

differences. The hispidating spicules are represented as all directed downwards, and the base of anchoring fibres are much larger in proportion to the sponge, and apparently denser than in my specimen. Measurements obtained from Carter's description and illustrations of the spicules of the type exceed those obtained from the Mergui specimen, which is characterised by the comparative smallness of its spicules; though small they are remarkably numerous, as if in compensation, and both by their abundance and smallness give quite a distinctive facies to the sponge. The ectosome is thin; the choanosome is crowded with flagellated chambers, lying so close together as to reduce to a minimum the mesoderm, they measure about 0·04 by 0·032 mm.; the choanocytes are free (*i.e.*, not confluent by their collars), with long flagella. Although my observations were not altogether satisfactory, I came to the conclusion that the chambers are eury-pylous, but the common canal into which they open is so small in most cases, that the nature of the communication is generally somewhat obscure. About the oscule the mesoderm is developed to the exclusion of flagellated chambers, it there forms a tissue consisting of oval, granular, not very deeply stained cells, set near together in a matrix which stains more deeply than the cells themselves.

*Tetilla euplocamus*, O. Schmidt.

*Tetilla euplocamus*, O. Schmidt, Spong. Algiers, p. 40, pl. v. fig. 10, 1868; Atlant. Spong. Gebiet., p. 66, 1870.

„ „ (?) E. Selenka, Zeitschr. f. wiss. Zool., Bd. xxxiii. p. 469, 1880.

*Sponge* small, pear-shaped; surface pilose; rootlets formed of spirally twisted anchors.

*Spicules*.—I. Megascleres. *Oxea*, fusiform, 2·3 by 0·22 mm.; *trichodal protriænes* (and *anatriænes*?).

II. Microscleres (?).

*Habitat*.—Desterro, South Atlantic (O. Schmidt). Western part of the Bay of Rio de Janeiro; depth, exposed at lowest spring-tides; bottom, sandy mud (Selenka).

*Remarks*.—No one from Schmidt's meagre description of this species could hope to identify it, unless by means of the spiral twist of the anchoring filaments, and this, very possibly, is not characteristic. A slide of mounted spicules, presented by Schmidt to the British Museum, showed oxeas of *Tetilla*-like form, and trichodal triænes, but no anatriænes nor sigmaspires. Selenka, with great probability, assigns a small *Tetilla* which he found at Rio to this species; it is of an olive-green to yellowish-brown colour; and is found at lowest ebb-tide, with the roots completely immersed in the sandy mud of the sea-floor, and the body projecting above. *Tetilla euplocamus* is most readily distinguished from *Tetilla leptoderma* (*vide* p. 3) by the smaller size of its oxeate spicules, which are only half the length and breadth of those in the latter species.