

ventral hypodermic flaps is noteworthy. Each extends over a larger base than the longitudinal ventral muscle of its side.

The hooks of *Protula (Psygmobranchus) multicostatus* and *Protula cæcus* of Claparède, and those of *Protula arctica*, Hansen,¹ so widely diverge from the foregoing that a different genus will probably require to be constituted. On the other hand, they approach those of *Protula (Psygmobranchus) protensa*, as figured by Claparède,² though they are nevertheless distinct.

Protula lusitanica, n. sp. (Pl. XXXIA. fig. 16).

Habitat.—Dredged at Station II. (off the Portuguese coast, near Setubal), January 13, 1873; lat. 38° 10' N., long. 9° 14' W.; depth, 470 fathoms; surface temperature, 57°·0; sea-bottom, green mud.

A fragment of the anterior region of a minute specimen, measuring about 5 mm. in total length, and scarcely 1 mm. in diameter.

The fragment of the body is normal. The cephalic collar forms a continuous reflected fold ventrally, and, turning over at each side dorsally, passes backward above the bristle-tufts to the posterior end of the thoracic region. The branchiæ are all injured, but they seem to have the usual structure, with a long, bare, filiform tip. Seven bristle-bearing processes occur on each side in the thoracic region. The bristles present the usual tapering tips with well-marked wings. The anterior hooks (Pl. XXXIA. fig. 16) have a simple curve (convexity) from the crown to the inflection, and a comparatively short edge behind the great fang inferiorly. They differ from those of the *Protula* from Valentia, and *Protula capensis*, and are somewhat triangular in outline.

The specimen was unfortunately lost, having been carried out of the dissecting-trough by a hair.

Protula arafurensis, n. sp. (Pl. XXXIA. figs. 17, 18).

Habitat.—Dredged in the Arafura Sea.

A fragmentary example, reaching 32 mm. in length and fully 2 mm. in diameter behind the thoracic region.

The branchiæ are absent, but the body has the usual form. The cephalic collar shows a broad fold ventrally, and then forms a membranous expansion over the thoracic setigerous processes. Two prominent papillæ occur on the dorsum just behind the snout, for the attachment of the branchiæ. Six setigerous processes occur on each side. The bristles (Pl. XXXIA. fig. 17) are elongate, slightly curved toward the extremity, which is finely tapered and furnished with well-marked wings. The tips on the whole are

¹ *Op. cit.*, p. 43, Tab. vii. fig. 30.

² *Annél. Chétop.*, p. 432, pl. xxx. fig. 7.