

*Thenea delicata*, Sollas (Pl. VI. figs. 10–20; Pl. VIII. figs. 9, 10).

*Thenea delicata*, Sollas, Prelim. Account, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 185, 1886.

*Sponge* (Pl. VI. fig. 10) small and symmetrical, upper portion larger than the lower, obtusely conical, apically truncated by a single oscule, surface hispid; tegminal edge circular, fringed with hispidating oxeas; basal portion convex, apparently smooth, but rough to the touch; its dermal membrane passes imperceptibly into the fenestrated membrane of the equatorial recess, so that the lower margin of the recess is not externally defined; a lower fringe of hispidating spicules is not present; anchoring rootlets few, slender, thread-like, issuing abruptly from the basal surface. Flagellated chambers large; collenchyma comparatively scanty.

*Spicules*.—I. Megascleres. 1. *Oxea*, slender, fusiform, usually 4·83 mm., but sometimes 6·3 mm. in length by 0·0434 mm. thick.

2. *Protriæne*, rhabdome and cladi slender, cylindrical, sharply pointed; rhabdome 3·927 by 0·0197 mm.; cladi 0·35 mm. long.

3. *Dichotriæne*, of the usual form; rhabdome 4·82 by 0·065 mm.; protocladi 0·143 by 0·058 mm.; deuterocladi 1·07 by 0·058 mm.

4. *Somal anatriæne*, a short, slender, cylindrical rhabdome, and comparatively long, slender cladi, the latter curved outwards and backwards in a gentle regular arc, so that two of them seen together in outline form a semicircle; rhabdome 0·954 by 0·0075 mm., cladi 0·075 mm. long, spread 0·0876 mm.

5. *Radical oxytylote* (Pl. VI. figs. 11, 12), a long, slender, cylindrical rhabdome, sharply pointed at the proximal end, at the distal end swollen to form a more or less spherical tylus. The axial fibre of the rhabdome may either terminate simply within the tylus, or, as more frequently happens, it may give rise to three or fewer branching or bifurcating fibres, which thus remain to indicate its triæne nature; rhabdome 5·35 by 0·0387 mm., tylus 0·0645 mm. wide.

II. Microscleres. 6. *Plesiasters*, few and comparatively small. Actines minutely spined, 0·079 by 0·0079 mm.

7. *Amphiasters*, not very numerous, axis short and straight, giving off at each end a whorl of three or four spines, and a single spine in continuation of its own direction. Spines roughened, frequently somewhat tylote. The spicule is 0·0395 mm., the spines 0·0158 mm. long.

*Colour*.—Greyish-white.

*Habitat*.—Station 147, near the Crozet Islands, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; depth, 1600 fathoms; bottom, Diatom ooze; bottom temperature, 34°·2 F.

*Remarks*.—Three specimens of this delicate and symmetrical sponge were trawled, two of them measure 20 mm. in diameter, and from 16 to 18 mm. in height, the third