form, there is here a wide area, which probably represents a further stage of the divergence from the common type. Instead of the fairly formed head of *Iphione muricata*, it is difficult to say which is the essential cephalic region in this form. The head presents posteriorly a median fissure flanked on each side by a large soft tubercle, which may aid in supporting the scale. A somewhat triangular area, with the broad base in front, completes the snout, the rounded anterior edge (which appears to be buccal rather than cephalic) folding over directly into the mouth. Inferiorly the scoop-like ventral lip projects considerably in front of the cephalic brim just mentioned. The broad posterior tubercles of the head narrow as they run forward, and end in a slight enlargement, which in the specimen shows no decided trace of an antenna. The palpi are comparatively short, tapering from base to apex, which is filiform. They arise beneath the posterior tubercles at each side. Between the first bristled foot and the latter is a sickle-shaped flattened lamella (corresponding to the first foot) bearing the tentacular cirri, which are short and filiform. The lamella is slightly enlarged at the tip, especially inferiorly. No trace of eyes occurs in the specimen. The great modification of the first foot (bearing the tentacular cirri) affords a marked contrast with *Iphione muricata*. In both, however, the mouth opens quite in front, and thus differs from the ventral position of the organ in *Lepidonotus*.

The scales are thirteen on each side. The first (Pl. IX. fig. 5) is somewhat ovoid, the rest are more or less elongated (fig. 6), narrower internally, wider externally, and with a well-marked median curve. The posterior and outer angle is rather acute in the posterior scales. The surface of attachment is unusually large and firm. The structure of each areola respectively in *Iphione muricata* and this species differ, the former presenting (when the scale is viewed as a transparent object) an arrangement like the cells in cork, the latter having a larger amount of chitinous tissue in the intersecting walls of the spaces. The outer margin bears a series of well-marked cilia, which in the first scale pass nearly all round. Along the anterior margin of this scale also there is a tendency to the grouping of the cilia on a basal web or pedicle, which shows a bifid, trifid, or other subdivision at the tip. Moreover, the homology of the spaces in the areæ is indicated by their transition into spines in the same scale. The scales are brittle, and fracture seems always to take place along the junctions of the more or less hexagonal areæ. The scar for the attachment of the scale does not exhibit the well-marked accessory process externally, so characteristic of *Iphione muricata*. In vertical section the scales present a beautifully regular series of thin chitinous septa, which run from the surface to the base. Each of the little areas of the rounded dorsal papillæ is thus mapped out.

The dorsal division of the foot bears a dense tuft of light coloured hairs, which are considerably shorter than the ventral bristles, so that the latter constitute the prominent points along the sides of the body, whereas in *Iphione muricata* these are formed by the dorsal bristles. Part of this prominence, however, is in the present species due to the