

curved styli (Pl. XIX. fig. 4), tapering very gradually to a sharp point at the apex and evenly rounded at the base, size about 1.0 by 0.037 mm.; making up the main skeleton. (2) Tylota (Pl. XIX. fig. 4a), with smooth, straight shafts and oval heads, which are usually more strongly developed at one end of the shaft than at the other; indeed they may be almost absent at one end; the ends of these spicules are very slightly spined and sometimes flattened<sup>1</sup>; size about 0.525 by 0.01 mm.; dermal. (b) *Microsclera*; small, palmate isochelæ, thickly strewn through the dermal membrane and also abundant in the tissues below; length about 0.02 mm. We have also observed a few large, slender toxa with very faintly spined ends, length up to about 0.2 mm., and a few, usually contort sigmata, length about 0.063 mm.

This is an interesting species, and it is a pity that there are not more and better specimens of it. It unites the characters of most species of *Amphilectus*, viz., the possession of smooth stylote megasclera and of small palmate isochelæ, with a feature which is very characteristic of the genus *Myxilla*, viz., the possession of a tylote dermal spicule. Possibly the new species may form an important connecting link in this very perplexing series of sponges.

*Locality*.—Station 320, February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; off the mouth of the Rio de la Plata; depth, 600 fathoms; bottom, green sand; bottom temperature, 37°·2.

### Subfamily 2. ECTYONINÆ.

1875. *Ectyonida*, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xvi., p. 133.

1886. *Ectyoninæ*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 470.

Skeleton fibre echinated by laterally projecting spicules.

### Genus *Myxilla*, Schmidt (Pls. XXVI., XXVII., XXX., XLVII.).

1862. *Myxilla*, Schmidt, Spong. Adriat. Meer., p. 71.

1880. *Hastatus*, p. p., Vosmaer, Notes Leyden Mus., vol. ii. p. 136.

Megasclera of at least two kinds:—(1) monactinal:—styli, usually spined, main skeleton spicules; (2) diactinal:—variously ended; strongyla, oxystongyla or tylota, chiefly dermal; to these are sometimes added (3) small spined styli, which echinate the main skeleton. Usually there is only a very small amount of spongin present. Microsclera tridentate isochelæ, to which sigmata are often added.

The genus *Myxilla* was founded by Schmidt in 1862 (*loc. cit.*), and the first species which he places therein is *Myxilla rosacea*, Liebkhn. sp. The original diagnosis runs as follows:—"Halichondriæ polymorphæ, molles et mucosæ, fragiles, fere omnes spiculis nodosis insignes," to which the author adds, "Ich gebe gern zu, dass diese Gattung auf

<sup>1</sup> It is doubtful whether flattening ever takes place at the larger end of the spicule.