but slightly flattened beneath; marked on the sides by several wrinkles, and slightly compressed towards the extremity of the tail, which is edged with a kind of soft skin or adipose fin, as it were: on each side the neck are three ramified branchial processes, resembling, on a larger scale, those belonging to the larvæ of water-newts, and at the base are the openings into the gills: the eyes are very small, and blue. The general colour of the animal is a deep or blackish brown, scattered over, especially on the sides, with numerous minute whitish

* The characters of this Order are thus given by Linnæus, viz. *Branchiæ & Pulmones simul. Pedes brachiati, unguiculati*. The generic character stands thus, viz. *Corpus bipedum, caudatum, nudum. Pedes brachiati, unguiculati*.

specks. Its size nearly equals that of an Eel, being frequently found of the length of more than two feet. It is a native of North America, and more particularly of South Carolina, where it is not very uncommon in muddy and swampy places, living generally under water, but sometimes appearing on land. It has a kind of squeaking or singing voice, for which reason Linnaeus distinguished it by the title of Siren.

This curious animal was first discovered and described by the ingenious Dr. Garden, who resided many years in Carolina, and who paid particular attention to the science of Natural History, which he enriched by many highly interesting observations. Dr. Garden communicated specimens of the Siren to Linnaeus, with particulars relative to its history and manners. Linnaeus, in his letter to Dr. Garden on this subject, declares, that nothing had ever exercised his thoughts so much, nor was there any thing he so much desired to know as the real nature of so extraordinary an animal.

The following particulars relative to the anatomy of the Syren are given by Mr. Hunter in the 56th volume of the Philosophical Transactions

“The tongue is broad and has very little motion: it has a bone similar to that in birds, turtles, &c. On the posterior and lateral parts of the mouth, are three openings on each side; these are similar to the slits of the gills in fish, but the partitions do not resemble gills on their outer edges, for they have not the comb-like structure. Above

and close to the extremity of each of these openings externally, so many processes arise; the anterior the smallest, the posterior the largest: their anterior and inferior edges and extremity are serrated, and formed into fimbriæ: these processes fold down and cover the slits externally, and would seem to answer the purposes of the comb-like part of the gill in fish.

“At the root of the tongue, nearly as far back as these openings reach, the trachea begins, much in the same manner as in birds. It passes backwards above the heart, and there divides into two branches, one going to each lobe of the lungs. The lungs are two long bags, one on each side, which begin just behind the heart, and pass back through the whole length of the abdomen, nearly as far as the anus. They are largest in the middle, and honey-combed on the internal surface through their whole length. The heart consists of one auricle and one ventricle. What answers to the inferior vena cava, passes forwards above, but in a sulcus of the liver, and opens into a bag similar to the pericardium: this bag surrounds the heart and aorta, as the pericardium does in other animals: from this there is an opening into a vein which lies above, and upon the left of the auricle, which vein seems to receive blood from the lungs, gills, and head, is analogous to the superior vena cava, and opens into the auricle which is upon the left of the ventricle. The aorta goes out, passing for a little way in a loose spiral turn, then becomes strait, where it seems to be muscular: at this part

the branches go off, between which there is a rising within the area of the aorta, like a bird's tongue, with its tip turned towards the heart*.

"The liver is principally one lobe pretty close to the heart at the fore part, and passes back on the right of the stomach and intestines; at its anterior extremity on the left side, there is a very short lobe ending abruptly. The gall-bladder lies in a fissure on the left side of the liver near its middle: there is no hepatic duct: the hepatocystic ducts, which seem to be three in number, enter the gall-bladder at its anterior end or fundus, and the cystic duct passes out from the posterior end of the gall-bladder, and terminates in the gut, about half an inch from the pylorus. The œsophagus, which is pretty large, passes back, and is continued into the stomach in the same line. The stomach at the posterior end bends a little to the right, where it terminates in the pylorus. The intestines pass back, making many turns: at the posterior end they become pretty

* This account of the venæ cavæ opening into the cavity of the pericardium may appear incredible; and it might be supposed, that in the natural state of the parts, there is a canal of communication going from one cava to the other, which being broken or nipt through in the act of catching or killing the animal, would give the appearance above described. I can only say, that the appearances were what have been described, in three different subjects which I have dissected; and in all of them the pericardium was full of coagulated blood. But, besides the smallness of the subjects, it may be observed that they had been long preserved in spirits, which made them more unfit for anatomical enquiries. They had been in my possession above seven years.

