

which in some cases are mere tubercles, so that under a low power or a lens the blackish pigment has a minutely punctate appearance. In some the inner and posterior border is slightly crenated, the short cilia projecting from the summit of each little elevation.

The feet are comparatively short, and the pallor of the bristles is in contrast with the dark pigment of the dorsum. They agree closely in general outline with those of *Polynoë scolopendrina*. The dorsal division of the foot has a series of somewhat short slender bristles (Pl. XIA. fig. 8) tapered from base to apex, and having distally very distinct hispid rows. They are covered with parasitic growths. The tips do not show the smooth terminal region so common in the group.

The ventral consist of pale and rather straight bristles (Pl. XIA. fig. 9) with boldly bifid tips, and well-marked spinous rows. The distal region of the bristle is proportionally short, a feature sometimes seen in commensalistic Polynoidæ, in which respect this form closely agrees with *Polynoë scolopendrina*.

In transverse section of the body-wall, the muscular constituents are largely developed, and the nerve-cords large, though the area is narrow. The hypoderm is very thin, but the cuticle is somewhat thick ventrally. The blackish pigment deeply tints the hypoderm over the dorsal arch. No reproductive elements occur in the specimens.

This evidently takes the place of our *Polynoë scolopendrina*, to which it is closely allied, but from which it differs in the absence of the large superior ventral bristles, and in the much more conspicuously ciliated condition of the cirri and scales.

Polynoë (Macellicephala) mirabilis,¹ n. sp. (Pl. XVI. fig. 1; Pl. XIIA. figs. 9-11).

Habitat.—A single example was dredged at Station 169 (off the north-west corner of the North Island of New Zealand), July 10, 1874; lat. 37° 34' S., long. 179° 22' E.; depth, 700 fathoms; bottom temperature 40°·0, surface temperature 58°·2; blue mud.

The length of the specimen is about 25 mm., and its breadth, inclusive of the bristles, 18 mm.

The body is thick and massive, little tapered anteriorly or posteriorly. The dorsal surface is pale, but the ventral in the preparation has a fine lustrous purplish or mauve hue, best marked on the slightly everted proboscis.

The head (Pl. XVI. fig. 1) presents great divergence from the ordinary type in the Polynoidæ. Anteriorly, it has two flattened lobes, which toward their inner border bear a short filiform process, that may be the homologue of the antenna. A wide hiatus separates the two lobes, and extends posteriorly almost to the base of the tentacle. The posterior part of the head is formed of two rounded eminences which bulge at each side,

¹ μάκελλα, a shovel.