

The axis is thin, horny, flexible and of a brown colour. The cœnenchyma and calyces are of a beautiful coral-red colour, corresponding to the intense red colour of the spicules. The tentacular opercula are whitish.

*Habitat*.—Admiralty Islands; depth, 16 to 20 fathoms.

*Muricella crassa*, n. sp.

Colony upright and ramified in one plane, with thick cœnenchyma, from which the bluntly conical polyps stand out straight, arranged in spirals. The branches and twigs are thickened at the apex.

The entire habit recalls *Paramuricea placomus* (Esper).

The main stem rises from a flat, expanded base to a height of 300 mm., with a thickness of 6 mm. which remains tolerably uniform throughout its course. Already at the base a branch, which has the same thickness as the main stem, comes off at an angle of 45°, and reaches a length of 130 mm. From this, as from the main stem, lateral branches come off on two sides, and finally bear twigs up to the third order. All are of nearly the same thickness; the terminal points are blunted and expanded (5 to 6 mm.). The branches and twigs arise at wide distances from one another; the terminal twigs attain a length of 70 mm.

The cœnenchyma is very thick and contains several layers of calcareous spicules. The horny, flexible axis is relatively thin and weak, being 1 mm. thick in twigs which have a diameter of 5 mm. The polyps project vertically from the cœnenchyma at intervals of from 1 to 1.5 mm., arranged in close, irregular spirals. The calyx forms a truncated cone, measuring 2 to 2.5 mm. at the base and 2 mm. high. The tentacular operculum can be withdrawn within the mouth of the calyx, but in the spirit specimen it forms on most of the calyces a low pyramid projecting above the calyx mouth. The apex of each twig is occupied by a short process of the cœnenchyma, on which are placed three polyps standing out in different directions.

The spicules of the cœnenchyma are large, stout spindles which are usually slightly curved. Sometimes they appear blunt at both ends, sometimes pointed at one end and rounded off at the other, but always covered with very closely placed, granular warts, which stand out straight. On the surface they form a thick layer. In the deep part of the cœnenchyma they are smaller and frequently possess one to three outgrowths, which indicate double to quadruple formations. They measure 1.2 by 0.1; 1 by 0.26; 0.9 by 0.25; 1.2 by 0.18; 0.9 by 0.125; 1.1 by 0.2; 0.62 by 0.083; 0.5 by 0.38 mm. The two last are double and quadruple spicules in which the breadth is the expansion of the lateral rays.

In the calyx the spindles form only one layer and are arranged in eight longitudinal bands, which stand vertically upon the spicules of the cœnenchyma. Each of the bands