strait, forming what may be called the colon, or rectum, where they are a little larger, and run to the vent in a strait direction. At the beginning of this larger part of the intestinal tube there is no valvular structure. The spleen is a very small but long body : its anterior end is attached to the upper surface of the stomach, and it is continued back along the left side of the mesentery, to which it adheres. The pancreas is a small body, lying above the duodenum, and is attached also to the left side of the mesentery. The kidneys are situated in the upper and posterior part of the abdomen, having the rectum below and passing between them, as in the snake, &c. Below the rectum lies a long bag like a bladder ; it adheres all along to the inside of the abdominal muscles, and its mouth opens into the rectum ; but whether it is the bladder or not I cannot tell. On each side of the rectum, close to the lungs, there is a body, the posterior end of which rests upon the anterior end of the kidney ; but what they are I cannot pretend to determine.²

The celebrated anatomist Camper seems to have deceived himself in a singular manner, in his examination of this extraordinary animal ; asserting that it was destitute of lungs ; and, in consequence, considering it as breathing by gills alone, in the manner of fish, regarded it as a species of *Muraena* or Eel, in which genus it is accordingly placed in the Gmelinian edition of the *Systema Naturæ* ; under the name of *Muraena Siren*. The opinion of Camper, however, is now allowed to

be erroneous; and the Siren is unquestionably most allied to the Lizard tribe; though it still remains doubtful whether it should be considered as a larva, or as an animal in its perfect or ultimate form.

The lightness with which the Count de Cépède passes over this interesting subject cannot be observed without surprise: I have surveyed, says he, with attention the figure of this animal in the Philosophical Transactions, as well as its description by Mr. Ellis, and have not a moment's hesitation in pronouncing it to be merely the larva of a Lacerta.

“ Nous avons examiné avec soin la figure et la description que M. Ellis en a données dans les Transactions Philosophiques; & nous n'avons pas douté un seul moment que cet animal, bien loin de constituer un ordre nouveau, ne fût une larve.”

How different this from the sober investigation and philosophical doubts of the great Linnæus, as well as from the patient enquiries of a Hunter and a Camper!

The celebrated Amphibiologist Schneider, after declaring his own opinion, that the Siren is really no other than the larva of some undiscovered Lizard, thus expresses his sentiments relative to the Count de Cépède's decision on the subject.

“ Factum igitur casu potius puto, ut suspicio Galli de Sirene lacertina Linnæi proposita, p. 611*,”

* Histoire Naturelle des Quadrupèdes ovipares.

tam bene caderet, nec a scopo veritatis plane aberraret."—*Schneid. Amph. fasc. 1. p. 41.*

It remains to be added, that the Siren, if thrown on the ground with any degree of violence, has been observed to break in two or three places; in this particular resembling the *Anguis fragilis* or Slow-Worm. It is also proper to observe, that no Lizard of which it may be supposed the Larva, has ever yet been discovered in those parts of Carolina where it is most frequent. The species to which it seems most allied is the *Lacerta Teguixin* of Linnæus, which is a native of South America.

ANGUINE SIREN.

Siren Anguina. *S. quadrupes, corpore anguilleformi, branchiis ramosis.*

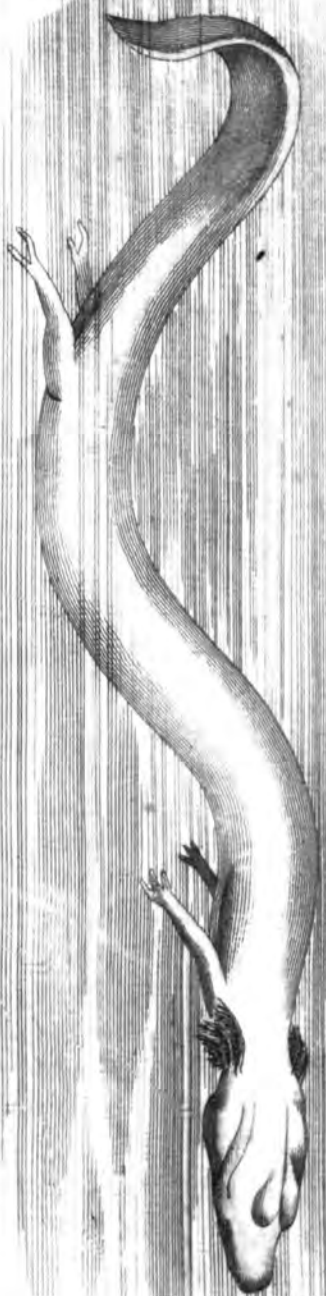
Four-footed Siren with eel-shaped body, and ramified branchiæ.

