

axis of longitudinally placed spicules, from which radiate bands of very loose spiculo-fibre to the surface, like the spokes of a wheel; these project more or less beyond the surface and give rise to its hispidity. (b) The skeleton of the head; this is very diffuse, and consists of loose bands of spiculo-fibre which run more or less vertically upwards towards the top of the sponge, radiating very slightly; as they approach the surface they break up into brushes of smaller tylostylote spicules. Owing to the direction in which they run it is only at the top of the sponge that the skeleton fibres abut vertically against the surface; lower down their direction lies more or less parallel with it, and they only run very obliquely into it.

*Spicules.*—*Megasclera*; of one kind only, viz., smooth tylostyli (Pl. XLV. figs. 4, 4a, 4b, 4c), with straight, or very slightly curved shafts and fairly well-developed, hemispherical or subglobular heads; tapering gradually to a fine point at the apex. Size extremely variable, in the deeper fibres very long and stout, towards the surface usually much smaller. They may attain a length of about 2.0 mm. and a diameter of about 0.03 mm.; but, as already stated, they are very much smaller in the radiating brushes at the surface of the sponge, commonly measuring about 0.4 or 0.5 by about 0.01 mm.

The most remarkable features of this sponge are its great softness and looseness of texture, as compared with the more typical species of *Suberites*, and the reduction of the "dermal crust" of spicules, which no longer forms a distinct cortical layer.

*Locality.*—Station 148, January 3, 1874; south of the Crozets; bottom, hard ground, gravel, shells; depth, 240 to 550 fathoms. One specimen.

*Suberites elongatus*, Ridley and Dendy (Pl. XLIII. figs. 11, 12).

1886. *Suberites elongata*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 486.

Sponge (Pl. XLIII. figs. 11, 12) consisting of a slender, fleshy-looking stalk, expanding below into attaching rootlets; and an oval, more or less elongated head. The relation, as regards size, between the head and the stalk is a very variable one; in one specimen the head is about 12 mm. and the stalk about 44 mm. long, while in a second the head is 25 mm. and the stalk only about 12 mm. long. The respective diameters of the head and stalk are, on the contrary, pretty constant, that of the head being about 4 mm. and of the stalk 1 mm. *Colour* in spirit pale yellow. *Texture* firm, cork-like. *Surface* even, on the head minutely hispid, on the stalk still more minutely so. *Oscula* very few, minute, scattered, sometimes one or two, sometimes none, discernible; usually at or near the top of the head.

*Skeleton.*—The dense central axis of the stem, composed of longitudinally placed, stylote spicules, is continued into the head as a not very definite central core, from which radiate, outwards and upwards, bands of spiculo-fibre to the surface of the sponge; on approaching the surface these branch more or less and the points of their terminal spicules