dicated 360 lbs. "Dimensions: His weight was 360 pounds; length from tip of nose to end of tail seven feet and one inch; breadth round the shoulders, thickest part, five feet two inches; length from tip of nose to end of jaw, covering the gills, two feet four inches; circumference of month, when braced open, three feet two inches; spread of tail from tip to tip, two feet three inches."

Dr. R. E. Rogers remarked upon the great interest excited by these specimens, and on motion a Committee was appointed to investigate their nature, and to procure from Mr. Davidson further information regarding their occurrence.

The thanks of the Academy were then ordered to be tendered to Mr. Davidson for his valuable donation received this evening.

# Nov. 29th.

## Mr. LEA, President, in the Chair.

Thirty-eight members present.

The Proceedings of the Biological Department for the present month were read.

The following papers, on report of the respective Committees, were ordered to be printed in the Proceedings.

#### Notes and Descriptions of Foreign Reptiles.

#### BY. E. D. COPE.

## TESTUDINATA.

The following species of Tortoises were brought by Mr. P. B. Duchaillu from equatorial West Africa, the present Autumn.

Kinixys erosa *Gray*. This curious species appears to be abundant throughout Gaboon, and the country of the Camma and Ogobai. Its range northward extends as far as the Gambia.

Sternothærus Derbianus Gray. Length, including head and neck, 14 in. 8 lin.; length of plastron, 6 in. 6 lin.; greatest breadth of do., 5 in.; breadth of head just before the tympani, 2 in. 5 lin.

Inhabits swamps in the Camma country.

This is probably the above named species, but judging from figures and descriptions, it approaches closely the S. s i n u at u s *Smith*, of South Africa, differing mainly in the form of the upper mandible, which is obtasely hooked in the former, bidentate in the latter. The habits of the two appear to differ; the S. African species inhabiting deep rivers, and remaining long at a time beneath the surface. It is considered by Dr. Gray (Catalogue Brit. Mús.) as identical with the S. castaneus *Bell*, but there is a manifest discrepancy between Smith's description, and the brief one of castaneus in the "Catalogue,"—principally with regard to the form of the vertebral scuta. The resemblance to the S. Derbianus is much closer, but judging as before, it is our impression that it is distinct from both.

#### HEPTATHYRA nob.

Cartilaginous border obsolete at the sides of the disc, and destitute of ossicles posteriorly. Sternum with two cartilaginous flaps, which cover the posterior extremities when retracted. Sternal callosities seven; one on each side corresponding to the closely connected hyo- and hyposternals, one to each of the FNov.

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epi- and xiphisternals, and one to the discoid entosternal. Hyo- and hyposternals united to the disc by suture, and separated from the episternals by a large cartilaginous interval. Head acute, parietal region depressed, frontal slightly arched. Nostrils not subdivided by a transverse process of the septum. Lips greatly developed, forming biangular flaps on each side of the mouth.

Heptathyra Aubryi. Cryptopus Aubryi Dumeril. Revue et Magasin de Zoologie; 1856, page 364.

Total length 2 feet, 6 in.; of sternum 15 in. 6 lin.; of head and neck 11 inches. Numerous specimens from the Fernando Vas river, Equatorial W. Africa.

The Dogania subplana of India doubtless exhibits the extreme of the Trionychoid modification of the Chelonian type, in the tardiness of the only partial union of the ribs into a carapacial disc, and the imperfect development of the sternal bones. There are but two callosities. Aspidonectes exhibits a superior grade of organization. The union of the ribs is more complete, a comparatively small part of their extremities extending beyond the disc in adult age. The sternal bones are better developed, especially the hyobypo- and xiphisternals. There are four external callosities.

