

short, irregular spirals, each of which consists of three polyps; young polyps and buds are developed everywhere between the old ones. The end of every twig and of the stem is always occupied by a polyp. The polyps are cylindrical, only expanded at the end, 3 mm. long. The spicules which surround the edge form bundles of at most three long needle-like forms. The tentacles are bent in from the base upwards.

The axis is horny, fibrous, soft and flexible, in the stem and branches it is somewhat flattened, in the thicker portions it is of a brownish hue.

The spicules in the cœnenchyma are longitudinally placed, and are generally curved, spiny spindles, whose ends sometimes give off lateral projections, 0.2 to 0.18 mm. to 0.4 mm. long; in the polyps the bent spiny spicules form eight longitudinal rows, which come together at angles and are relatively thick, 0.4 mm. long and 0.05 mm. in their greatest diameter.

The projecting spicules at the edge are slender, somewhat bent spindles, covered with a few sharp spines, 0.67 mm. and 0.54 mm. long, and 0.05 to 0.04 mm. in diameter.

The polyps are very like those of *Acanthogorgia* (*Blepharogorgia*) *schrammii*, Duch. and Mich., only in this species the polyps are smaller, 2 mm., and the spines on the edge of the calyx opposite to the calyx spicules are remarkably thick and coarse.

The colour in alcohol is brown.

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

3. *Acanthogorgia laxa*, n. sp. (Pl. XXII. fig. 2; Pl. XXV. fig. 3).

The upright stem gives off larger and smaller branches, chiefly on two sides, of which the former again branch many times. Between these arise other small, short branches from one side of the stem. The main stem is 7 mm. in diameter at the root and rises from a horny, flat base, it is flattened in one plane and is many times bent in its course. Its length reaches 160 mm. There arise, mainly from two sides, in irregularly alternating series, larger, ramified branches, and smaller, rod-like twigs. They arise at angles of 70° to 90° and are generally bent outwards in their further course, their soft, terminal portions, however, usually fall drooping towards the root. The larger branches attain a length of 150 mm. and have at their base a diameter of 3 mm., they again give off lateral twigs on two sides, which reach a length of 40 to 50 mm. The smaller, unramified branches are thin, generally bent outwardly in their course, and reach up to 52 mm. in length. Between the two rows of branches, which arise from the narrow edges of the stem, another row of small, thin twigs arises, which