

The epitheca is marked at intervals by several horizontal folds or ridges, and in its upper region is thrown into a series of longitudinal costal folds which are equally developed and only very slightly prominent. In some parts of the wall they are marked on the lower part of the corallum also, being traceable nearly to the apex. Towards the edge of the calicle the epitheca shows a triple margin appearing as if produced by three intervals in growth. The rounded edges of the primary and secondary septa can just be seen above the level of the margin of the calicle, which is nearly circular in outline. The sexradiate arrangement of the septa is a little obscured by irregularities, but can be plainly made out. There are six systems and four cycles, with additional septa in three pairs of the systems. The additional septa are developed symmetrically in pairs as regards the longer transverse axis of the calicle, but not as regards the opposite ends of that axis. The septa are quite straight with smooth faces; their inner edges are straight and perpendicular and parallel to the face of the columella, which they join only at a considerable depth within the calicle by curving horizontally inwards just as occurs in *Sphenotrochus rubescens*, with which coral the present agrees also in the form of the columella. At the margin of the calicle at a little distance below the edge of the epithelial border, and at a short distance below their own outer summits, the outer regions of all the septa are soldered together by a zone of stereoplasma (the name by which Lindström¹ denotes the solid calcareous matter filling up the interior of such corals as this and *Duncania*) which extends down for about one-third of the height of the calicle. The lower part of the calicle is quite free from stereoplasma or other filling up, but hollow to the apex, and the wall of the lower part is so thin as to be translucent when held up to the light. The columella is somewhat elongate in the outline of its summit, indicating thus the position of the longer transverse axis of the calicle. It is composed of four vertical flattened pillars fused together below but free at their tips. It projects up free within the fossa for a height of 2 mm.

Height of the calicle, 8 mm. Diameter of the calicle, 6 mm.

One specimen only dredged, attached to a fragment of volcanic rock.

Station 194. Off Banda Island, East Indies. 60 fathoms.

Desmophyllum.

Desmophyllum ingens, n. sp. (Pl. IV. figs. 1-6, 1a-6a, Pl. V. figs. 1-to 4, 1a-4a).

In the fjords of Western Patagonia were dredged numerous specimens of a gigantic *Desmophyllum* which seems closely allied to *Desmophyllum crista galli*, but which, because of its extraordinary size, and because an exactly similar coral occurs in Sicilian Tertiary beds, I have termed *Desmophyllum ingens*. Various forms of the coralla are figured on Plate V. of the natural size. The coralla are extremely massive and heavy. The shapes are exceedingly various according, to some extent, to the positions in which the

¹ Actinology of the Atlantic, p. 13.