

begins to give off branches near its base, which attain to nearly the thickness of the main stem. In one case the lowest branches anastomose with one another, the lowest fuses again with the stem, so that it is difficult to recognise the regular ramification.

Usually there arise four more or less thick branches from each calcareous joint of the stem at different heights and on different sides. Still the tendency to develop the branches, more particularly in one special plane, generally prevails. The largest branches arise from two opposite sides and spread themselves out in the same plane, while the other branches remain shorter. The branches arise at acute angles to the stem. Each branch develops lateral twigs in the same manner as does the main stem, and the ramification proceeds to the formation of twigs of the fifth order. Most of the branches reach the summit of the main stem.

The height of the colony reaches 120 mm. Diameter of the stem at the base 2 mm.

Length of the main branches up to 45 mm., of the thin terminal twigs up to 10 mm.

The polyps are small, inclined inwards towards the branches. They arise from the branches and twigs at considerable intervals from one another, 0·8 to 1 mm. On the larger twigs and branches mostly on three sides, on the terminal twigs only on one side.

Their form is club-shaped, the base broad, the mouth rounded off, the middle constricted. Length, 0·8 mm. They seem, like the Primnoids, in a position to bend themselves inwards towards the branches.

The calcareous joints of the axis are long, cylindrical, frequently bent and twisted. In the main stem and larger branches 10 mm. long. The horny joints, on the other hand, are very short, yellow-brown. The branches always arise entirely from the calcareous joints and begin with a calcareous portion. The end twigs are calcareous, often for a length of 18 mm.; they give off twigs and lateral twigs in which the horny joints are completely absent, and thereby the tender terminal twigs of the colony acquire a very fragile and brittle consistency.

The spicules of the cœnenchyma form three-sided and irregular longish scales, with sharply toothed and incised edges, covered with numerous sharp spines. There are also spindles with pointed warts. They hold firmly together by means of the toothed edges. Their length to breadth in mm. reaches 0·15-0·03; 0·1-0·06.

In the polyps the spicules form eight regular vertical rows of broad, flat, strong scales, convex in accordance with the periphery of the polyp, strongly toothed and covered with pointed warts. Their height to breadth in mm. reaches 0·05-0·2; 0·05-0·15; 0·03-0·12. The scales lie upon a support of bent, thorny spindles of 0·08 mm. length, which form eight longitudinal rows. The tentacle scales are broad, unsymmetrical, in three rows.

*Habitat.*—Station 320, off the Rio de la Plata; depth, 600 fathoms; bottom, green sand.