

less in the mesial line; and a small upturned spine is seen on each side of the mouth. In the form termed "*inermis*" (*loc. cit.*, pl. xlix. figs. 3, 4) the curious external marginal teeth are entirely absent. In all other respects, however, it agrees with the former, that is to say, in the peculiar form and position of the avicularia, and the habit and general characters of the zoarium. They agree also in the circumstance that the sides of the zoecium *within* the frontal membrane are furnished with a few distant, minute, sharp-curved spines or spicules, whose function is very obscure.

The Challenger form agrees in all respects with the second variety, except that it presents no vestige of the ascending spine on each upper angle. But on this account alone it cannot perhaps be looked upon as more than a variety.

The marginal zoecia are for the most part void of polypides; and they are much more slender than the inhabited ones. But whether inhabited or not, these zoecia always have their external wall furnished with a series of discoid stigmata, probably homologous with interzoecial pores or "Rosettenplatten," as they are termed, none of which, however, appear to exist in the ordinary oecia.

(3) *Flustra biseriata*, n. sp. (Pl. XVI. fig. 1).

*Character*.—Zoarium composed of very narrow, ligulate, bifurcate branches; probably several inches high. Zoecia biserial, broadly ovate, truncated below, very convex in front. Orifice very wide.

*Habitat*.—Station 196, lat. 0° 48' S., long. 126° 58' E., 825 fathoms, hard ground. Station 299, lat. 33° 31' S., long. 74° 43' W., 2160 fathoms, blue mud.

The ligulate divisions or branches are bordered on each side by a continuous chitinous tube.

(4) *Flustra membraniporides*, n. sp. (Pl. XXXII. fig. 7).

*Character*.—Zoarium composed of narrow, ligulate, forked lobes. Zoecia pyriform in outline, with a large oval aperture occupying more than half the length. Border slightly raised. A short marginal spine on each side above; one or two sessile avicularia, with short triangular mandible, on the front of the closed portion of the zoecia near the bottom. In the marginal zoecia the avicularium is larger and always single. Oecium small, inconspicuous, with a flattened, triangular or trifold space in front. Surrounded with a raised fascia, which is continued across the lower border.

*Habitat*.—Station 163B, Port Jackson, 35 fathoms, hard ground. Station 162, off East Monceur Island, Bass Strait, 38 fathoms, sand, shells.