with very long tubular pedicels arise from the front of each zoœcium; one much larger than the other, and of a different form, arises low down from the tubular prolongation of the cell, and the other much smaller from the front, close below the aperture. Numerous slender radical or clasping tubes arise from the backs of the zoœcia.

Habitat.—Station 157, lat. 53° 55' S., long. 108° 35' E., 1950 fathoms, Diatom ooze.

The structure of this magnificent species is of extreme delicacy, so much so indeed that it is difficult to discern the transition from the diaphanous membrane which covers in the frontal aperture to the cell-wall proper; both textures are as transparent as glass and excessively thin. The avicularia are of two distinct kinds, one of each being attached normally to every zoecium. The larger kind is elongated, and when the mandible is thrown back a digitiform process protrudes (fig. 1e). avicularium is supported on a very long jointed, tubular, flexible, peduncle, which in the living state is probably cylindrical, but, perhaps from the action of the alcohol, it usually appears flattened and often thrown into regular zig-zag folds, leading to the suspicion that it may contain a contractile element. The wall of the peduncle of both kinds of avicularia is very finely ringed. The numerous jointed tubular threads proceeding from the back of the zoœcia appear to be of the same nature as those which connect the branches in Bicellaria reticulata, from which they differ, however, in their smaller diameter, and in their never, apparently, acting as connectives. Each of these tubes terminates, as it would seem, in a very delicate, but still jointed or segmented hollow filament, upon which may often be seen Globigerina shells and other Foraminifera It may be supposed, therefore, that the zoarium in its natural state lies prostrate on the ooze, and is affixed by numerous points as well as by a central peduncle.

The polypide has eighteen or twenty tentacles, and appears to be capable of being entirely protruded to a considerable distance; though how this protrusion is effected is very difficult of explanation.

§ 7.

(7) Bugula margaritifera, n. sp. (Pl. VIII. fig. 4).

Character.—Zoarium 3 to 4 inches high, lax and straggling. Zoœcia very long and narrow, entirely open in front. A very small spinous process at each upper angle. A subglobose, almost sessile avicularium articulated on the outer border of each zoœcium, close to the bottom.

Habitat.—Station 323, lat. 35° 39′ S., long. 50° 47′ W., 1900 fathoms, blue mud. Station 332, lat. 37° 29′ S., long. 27° 31′ W., 2200 fathoms, Globigerina ooze.