

2. *Discotriæne* (Pl. XXXI. figs. 5, 5a-5d), a short conical rhabdome, with a usually rounded end, expanding distally into a cyathiform cladome, with a circular, oval, or sinuous margin. The sides of the cladome extend forwards and outwards, forming a regular cone with an obtuse apical angle, or after extending outwards and forwards they may continue outwards only, forming a horizontally expanded brim. The axial rod extends throughout the rhabdome, but stops suddenly within the cladome at a distance of 0.032 mm. from its origin. Within the substance of the cladome fine granules, often concentrically arranged, are observable. Where the rhabdome enters the cladome, numerous fine radiating striæ occur, distinct from the axial rod (Pl. XXXI. fig. 5c). I am inclined to regard them as optical effects, due to the elongated appearance taken on by granules seen through the rhabdome as a conical lens.

3. *Oxea* (Pl. XXXI. figs. 2, 2a), long, slender, fusiform, tapering as though to a sharp point, but rounded off before reaching it; 0.8 by 0.008 mm.

II. Microscleres. 4. *Microxea* (Pl. XXXI. figs. 3, 3a, 3b), minute, fusiform, sometimes centrotylote, sometimes centroclinate, with pointed ends and finely granulated surface; 0.05 by 0.0039 mm.

5. *Microstrongyle* (Pl. XXXI. fig. 4), minute, ellipsoidal, or cylindrical with hemispherical ends, with a finely granulated surface; 0.0158 to 0.02 by 0.0039 mm.

Colour.—Of the skeleton white; remains of the dried skin yellowish-white.

Habitat.—Unknown.

Remarks.—The single specimen of this species is but the skeletal remains of the sponge, with a small patch of the dried ectosome incrusting the inner surface. It closely resembles *Discodermia calyx*, Döderlein,¹ but differs from it in the cyathiform character of the discotriænes; in this respect it resembles *Discodermia lævidiscus*, Carter,² but differs from it in general character, the latter being an incrusting sponge found on specimens of "*Melobesia*."

The present specimen is 66 mm. in maximum height, the cup is 35 mm. deep, 33 mm. and 43 mm. measured along its minor and major axes, and 4 mm. thick at its margin. The specific name "*ornata*" has reference to the highly ornate character of the desmas, produced by the rich development of tubercles by which they are usually studded all over. The tubercle commences as a conical process with a rounded end; by a lateral growth at two opposite sides it extends into a long rounded ridge which sometimes partially surrounds the epactines or cladi transversely; more usually it passes into a cylindrical form, and this may then develop secondary rounded tubercles at the end. The usual mode of zygosis of the desmas is by the ends of the apposed cladi, but some-

¹ Döderlein, Studien an japanischen Lithistiden, *Zeitschr. f. wiss. Zool.*, Bd. xl. pp. 64-104, pls. v.-vii, 1884.

² Carter, On Specimens Dredged up from the Gulf of Manaar, *Ann. and Mag. Nat. Hist.*, ser. 5, vol. vi. p. 149, pl. viii. fig. 51.