Melinna, Malmgren.

Melinna maculata, Webster (Pl. XXVIIA. figs. 10-12).

Melinna maculata, Webster, Ann. Chætop. of the Virginian Coast (separate copy), Trans. Albany Institute, January 1879, p. 61, pl. x. figs. 145-147.

Habitat.—Dredged off Sombrero and St. Thomas, West Indies, in 470 and 390 fathoms.

Two friable and broken fragments of the anterior region of a small Melinna having a diameter of about 1.5 mm. at the wide anterior region.

So far as the imperfect examples show, the head and anterior region agree with the typical form (*Melinna cristata*), but their condition does not warrant a description of other than the hard parts.

The structure of the isolated dorsal hook (Pl. XXVIIA. fig. 10) placed on each side behind the branchiæ is diagnostic when compared with Melinna cristata from Norway, or Melinna elisabethæ, which is not uncommon in the stomachs of haddocks caught off St. Andrews Bay. This chitinous hook is short, with a stout fibrous shaft, tapering superiorly, while the pointed and more solid tip is somewhat stiffly bent, very nearly at a right angle to the shaft. The extremity is composed of hard structureless chitin, and a thicker layer of the same nature passes downward on the anterior aspect of the shaft. On the other hand, the whole appearance of the hook differs in Melinna cristata from Norway (and Malmgren's artist has certainly laboured under a slight misapprehension if he had the hook of this species before him), especially in the form of the tip, which is pierced toward its dorsal margin by a perfect canal, as if for the transmission of a poisonous fluid. The Melinna from St. Andrews, again, has a much broader shaft, and a larger and more solid hook at the tip, the curve made by the latter forming a segment of a circle, and therefore the angle of the inner border of the arch is much less than a right angle. The circular strize on the neck of this form are also characteristic.

The wings at the tips of the bristles of the West Indian form (Pl. XXVIIA. fig. 11) are also proportionally broader than in *Melinna cristata*.

The ventral hooks (Pl. XXVIIa. fig. 12) are likewise as diagnostic as the preceding organs. Each has a series of four teeth, which increase in size from above downward, followed by a less developed tooth, with a broad base above the anterior inferior process. The latter tooth in some bears traces of its homology with the rudimentary process often present in the gap above the inferior projection. The dorsal margin of the hook has a distinct inflection a little above the base, while the latter is evenly convex from the posterior angle forward to the base of the anterior process.

Both in Melinna cristata and the species from St. Andrews the hooks have a much shorter form (from base to apex), and only three teeth occur above the modified inferior one.