of spiculo-fibre. The main fibres run vertically to the surface, branching freely as in *Esperella arenicola*, nobis, and terminate in bunches of free spicules, the points of which project a little way beyond the dermal membrane.

Spicules.—(a) Megasclera; of one kind only, viz., styli (Pl. XV. fig. 2), with a slight tendency to become tylostylote by the development of a long oval head; broadest at about the middle and tapering to a rather sharp point at the apex; size about 0.9 by 0.02 mm. (b) Microsclera; large palmate anisochelæ of very remarkable shape and singular beauty (Pl. XV. figs. 10, 10a); the whole spicule measuring up to 0.094 mm. in length. They never seem to occur in rosettes. Numerous young ones are also present. No other microsclera are present, but the chelæ occur in the greatest profusion.

This is one of the most satisfactory species in the collection, being excellently

characterised both by its external form and by its spiculation. In the absence of

a dermal skeleton reticulation it agrees with Esperella nuda and Esperella arenicola, nobis, and differs widely from Esperella murrayi, nobis, with which its definite external form would seem to associate it. To the absence of a dense dermal reticulation, such as exists in Esperella murrayi, is probably due the fact that the pores are not collected into definite pore-areas, all parts of the dermal membrane, excepting just where the spicular tufts project, being suitable for them. In connection with the great development of the teeth of the smaller end of the anisochela it is perhaps worth calling attention to this spicule in Esperia lanugo, Schmidt, which is described as having this end unusually developed, individual spicules showing a completely isochelate condition; it is not figured, but Schmidt would probably have described the outward turning of the lateral teeth of the smaller end had it, as here, occurred in his species.

Embedded in the soft tissues of the sponge, beginning at about a third of an inch below the surface, are an immense number of little yellow embryos (Pl. XVI. fig. 2a, e), which will be found fully described in the Introduction.

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. One fine specimen in excellent condition.

## Esperella parishii, Bowerbank, sp.

1875. Raphiodesma parishii, Bowerbank, Proc. Zool. Soc. Lond., April 1875, p. 283. 1880. Amphilectus parishii, Vosmaer, Notes from the Leyden Museum, vol. ii. p. 119. 1884. Esperia parishi, Ridley, Zool. Coll. H.M.S. "Alert," p. 436.

With this species we identify a thinly incrusting sponge from the Philippine Islands. As it has been fully described (but unfortunately not figured) by Bowerbank (loc. cit.), it

1 Jahresb. Comm. Wiss. Unters. deutsch. Meere, ii., iii. p. 118.