

series of bristles is of moderate length. These are less tapered than in specimens from St. Magnus Bay, but more slender than those from Canada and Bergen. The lateral bristles, which are seventeen in number, agree most nearly with the former. The tips differ slightly from those of *Amphicteis sarsi*.

There are fifteen hook-bearing pinnules posteriorly, but the tip of the tail is absent. The hooks (Pl. XXVIIA. fig. 2) show five teeth and a process beneath the inferior one. They seem to be comparatively minute, and their outline differs both in the dorsal curve and the anterior inferior process from that of any other known species. The closeness with which this and allied forms approach each other, and yet the fixed nature of the differences in the minute structure of the hooks, is interesting.

A pure white pulp filled the alimentary canal of the animal. Microscopically a vast number of Diatoms, Radiolarians, forked structures with a spike at the end (like the tips of the cylinders formerly described in *Maldane sarsi* (p. 393), only with a shorter spike and larger basal region), and a few small *Globigerinæ* were the chief forms observed in this rich ooze. The *Globigerinæ* appeared to be in very good condition, and were probably fresh when swallowed, the fine spines in some cases radiating all round like hairs, and the interior apparently still filled with the protoplasm. There seems to me to be no valid reason why these Foraminifera, Radiolarians, and other forms should not live on the bottom any more than the arenaceous types or the Annelid itself, concerning which no manner of doubt exists.

No trace of a tube exists in the preparation.

*Amphicteis japonica*, n. sp. (Pl. XXVIIA. figs. 3-5).

*Habitat*.—Dredged at Station 232 (south of Yedo, Japan), May 12, 1875; lat. 35° 11' N., long. 139° 28' E.; depth, 345 fathoms; bottom temperature 41°·0, surface temperature 64°·2; sea-bottom, green mud.

The length of the example is about 28 mm., with a diameter in front of 2·5 mm.

In general appearance it corresponds with *Amphicteis gunneri*, having seventeen pairs of bristle-tufts in front and fifteen pairs of hook-bearing pinnules posteriorly. The paleolæ are of moderate length and nearly straight, the more slender only exhibiting a slight curvature. They differ from the corresponding organs in a typical example of *Amphicteis gunneri* from Norway (Pl. XXVIIA. fig. 4), both in regard to the character of the tapering and the general outline, which is somewhat fusiform (Pl. XXVIIA. fig. 3). They are marked by the usual longitudinal striæ. The traces of wings are less evident in these than in the Norwegian species, the bristle-tips of which are tapered to a degree of extreme tenuity. The lateral bristles present no feature of note, except perhaps that the wings are rudimentary.