

greater length of the foot generally, as well as that of the ventral bristles. In the dorsal bristles of *Iphione muricata* there is a well-marked difference between the lower and the distal spinous rows, the former being wide, the latter most regular and close, the whole tip having a broader aspect than in the other species. The entire spinous arrangement is also more lax (Pl. VIII. fig. 7). In ordinary views the bases of the spines are opposite, as in the former species.

The ventral division of the foot is furnished with paler bristles than in *Iphione muricata*. The upper have elongated tips and well-marked spinous rows, the extremities being longer than in *Iphione muricata*. The next series (Pl. VIII. fig. 8) are also proportionally longer, and their spinous rows less prominent. The smooth portion with the hook at the tip is evidently longer than in *Iphione muricata*, and the curve in front is different. The upper part of the shaft (below the tip) is slightly marked by indications of spinous rows. On the whole the rows of spines are much more distinctly marked in *Iphione muricata*.

The dorsal cirri have an enlargement below their basal segment. The latter is large and cylindrical, and appears almost to represent the body of the organ. The absence of the papillæ on its surface, however, makes its homology clear. The cirrus proper is only about twice the length of the basal division, and is in the form of a slender tapering process covered with rather large clavate cilia. The organ seems to be capable of a certain degree of invagination within the basal part. The cirri of *Iphione muricata* are much longer, and correspond more with the ordinary structure, showing a short basal division, a long tapering ciliated shaft, dilating at the tip, and having a filiform process (which is longer than the cirrus proper in the present species) appended to the latter. Moreover, the cilia on the surface are much longer and less clavate than in the form from the Challenger. The cirri scarcely reach the extremities of the dorsal bristles.

The ventral papilla is just indicated in this species as in *Iphione muricata*, and in this respect diverges from *Lepidonotus*.

In transverse section the body-wall differs from *Lepidonotus squamatus* in the longer interval between the insertion of the oblique muscles in front and the smallness of the flattened nerve-area. The muscular wall of the region, moreover, is comparatively thin, and in marked contrast to the species just mentioned. The hypodermic layer of the proboscis is perhaps more lax and areolar than usual.

Kinberg very justly separates the genus *Iphione* from the other Polynoidæ by a wide interval, and when to his other characters the opposite condition of the pinnæ or spikes of the dorsal bristles is added, the distinction is even more decided. The remarkable condition of the head and the absence of eyes in the present form are noteworthy. De Quatrefages' species, *Iphione glabra*, *Iphione cimex*, and *Iphione fimbriata*, seem to be in need of re-examination, especially as he found no cilia on the scales of Kinberg's *Iphione ovata*. His descriptions are not sufficiently precise to give certainty, and much