

One specimen has a length of 116 cm. The lower part of the stem is devoid of cœnenchyma and polyps, and is partly overgrown with colonies of Polyzoa and with Ascidians. The cœnenchyma is first met with at a height of 36 mm. The axis has at the base a thickness of 2.5 mm., but soon diminishes to 1 mm. in diameter; it is hard and calcareous at the commencement, but soon becomes soft and horny, with a tendency to bend itself together spirally. There are only eight to twelve polyps in a whorl, whereby the colony appears much thinner and more thread-like than in the typical specimens from shallow water. From the same spot came also specimens which appear still slenderer, the polyps in which are placed around the stem in whorls of from eight to ten, and have a very small diameter; their more minute structure, however, agrees with that of the typical specimens.

The calyces of this species are covered with scales, which form two dorsal, two lateral, and four ventral longitudinal rows. The two dorsal rows of scales, visible only in the calyces bent in to the stem, come together at obtuse angles in the middle line. The scales of the two rows are placed alternately, so that one scale is always in contact with two half scales of the other row. The ventral spicules form only small, thin scales, arranged in four irregular rows. The outer rows are covered over by the edges of the lateral scales.

The opercular scales are very short, with evenly truncated upper edges, they do not form a cone when laid together but cover the calyx flat.

Sizes of the spicules.—Calyx scales, much broader than long, with straight upper edge and toothed lower edge; height to breadth, 0.2–0.33; 0.18–0.3; 0.16–0.2; 0.2–0.31; 0.2–0.3 mm.; lateral scales, 0.2–0.27; 0.26–0.23 mm.; ventral scales, 0.04–0.11; 0.1–0.11 mm. Opercular scales; dorsal 0.3–0.1 mm.; lateral 0.16–0.1; 0.2–0.158 mm.; ventral 0.18–0.06; 0.12–0.1 mm. Scales of the cœnenchyma; outer layer, triangular to irregular longish polygonal, height to length, 0.31–0.2; 0.25–0.17; 0.27–0.2; 0.16–0.12; 0.2–0.018 mm.; inner layer, small, thin scales occur with only a few fine prominences, 0.1–0.15; 0.1–0.09 mm.

*Habitat.*—Port Jackson, Australia; depth, 30 to 35 fathoms.

Station 163A, off Twofold Bay, Australia; depth, 150 fathoms; bottom, green mud.

This species has already been very frequently collected as an inhabitant of shallow water. Gray gives the Australian Seas as a locality. Verrill obtained it from New Zealand, Bluff Harbour, one specimen from 7 fathoms, Tasmania. The museum of the Jardin des Plantes at Paris possesses a specimen from the Australian Sea which is 150 cm. long. The Godeffroy museum possessed specimens from Bass Strait.