THE ANNALS
AND
MAGAZINE OF NATURAL HISTORY,
INCLUDING
ZOOLOGY, BOTANY, AND GEOLOGY.
(BEING A CONTINUATION OF THE 'ANNALS' COMBINED WITH LOUDON AND CHARLESWORTH'S 'MAGAZINE OF NATURAL HISTORY.')

CONDUCTED BY
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1867.
hinder supraorbital notch narrow, elongate, contracted behind by the
infection of the sharp tips of the lobes; upper edge of orbits
narrow; the hinder nasal opening narrow, very deep; sides
flat, contracted at the top; lower front edge of the zygoma
rather dilated, solid. Hind legs short.

"Skull more than twice as long as wide; muzzle and nasal
bones very long, the former wider than high, anterior to the
molars. Postorbital processes divergent, not in contact behind
with the skull." (Baird.)

Glr. 64. L. magellanicus, Lesson; Blasius, Faun. Deut. (fig. of
skull). L. vermicula, Thompson.) Europe, North Africa. B.M.

Section II. Skull conical, subcylindrical; nose thick, subcylindrical;
cheeks very convex; the front edge of the orbits and theupper
hinder processes of the intermaxillaries scarcely raised. Orbits
moderate, oblong. Cutting-teeth large, strong; the hinder upper
orbital notch open, short; the zygomatic arches broad, flat, and
produced behind, over the temple.

7. Carpolagus, Blyth, J. A. S. Bengal, 1845, p. 247. Ears
shorter than the head; fur harsh. Skull solid; face broad,
rounded on the sides; upper edge of the intermaxillaries thin,
even with the nasals. Cutting-teeth very broad; grinders broad;
palate long and broad. Anteorbital foramina nearly closed by
oblique, transverse, bony spicules. Zygomata very long. Supra-
orbital processes continued forward uninterrupted; anterior
notch quite filled up with bone, hinder less deep.

Carpolagus hispidus, Blyth. (Lepus hispidus, Pearson, Waterh.
Gl. 78.) Burrows? Assam. B.M.

XXVIII.—Descriptions of two new Saurians from Mossamedes
(West Africa). By J. V. BARBOZA DU BOCAGE.

Scapateira (?) reticulata.

Characters.—Head narrow, with the muzzle elongated and
pointed. No occipital shield. Nostrils situated in the midst
of three slightly inflated shields—one naso-rostral and two naso-
fenrals. No teeth on the palate; tongue emarginate at apex,
covered with imbricated squamiform papillae. Inferior eyelid
granular. Palpebral disk bordered with granules without and
behind, and preceded by a large shield placed between two very
small ones. Subocular shield situated between the seventh and
eighth labials. Anterior margin of the ear furnished with three denticulations. Upper parts and sides of the neck, and the anterior half of the back clothed with very small rounded scales, smooth and not imbricated; on the posterior half of the back and on the base of the tail these scales gradually become larger and more distinctly keeled and imbricated; the rest of the tail is covered with large keeled scales above and below. Ventral shields quadrilateral, smooth, arranged in longitudinal and transverse series; the widest of the latter includes eighteen shields. In the middle of the praenanal region there is a large scale surrounded by smaller ones. Femoral pores twenty to twenty-two. Digits smooth beneath, but denticulated on the edges; the anterior less compressed than the posterior.

Coloration.—Above (on a ground sometimes fulvous, sometimes with a bluish tinge) all our specimens present a reticulate design of a dark-brown colour. On the head predominates an olive tint punctured or marbled with brown. A blackish streak, more or less interrupted, follows the middle of the dorsal surface of the tail; another similar streak extends along each side of the tail, from its origin to its extremity. The upper surface of the limbs resembles the back. The inferior regions are white or yellowish white.

Dimensions.—The largest of our individuals measures 150 millims. in length, of which the head occupies 14, the trunk 37, and the tail 99.

Habitat.—Mossamedes, Western Africa. The natives call it Cocola, a name which they also give to several other Saurians. The five individuals which we possess were sent to us by our indefatigable travelling naturalist, M. d’Anchieta.

In its characters this reptile seems to approach most closely to the genus Scapateira. Thus the position of the nostrils in the midst of three shields, the existence of numerous femoral pores, the structure of the dorsal scales and ventral shields, the denticulations with which the edges of the digits are furnished, and the presence of an antepectoral fold are so many characters which it has in common with the single species of that genus, Scapateira grammica. Nevertheless it presents certain differences of some importance, such as the absence of an occipital shield, and especially the conformation of the anterior digits, which have no well-marked flattening. This is why we hesitate in referring it to the genus Scapateira.

