

Suberites ramulosus, var. *cylindrifera*¹ (Pl. XXIX. figs. 5, 5a; Pl. XLIII. figs. 13, 14).

1886. *Suberites ramulosa*, var. *cylindrifera*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 487.

Sponge (Pl. XLIII. figs. 13, 14) consisting of one or more heads, with long, slender, simple or branched stalks; when the stalk is simple there is only one head, but when it is branched there is a head at the end of each branch. The stalk is slender, usually more or less crooked, and ends below (in perfect specimens) in branching rootlets; at its upper end it gradually expands into the elongated, pear-shaped head, which terminates in a single osculum at the summit. When the stem is branched the branches come off from the main stem at various angles and quite irregularly; when a stem comes into contact with a head or with another stem the parts in contact may anastomose. Size of specimens variable; the finest unbranched specimen has a head which is 31 mm. long by about 13 mm. broad, and a stem about 100 mm. long by about 2.5 mm. thick. *Colour* in spirit dirty, greyish-yellow. *Texture* of head rather soft and spongy; of stem firm and fibrous. *Surface* strongly hispid. *Oscula*; normally there is a single one, surrounded by a slight spicular fringe, at the summit of each head.

Skeleton.—The skeleton of the stem consists of a dense, central axis of large, blunted stylole spicules, from which project at right angles loose tufts of smaller, subtylostylole spicules whose points project beyond the surface. That of the head consists of ascending lines of very loose spiculo-fibre, composed of the large, blunted styli, running very obliquely to the surface, where they end in loose, irregular tufts of smaller subtylostyli whose points project outwards and upwards and give to the surface its uniform hispidity.

Spicules.—*Megasclera*; (1) long, smooth, straight, slightly fusiform (cylindrical) styli (Pl. XXIX. figs. 5, 5a), evenly rounded off at the base and tapering gradually to a narrow, but rounded, apex; size about 2.6 by 0.056 mm. (2) Long, straight or slightly curved subtylostyli, with slightly developed heads and usually sharply pointed at the apex; size very variable, passing by occasional transitional forms into the larger spicules, commonly measuring about 1.0 by 0.014 mm. but often smaller.

This very interesting variety is well represented in the collection by a large number of fine specimens; indeed it is very much better represented than the more typical form of the species. A very remarkable point in connection with it is the high temperature (71°0) of the water in which it grew; it was obtained from Station 209 only, while the types of the species were obtained from Station 207. It differs from the types mainly in the absence of heads to the larger megasclera and in their still greater bluntness, and throws considerable doubt on the specific value of these characters; differences also exist in the proportions of the spicules, which will be seen by comparison of the descriptions. As regards external form there is very little difference to note between the specimens

¹ So-called on account of the strong tendency exhibited by the larger spicules to become cylindrical.