

coenenchyma and the polyps in spirit specimens are brownish-grey, but white when dried.

*Habitat*.—Station 135, Tristan da Cunha; depth, 360 fathoms; bottom, volcanic sand.

2. *Clematissa robusta*, n. sp. (Pl. XXII. fig. 9; Pl. XXVI. fig. 5).

The stem is upright, loosely branched in one plane. The principal stem gives off branches at right angles, in alternating series on either side, and at long intervals. These branches stand off horizontally from the stem. The branches sometimes equal the stem in thickness, and sometimes surpass it in length. These give off single, perpendicular, lateral twigs which now and then anastomose with other branches; they sometimes, but rarely, give off secondary twigs. The unbranched terminal portions of the branches are long, tendril-like, and with thick knob-like endings; the length of the principal stem is 250 mm., with a diameter at its base of 7 mm.

The branches extend to a length of 240 mm. and over, with a basal diameter of 3 mm. The unbranched terminal portions of the branches reach to a length of 100 mm.

The polyps are spirally arranged on the stem and branches, at intervals of from 1 to 2 mm.; at the termination of the branches only are they closely packed. The polyps are about 1.5 mm. in height, with the same measurement for their basal diameter; the tentacular operculum is 1.5 mm. high.

The spicules in the coenenchyma and in the polyps are large, club-shaped, armed with branched spines, and often curved and bent; the club-shaped warty extremities project and give the polyps a rough warty appearance. These measure 0.5–0.12; 0.52–0.08; 0.62–0.1; 0.42–0.1; 0.54–0.067; 0.62–0.08 mm. In a deeper layer they are more spindle-shaped, and are packed close together, with their spines interlocking; these measure 0.6–0.07; 0.38–0.05; 0.3–0.04; 0.38–0.07 mm. The spicules of the tentacles are feebly bent spiny spindles.

The axis is horny, fibrous, soft, and very flexible, so non-elastic that the branches out of water droop loosely.

The stem is of a yellowish-brown colour. The coenenchyma and polyps in spirits are of a brownish-yellow, but when dried are yellow.

*Habitat*.—Station 310, Sarmiento Channel, Patagonia; depth, 400 fathoms; bottom, blue mud.

3. *Clematissa obtusa*, n. sp. (Pl. XXIII. fig. 2; Pl. XXVI. fig. 4).

The stem is feebly branched in one plane. The principal stem gives off, on one side only, two branches, which are either unbranched or very feebly so; the terminal twigs