

a much shorter and proportionally broader hook at the tip. Both have the duct perforating the tip. The shaft of the new species is also much shorter and thicker than the Norwegian, indeed it approaches in this respect the Canadian form. The duct or groove seems to be due to a splitting of the dorsal margin of the hook, and it appears sometimes to be incomplete at the extremity. The bristles are decidedly longer in the new form and the tip more attenuate. The wings in both species are narrow.

The hooks of the two species, as might be expected, are very closely allied, yet in the general outline of each there is sufficient to distinguish them. The hook in the new form (Pl. XXVIIA. fig. 15) is more elongated from the crown to the anterior inferior angle than in the Norwegian (Pl. XXVIIA. fig. 16), some of the uncini, indeed, showing four teeth above the supra-mucronal one instead of three as in the figure. The curvature of both base and dorsum is also diagnostic; and the flexures at and above the anterior inferior process (or mucro) are dissimilar. The respective figures best demonstrate distinctions which are difficult to explain concisely.

Posteriorly forty-two or forty-three segments occur between the last bristle-bundle and the anus, so that the region is comparatively long and tapered, though apparently shorter than in *Melinna cristata*. The anus appears to be a simple wide funnel, and no cirri are present in the specimen.

The example is somewhat soft and the hypoderm rather incomplete. It seems, however, to have considerable depth ventrally. The circular coat is moderately strong. The longitudinal ventral muscles are massive and convex inferiorly, while the dorsal are somewhat extended. The nerve-cords agree in position with those of *Amphicteis*.

*Melinna pacifica*, n. sp. (Pl. XLVIII. fig. 6; Pl. XXVIIA. fig. 17).

*Habitat*.—Trawled at Station 246 (nearly in Mid Pacific, in a line between Japan and San Francisco), July 2, 1875; lat. 36° 10' N., long. 178° 0' E.; depth, 2050 fathoms; bottom temperature 35°·1, surface temperature 73°·0; sea-bottom, Globigerina ooze.

The specimens were all enclosed in their tubes, and thus were imperfectly preserved, the spirit not having penetrated sufficiently before softening occurred. The size is variable, the longest ranging from 45 to 50 mm., with a diameter at the thick anterior region of fully 3 mm., exclusive of the bristles.

The contrast between the head of this form and that of the Norwegian *Melinna cristata* is striking, from the great development of the large, club-shaped, and elongated tentacles, which, when *in situ* in the tube, are folded in front of the snout and beneath the branchiæ. They are grooved, and, in the preparation, crenate; and evidently are capable of great extension. Their bases, as in the common form, are