

few, rather small, on the summits of small oscular tubes at the top of the sponge. *Pores*, observed only in the well-defined "pore-zone" above mentioned, here they are very abundant (Pl. XI. fig. 2a).

Skeleton.—The main skeleton is extremely diffuse and irregular, consisting of an almost unispicular reticulation of stylote spicules with no definite spiculo-fibre. Below the pore-zone there is an irregular dermal reticulation of thickly scattered stylote and tornote spicules. In the pore-zone itself one finds the stylote spicules absent from the dermal membrane, and the tornota coming to the surface in thick brushes. Above the pore-zone comes a low wall of thickly packed, and for the most part vertically disposed tornota (lying parallel with the surface), terminating above flush with the top of the sponge.¹ On the top itself the dermal reticulation is of the same character as below the pore-zone (*i.e.*, irregular).

Spicules.—(a) *Megasclera*; (1) stout, smooth, slightly curved, rather bluntly pointed styli (Pl. XXIX. fig. 1), measuring about 0·87 by 0·03 mm., forming the main skeleton and occurring also in the dermal reticulation; (2) straight, smooth, slightly fusiform, hastately pointed cylindricals (tornota) (Pl. XXIX. fig. 1a) with rather peculiarly shaped points, size about 0·56 by 0·019 mm., occurring, as usual, at or near the surface. (b) *Microsclera*; long, straight, oxeote raphides, size about 0·56 by 0·0031 mm., commonly in whisp-like bundles. It seems to us not at all impossible that the raphides in this and in other species of *Tedania* may be in reality only young oxeote (tornote) megasclera; certain it is that they are very different from the "trichodragmata" such as occur in *Esperella murrayi*, &c.

This is a very important and well-characterised species; it is distinguished from all previously known by its external form and the arrangement of the pores in a definite zone. Its stylote spicule is the largest in the genus. It affords a really splendid instance of the manner in which sponges, which are shapeless masses when occurring in shallow water, assume in abyssal depths (in this case 2160 fathoms) a definite, symmetrical external form; this is its chief interest, for the species of the genus hitherto known, from comparatively shallow water, are, *par excellence*, amorphous sponges.²

Unfortunately there is only one specimen in the collection and that in bad condition, so that we are unable to give any details as to the minute anatomy.

Locality.—Station 299, December 14, 1875; lat. 33° 31' S., long. 74° 43' W.; west of Valparaiso; depth, 2160 fathoms; bottom, blue mud; bottom temperature, 35°·2. One specimen.

¹ This arrangement gives rise to a faint vertical striation on the surface of the sponge above the pore-zone (*vide* fig. 2). It is also present to a less extent just below the pore-zone.

² We must make an exception to this statement in the case of *Tedania infundibuliformis*, nobis, while *Tedania massa*, nobis, is an amorphous form ranging down to 600 fathoms.