

The dorsal surface of the body is slightly convex, whereas the ventral is marked by a deep median groove from the mouth to the posterior extremity. On the prominent portion of the second body-segment, bounding the lateral and posterior part of the mouth, on each side is a slight pit containing the characteristic hooks of the species. The succeeding segments show a similar fossa on each side, about midway between the median groove and the external border. The hooks (Pl. IIIA. fig. 17) are strictly bifid, with a long curved sharp terminal claw, and a shorter blunt one beneath; the former being marked by coarse, and the latter by fine striæ. The deep pits with their prominent fleshy margins are probably of importance in keeping the hooks always sharp and uninjured. The latter are perhaps capable of a certain amount of extrusion when the animal wishes to anchor itself to floating timber or other structures. In *Hipponoë cranchii*, Baird, the hooks quite differ in structure.

A single cirrus of considerable size, in the form of a simple subulate process, is situated at the inferior margin and slightly behind the bristle-tuft, and therefore is best seen from the ventral surface.

Posteriorly the body terminates in a simple rounded papilla bearing the anus on the dorsum. The last pair of branchiæ occur at each side of the papilla.

The specimens are all so distended with ova that the structure of the body-wall cannot be seen with clearness. The chief points noticed are the great thickness and translucency of the hypoderm, which is almost Nemertean in its areolar and cellular condition, along the ventral and lateral surfaces; but on the dorsum between the bristle-bundles it is much thinner and more compact. Moreover, the cuticle along the ventral region is not readily distinguished as a separate layer (the surface resembling that in the Nemertean which has a ciliated coat); while on the dorsum the cuticle is of considerable thickness. There is thus some evident difference in the physiology of the surfaces. Beneath the hypoderm is the circular muscular coat. The longitudinal and oblique muscles were so interfered with by the ova in the somewhat softened preparation, that nothing definite could be determined. So far as could be observed, the nerves seemed to lie above the oblique muscles.

In the example from the North Pacific there are twenty-four segments, including head and tail. The branchiæ commence on the left side on the second, as a simple process, and on the right on the fourth segment as an arbuscle. The ventral hooks and dorsal bristles correspond in minute structure with those from Bermuda.

Dr. Baird speaks of certain small parasitic animals being attached to the under surface of the specimens in the British Museum. None occurred in the present forms. The species appears to have a very wide range, stretching from Port Jackson, Australia, to Madeira and the Bermudas. Dr. Baird,<sup>1</sup> has the credit of correcting the erroneous descriptions of his predecessors in regard to the eyes, hooks, and other parts. It is remarkable

<sup>1</sup> *Proc. Linn. Soc. Lond.*, vol. x. p. 239.