

coralla grow attached. The short cylindrical forms with expanded summits (figs. 2 and 3), were attached to large Gorgonoid fans, and all the specimens so attached were more or less alike. The compressed trumpet-shaped specimens with long attenuated and branching bases (figs. 1 and 4, Pl. V.) are mostly attached to one another; and often form large and complicated masses as in the specimen figured in fig. 4, which is reduced to one-half the natural size. The outer surfaces of the coralla are smooth and covered with an abundant dense epitheca, which solders them to one another or to any objects with which they are in contact, and, as may be seen in fig. 1, Plate V., occasionally fills up the interseptal chambers of dead specimens with solid heavy calcareous matter. In the largest specimens there are five complete systems of septa which are almost exactly regular. The septa are extremely thick and stout, and from their free margins at the base of the fossa, in the largest specimens, grow out large rounded knob-like projections forming a sort of columella as in *Flabellum*.

A series of young specimens is figured on Plate IV. showing the various stages of growth. The smallest specimen (fig. 2) has six systems and four complete cycles, and the margin of the calicle is nearly even, being only slightly toothed by the primary costæ, which alone are exsert. In the next specimen (fig. 3) there are still only four cycles, but all the septa are slightly exsert, and the quaternary septa next the primaries and secondaries are higher than the tertiaries, and lie close against the principal septa. In some cases the septa do not become exsert until the coral is much larger, as is seen in the case of the specimen shown in figure 1, where the septa are as yet not at all exsert, although quinary septa are already developed in this instance in some of the systems. The specimen shown in figure 6 has already assumed the form of the larger compressed specimens. In it the fifth cycle is complete in all the systems, whilst the quinary septa next the primaries and secondaries are in most of the systems as high as these latter septa, and are joined to them for their whole height by a prolongation of the wall.

There is a fossil specimen in the British Museum collection from quaternary beds at Messina, marked *Anthophyllum*, n. sp., which is identical apparently with the larger compressed trumpet-shaped specimens from Patagonia, both in form and dimensions. In the Jardin des Plantes' museum there is a specimen of *Desmophyllum crista-galli*, from Cape Breton, which resembles the Magellan specimens very much, but is smaller.

Professor Martin Duncan has also shown me a fragment of a *Desmophyllum*, dredged from 904 fathoms in the Mediterranean, which indicates a calicle almost as large as those of the Magellan Straits' specimens. The fragment is blackened with manganese.

Long diameter of the calicle of the largest specimens, 82 mm. Short diameter, 50 mm. Extreme length of longest specimen, 135 mm.

Numerous specimens dredged in the fjords of Western Patagonia.

Station 306. 345 fathoms.

Station 307, off Saumarez Island. 147 fathoms.