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slightly curved upwards, about three and one-half times as long as the head; closely set with moderately long setæ to the distal fifth. Terminal hairs very short.

Hab. India; four specimens, together with several nymphs and pupa, taken by Mr. Iyer on "Piama" leaves at Karwappany, West Dehra Dun, base of the West Himalayas.

P. coriaceus much more nearly approaches the South African species *caudatus*, Bagn., than the Malayan *gracilis*, Bagn. It is a smaller species, the head is much shorter and broader, and the surface is roughly sculptured, either reticulate or finely scabrous; the abdominal segments are strongly transverse, whilst the tube is, compared with the length of head, even longer than in *caudatus*.

The discovery of *caudatus* and this species, which in the form of the abdomen differ strongly from the type *gracilis*, would seem to show that the genus *Panurothrips* has stronger affinities with the Phleothripidæ than with the Idolothripidæ.

XX.—*The Osteology of the Teleostean Fishes of the Order Opisthomi.* By C. TATE REGAN, M.A.

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THE order Opisthomi comprises the single family Mastacembelidæ, with two genera, *Mastacembelus* and *Rhynchobdella*, from the fresh waters of Africa and Southern Asia. These fishes have the body elongate and compressed, covered with small scales; the many-rayed dorsal and anal fins are contiguous to or confluent with the small caudal; the dorsal is preceded by a series of isolated spines and the anal has three spines, the second strong and depressible in a groove; the pectorals are well developed, but the pelvic fins are absent. The mouth is small or of moderate size, terminal or subterminal, with villiform teeth in the jaws and sometimes on the vomer; the maxillaries are firmly attached to the non-protractile præmaxillaries. There are two nostrils on each side, the posterior in front of the eye, the anterior tubular, at the side of a fleshy tentacle at the end of the snout. The gill-membranes are separate or narrowly united, and free from the isthmus, but the gill-openings are restricted from above, the operculum having no free edge.

Such are the principal external characters of this group of apodal acanthopterous physoclists; the skeleton indicates

that these fishes are related to, but more specialized than, the Percomorphi, but they show no particular affinity to any group of Percomorphous fishes.

The skull is elongate, narrowed forwards, without crests or ridges on the upper surface; the parietals are separated by the supraoccipital; there is no opisthotic, but the other otic bones are normally developed; alisphenoids are present, but

Mastacembelus armatus. Skull from above, from the side, and from below.

p, parietal; f, frontal; n, nasal; eth, mesethmoid; leth, lateral ethmoid; v, vomer; pal, palatine; soc, supraoccipital; eoc, exoccipital; boc, basioccipital; epo, epiotic; pto, pterotic; spo, sphenotic; pro, prootic; asp, alisphenoid; psp, parasphenoid.

there is no basisphenoid nor orbitosphenoid. The nasals are very large, meet in the middle line, and are firmly united to the upper edge of the mesethmoid, which forms a vertical septum between the nasal cavities; the præorbital is rather large, articulates with the lateral ethmoid, and is attached to the lower edge of the nasal; the suborbitals are unossified. The hyo-palatine and opercular bones are all present, but

the palatine and pterygoid are very peculiar; the former is an elongate narrow lamina which is firmly united to the lower surface of the vomer and also to the mesethmoid, lateral ethmoid, and parasphenoid; the pterygoid is movably articulated with the lateral ethmoid external to the palatine. The branchial skeleton is percoid.

There is no post-temporal, and the supra-cleithrum is attached by ligament to the third or fourth vertebra; the hypercoracoid is perforate, the hypocoracoid has a strong post-coracoid process, and there is no mesocoracoid; there are 4 radials, 2 on the hypercoracoid and 2 on the hypocoracoid.

The vertebræ are numerous, 77 to 95 (34-44+43-51); the first centrum is convex, fitting into the concavity formed by the basi- and exoccipitals; the ribs are inserted on strong parapophyses.

XXI.—A new Gerbil from British East Africa.

By GUY DOLLMAN.

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Tatera phillipsi umbrosa, subsp. n.

♂. 497. Hot Springs, near Baringo.

♂. 1372, 1384, 1395; ♀. 1318, 1335, 1383, 1389, 1400. Baringo (*R. Kemp*).

A dark-coloured race of *Tatera phillipsi*.

Size and proportions much as in *phillipsi*, head and body dimensions rather greater. General colour of dorsal surface very much darker than in the Somali form, the sandy colour of that species is here hidden by a dark brownish wash. Flanks rather lighter in colour, the buff tint more evident than on the shoulders or back. Head and face very much darker. Ears clothed with short dark hairs, the general effect conspicuously different from the yellowish-buff ears of *phillipsi*. Backs of hands and feet rather thinly clad with white hairs; in the Somali form the feet are thickly covered with snow-white hairs. Ventral surface of body white. Tail dark brownish black above, paler in the basal portion; apical region dark brown. Under surface of tail dirty white, tinted with buff.

Skull about equal in size to that of *phillipsi*; teeth a trifle smaller.