

*Remarks.*—Although the minute characters of the cortex are indeterminable (the specimen is a dry one), there can be little doubt that it belongs to the *Tetilla* type; the presence of trichodal triænes is strongly in favour of this determination.

The spreading circular fringe of basal spicules reminds one of *Trichostemma hemispherica*, Sars, it differs from the fringe of this species, however, in several details, chiefly in being denser and composed of larger spicules, which again are triænes and not styles.

*Tetilla dactyloidea* (Carter.)

*Tethya dactyloidea*, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. iii. p. 15, 1869; vol. ix. p. 82, pl. x. figs. 1-5, 1872; and ser. 5, vol. xi. p. 365, 1883. *Non* Ridley, Voyage of the "Alert," p. 625, 1884.

*Sponge*, a highly prolate ellipsoid; with a leash of anchoring spicules proceeding from the base; a single circular oscule at the apex; pores generally distributed. Surface pilose.

*Spicules.*—I. Megascleres. 1. *Somal oxea*, fusiform, exceedingly sharply pointed, 1.35 by 0.006 mm. 2. *Somal protriæne*, rhabdome 1.43 by 0.004 mm.; cladi 0.026 mm. long; chord 0.013 mm., or cladi of different lengths, the longest 0.04 mm. 3. *Radical anatriæne*, rhabdome 12.0 by 0.004 mm., cladi 0.032 mm. long, chord 0.0355 mm.

II. Microsclere. 4. *Sigmataspire*, 0.008 mm. long.

The oxeas are arranged partly in fibres and brushes, partly irregularly scattered. Except on approaching the ectosome the fibres are arranged longitudinally, but near the ectosome short brushes of spicules, directed at right angles to the surface, radiate outwards; the longitudinal fibres are crossed by the irregularly scattered spicules, and as they descend they curve outwards and enter the ectosomal brushes, to the formation of which they contribute; near the base, however, they appear to converge, and anatriænes making their appearance, the fibres issue from the sponge as the leash of anchoring filaments. The cladomes of the anatriænes form a series of successive stages of growth within the sponge, evidently growing forwards to replace those of the protruding filaments as these become effete.

*Colour.*—Brownish-grey.

*Habitat.*—South-east coast of Arabia; Mergui Archipelago; Burmah.

*Remarks.*—I owe to Mr. Carter's generosity a perfect example of this sponge from Mergui. It is well enough preserved in spirit to admit of examination in thin slices; the foregoing measurements are based upon it. Whether it is altogether identical with the type of the species found off the south-east of Arabia I do not feel quite certain. Carter's drawing representing the whole sponge suggests the existence of several important