

II. Microscleres. 4. *Sigmaspire*, 0·0125 mm. long. 5. *Spherule*, 0·0042 mm. in diameter.

*Colour*.—Grey.

*Habitat*.—South-east coast of Arabia.

*Remarks*.—Carter's description leaves little doubt as to the genus to which this sponge must be assigned, since he speaks of the cortex as "loose and ill-defined, with tufts of spicules matted together with dermal sarcode." There are but a few dried fragments of the sponge in the British Museum collection, and so far as the structure of the ectosome could be made out in these, it appeared to be that of *Tetilla*.

*Tetilla* (?) *australiensis* (Carter).

*Tethya cranium*, var. *australiensis*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xvii. p. 127, 1886.

*Sponge* ellipsoidal, sessile (?), surface finely hispid; oscules numerous, small; pores generally distributed.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, finely pointed, 5·7 by 0·038 mm. 2. *Protriæne* nearly the same length as the oxea; cladi 0·135 mm. long.

II. Microscleres. 3. *Microxea*, minutely spined, 0·21 mm. long. 4. *Sigmaspire*, 0·017 mm. long.

*Colour*.—Yellow. Size 112 mm. high, 65 mm. wide, and 37 mm. broad.

*Habitat*.—Port Phillip Heads, South Australia; depth, 20 fathoms.

*Remarks*.—This species is distinguished not only by the oxate microscleres but also by the large size of the sigmaspire. The oxate microscleres are almost unique among the Tetillidæ, *Tetilla merguiensis* being the only other species possessing them, and in it they are nothing like so abundant as in the present species.

*Tetilla casula* (Carter).

*Tethya casula*, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. viii. p. 99, pl. iv. figs. 1-9, 1871.

*Sponge*, see Carter's description (*loc. cit.*), distinguished by its remarkable basal fringe of spicules.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, 5·0 by 0·045 mm. 2. *Protriæne*, rhabdome 10·42 by 0·013 mm., cladome distinguished by its short cladi, 0·039 mm. long, chord 0·026 mm. 3. *Trichodal protriæne*, marginal to the pore-areas, 0·416 mm. long. 4. *Anatriæne* absent.

II. Microsclere. 5. *Sigmaspire*, 0·014 mm. long.

*Habitat*.—Port Elizabeth, Natal, South Africa (Carter).