

Two specimens in the Challenger collection, both from Torres Strait, may be referred to this species. One of them obviously belongs to the typical form, while the other may be distinguished as a variety with a lower ramification.

In the first the colony is upright and branched; 145 mm. high and 100 mm. broad. One can distinguish a barren cylindrical stem, 55 mm. high and 20 mm. thick, continued into a main stem which gives off larger and smaller polyp-bearing branches on all sides; the largest branch, 48 mm. long, belongs to the first series of branches.

The diversity in length of the branches gives to the surface of the polyp-bearing portion an irregular, knobby appearance. Each branch gives off in turn additional branches, which finally break up into little, diverging twigs, having bundles of five to ten, and more, polyp heads, each surmounted by a stout spicule. The bundles of polyps stand so closely together, that on the ramified head-like portion of the colony, only polyp heads, supported by spicules, are visible, and the branches and twigs are completely hidden. The polyp heads are placed on short peduncles surrounded by large spicules, one or two spicules project for about 1 mm. beyond the head.

Each polyp head is surrounded by a crown composed of eight groups of spicules, which reach from its base to above the origin of the tentacles.

The spicules are rough spindles, straight or *f*-shaped, at times somewhat enlarged at one end, almost club-shaped. Occasional examples, also, are forked at one end. In the twigs they are long and spindle-shaped, often thickened at one end and simple or *f*-shaped, with numerous spines, which are thickly placed and blunt at the end, or covered with fine warts or toothed. The smaller ones measure 0.6 by 0.05 mm.; 0.42 by 0.04 mm.; 0.54 by 0.12 mm. Larger spicules, thickened at one end, with branching spines, measure 1.5 by 0.25 mm. The large spicules lying in the peduncle of the polyp heads measure from 1 to 2.5 mm. in length, and 0.21 mm. in thickness. The large, slightly curved spicules measure 3 mm. in length by 0.14 to 0.26 mm. in breadth. In the head one distinguishes in the first place larger spicules, of which eight extend radially from the base to above the base of the tentacles; these are somewhat enlarged above and covered with sharp-pointed outwardly directed spines. They reach 0.4 by 0.057 mm. in size. Upon these are supported smaller needle-shaped spicules, converging outwards in eight groups towards the large spicule; these needle-shaped spicules are covered with sharp spines, and measure 0.3 mm. in length by 0.03 mm. in diameter.

The polyp-bearing portion of the colony is of a pale purple colour, mixed with white. The twigs are white; as are also the large spicules of the polyp peduncles and the larger spicules of the head. The smaller spicules of the heads and those of the tentacles are purple. The peduncle is reddish-white.

*Habitat.*—Station 186, Torres Strait; lat. 10° 30' S., long. 142° 18' E.; depth, 8 fathoms.