

connected by a duct (? vessel) with the buccal region. The vessel bifurcates just behind the latter region, the right branch joining a cylindrical firm glandular organ closely applied to the gullet, the left passing round the latter toward the dorsal region. The cylindrical glandular organ formerly mentioned is joined a little in front of its posterior border by another U-shaped glandular body of much larger size, but apparently of the same structure. One leg of the U is fixed to the former organ, the other is attached to the œsophagus.

The united nerve-cords lie between the ventral longitudinal muscles, and are internal, that is, they are bathed by the perivisceral fluid. The ganglia and their lateral branches are well marked, and are situated nearly opposite the bristle-bundles.

The body-wall is composed of a hyaline, slightly areolar, cuticular coat of great thickness (Pl. XXXVIIA. fig. 1), to the external surface of which the long slender papillæ are attached. The best developed of these organs are from eight to ten times longer than the whole thickness of the body-wall, and each papilla only diminishes very slightly toward the tip. The whole surface, as already mentioned, however, is obscured with fine Diatom ooze, which also binds several adjacent papillæ into a mass. A hypodermic process passes through the translucent cuticle at the base and goes almost to the extremity of the papilla. The basal part of this hypodermic axis is dilated at its origin. The hypoderm is comparatively thin, and the same may be said of the circular muscular coat. A nearly continuous layer of longitudinal fibres (homologous with the dorsal longitudinal muscles) envelops the body-wall within the former, and gives a glistening aspect to the inner surface. The two ventral longitudinal muscles form narrow flattened ribbands on each side of the nerve-cord.

In several respects, such as the great size, the condition of the skin, the paucity of the branchiæ, and the internal anatomy, this form presents diagnostic features. The *Stylarioides parmatus* of Grube,¹ from the Philippines, somewhat resembles it in outline, but diverges much in regard to the branchiæ and the nature of the ventral bristles. The anatomy of this Philippine Annelid is not given.

Brada, Stimpson.

Brada mammillata, Grube (Pl. XLIII. fig. 11; Pl. XXIII A. figs. 7, 8).

Brada mammillata, Grube, Jahrb. d. Schles. Gesellsch. für 1876, Bericht d. Naturwiss. sep.)
Abd.), p. 40.

Habitat.—Dredged somewhat plentifully at various points off Kerguelen, *e.g.*, Station 149 (Accessible Bay), January 9, 1874; lat 49° 8' S., long. 70° 12' E.; depth, 20 fathoms; sea-bottom, volcanic mud. Station 149A (Betsy Cove), January 14, 1874; lat. 49° 8' S., long. 70° 9' E.; depth, 40 fathoms; sea-bottom, volcanic mud.

¹ Annelidenfauna d. Philippinen, p. 199, Taf. xi. fig. 1.