PACHYRHYNCS, genus novum.

This new genus that we propose is established upon the examination of a single adult individual lately received from Mossamedes through M. d’Anchieta.
It belongs to the Lacertia (Caelodontes pristidactyles of the
‘Erpétologie Générale’). From its general organization it is in
the vicinity of the genera Acanthodactylus and Eremias, perhaps
between the two, that it should be placed; but the flattening of
its head and the extraordinary widening of its muzzle give it a
peculiar physiognomy, and render it perfectly distinct from all
other Saurians in general.

Generic characters.—Head wide and flattened; muzzle much
depressed, wide, spatulate, with its trenchant margins greatly
exceeding the outline of the opening of the mouth (figs. 1 & 2).

Tongue sagittate, emarginate at its extremity, covered with
squamiform papillae. Palate not furnished with teeth. Nostrils
looking directly upward, placed in the midst of three shields, as
in Eremias. Rostral shield much depressed, forming with the
first seven superior labials the projecting border of the muzzle.
No free antepectoral fold. Ventral shields smooth, forming
regular longitudinal and transverse bands. Tail broad and
depressed at the base, rounded throughout the rest of its extent.
No femoral pores. Five unequal digits on each foot; these are
compressed, covered with smooth scales beneath, and denticu-
lated at the edges.

Pachyrhyncus Anchietae, sp. n.

No occipital plate. Lower eyelid covered with granulations.
Auricular opening narrow, its anterior margin smooth, without
denticulations. Nostrils bordered by three shields— one naso-
rostral and two freno-nasals. Nine superior labials, of which
the first seven form with the rostral the trenchant margin of the
muzzle. One subocular shield, in contact by its lower margin
with the fifth, sixth, and seventh superior labials. Scales of the
back and base of the tail very small, smooth, slightly inflated,
not imbricated; those of the rounded portion of the tail large,
imbricated, and keeled. Ventral shields quadrilateral, of moder-
rate size, nearly equal, arranged in from twenty to twenty-four
longitudinal rows, and bordered upon the flanks by several rows
of similar but smaller shields. Preanal scales numerous, small,
nearly equal.
We may refer to figs. 1 and 2 for more ample details as to
the scaling of the head.

Coloration.—The upper parts exhibit a fine golden-yellow tint;
an elongated black spot covers the occiput; a black streak is con-
tinued upon the dorsal line from the region of the fore limbs as far
as the anterior third of the tail; on both sides the back is covered,
down to the flanks, with a large-meshed black network, having
a very pretty effect; the upper surface of the limbs presents a
similar pattern. The head and the temples are variegated with
black; beneath each eye a great number of small black spots form
an elongated spot, which is prolonged from the fourth to the last
of the labials. A black line follows the lateral margin of the
tail from the base. The lower parts are of a uniform white or
whitish tint.

Dimensions.—Total length 112 millims.; head 17, trunk 13,
tail 57.

Habitat.—Mossamedes. A single individual.

We have received from the same locality, through M. d’An-
chieta, several rare and interesting reptiles, such as—

Sauria: Chameleo namaquensis (Smith), Homodactylus Bibroni,
Euprepes Olivieri, E. Merremii, Mochlus afer, Anelytrops elegans.
Ophidia: Cerastes caudalis, Psammophis, sp.?
Batrachia: Dactylethra Müller, Bufo spinosus.

Lisbon, July 9, 1867.

MISCELLANEOUS.

On the Development of the Ctenophora.

By A. KOWALEWSKY.

The author has carefully traced the development of the egg in
various Ctenophora, and has arrived at some very curious results,
especially with regard to the first phases of evolution.

In the Eschscholtzicz (and the other Ctenophora seem to be in
the same case) two layers may be distinguished in the vitellus,—the
external one very thin, formed of true protoplasm, the other central,
consisting of an emulsion of large fatty drops. Acetic acid produces
a granular precipitate in the former, but has no action on the
second. The distinction of these two layers is important, as the
former alone plays the part of a formative vitellus, the second behaving
as a vitellus of nutrition.

The segmentation into two and then into four and eight parts is
effected in such a manner that each of the spheres of segmentation
presents the two layers, like the original vitellus. These spheres are
completely destitute of nuclei. At this period a remarkable pheno-
menon takes place. In each of the eight spheres of segmentation