Proteus anguinus. Laurenti Spec. Med. p. 37, t. 4. f. 3.

Austrian Siren.

THIS singular animal is found in as singular a situation; being an inhabitant of the celebrated and romantic Lake called Lake Zirknitz*, about six German miles from Labac, in the Dutchy of Carniola in Austria. From this lake, which is somewhat more than a German mile in length, and half as much in breadth, the water regularly retires during the summer, by numerous subter-

* Lugea Palus of the ancients.



ANGELINE STREIN.

How much

aneous outlets or holes at the bottom; leaving the ground dry, and fit for pasture, the cultivation of millet, &c. &c. as well as for various kinds of hunting and other amusements: but in the month of October it again returns, with great force; springing out of the passages before mentioned from a vast depth till the Lake is completely filled. It is situated in a hollow or valley, surrounded by rocky and woody mountains, in which are vast caverns, and is principally supplied by eight rivulets running into it from the adjoining mountainous region. Of this Lake, with a probable theory of its phænomena, an ample description may be found in the sixteenth volume of the Philosophical Transactions.

The species of Siren at present to be described is extremely rare, and is found, in the spring, and towards the decline of summer, in some particular parts of the above-mentioned lake, and commonly measures, when full grown, from about ten to twelve or thirteen inches in length; the largest specimens being near three quarters of an inch in diameter. It is entirely of a pale rose or flesh-colour, or even nearly white, except the three pair of ramified branchial fins on each side the neck, which are of a bright red or carmine-colour. Its general shape is that of an eel; the body being cylindric, till towards the end of the tail, where it becomes flat, and is attenuated both above and below into a kind of fatty fin, scarce distinguishable from the rest of the tail: the skin is every

where smooth and even; the head of a somewhat depressed form, with a lengthened, obtuse, and widish snout, and has no external eyes: the mouth is moderately wide, and furnished with a row of very minute teeth: the legs are about three quarters of an inch in length; the fore legs being situated almost immediately behind the branchial fins, and the feet furnished with three toes, without any appearance of claws: the hind legs are situated at a great distance backwards, towards the commencement of the tail, and are of the same appearance with the fore legs, but the feet have only two toes, which, like those of the fore feet, are destitute of claws. The motions of the animal, when taken out of the water, are, in general, extremely slow and languid; as is also the case when kept in a vessel of water; but when in its native lake, it is sometimes observed to swim pretty briskly, waving its body in a serpentine direction, in the manner of a leech.

The Anguine Siren is well figured by Laurenti, who seems to have been its first describer, in his work entitled *Specimen Medicum, exhibens Synopsis Reptilium*, under the title of *Proteus Anguinus*.

With respect to its real nature, Zoologists are not yet agreed: some imagining it to be the Larva of some species of Lizard, whose gradations have not been fully ascertained, while others, with perhaps equal probability, suppose it a complete or perfect animal.

Its anatomy is amply detailed by Dr. Schreibers,

in the 91st volume of the Philosophical Transactions. The chief abbreviated particulars are the following:

The *Eyes* are most extremely small, subcutaneous, and situated on each side the base of the rostrum or upper jaw, just before the bulging or projecting parts.

The *Tongue* is large and fleshy; loose at the point, but attached by the root to the lower jaw.

The *Stomach* is very large, and of an almost coriaceous nature.

The *Liver* is extremely large and long; appearing, at first view, to fill the whole cavity of the abdomen, so as nearly to hide the other viscera.

The *Lungs* consist of a pair of very long tubular canals or processes, each terminating in an oblong simple bladder which is not divided internally into cellular spaces, but merely separated into two cavities by an intermediate membrane, a communication between the two sides of the bladder being left by means of a large semilunar opening at the upper end.

The *Bones* seem to be of the same conformation and nature as in the Salamander: no ribs or sternum; but bones in the tail.