Those species which agree in possessing cartilaginous flaps upon the posterior lobe of the sternum, are included by M. Dumeril in the single genus Cryptopus; but in some respects they are strikingly dissimilar. The unctatus and T. Sen egalens is are very interesting, as possessing in the free marginal ossicles the analogues of the marginal bones so universal among higher Chelonians. This far from unimportant peculiarity is wanting in the T. freenatus and Petersii; while the additional character of every sternal bone being protected by a corresponding external callosity (their number thus amounting to nine), proves the propriety of the generic name Cycloderma assigned by M. Peters. T. Aubryi, it is seen, agrees with the last in the absence of ossicles, but maintains the more typical Trionychoid peculiarity of one undivided callosity covering the hyo- and hyposternal bones. The extent of the union of these, (hæmapophyses,) with the disc, (pleurapaphyses,) without lateral cartilaginous or osseous "appendage," offers as good an example of a normal "hæmal arch" as is to be found in the order.

The object of generic nomenclature being, as we understand it, to indicate the modifications of Nature's types and the sensible steps by which they approach each other, to ignore any such step appears to us unphilosophical. Hence we venture to propose for the species under consideration the generic appellation of Heptathyra.

Aspidonectes as pilus nob .- Head acute, plane, not sloping as in Platypeltis. Lips thin, not developed into flaps. Septum of the nasal orifice with a short process on each side. Ribs eight pairs, projecting in the adult about two inches beyond the disc. Disc subcircular, broadly truncate behind, vermiculately rugose. Vermiculations transverse along the sutures of the costal plates, longitudinal between. Vertebral line slightly depressed. Cartilaginous border extending two inches beyond the edge of the anterior sternal callosity, and 9 in. 10 lin. from the posterior margin of the disc, to within 3 in. 6 lin. of the end of the tail. Sternal callosities four. The posterior subtriangular, anterior and posterior angles divergent, the inner almost in contact. Anterior angle with an emargination corresponding to an angular process in the posterior border of the hyposternal. The interior and exterior borders of the anterior callosity made nearly right angles with its anterior edge. This is not perfectly transverse, so that the inner borders approach to within 1 in. 11 lin. of each other, they then round off and extend much farther posteriorly than the external borders. Episternal bones small, considerably separated, diverging anteriorly. Claws nearly straight, compressed, sharp at their inner edges, dirty white. Disc brown, vermiculations shaded with yellow. Border, extremities, neck and head dark brown, without spots or markings of any kind. Sternal callosities whitish.

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Length of disc 17 in.; of head and neck 19 in. 6 lin.; total, four feet. Length of sternum 20 in. 6 lin.

Habitat.--The Rembo and Ovenga rivers, tributaries of the Fernando Vas; Equatorial West Africa.

Not having at hand specimens of the Aspidonectes niloticus of W. and S. Africa, we have been unable to compare the only specimen of the aspilus with it; their differences are, however, sufficiently obvious. In the latter the sternal callosities are much smaller, and the anterior pair have their anterior and posterior borders nearly parallel, and the outline of the inner semicircular. The tail is shorter, and the colors are brownish green with white and yellow spots.

The Old World Aspidonectes possess eight pairs of ribs; we do not know how it is with the American species, as there are no authentic specimens in the Acad. mus., but our Amyda and Glatypeltis have but 7 pairs.

#### EMYDOSAURIA.

Crocodilus marginatus Geoffr.—Brought by Mr. Duchaillu, from the Ogobai. This species is principally abundant in the Cape colony, but is found in other parts of Africa.

#### OPHIDIA.

## COLUBRIDÆ-CALAMARINÆ.

#### OLISTHENES nob.

Head scarcely distinct from the body, depressed, especially in front. Muzzle elliptical in outline, projecting much beyond the under jaw, as does also the superior labial region. At the posterior extremity of the superior maxillary bone are two curved teeth, larger than the other maxillaries, separated from them by an edentulous space, and grooved in front. Cephalic shields normal. Vertical broad; loral small. Rostral prominent, broad, dividing the anterior frontals somewhat; not recurved. Preocular 1, postoculars 2. Urosteges and anal shield entire. Scales very smooth.

