

remain connected with it as "fimbriæ" (*Cladorhiza tridentata*, figg. citt.), and so on.

5. *Bipocilli* (woodcut, Fig. V., 7); these are curious forms which, owing to their minute size, it is very difficult to make out satisfactorily. They occur only in a single genus, *Iophon*. Each consists of a shaft, with a terminal, cup-like expansion at each end. A modification of this type of spicule, which occurs in a new species of *Iophon*, *Iophon chelifer*, nobis (Pl. XVII. fig. 3), has the cup-like expansions divided into teeth, and thus seems to connect the bipocilli with the chelate forms.

C. Stellate Forms.

Microsclera of the stellate group are rare amongst Monaxonid sponges. In the Tetractinellida and in the *Tethyæ* they are, however, met with in great abundance and under a great variety of modifications. We shall describe here only those types which are certainly known to occur in the Monaxonida.

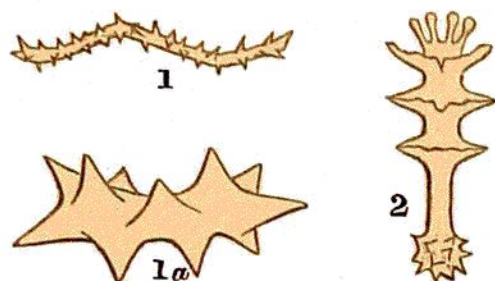


FIG. VII.—Stellate forms of microsclera.

1. *Spirulæ* (woodcut, Fig. VII., 1, 1a); these are more or less elongated, spiral or subspiral forms, which may be either smooth or provided with more or less numerous spines. The spinose forms are very characteristic of the genus *Spirastrrella*.

2. *Discastra* (woodcut, Fig. VII., 2); spicules with a straight, elongated shaft, usually with a spinose base, and surrounded by a greater or less number of usually spinose whorls, altogether much resembling a miniature chess-man, or, in some species, a little fir tree. These spicules occur in the genus *Latrunculia*.

3. *Amphiastra*, consisting each of a cylindrical shaft bearing a single toothed whorl at each end; occurring, for example, in *Axoniderma mirabile*, nobis (Pl. XXI. fig. 9).

(b) The Spongin, the Spongoblasts and the Connective Tissue Sheath of the Skeleton Fibres.

Before proceeding to treat of the arrangement of the skeleton it is necessary that we should first speak of a second very important constituent thereof, viz., the spongin.

The spongin is the horn-like cementing material which, in many, though by no