

of straight tylote spicules; these spicules, just beneath the surface of the sponge, are collected into loose, irregular fibres, which break up into tufts of spicules on approaching the dermal membrane. (b) *Main*; a very irregular, somewhat Halichondrioid reticulation of spined styli, echinated by much smaller spined styli. There is no very distinct fibre, though in places there appears to be a tendency towards the radiate arrangement characteristic of Bowerbank's genus *Microciona*.

Spicules.—(a) *Megasclera*; (1) long, slender, straight or slightly curved, entirely spined styli (Pl. XXVII. figs. 6, 6a), tapering very gradually to a fine point at the apex, measuring about 0.42 by 0.01 mm. (2) Much smaller, usually straight, entirely spined styli (Pl. XXVII. figs. 6d, 6e), tapering gradually from base to apex and finely pointed, size usually about 0.14 by 0.0065 mm.; distinguished from the preceding by their position (echinating), their smaller size, and the fact that they are more strongly spined. (3) Straight tylota (Pl. XXVII. figs. 6b, 6c), with usually distinct, elongated, oval heads, often narrowing towards the end; size about 0.28 by 0.0045 mm. (b) *Microsclera*; (1) tridentate isochelæ (Pl. XXVII. fig. 6f), with slightly curved shaft; length about 0.037 mm. (2) Slender sigmata, usually much contort; length about 0.056 mm. ((?) (3) A few scattered, long, straight, hair-like, oxeote raphides; length about 0.35 mm. It is possible that these spicules may have been taken in by the sponge as foreign bodies, and that they really belong to some of the *Tedaniæ* which occur at the same locality).

Rejecting the long hair-like spicules as young forms or foreign, this sponge differs from the type of the species only in the comparative slenderness of the megasclera. The species comes very close in spiculation to *Myxilla (Microciona) bihamigera*, Waller.¹ In the latter, however, the megasclera are all smaller and the diactinal spicules without heads (hastately pointed), while the isochelæ are described as being palmate; the habit and the arrangement of the main skeleton also differ in the two species.

Locality.—Off the south-west coast of Patagonia. One specimen.

Myxilla compressa, Ridley and Dendy (Pl. XXVII. figs. 9, 9a, 9b, 9c, 9d, 9e).

1886. *Myxilla compressa*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 473.

Sponge massive (?), flattened. The largest piece in the collection is about 56 mm. long by 25 mm. wide and 4 mm. thick. *Colour* in spirit yellowish-grey. *Texture* soft and spongy. *Surface* smooth where the dermal membrane is still intact, but the subdermal cavities show very distinctly through the transparent membrane and give to the sponge a honeycombed appearance. *Dermal membrane* distinct, thin and transparent. *Oscula* small and scattered, having their margins flush with the surface of the sponge. *Pores* collected in groups—pore-areas—in those portions of the dermal membrane which cover the subdermal cavities. The pores are round or oval and average about 0.2 mm. in diameter.

¹ *Journ. Quekett Micr. Club*, vol. v. p. 1, pls. i., ii., 1878-79.