consists of two rows of spindles converging towards the margin of the calyx, which, for the rest, have the same form and size as the spindles of the cœnenchyma. Their size averages 0.9 by 0.1; 0.89 by 0.067 mm. Each of the eight longitudinal bands projects spine-like somewhat above the margin of the calyx. The tentacular operculum is formed of spicules of which two always lie in the base of each tentacle, converging towards its apex. When the tentacles are folded these close together in a conical, convex operculum. These spicules measure 0.43 by 0.04; 0.4 by 0.05 mm. Small spicules occur also in the more distal portion of the tentacle, measuring 0.2 by 0.5 mm. and less. The spicules of the tentacles are spindle-shaped, somewhat flattened and curved, covered with small, scattered, upright, pointed warts.

The colour of the entire colony is greyish-white; the axis is brown. The colony is densely covered with a species of *Coryne*, which forms over it quite a felted coat.

In the thickness of its conenchyma and in its entire habit, which recalls rather Paramuricea, this species differs very considerably from the other species of the genus, which are usually graceful and have a thin conenchyma. The shape and armature of the calyces and the structure of the spicules show, bowever, such a close agreement with the other species of Muricella, that one may without hesitation refer it to this genus.

Habitat.—Station 190, Arafura Sea; depth, 49 fathoms; bottom, green mud.

Genus Elasmogorgia, n. gen.

? Filigella, Gray, Ann. and Mag. Nat. Hist., ser. 4, vol. ii. p. 443, 1868.

This genus has been established for a small Muriceid, with a flexible, horny axis, which is covered by a thin but not transparent coenenchyma. The polyps rise at large intervals, and at right angles to the stem. They are short and bluntly conical. The tentacles are quite retractile, and when in a state of repose the margin of the calyx is quite infolded over them.

The terminal portions of the branches are truncated and without polyps. The spicules are broad, somewhat straight, warty spindles; sometimes curved spindles 0.2 to 0.6 mm. long; which lie close to one another and occur both in the coenenchyma and in the polyps. In the coenenchyma the spicules seem to be longitudinally placed; on the polyps they extend from the base to the oral region. The tentacles are armed with rough spiny spicules on their basal portions, which, when the tentacles are retracted, form an opercular covering, but this can be completely withdrawn into the body, so as to leave no outward trace. The only example found has a delicate flexible stem, from which one branch is given off. The stem is of the same diameter throughout, and is so flexible that it can be bent and twisted like a piece of twine. It is just possible that the form may be identical with that described by Dr. Gray as Filigella gracilis (loc. cit.); but the description leaves much to be desired, and in the absence of the type