

4. DESCRIPTION OF TWO NEW SPECIES OF CORALS BELONGING TO THE GENUS FLABELLUM. BY E. W. H. HOLDSWORTH, F.L.S., ETC.

(Plate XXVIII.)

1. FLABELLUM CAMPANULATUM. (Pl. XXVIII. figs. 1-3.)

Compressed, campanulate; borders straight or slightly convex; without spines. Base usually terminating in a small pedicel, sometimes irregularly compressed. Superior margin slightly arched. Cell deep and narrow. Border of lamellæ entire, sloping inwards from the apex for about one-third of their length, thence continuing straight to the bottom of the cell. Columella indistinct. Five principal lamellæ in half an inch. Height 14 lines; breadth 16 lines; proportion of axes 7 : 16.

Specimens in the British Museum are rather longer in proportion than those in my possession; but the variation is not very great.

Hab. Philippines.

This coral is very neat and symmetrical, and can hardly be confounded with any other species.

2. FLABELLUM NOBILE. (Pl. XXVIII. figs. 4, 5.)

Much compressed throughout, elongated. Borders rather concave, with four or five root-like appendages more or less distant from the base, but closely united throughout their length to the lower half of the coral. These appendages spring from and are continuous with the transverse epithecal ridges which mark the successive periods of increase in the coral, and, although now intimately united to the main stem, are evidently of extraneous growth, corresponding in origin and nature with the ordinary form of spines, but taking a downward direction to increase the basal area. Upper margin of the coral slightly arched. Cell very deep and narrow. Margin of lamellæ entire, and gradually curving from apex to base, at which point opposite series of the larger plates almost unite. No columella perceptible. Four principal lamellæ in half an inch.

The two specimens which have furnished the above description are of different ages. The smaller and more perfect example is attached to the upper margin of the flat side of the larger one, and has grown in nearly the same vertical direction. It measures 2 inches 6 lines in height, and 1 inch 10 lines in greatest breadth. The older example is 2 inches 6 lines in the long diameter, and 1 inch 3 lines in the short. The base of this specimen is imperfect; so that the original length of the coral cannot be certainly ascertained.

This species is intermediate between the genera *Flabellum* and *Rhizotrochus*, having the usual compressed shape of the former, with a partial development of the radiciform appendages of the latter remarkable genus. The peculiar situation of the smaller specimen is perhaps worthy of notice, as being one in which the supplemental props are especially useful in aiding the attenuated base to support the long and heavy coral. A similar tendency to parasitic growth,

or rather adhesion to another individual of its own species, may be observed in Milne-Edwards's figure of the type-specimen of *Rhizotrochus**. The species now under consideration should, I think, be placed in the genus *Flabellum*, although differing in some of its characters from most of the typical forms; and as it is the largest member of the genus, I propose to call it *nobile*.

The precise habitat of this coral is unknown. It was brought to this country by the late Sir Everard Home; and as that gentleman's collections were principally made in the neighbourhood of Australia and New Zealand, these corals were probably obtained from the same part of the world.

The specimens are now in the Museum of the Royal College of Surgeons of England.

5. ON THE OCCURRENCE OF *CARYOPHYLLIA CLAVUS* ON THE COASTS OF BRITAIN, WITH SOME REMARKS ON THE CIRCUMSTANCES AFFECTING THE DISTRIBUTION OF CORALS AROUND THE BRITISH ISLANDS. BY E. W. H. HOLDSWORTH, F.L.S., F.Z.S., ETC.

By the kindness of the Rev. Thomas Hincks of Leeds, I have recently been enabled to examine some specimens of coral which had been forwarded to him from Shetland, and from Loch Fyne on the east coast of Scotland. They prove to be new to Britain, and are identical with the *Caryophyllia clavus* of the Mediterranean, first described as a fossil by Scacchi in 1833, and figured and described from recent specimens under the name of *Cyathina turbinata* by Philippi in his 'Catalogue of Sicilian Mollusca,' published in 1836. Several examples of this coral have been obtained from deep water in the above-mentioned localities; and an examination of characteristic specimens of different ages has enabled me also to identify with this species two small and much-worn corals which, in June 1857, were dredged from a depth of 60 fathoms, about forty miles west of Scilly, by Mr. S. P. Woodward of the British Museum, and kindly placed in my hands a short time ago by that gentleman.

This species of *Caryophyllia* may be readily distinguished from its near ally, our common *C. smithii*, by its conical form and finely pointed base, as well as by the thinness of its walls and lamellæ. The general character of the polype, as described by Philippi†, agrees with that of *C. smithii*; the integuments, however, are said to be excessively delicate and transparent, so that the borders of the lamellæ can be seen through them. The body is of an orange-colour, and the capitate tentacles whitish with metallic-green reflections. The coral is frequently attached to a tube of *Ditrupea*, or the shell of some deep-water univalve, or, in some cases, is entirely free. In

* Milne-Edwards et J. Haime, Ann. des Sc. Nat. 3^e sér. t. ix. p. 282, pl. 8. f. 16, 1848.

† Philippi, Arch. für Naturgesch. t. i. p. 42, 1842.