Locality.—Station 208, January 17, 1875; lat. 11° 37′ N., long. 123° 31′ E.; Philippine Islands; depth, 18 fathoms; bottom, blue mud. One specimen.

Habitat.—Torres Strait (Ridley, "Alert"); Philippine Islands (Challenger).

Spirastrella massa, Ridley and Dendy (Pl. XLV: figs. 14–14k).

1886. Spirastrella massa, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 490. Sponge massive, represented in the collection by two large, squarish blocks, which

have evidently been cut out of a very large specimen, or possibly from two. Colour in spirit pale, greyish-yellow. Texture fairly compact throughout, but rather spongy. Surface almost glabrous in appearance, but rather lumpy and uneven; very minutely hispid. Dermal membrane thin, transparent. Oscula; one or two scattered ones, of

moderate size, have been observed, but it is very probable that many more were present in the entire specimen; possibly they were mainly localised in some portion of the sponge which has not been preserved. *Pores*, small round openings, thickly scattered in some parts, so as almost to reduce the dermal membrane to a network, very rare or almost undiscernible in other parts; diameter, taken from a part of the sponge where they were abundant, about 0.06 mm.

Skeleton.—Very diffuse and with no distinct spiculo-fibre; consisting of abundant,

irregularly scattered stylote and subtylostylote spicules. Immediately beneath the surface these spicules are much more closely packed than elsewhere and are also, for the most part, horizontally disposed. They thus form a fairly thick cortical layer, not, however, very well defined from the deeper skeleton. At the surface itself are irregular tufts of stylote spicules whose apices project for a short distance beyond the dermal membrane.

Spicules.—(a) Megasclera; slightly curved, rather slender, smooth styli or subtylostyli (Pl. XLV. figs. 14, 14a, 14b); the heads, when present, are somewhat irregularly developed; apex not very constant in form, sometimes very sharply and gradually pointed, at others more blunt, sometimes slightly and irregularly jagged; size about 0.45 by 0.0065 mm.; in the surface brushes a trifle shorter. (b) Microsclera; small

pointed, at others more blunt, sometimes slightly and irregularly jagged; size about 0.45 by 0.0065 mm.; in the surface brushes a trifle shorter. (b) Microsclera; small spined spirulæ (Pl. XLV. figs. 14c-14k), the largest of which are slender, have five or six bends, and measure about 0.044 mm. in length. These are, however, not nearly so numerous as the smaller ones, which often consist of only one short length with spined ends; about 0.0095 mm. long. As forms intermediate between the two described can be found, it seems probable that they are all merely different stages of the same spicule. These spicules are nowhere abundant except in the dermal membrane, where they are very plentiful.

Perhaps the two most remarkable characteristics of this species are its singularly