This animal appears evidently to be of a predacious nature; feeding on the smaller kind of aquatic animals; since one which was kept alive for some days in a vessel of water, was observed to discharge from its stomach several small shells of the genus *Helix*, and in the stomach of one which Dr. Schreibers dissected were found the head and

bones of a small fish. Its voice is a strong hiss, louder than might be expected from the size of the animal.

Upon the whole, as Dr. Schreibers observes, there can be no doubt that this animal bears a great affinity to the *Siren lacertina*, before described, having both gills and lungs; and, therefore, leaves us in equal uncertainty as to its being a larva or a perfect animal. It is, however, remarkable that, notwithstanding the most careful researches, during many years, and the frequent fishing which takes place in the lakes and caverns of the neighbouring country, at all seasons of the year, no animal has hitherto been detected of which it can possibly be supposed the larva.

FISH-FORMED SIREN.

Siren Pisciformis. *S. fusco-ferruginea, nigro maculata, branchiis ramosissimis, palmis tetradactylis, plantis pentadactylis.*

Ferruginous-brown Siren, spotted with black, with finely ramified branchiæ, tetradactylous fore and pentadactylous hind feet.

Gyrinus Mexicanus. Mexican Tadpole. *Naturalist's Miscellany, pl. 342, 343.*

THIS animal was first described in the *Naturalist's Miscellany*, from a well-preserved specimen in the British Museum. I shall, therefore, here repeat my former description from the above-mentioned work.

The animal here represented in its natural size is supposed to be native of Mexico, and though



FISH-FORMED SIREN.

Hill engr.

perhaps no other than the Larva or Tadpole of some large American Lizard, seems a scarce less singular and curious animal than the *Siren*, so much and so long the subject of dubious speculation to Linnæus, and for which he at length instituted his additional order termed *Meantes*. In its general appearance it bears some resemblance to the larva of the *Rana paradoxa*, but is furnished with gills, opening externally in the manner of a fish: the openings are very large, and the operculum or external flap is continued from the sides of the head across the throat beneath, so as completely to insulate the head from the breast: the gills themselves consist of four semicircular bony or cartilaginous arches, which are denticulated or serrated on their internal or concave part, like those of fishes: on the opercula or external flaps are situated three very large and elegant branchial fins or ramified parts, divided and subdivided into a vast number of slender or capillary processes. In these particulars it resembles the *Siren lacertina*, except that in that animal the external opening to the gills is very small: the mouth is furnished in front with a row of extremely minute teeth: the tongue is large, smooth, and rounded at the tip: the rictus or gape, when the mouth is closed appears considerably wider than it really is; owing to a lateral sulcus proceeding from each corner to some distance: the feet are entirely destitute of webs, and the toes are furnished with weak-

ish claws: the fore feet have four, and the hind feet five toes. Exclusive of the general colour of the animal, the whole skin when minutely examined, appears to be scattered over with very minute white specks, resembling those on the surface of the *Siren lacertina*. The sides of the body are marked by several strong rugæ or furrows, and an impressed lateral line or sulcus is continued from the gills to the tail*.

It may be added that the animal figured in the 4th volume of the American Philosophical Transactions and described by Mr. de Beauvois as a new species of Siren, seems much allied to the present, and may even be the same species, since it appears to agree in the leading particulars: the specimen, however, seems not to have been in the highest state of preservation, since no mention is made of any spots: its size is considerably smaller than that of the present ani-

* A species nearly allied to this is mentioned by Mr. Schneider, who examined it in the museum of Professor Hellwig at Brunswick. It was taken in the Lake Champlain, in North America, where it is said to be dreaded by the fishermen, who consider it as a poisonous animal. Its length is more than eight inches, and its diameter nearly an inch: it is soft, spongy, and porous, and is marked on each side by three rows of round black spots: tail ancipital, compressed, and spotted; lower edge strait; upper curved; tip roundish or cylindric. Head broad, flat; eyes small; teeth in both jaws conical obtuse, and rather long: tongue broad; mouth wide; lips like those of a fish: on each side the neck three branchial fins: feet four; distant; tetradactylous, and without claws.—*Schneid. Hist. Amph. fasc. 1. p. 50.*

mal; and the toes are represented as terminating bluntly. Mr. De Beauvois thinks, that, upon the whole, the Linnæan order *Meantes* should be preserved, until more detailed and enlarged observations on these animals shall have completely elucidated their real nature.

END OF VOLUME III.

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