

tip has a peculiar knife-edge appearance on the anterior or spinous margin. Parasitic *Loxosomæ* are frequently attached to them.

The ventral bristles (Pl. VIA. fig. 11) are long and slender, but the tips conform to the structure in *Lagisca*, the weak secondary process being diagnostic. The pigment alluded to in the dorsal division is continued to the spinigerous process of the ventral, and nearly forms a ring round it. An *Exogone* with its buds occurred amongst the debris on these bristles.

The scales (Pl. XVIII. fig. 1) are fifteen pairs, their most prominent feature being a series of characteristic rotate (almost globular) papillæ along the posterior border. The first scale as usual is rounded, and besides the conspicuous papillæ along its posterior border, a group of smaller processes occurs in its centre, and a few larger appear over the central region of most posteriorly. The scales are mottled with brownish pigment, which is situated under the spinose dorsal cuticle, and often show a dark brown patch in the centre. Besides the numerous conical papillæ, a fringe of cilia occurs along their outer border. The latter are longest on the posterior scales, which also have a few elongated papillæ instead of the globular processes on the posterior border. The surface of the scale is minutely spinous; and most present a curiously thickened and elevated area toward the posterior part of the inner border.

The cuticle on the under surface of the scale is continuous with that of the scale-papilla, the thickest part of the organ occurring just over this region, the hypoderm dipping downward at the point of attachment, while the roof of the scar forms an arch, so that the area is thinnest in the middle. In the hypoderm of the dorsal process for the scale are a series of muscular fibres, vertical, circular, and oblique, so that considerable motion is provided for. In one of the sections, moreover, a rounded cellulo-granular body like a ganglion with a branch or two was situated just below the muscular fibres, beneath the scale. A thin stratum or layer, apparently continuous with the hypoderm, bridges over the summit of the scale-pillar. The fibres of the hypoderm of the scale are directed in a radiate manner from the fold of attachment to the scar, sloping inward and upward to the arch, to the central line of which many go, and interlace with others in a very complex manner.

The alimentary canal contained elongated masses, amongst which fragments of sessile-eyed Crustacea, soft odontophorus Mollusca, probably Pteropods, and quantities of Diatoms, which seem to have been in the stomachs of their prey.

This species approaches Grube's *Polynoë vesiculosa*,¹ procured during the expedition in the German ship "Gazelle," from the Strait of Magellan. Both have slightly bidentate tips to the inferior bristles, and the structure of the scales is closely allied. It diverges in the colour of the dorsal cirri, and in the structure of their cilia, which are stated to be setiform in *Polynoë vesiculosa*. Grube's example was only 21 mm. in length, and