

1. *Stenella johnsoni*, n. sp. (Pl. XIII. fig. 3; Pl. XX. fig. 6).

Axis attached to Corals, irregularly branching, branches at wide intervals, and irregularly dichotomous. The only specimen dredged is about 200 mm. in height. Older portion of a dense horny and calcareous structure; younger portions horny, feebly calcareous. Cœnenchyma thin, with large scale-like spicules, often imbricated, and varying in size and outline, through which the axis is seen. At the base of the polyps the spicules are large and concave, partially surrounding the opercular scales.

Polyps in whorls of two. Polyps about 2.5 mm. high by 1.5 mm. at widest diameter. The large scale-like spicules which surround the body are in about three rows, overlapping at their edges; the row immediately below the opercular spicules consists of four large spicules, the free edges of which form a deep frill around the polyp. Opercular scales eight in number; when closed the summit of the operculum scarcely projects beyond the margin of the cup-like frill formed by the last row of body spicules. The spicules on the body are symmetrical.

The spicules of the cœnenchyma measure 1-0.75; 1.25-0.50 mm.; those on the polyps 1.50-1; 1-1 to 1.25-1 mm. (just below opercular scales). The opercular scales 0.50-0.45 mm.

Of this species parts only of one specimen were obtained; these were very much damaged by the tangles getting intertwined with them. It is nearly related to *Stenella imbricata*, Yate Johnson, but is easily to be distinguished by the form of the opercular scales, which in the species from Madeira form a projecting cone over the retracted tentacles.

*Habitat*.—Station 344, off Ascension Island; depth, 420 fathoms; bottom, hard ground.

2. *Stenella gigantea*, n. sp. (Pl. XIV. fig. 4; Pl. XX. fig. 8).

Axis in the only specimen found, about 520 mm. long and 2 mm. in diameter. Slightly curved, dense, brittle, the horny fibres being largely loaded with calcareous matter. Very slightly grooved, iridescent. The cœnenchyma is thin, with a dense layer of large irregularly quadrilateral spicules, which form quite a crust around the axis. The polyps are in whorls of four each, about 10 mm. apart. The polyps are large, from 6 to 7 mm. in height, and about 3 mm. in widest diameter. The large scale-like spicules that surround the body of the polyp form about four rows, of which the fourth or pre-opercular row is formed of four large scales, forming a calyx, within which are the very prominent projecting opercular scales; these latter are deeply keeled. On the side of the body of the polyp, next to the axis, a few small, circular, scale-like spicules are found.

The spicules of the cœnenchyma measure 2 mm. by 1 mm. Of those on the body of