

The ectosome, including the subdermal cavities, is 0·079 mm. in thickness.

The spirasters are not confined to the immediate vicinity of the outer epithelium, but occur throughout the sponge.

*Pæcillastra laminaris*, Sollas.

*Normania laminaris*, Sollas, Prelim. Account, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 186, 1886.

*Sponge*.—A thin irregular lamellar expansion. Inner surface even, regularly pitted by minute circular depressions, rounded off above as it approaches the outer surface; outer surface faintly striated by subdermal oxeate spicules longitudinally disposed; raised into irregular longitudinal ridges and rounded prominences; terminating above where it meets the inner face in a sharply marked margin, which is fringed with slender oxeate spicules projecting 4·5 mm. beyond it. A few hispidating spicules in addition are present here and there over the whole outer face.

*Spicules*.—I. Megascleres. 1. *Oxea*, stout, fusiform, not sharply pointed, frequently with one or both ends rounded off; 3·5 by 0·0516 mm.

2. *Oxea*, long, slender, cylindrical, projecting to form the marginal fringe; 5·3 by 0·008 mm.

3. *Orthotriæne*, rhabdome straight, conical, sharply pointed; cladi similar; rhabdome 0·678 by 0·06 mm.; cladi 0·357 by 0·06 mm.

4. *Calthrops*, similar to the triænes, sometimes with all four actines approximately equal, sometimes with one much elongated in the direction of the spicular bundle in which it lies. The ends of the actines or cladi in both calthrops and triænes frequently rounded off, sometimes quite close to their origin, so as to become reduced to mere tubercles. One actine of an isoactinate calthrops measured 0·636 by 0·063 mm.

II. Microscleres. 5. *Microxea*. Of the usual form; 0·145 by 0·004 mm.

6. *Metaster*. Of the usual character, frequently reduced to a plesiaster with three or four actines; spines rough and sometimes tylote; one spine measures 0·0150 mm.; total length 0·0197 mm.

7. *Spiraster*. Abundant and stout, spire with numerous short spines, blunt or abruptly truncated at the ends, spirally arranged; total length 0·0197 mm.; of a single spine 0·0039 mm.

*Colour*.—Greyish-white.

*Habitat*.—Off Amboina, 1000 fathoms.

*Remarks*.—Several fragments of this sponge are in the collection; the largest measures 103 mm. in length by 90 mm. in breadth; when placed together they form a plate 155 mm. wide and 110 mm. high, but whether originally they all formed parts of one individual or not I do not feel at all sure. The thickness of the plate varies from about 4 to 5 mm.