

specimen there can be little certainty. According to Dr. Gray's description the "Coral stem is free, filiform, simple, rather rigid," &c., but there seems no reason to suggest that the axis of the form now described was otherwise than fixed.

Elasmogorgia filiformis, n. sp. (Pl. XXIII. fig. 10; Pl. XXVII. fig. 7).

The colony consists of a long, flexible, thin, little stem, which is very slightly thickened at what is pretty certainly the terminal end; the base is wanting. Towards the upper part a simple branch is given off at an acute angle, which is not longer than the principal stem. The length of the principal stem, so far as preserved, is 270 mm., with a diameter, in the lower portion, of 1 mm., and of 1.5 mm. at its apex. The lateral branch is 30 mm. long. The cœnenchyma is thin but not transparent. The polyps arise at right angles from the somewhat flattened stem, at long intervals and for the most part from either side, in alternating series. Directly under the truncated apex of the stem, which has small polyps, three polyps stand nearly in one plane. The polyps in the lower part of the stem are somewhat cylindrical; towards the top they are more conical, with a round oral region; their basal diameter is 1 mm., with a height of 0.5 mm. The tentacular operculum in a retractile state is quite withdrawn into the calyx. The spicules are broad spindles, armed with small sharp spines, which in the cœnenchyma are placed close to one another, and are frequently curved. They constitute a thick uniform layer. In the cœnenchyma they are placed in the longitudinal direction of the stem; on the body of the polyp they are placed circumferentially, beginning from the base. They are of considerable size, so that they are discernible on a very slight enlargement. They measure, length by breadth, 0.62-0.13; 0.5-0.1; 0.33-0.08; 0.13-0.1; 0.23-0.07 mm. The basal portions of the tentacles are armed with numerous spindle-shaped spicules, which measure from 0.18 to 0.16 mm. in length, and from 0.04 to 0.016 mm. in breadth. The axis is thin, horny, black, and flexible. The colour of the stem is white.

Habitat.—Station 188, Arafura Sea, south of Papua; depth, 28 fathoms; bottom, green mud.

Genus *Muricea*, Verrill (*emend.*).

In the genus *Muricea* Lamouroux included all the then known species of Muriceids; Kölliker was the first to greatly limit it,¹ by separating from it the species which form the genera *Paramuricea*, *Echinogorgia*, &c., in which spindle-shaped and unilateral spiny spicules occur. Verrill² still further circumscribed the genus, and divided Kölliker's group into three, *Eumuricea*, *Muricea*, and *Muricella*. These three groups

¹ *Icones Histiologicæ*, p. 135.

² *Trans. Connect. Acad.*, vol. i. p. 449.