what flattened. The reproductive elements (male) are present in the bases of the feet.

This form differs from any known genus.

Polynoë magnipalpa, n. sp. (Pl. XIII. fig. 6; Pl. XIV. figs. 1, 6; Pl. XVIII. fig. 5; Pl. XA. figs. 5, 6).

Habitat.—Trawled at Station 171 (a little north of the Kermadec Islands), July 15, 1874; lat. 28° 33′ S., long. 177° 50′ W.; depth, 600 fathoms; bottom temperature 39°.5, surface temperature 66°.5; hard ground.

The length of the male is 17 mm. and its breadth about 4.5 mm. The females measure about 8 mm., and have a breadth of 4 mm.

In the female (Pl. XIV. fig. 6), which was that first noticed, the body is short (almost elongate ovoid in outline) and the palpi conspicuously large.

The head in the same sex (Pl. XIII. fig. 6) is somewhat short in antero-posterior diameter, and wide transversely. Two large black eyes are placed at the posterior border and wide apart, and two larger with pale centres occur on the prominent lateral region, and therefore little removed from the former. The tentacle is absent, but it arose from the anterior border of the head. The antennæ are short and subulate, and are widely separated from the tentacle, springing just under the slight anterior peak of the head. The palpi are proportionally large, much dilated in the middle, but finely tapered at the tip. They appear to be nearly smooth, a few translucent and slender papillæ only appearing along the edges. The dorsal cirri in several instances present remarkably tumid columns, the tips being finely tapered. Others are simple tapering organs like the tentacular cirri. They also show a very few short clavate papillæ on their surface. The ventral cirrus is somewhat longer than in the male, and its filiform tip extends beyond the bases of the bristles. The enlargement from which the ventral papilla springs is much more conspicuous than in the other sex.

The scales (Pl. XVIII. fig. 5) are thin, pale, and somewhat translucent, the anterior being minutely spinous over nearly the whole area, a few short clavate cilia appearing along the posterior border. The posterior, again, are minutely granular, with a few short clavate papillæ along the free border. Within the scale are a number of branched gland-like structures resembling fragments of granular vermicelli. These are especially conspicuous just inside the margin. Moreover, the surface of the scale has minute black grains. The scales almost entirely cover the dorsum.

The feet of the female are smaller (for the entire animal is less) than those of the male, but their general configuration corresponds. The dorsal branch bears a tuft of pale bristles of two kinds, those next the ventral being rather attenuate and long, with well-