bent spindles, somewhat transparent and armed with numerous spines. In the body they often assume a more club-like form, one end becoming truncated and a little thickened; here they form eight rows, in each of which two spicules converge always together. Each of these rows subtends a tentacle. The colleret contains spiny, feebly bent, rod-like spicules which form a peripheral ring, the margin of which is composed of eight groups of spicules. The basal portion of the tentacles which forms the operculum is situated at the point of contact of two groups, formed from several rows of spicules converging upwards.

The axis is soft, horny, fibrous; the terminal branches are soft and pendulous.

Anthomuricea argentca, n. sp. (Pl. XXIII. fig. 1).

The main stem branched in one plane rises from a flat base; it consists of a principal stem with branches arising at angles, which do not give off branches in their turn, and there are four large branches which give off simple lateral twigs like the principal stem. The principal stem and branches are bent in various ways, the branches at their apices are soft and pendulous, at their terminations they are only slightly thickened. The main stem reaches the length of 400 mm., at the base it has a thickness of 5 mm. The small lateral branches are from 1 mm. to 20 mm. The large branches are 220 mm. in length and have a thickness of 3 to 4 mm. at their origin. The connenchyma is everywhere very thin and almost transparent. The hyaline spicules, which only form a thin layer, give it a silvery appearance. The polyps on the stem and branches are at intervals of from 2 to 2.5 mm. They are arranged spirally and so that three to four polyps form a spiral. They are cylindrical, rising perpendicularly 2 mm. high; 1 mm. constitutes the calyx, and 1 mm. the opercular portion near the colleret. The young polyps at the apex of the branches arise directly behind the blunt stolon which forms the termination of the branches and the twigs. The spicules of the conenchyma are chiefly curved spindles with short pointed spines; length by breadth 0.5-0.04; 0.3-0.05 mm. The calycine spicules assume a slightly club-like form and are in pairs, the blunt ends converging; the length by breadth of these spicules is 0.25-0.04; 0.3-0.05; 0.3-0.045 mm. At the colleret the spicules are feebly curved rods rounded off on both sides, and armed with delicate spines; length by breadth 0.58-0.03; 0.4-0.03; 0.33-0.025 mm. The basal portions of the tentacles which form the operculum are armed with at least from four to five rows of spicules placed en chevron, which have a spindle-like form and are feebly bent. length, taking those from the base to the termination of the opercular region, is 0.38-0.22; 0.2; 0.18; 0.16 mm. The axis is horny, fibrous, a little compressed, in the smaller branches it is soft and pendulous. Colour brown. The colour of the coenenchyma is glistening white. The polyps are brown.

Habitat.—Station 307, off Port Grappler, Patagonia; depth, 140 fathoms; bottom, blue mud.