of each (papilla) being a bluntly conical process, to which a filiform extremity is attached. The smooth dorsal cirri have a well-marked blackish belt a little below the pale extremity. The ventral cirrus is short and slightly tapered. It does not reach the bases of the bristles. The ventral papilla is somewhat clavate, its nearest ally in this respect being Lepidonotus clava.

There are eighteen pairs of blackish-grey ovoid scales (Pl. XVII. fig. 2), variegated with a white patch over the surface of attachment, a somewhat pale external border (a continuation of the pale anterior covered portion), and a series of very distinct tubercles which resemble pustules. The posterior scales are considerably smaller, but the isolated tubercles are larger. In vertical section the thick dorsal cuticle of the scales is peculiarly wrinkled or facetted, a feature probably due to the tuberculated condition. On the external border of the scale are a series of small conical papillæ, about three appearing in each transverse section just within the tip.

The bristles of the dorsal division of the foot are very slightly developed, forming a small tuft projecting outward at the tip of the strong spine. The bristles (Pl. IXA. fig. 6) have stout basal portions and very finely attenuated tips, with well-marked rows of spines, somewhat like those of *Polynoë platycirrus*. The shorter forms possess blunt extremities, but even more boldly marked spinous rows.

The ventral series consist of pale straw-coloured bristles, characterised by very short extremities. The shaft (Pl. IXA. fig. 7) dilates gradually from the insertion towards the tip, which presents the stout appearance of such as *Lepidonotus squamatus*, but further has beneath the terminal hook a very characteristic secondary process and ridge; while the spinous rows are largely developed. The nerve-area is small, the ovoid cords placed close together in section, and with a median space beneath. The cuticle is very dense.

In the intestine of the smaller example was a little whitish debris which contained fragments of Radiolaria, minute Crustacea, and a large series of the dorsal paleæ and bristles of a *Chrysopetalum*, or a form allied to *Bhawania myrialepis*, Schmarda.

This form closely approaches Lepidonotus. Dr. Baird's Lepidonotus oculatus,¹ from the Australian seas, presents a pustular condition of the anterior scales, but the organ in the preparations is pale, with the exception of a black spot over the surface of attachment, and the structure of both dorsal and ventral bristles materially diverges. The latter are simple, not bifid at the tip.

Polynoë (Lepidonotus) iphionoides, n. sp. (Pl. X. figs. 1, 2; Pl. XA. figs. 1, 2).

Habitat.—A single example was procured by the trawl at Station 201 (in Basilian Strait off the Philippine Islands), October 26, 1874; lat. 7° 3′ N., long. 121° 48′ E.; depth, 82 fathoms; surface temperature, 83°0; stones and gravel.

¹ Journ. Linn. Soc. Lond., vol. viii. p. 184.