ART. VIII. Contributions to the Natural History of Southern Africa. By Andrew Smith, M. D. Surgeon to the Forces.

(Continued from page 33)

Genus NAJA, Dand.

N. nigra. Colour above, livid black, beneath, greenish black; each abdominal plate margined behind by a tint of a lighter hue. Scales on the upper part of the neck near to the head, somewhat circular, those on the body ovate. Abdominal plates 224. Subcaudal scales 75 pairs. Length 5 feet 9 inches, of which the tail measures 13 inches. Circumference of the thickest part of the body 3½ inches. Inhabits the districts towards the Orange River; and is called the "Spitting Snake," from its being in the habit, according to the natives, of casting its poison at individuals who may be passing near it.

N. gutturalis. Colour above, a light yellowish brown, sometimes finely mottled with delicate short white and almost invisible streaks; beneath, nearly the same tint, with a dark brown collar, nearly 2 inches in breadth, about an inch behind the head; and towards its anterior extremity extending upwards on the sides of the neck, so as to be visible when the snake is lying flat on the ground. Abdominal plates 204. Subcaudal scales 59 pairs. Length 1 foot 10 inches. Inhabits the country near the mouth of

the Orange river.

Genus VIPERA.

V. ocellata. Colour above, a yellowish or reddish brown, with a row of large brown spots along each side, and each spot marked with a blue tint near its centre. Along the middle of the back is a series of transverse black bars, each edged, on one side at least, by a white or yellowish white line; beneath, of a yellowish white or pearly hue. Over each eye a conical elevation, out of which projects a cylindrical spine, slightly curved backwards, and about a line and a half, or nearly two lines in length. Abdominal plates 149. Subcaudal scales 27 pairs. Length 14 inches. Young specimens exhibit no appearance of spines over the eyes. Inhabits sandy districts north of the Cape Colony, and is very dangerous from its being liable to be trodden upon, owing to its colour being so nearly that of the sand.

Genus LACERTA.

Palpebral plates* not edged by granular scales.

L. elegans. Scales somewhat circular, small and flat, placed in transverse rows; abdominal plates disposed in 6 rows; collar formed of 8 scales; femoral pores 14 or 15. Colour of back and sides light reddish brown, tail and legs light red; under parts reddish white. Length, from 12 to 15 in. Inhabits Little Namaqualand and the country towards the Orange river.

L. tesselata. Anterior part of back, and the sides, for nearly their whole length, black, the former variegated by 4 fine, white, longitudinal lines, the latter by vertical white stripes. Posterior part of back and tail greenish brown; beneath yellowish white; fore legs variegated by white spots.—Abdominal plates disposed in 6 longitudinal rows; collar composed of 10 plates; femoral pores 12 or 14. Length about 14 inches. Inhabits the eastern parts of the Cape Colony.

L. livida. Back brown, sides black, the latter closely spotted or striped with white, the former with 6 white lines, either continuous, or formed of short stripes or spots; fore legs spotted with white. Tail greenish brown,

with a black irregular line on each side towards its base; under parts white. Six rows of abdominal plates, collar formed of 10 scales. Femoral pores 10. Length about 12 inches. Inhabits the northern parts of the Cape Colony.

This may perhaps be only a variety of the last; in many points they ap-

proximate, and in others, some of them essential points, they differ.

L. tæniolata. Back brown, with two fine black lines, in places composed of dots; sides black, with 3 longitudinal white lines, vanishing at or near the base of the tail. Tail brown above, inclined to red near the extremity, and marked on each side, towards the base, with a blackish line; under parts dull white. Abdominal plates in 6 longitudinal rows; collar of 9 scales; femoral pores 14. Length about 9 inches. Young—Black above, with 9 longitudinal white lines, the central one extending only a little distance along the neck. Inhabits the grassy districts of the Cape Colony.

L. intertexta. Colour above, reddish brown, with two rows of circular white spots, discontinued about half way between the anterior and posterior extremities, each spot surrounded by a black ring; sides chequered, black and white, the latter colour disposed in narrow vertical stripes. Tail light brown, with a dotted black line on each side, and the space between them above, irregularly marked with small black spots; under parts white. Abdominal plates in 6 rows; collar consisting of 12 or 13 scales; femoral pores 11. Length about 9 or 10 inches. Inhabits the country near Latakoo.

