

and an outer of two filaments. When fully formed the organs differ from those of the previous form by their greater size and more evident divisions, features borne out on microscopic examination. The processes are larger and longer, as well as more distinctly lanceolate at the tip, whereas in the former case they are blunt. The branchiæ are continued to the posterior end.

In examining the dorsal bristles, a feature at once strikes the observer, viz., their greater translucency and much more flexible nature. The bifid kind (Pl. IIIA. fig. 10) have somewhat larger shafts than in the former examples, and the serrations on the inner side of the tip are less distinct. The serrated kind (Pl. IIIA. fig. 11 represents an average specimen) is not marked by distinct lines or grooves toward the tip as in the previous form, and the teeth are less prominent. These bristles seem to be more numerous in the tuft than in the typical *Eurythoë pacifica*. Another feature is the great prominence of the smooth curved form (Pl. IIIA. fig. 5) in the foregoing specimens, and their comparative paucity and slenderness in this.

The ventral bristles are on the whole more translucent, and have the tips more dilated than in *Eurythoë pacifica* proper. One of the average bristles from the anterior third of the body is shown in Pl. IIIA. fig. 12, though it has to be mentioned that the number of serrations on the inner edge of the tip is sometimes three or four in the anterior feet. If the bristle is slightly turned round the tip appears narrower, so that there is lateral flattening. The hastate spine (Pl. IIA. fig. 14) is somewhat larger than in the previous form. The elongated series, corresponding to Pl. IIIA. fig. 8, is also present, and closely approaches the latter. The resemblance in the characters of the bristles is striking, and it has been thought unnecessary to make specific separation.

The nerve-cords have the same relations as in the preceding form, and the alternation of the ventral longitudinal muscles is even more apparent. This alternate passage inward and outward of the ventral longitudinal muscle is noteworthy. A small canal exists in the central line of the hypoderm. It is interesting to find the canal independent of the nerve-cords.

*Hipponoë*, Audouin and Milne-Edwards.

*Hipponoë gaudichaudi*, Audouin and Milne-Edwards (Pl. I. fig. 5; Pl. IV. fig. 3; Pl. IIIA. figs. 13-17).

*Habitat*.—Several examples occurred on a log at the surface of the sea, 100 miles north of Bermuda, 28th May 1873. Another was found adherent to *Lepas fascicularis* on the surface of the North Pacific, 6th July 1875.

This form certainly presents a very considerable divergence from the Amphinomidæ in external appearance. The body is much more flattened, somewhat fusiform in outline, and composed of about thirty-two boldly-marked segments, including head and tail. The length of the largest specimen is 24 mm., and its breadth fully 5 mm.