

Station 308, off Tom Bay. 175 fathoms.

Station 311. 245 fathoms.

Desmophyllum eburneum, n. sp. (Pl. VI. figs. 1, 1a, 1b).

Only imperfect specimens of this species were obtained. The corallum is of a pure white. It is elongate conical in form, slightly compressed, with a long cylindrical pedicle which expands slightly at the broad base of attachment. The outer surface of the corallum is remarkably smooth and polished, and glistens like polished ivory. The primary, and in some specimens also the secondary costæ appear on the surface, where the corallum begins to expand, as slightly prominent ridges, here and there roughened by slight indentations. The development of the costæ varies much in different specimens, as also the amount of exsertion of the septa. The primary septa are prominently exsert and sometimes unequally so, and some are bent over outwards beyond the margin of the calicle. In some specimens the secondary costæ are as far exsert as the primary; the tertiaries are only slightly exsert. There are six systems of septa and four complete cycles. The septa are straight and thin, and are covered on their faces with sparsely scattered, small-pointed granules. Only the primary and secondary septa extend to meet one another laterally around the centre of the calicle, where their perpendicular margins surround a deep but narrow fossa.

Judging from the broken specimens, the height of the full-grown calicles is probably about 35 mm. Extreme breadth of a perfect calicle, 21 mm.

Station 306. Off Middle Island, Patagonia. 345 fathoms.

Desmophyllum cailleti, Duch. and Mich.

Desmophyllum cailleti, Duch. and Mich., Supp. Mém. Coral, 1874.

A single dead and partly decayed specimen obtained off the Virgin Islands appears referable to this species; if so, it is large, measuring 30 mm. in height, and 20 in diameter of the calicle.

Station 24. Off Culebra Island, Danish West Indies. 390 fathoms.

Flabellum, Lesson.

NOTES ON THE STRUCTURE OF THE SOFT PARTS OF SPECIES OF THE GENUS *Flabellum*.

When a specimen of a *Flabellum* hardened in absolute alcohol is decalcified, no trace of any external layer of soft tissue covering the outer surface of the wall remains. The living tissues in *Flabellum* are confined to the interior of the calicle and the immediate outer edge of its margin. The decalcified mass of soft tissue which occupied the interior of the calicle, consists of twelve wedge-shaped lobes connected together at their narrowest ends by means of the central stomach of the animal. The interior of each of the lobes