

branches, they are cylindrical, on the twigs they look directly upwards; on the thinner twigs there are usually two on an internode, on the stem and the thick branches four, standing around the stem in an ascending spiral. The zooids, which under a low magnifying power appear as little villi, covering the cœnenchyma in the neighbourhood of the polyps, are 0.5 mm. high, obtusely conical structures with a simple mouth-opening. The ectoderm in this case is but slightly thickened and contains only a few thread-cells, the mouth is slightly below the apex, and the uppermost part projects beyond it as a lobe. Their cœlenteric cavity leads into canals, which first anastomose in a reticulate manner before passing into the longitudinal canals. Some of them contained ova.

The axis is smooth, yellowish brown, in the main stem hard and brittle, in the thin twigs elastic and soft. It exhibits, especially in the thicker branches, brilliant metallic reflections.

The spicules of the cœnenchyma are broad spindles and lancet-shaped bodies, 0.38 to 0.4 mm. long, which are crowded together, partly with their edges overlapping, and follow the longitudinal direction of the twigs. At the base of the zooids they alter their direction and are continued into these in the form of eight longitudinal series. In the polyps the spicules are more scale-like, placed transversely to the long axis, broad, with finely toothed edges and fine wrinkles on the surface, which with oblique illumination give rise to iridescent reflections. Their length to breadth in mm. reaches 0.33-0.15; 0.38-0.15; 0.25-0.12.

In the tentacles the spicules are again longitudinally placed, flat, rod-like structures with blunt ends, sometimes with a short fork at one end. Their length to breadth in mm. reaches 0.23-0.04; 0.2-0.07; 0.25-0.08; 0.26-0.06. The deeper layer of spicules consists of small, flat, rod- or scale-like bodies, which show a tendency towards double and quadruple forms; these measure 0.16-0.15; 0.1-0.04 mm.

Habitat.—Station 237, off Japan; depth, 1875 fathoms; bottom, blue mud.

[Genus 3. *Chrysogorgia*, Duchassaing and Michelotti, *emend.* Verrill.

Chrysogorgia, Duch. and Mich., Mem. Corall. des Antilles, Suppl., p. 21.

The authors, Duchassaing and Michelotti, describe under the name *Chrysogorgia desbonni*, n. gen. et sp., what are obviously two different Corals. The one represented (*loc. cit.*) on pl. i. figs. 7, 8, is placed among the Primnoaceæ; the second, pl. iv. figs. 5, 6, among the Gorgonaceæ. The first is, according to the description and figure, either a Primnoid, which perhaps belongs to *Plumarella*, or an Isid; to the second Pourtalès has referred his *Chrysogorgia desbonni* = *Chrysogorgia fewkesii*, Verrill.¹ Verrill has also recognised the same as *Chrysogorgia* and described it afresh. Unfortunately the originals of Duchassaing and Michelotti are not to be found in the museum of

¹ *Bull. Mus. Comp. Zool.*, Nos. 6 and 7, 1868, p. 131.