

massive external form and the shape of the megasclera. *Spirastrella cunctatrix*, Schmidt,¹ approaches it in spiculation, but in that species both megasclera and microsclera are of decidedly more robust growth, and the megasclera are usually very distinctly tylostylote and quite straight, while the form of the spined spirulæ is also different. *Spirastrella massa* is also remarkable for the great irregularity in the shape of the megasclera; these are often very abnormal in appearance and may even (though rarely) become oxete; this should perhaps be connected with the apparent interchangeability (in different species) of the stylote and oxete spicules, and with the instability in the condition of the ends of the oxete in *Latrunculia* (?) *acerata*, nobis.

Locality.—Station 162, April 2, 1874; lat. 39° 10' 30" S., long. 146° 37' 0" E.; Bass Strait; depth, 38 fathoms; bottom, sand and shells. Two large pieces.

Spirastrella solida, Ridley and Dendy. (Pl. XLI. fig. 7; Pl. XLV. figs. 13–13e).

1886. *Spirastrella solida*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 491.

Sponge (Pl. XLI. fig. 7) erect, sessile, lobate or digitate; consisting of a broad base, containing a large amount of embedded foreign matter, from which arise broad, fleshy-looking lobes, the larger of which have each one osculum (? sometimes more) at the summit. Height of the largest specimen 88 mm.; breadth at base 54 mm. *Colour* in spirit light yellow. *Texture* very firm and hard throughout, excepting immediately around the larger canals, where there is a well defined zone of soft, gelatinous, transparent tissue enclosing and following the course of the canal. In the wider parts of the exhalent canals, near the summits of the lobes, the same kind of tissue forms well defined circular diaphragms, each with only a small aperture in the centre. *Surface* rather lumpy and uneven, almost glabrous in appearance yet harsh to the touch. *Dermal membrane* difficult to distinguish as such, being very heavily laden with the characteristic microsclera. *Oscula* few in number, but of fair size, occurring (? singly) at the tops of the lobes. *Pores* irregularly but very plentifully scattered over the general surface of the sponge; they are round openings about 0·044 mm. in diameter.

Skeleton.—Consisting throughout of an extraordinarily dense, but quite irregular reticulation of interlacing tylostylote spicules; no spiculo-fibre. At the surface are loose, radiating brushes of smaller, straight, tylostylote spicules, whose apices project for a short distance beyond the surface.

Spicules.—(a) *Megasclera*; (1) the main spicules, almost straight, fairly stout tylostyli (Pl. XLV. fig. 13), with well developed subglobular heads and rather blunt apices; size about 0·7 by 0·19 mm. (2) The spicules of the surface brushes; nearly or quite straight, slender tylostyli with well developed subglobular heads and sharply pointed

¹ Spongien d. Küste v. Algier., p. 17.