O. e u p h a e u s nob.—Scales subequally hexagonal on the flanks, more elongate on the back, very little imbricate; in nineteen rows. The rows diminish in number upon the tail, by two or more running together upon the dorsal region, thus forming short series of from four to six scales twice or thrice the usual width. Vertical plate broad, hexagonal, the anterior angle very obtuse, the posterior acute, dividing the occipitals. Superciliaries rather small, broader behind in consequence of the convergence of the sides of the vertical. Posterior frontals large, extending on the side of the head half way along the preocular. Anterior frontals rather small. Nostril between two nasals; the anterior large, separating the rostral and first labial, and nearly reaching the edge of the mouth. Rostral broad, triangular, depressed, slightly dividing the anterior frontals. Postoculars two. Superior labials eight, the first three small, the eye resting on the fourth and fifth. Pupil erect, elliptical. Inferior labials eight, the fourth largest, and in contact with the posterior geneials, of which there are two pairs.

Gastrosteges 205, anal 1, urosteges 75.

Color uniform brown, dark on the head and anterior part of the body, lighter posteriorly, and pale beneath.

Length 2 ft. 9 in. 6 lin. Tail 17 in. 6 lin.

Had Dr. Günther placed his Hologerrhum p h i l i p p in u m among the Calamarinæ, instead of Scytalian Colubridæ, we should have felt well satisfied in recording this as a second species of that genus; we are not positive, indeed, that it may not yet be so considered; but with our present knowledge we must distinguish it generically. The head of this serpent is very Calamarian in its indistinctness from the body, its depression and projecting rostral. Besides these, a broader vertical and more distinctly divided rostrals distinguish it from Hologerrhum.

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Rhinosimus (D. and B.) placed by Günther among the Calamarinæ, differs only in the keeled, recurved rostral, and Rhinostoma *Fitz.*, the only other genus with grooved maxillaries, has the recurved rostral, with divided urosteges.

The form and glossy smoothness of the Olisthenes euphaeus admirably adapt it for making its way among pieces of bark, decayed logs, and other debris of the forest. Its native country is unknown to us, but as it was obtained in a jar containing a specimen of the species below mentioned, it probably came from South America.

#### CORONELLINÆ.

Liophis vittatus. Coluber vittatus Hallowell, Proceed. Acad. Nat. Sci., Vol. ii. p. 242. The serpent described as above, from specimens brought by Mr. Ashmead from Venezuela, is a true Liophis, resembling the L. reginæ, tæniurus, and conirostris, but without the transverse markings of the first and second, and the peculiar plating of the last. There are numerous specimens in the Acad. Mus. It does not appear to be known to European herpetologists.

## Descriptions of two new species of Carboniferous Fossils, brought from Fort Belknap, Texas, by Dr. Moore.

## BY W. M. GABB.

Myalina deltoidea.—Shell triangular, flattened, beaks narrow, tapering and curved anteriorly; cardinal margin slightly curved and nearly as long as the anterior edge; anterior edge gently sinnous; posterior edge nearly straight; basal edge rounded; umbones subangular; umbonal ridge running parallel with the anterior border losing itself near the basal edge; anterior umbonal slope perpendicular to the plane of the valve; posterior umbonal slope gentle, and extends to the posterior edge; inside, the cardinal third of the shell shows an alation which is invisible exteriorly; surface marked with indistinct concentric lamellæ.

This shell was found near Fort Belknap, either in the coal or in the stratum of dark blue shale overlying the coal. The specimens, consisting of a left valve, nearly perfect, and several fragments of the beaks showing the hinge well preserved, are replaced by pyrites.

Posidonia Moorei.—Shell subquadrangular, slightly gibbous, cardinal edge straight; beaks small, near the anterior edge, and slightly projecting beyond the cardinal line; umbones prominent, anterior edge rounded; posterior edge straight above, rounded below to meet the basal margin, which is regulaly curved; surface marked by about twenty prominent round concentric ribs. Locality and Position. From a buff colored limestone above the coal, near

Fort Belknap.

## Descriptions of supposed new species of Birds from Cape St. Lucas, Lower California.

## BY JOHN XANTUS.

A sojourn of several months at Cape St. Lucas, Lower California, besides furnishing many species of birds not found by me at Fort Tejon,\* has brought to light several species, which, as far as I have now the means of judging, seem to be entirely new. I subjoin descriptions of those which appear to be most decidedly undescribed birds, although it is very probable that a careful

\* See Proceedings Acad. Nat. Sciences, August, 1859, for a list of birds collected by me at Fort Tejon, California.

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