Hymeniacidon (?) hyalina, n. sp. (Pl. XLV. figs. 6, 6a, 6b).

Sponge massive, amorphous, encrusted by numerous foreign organisms; represented in the collection by two or three small, shapeless fragments, remarkable for their transparent, hyaline appearance; the largest one only about 19 mm. in diameter. Colour in spirit, very pale, yellowish grey, transparent. Texture soft and spongy, internally cavernous. Surface, for the most part encrusted by foreign organisms, where visible fairly smooth. Dermal membrane very distinct, hyaline. Oscula (? rather large and scattered).

Skeleton.—(a) Dermal; consisting of tylostylote spicules thickly and quite irregularly strewn through the dermal membrane. (b) Main; diffuse and irregular in the extreme, with only very slight indications of fibres running vertically towards the surface; composed of loosely and irregularly disposed tylostylote spicules of various sizes.

Spicules.—Megasclera; of one form only, viz., smooth, nearly straight tylostyli

(Pl. XLV. figs. 6, 6a, 6b), with distinct but not very large, subglobular heads; sharply and fairly gradually pointed at the apex. Size very variable, but not differing in such a manner as to give rise to outside smaller and inside larger spicules as in the genus Suberites; the different sizes are throughout mixed up with one another; the maximum size is about 1.1 by 0.025 mm.

It seemed very doubtful whether it was worth while to describe a new species on such fragmentary evidence, but it is interesting to come across a form whose spiculation is almost exactly that of the genus *Suberites*, while the other characters, e.g., the arrangement of the skeleton and the nature of the ectosome, are totally different. We doubtfully place the species in the genus *Hymeniacidon* because we do not know what else to do with it.

Locality.—Off the south-west coast of Patagonia. Two or three fragments.

Hymeniacidon (?) subacerata, Ridley and Dendy (Pl. XXXIX. fig. 4; Pl. XL. figs. 5, 5a).

1886. Hymeniacidon (?) subacerata, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 478.

Sponge (Pl. XXXIX. fig. 4) massive; consisting of irregularly anastomosing trabeculæ, which may be subcylindrical, or angular, or more or less flattened and expanded. The largest specimen, taken as a whole, is about 88 mm. long by 62 mm. broad and 37 mm. thick. Colour in spirit pale yellow; the sponge is characterised also by a peculiar, waxy, translucent appearance. Texture rather brittle and cavernous. Surface glabrous in appearance, but rather harsh to the touch and very uneven. Oscula of fair size, mostly

near the summit of the sponge, having their margins flush with the general surface.