Genus 10. Aulocalyx, n. gen.

With the single species Aulocalyx irregularis, n. sp.

A thin-walled cup, much folded, extended into lateral diverticula, and also continued into short laterally projecting tubes. The cup is fixed by a firm irregular base. The connected framework of beams consists of much curved hexacts, partly united by synapticula, partly soldered together. The parenchyma contains loose discohexasters with short or with medium-sized principal rays, bearing S-shaped terminals disposed in perianth-like fashion. Under the skin there are large hexasters in which each of the short principal rays bears six long diverging terminals, which gradually increase in thickness towards the round outer end, and are beset all round with backward bent pointed hooks. The dermalia and gastralia are rough medium-sized oxypentacts. Marion Islands, southeast of the Cape of Good Hope, 310 fathoms; between Marion and the Crozet Islands, 600 fathoms.

Genus 11. Euryplegma, n. gen.

With the single species Euryplegma auriculare, n. sp.

Cup- or ear-shaped plate, 3 to 5 mm. in thickness, with smooth convex outer surface, penetrated, however, by numerous longitudinally disposed, oval incurrent apertures, and a concave internal surface exhibiting numerous longitudinal ridges and papilla-like bosses 3 to 4 mm. in breadth. The excurrent apertures, 1 to 2 mm. in width, are found between the longitudinal ridges and on the summit of each protuberance. The beams of the very irregular dictyonal framework, which exhibits numerous ladder-like structures formed by transverse synapticula, are beset with small scattered pointed tubercles, and exhibit no thickening of the nodes of intersection. The loose parenchymal spicules are small simple rough oxyhexacts and discohexasters of various kinds. Some of the latter bear three to five somewhat markedly divergent terminals, while in others the moderately short principals exhibit three to ten long S-shaped rays, united in a slender calycine arrangement.

The dermal and gastral skeletons consist exclusively of oxypentacts, which bear small tubercles at the ends of the sharpened rays, but are otherwise smooth. Off Raoul Islands, north-east of New Zealand, 630 fathoms.

Tribe II. AMPHIDISCOPHORA, F. E. S.

Amphidiscs are always present in the limiting membranes. The parenchyma contains no hexasters whatever. A basal tuft of fibres is always present, anchoring the cup- or