

male the ventral papillæ are much longer and more tapered than in the female, indeed the terminal region is separated from the basal by a joint. In both, the processes as well as the enlargement at the base are well developed.

All the scales are absent, but judging from the pedicles, twenty-four pairs seem to have been present. The pedicles are borne far outward on the feet, so that they appear to be parts of, and must be freely movable with, these organs.

The feet are greatly developed, both as regards the setigerous division and the bristles. The foot behind the tentacular cirri bears dorsally the first scale, and a ventral cirrus fully as long as the former cirri. The next foot has a much smaller ventral cirrus, which does not reach so far outward as the terminal process covering the end of the spine of the succeeding foot. The feet gradually increase in the free portion, and soon become very prominent organs. When fully formed there is dorsally either a pedicle for a scale or a cirrus (Pl. XX. fig. 6), which, though long, does not extend beyond the tips of the bristles. A long elevation terminating in the process covering the dorsal spine next succeeds; but in no instance are any traces of bristles visible.

The inferior branch has its spinous process greatly elongated, and from this point downward is a series of very long, flexible, and translucent bristles, which flatten out as they approach the tip, and become serrated after the manner of the Polynoidæ, but the extremity (Pl. XIIA. fig. 17) is quite different from anything yet known in the group. It curves from the serrated edge, and diminishes to form two broad, dagger-like, terminal processes. The spinous rows beneath the latter are very fine.

A large though somewhat flattened boss occurs on the proboscis, close beneath the central frontal region. The anus is almost terminal.

In the female the ova are both large and numerous.

The structure of the body-wall of this form shows certain interesting divergencies from the ordinary type. Thus the cuticle is thin, ventrally, while the hypoderm in the middle line is greatly developed, forming a thick layer over the nerve-area and the ventral longitudinal muscles. This coat is not scooped out opposite the nerves to any extent, the circular muscular fibres mostly passing to their exterior, though the preparation is not so well preserved as to show these fibres distinctly. The cords are thus placed far inward, and have a band of connective tissue separating them from the body-cavity. They are rounded in transverse section.

The ventral longitudinal muscles are peculiarly curved (apparently rolled together), so that in section they are kidney-shaped, the hilum being superior.

The wall of the proboscis is somewhat thin, the cuticle well-developed, and the hypoderm blackish. A conspicuous ridge occurs dorsally and ventrally.

In the presence in the dorsal division of a solitary spine and the absence of bristles, this species agrees with Mr. Haswell's *Polynoë astrolepis* from Torres Strait.¹

¹ *Proc. Linn. Soc. N. S. Wales*, vii. p. 292.