

suffered an arrest of development. The oscules are surrounded with a slightly thickened margin, and sometimes one or more smaller accessory oscules occur in the same cloacal roof as the main centrally situated one. The cloacal roof is about 9 or 10 mm., and the oscule 1 mm. in diameter; but in one instance out of the four present in one specimen it has become enlarged to 4 mm. in diameter at the expense of the cloacal roof. In this case the openings of the excurrent canals in the floor of the cloaca are fully revealed. This conversion of a cloaca with a small oscule to a wide superficial depression with an oscule as wide or almost as wide as itself is a phenomenon of very frequent occurrence.

*Discodermia japonica*, Döderlein.

*Discodermia japonica*, Döderlein, Zeitschr. f. wiss. Zool., Bd. xl. p. 62, pls. v.-vii., 1884.

*Sponge*.—Clavate or conical, in older examples once or oftener dichotomising; oscules situated in the middle of the summit, or at the ends of the branches. Pores (?).

*Spicules*.—I. Megascleres. 1. *Desma*, epactines of equal length, smooth, or with transverse crescentic ridges and tubercles, cladose, cladi ending in tubercles and other syzygial processes. Total length from 0·3 to 0·8 mm., of epactines 0·1 to 0·5 mm., thickness near the centre 0·03 to 0·13 mm. 2. *Discotriæne*, similar to that of *Discodermia discifurca*. 3. *Oxea*.

II. Microscleres. 4. *Microoxea*, fusiform, curved, smooth. 5. *Microstrongyle*, ellipsoidal, minute.

*Habitat*.—Island of Enoshima, Bay of Sagami; depth, 30 to 60 fathoms.

*Discodermia* (?) *lævidiscus*, Carter.

*Discodermia lævidiscus*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 503, pl. viii. fig. 51, 1880.

*Sponge*.—Small; surface even.

*Spicules*.—I. Megascleres. 1. *Desma* (not sufficiently characterised), syzygial processes expanded, irregular. 2. *Discotriæne*, depressed in the centre or cyathiform.

II. Microsclere. 3. *Microoxea*, minutely spined, 0·034 mm. long.

*Colour*.—Yellow internally. Size, about 6 mm. in diameter.

*Habitat*.—Gulf of Manaar, Indian Ocean; depth, under 65 fathoms.

*Discodermia* (?) *papillata*, Carter.

*Discodermia papillata*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 146, pl. viii. fig. 48, 1880.

*Sponge*.—Small, incrusting and burrowing; surface even. Oscules and pores (?).

*Spicules*.—I. Megascleres. 1. *Desma*, of the usual characters, covered with wart-like