figure would signify." Nevertheless, in the thick spindles which are found in the connenchyma, the one side has decidedly larger warts than the other side.

Habitat.—Station 190, Arafura Sea, south of Papua; depth, 49 fathoms; bottom, green mud.

3. Muricella complanata, n. sp.

Colony ramified in one plane, with an upright stem giving off branches on two sides at angles of about 45°; these branches again bear twigs which come off straight. The stem and branches are flattened in the plane of ramification. The polyps have projecting, truncatedly conical calyces, which stand out at right angles from their support. They arise in alternating series from the edges of the stem and branches.

The height of the colony is, in the case of the single specimen found, 250 mm.; the greatest width is 125 mm. The diameter of the main stem is 4.5 mm. near the base, and 4 mm. in the middle. The larger branches have almost the same thickness and attain a length of 170 mm. The first branch arises at a height of 32 mm. The main stem rises from an encrusting base to a height of 250 mm., bending many times in its course, but always in the plane of ramification. This is caused by the coming off of the larger branches, which always cause a deviation of the growth in the opposite direction.

In its lower part the stem is still almost cylindrical, with the origin of the larger branches it becomes flattened in the plane of ramification. Four larger branches arise in alternating series from both sides of the stem at angles of 45° to 60°; they are almost of the same thickness as the stem (3 to 4 mm.), flattened in the same plane and exhibiting a similar course. They generally give off secondary branches at from acute to right angles; these either remain simple or again bear short twigs. The secondary branches often bend after a short course and run more or less parallel to the main branch. Like the branches the main stem also gives off, especially in the upper half of its course, simple secondary branches, coming off at right angles, which only rarely again bear short twigs. The distance between the origin of the main branches reaches 12 to 25 mm. The secondary branches arise at intervals of 15 to 20 mm, and more. The twigs are 12 to 25 mm, long and 2 mm, thick. The stem, branches and twigs remain of the same thickness up to the terminations, which become expanded to a thickness of 4 mm.

The polyps arise in alternating series from the edges only of the stem, branches and twigs, and leave the broad surface of the branches free. They are placed at distances of 1 to 1.5 mm. from one another. The calyx, from which the tentacular operculum scarcely projects, is truncatedly conical, somewhat narrowed in the plane of ramification. The diameter of its base reaches 2 mm., and its height 1 mm. The end of the twig is usually occupied by two divergent polyps, between the bases of which a small, blunt process projects which forms the apex.