2. Palpebral plates partially or entirely surrounded by one or more rows of small granular scales.

L. ctenodactylus. Colour above rusty yellow, sometimes greenish brown, and finely variegated with brown or black points; sides brownish black, with two longitudinal whitish lines, either continuous, or formed of distinct spots; space between the lines also variegated with white spots; each side of the tail towards the base, marked with a black stripe; under parts yellowish white; extremities freely variegated with irregular yellowish white spots. Palpebral scales margined on their outer and hinder edges, by small granular scales. Abdominal plates in 18 longitudinal rows; collar formed by 11 scales; femoral pores 29 or 30. Length from 6 to 8 inches. Outer edge of each toe margined by a row of projecting, pointed scales, like the teeth of a comb. Inhabits the sandy deserts of Little Namaqualand.

L. undata. Colour above reddish yellow inclined to orange, with five broad black longitudinal lines, the central one lost on the neck, the next of each side united near the base of the tail, and from thence extend as one, a little way on the latter; the outermost on each side waved, or slightly tortuous, and below edged with some yellow spots. Palpebral plates edged on their posterior, anterior, and outer margins, by small granular scales. Collar composed of 13 scales; femoral pores 9 to 12; abdominal plates disposed in 10 longitudinal rows. Length about 6 inches. Inhabits the north-

ern and western parts of the Cape Colony.

L. lugubris. Palpebral plates completely surrounded with small granular scales. Scales on the body small, inclined to 4-sided, and placed in oblique transverse rows. Collar formed of 8 scales; abdominal plates disposed in 6 longitudinal rows; femoral pores from 14 to 16, or more. Colour of the body above and below, deep black or brown, more or less tinted with black, and above variegated with three golden yellow longitudinal stripes, either continuous or interrupted, the centre stripe bifid near the head; tail generally light red; extremities black or brownish, with yellow spots. Length about 6 inches. Inhabits the district immediately beyond the northern frontier of the Colony.

L. Capensis. Anterior, posterior, and outer margins of palpebral plates,

edged by several rows of small granular scales, their inner margin by a single row. Collar formed of 9 scales; femoral pores 11 or 12; abdominal plates in 14 longitudinal rows. Colour above, blueish green, with 5 longitudinal black lines, the central one very narrow, and bifid at its anterior extremity, the lateral ones slightly broken, and the one on each side next to the central one, inclosing white spots; tail above, and on the sides, of a light brown tint, under parts whitish. Length about 8 inches. Inhabits the arid districts of Cape Colony.

Genus ALGYRA, Cuv.

A. Capensis. Colour above, reddish yellow, with two or three irregular rows of black spots or stripes, many of the spots being encircled, or partially margined by white; along each side one, and sometimes two rows of white spots, or continuous white lines, the lowermost, when two exist, extends across the temples, as far as the eye; tail above, towards the base, marked with black spots; under parts yellowish white. Plates on upper surface of head, rough and furrowed, frontal plate concave towards its anterior extremity, and from the latter a deep groove extends to the apex of nose. Femoral pores from 10 to 13. Abdominal plates imbricate, and disposed in about 10 rows. Length from 7 to 9 inches. Inhabits the sandy deserts around Latakoo.

(To be continued.)

ART. IX. Letter from RICHARD OWEN, Esq. F.R.S. &c. Hunterian Professor to the Royal College of Surgeons, addressed to M. Arago, Perpetual Secretary to the French Academy of Sciences. Communicated by the author.*

> Royal College of Surgeons, London, January 21st, 1838.

Sir,

I regret that, owing to absence from London, and other causes, I have not, until this day, perused the paragraphs relating to the *Allantois* of the Kangaroo, which have appeared in the 'Comptes Rendus' of the Academy of Sciences;—Nos. 18, 19, and 20, of which have been placed in my hands, by my friend, Mr. Robert Brown.

With reference to the description of the allantois of the kangaroo given in No. 18, p. 638, I have briefly to state that M. Coste is mistaken, in supposing that an undissected ovum of a kangaroo, was submitted by me for his examination; it was the fætus of a kangaroo, with the vitelline sac and allantois appended to it: the ovum, (l'œuf de kangaroo), had been

* The preparation of the membranes in a fætal kangaroo, described and figured in the Mag. Nat. Hist. (Vol. i. p. 483, n. s.) was shewn by Mr. Owen to M. Coste, during a late visit of the latter to this country. On his return to Paris, M. Coste communicated to the French Academy, the existence of the allantois, accompanied by a direct intimation that this highly interesting and important discovery had been effected by his, M. Coste's dissection. Ep.