

they stand out perpendicularly from the stem and its branches, at intervals of 1.5 to 2 mm. For the most part the polyps arise from both sides of the thicker branches and twigs, leaving an intermediate portion of the cœnenchyma free; towards the summit of the branches they arise more closely, and at the very extremity of these four or five are found clustered together so that the apices appear thickened. The spicules of the cœnenchyma are long, straight, or feebly bent spindles, thickly set with sharp spines and often with terminal knob-like swellings also covered with sharp spines; occasionally they are also curved with two diverging spiny prominences from their convexities. They measure 0.25-0.05 mm., and 0.5-0.07 mm. On the body there is an outer layer of club-shaped spicules, the thickened portion of which is armed with sharp spines; under this come the branched "Stachelplatten," many of which have a very characteristic form. They consist of a broad root-like portion, from which branched spiny prominences project, and a thickened club-like portion armed with pointed spines. These measure, length by breadth—0.3-0.1; 0.4-0.2; 0.45-0.1; 0.22-0.06 mm. The colleret is formed of curved spiny spicules, the tentacular spicules are broad spiny spindles, of which the middle row is the largest; size 0.45 by 0.05 mm. The axis is soft, flexible, horny, fibrous, a little compressed on the main stem, and flattened on the terminal branches; it is of a yellowish-brown colour. While this species is very similar to the previous one, it will be easily distinguished from it by the form of the spicules.

Habitat.—Station 308, off Tom Bay, Patagonia; depth, 175 fathoms; bottom, blue mud.

Genus 3. *Anthomuricea*, n. gen.

Colony with a branched stem and a horny axis. The polyps have cylindrically shaped calyces which stand out perpendicularly to the axis. These are supported by eight series of spiny spindle-shaped spicules placed *en chevron*, which are often more thickly packed at the apices. The basal portions of the tentacles constitute an eight-rayed conically projecting operculum; each of the eight rays is composed of many converging spiny spicules, which lie one above the other, and are placed *en chevron*.

The ordinary habit of the only species belonging to this genus corresponds more or less to that of a *Paramuricea*. The stem is upright, tree-like, and the branches are in one plane; the cœnenchyma is thin and on the more slender branches translucent. The polyps arise at somewhat wide intervals and stand in spirals of threes around the stem. The apex of a branch is never occupied by a polyp. Every polyp possesses a high, cylindrical and perpendicularly erect calyx. When the œsophageal portion is retracted the colleret assumes the position of a covering over the oral region. The eight basal tentacular portions form an eight-rayed conically projecting operculum. The whole polyp is clove-shaped. The spicules differ from those of *Paramuricea* in that no "Stachelplatten" are developed. The spicules of the cœnenchyma are curved or feebly