

forked, often bent, and showing a tendency in some cases to form "Stachelplatten." They are arranged irregularly on the cœnenchyma and on the polyp calyces, overlapping one another, and forming several layers. The colleret is composed of delicate needles arranged in the form of a ring, one row of which always forms the basal portion of the row of tentacles. In the tentacles the bent spiny spicules are always placed *en chevron* as in *Paramuricea*, so that two always converge together upwards. Spicules can be traced to the very apices of the tentacles.

The axis is always soft, horny and flexible, of a fibrous texture, with the ends of the branches usually drooping.

Of this genus, which is very nearly related to *Paramuricea*, three species are to be found in the Challenger collection, all of which were dredged in the South Atlantic.

1. *Clematissa verrilli*, n. sp. (Pl. XXII. fig. 10; Pl. XXVI. fig. 6).

The stem is upright, much branched in one plane; 360 mm. high and 300 mm. broad. The main stem arises from a flat, expanded, horny base; but it is soon diverted from its perpendicular course by the shooting out of a large lateral branch. The main axis next gives off on either side, at irregular intervals, large and small branches, which in their turn give off branches in a similar manner, and so on till branches of the fourth order are given off. The branches at first arise at almost right angles from the stem, bend soon in an upward direction, and then continue their course parallel with the stem; the small ones alone keep their original direction. The terminal portions of the branches and twigs are always knob-like. The diameter of the base of the stem is 8 mm., that of the larger branches from 4 to 5 mm. The length of the larger branches is 270 mm., of the unbranched terminal portions from 50 to 90 mm. The terminal twigs measure at their bases 1.5 mm., increasing to a thickness of from 4.5 to 5 mm. The cœnenchyma is thick and opaque.

The polyps are arranged all through in spirals, with intervals of 2 mm., they are erect, 2 mm. high, with a basal diameter of 2.5 mm. The basal portions of the tentacles form an operculum about 2 mm. in height. The arrangement of the spicules in the cœnenchyma and of the polyps is the same, and on this account the basal portion of the polyps is not very well defined.

The spicules of the cœnenchyma and of the polyps are thick and armed with spines, these latter are often branched, rarely with large, branched prominences. One extremity is usually knob-shaped, with a roughened surface. These measure in mm. 0.14-0.16; 0.50-0.16; 0.4-0.08; 0.46-0.1; 0.32-0.1. The spicules of the colleret are curved spiny spindles of 0.41 mm. in length and 0.04 mm. in breadth. Those of the tentacles are like shaped, of 0.33 mm. in length by 0.03 mm. in diameter.

The axis is soft, flexible, fibrous, horny; of a yellowish-brown colour. The