Esperella magellanica, Ridley, sp.

1881. *Esperia magellanica*, Ridley, Proc. Zool. Soc. Lond., January 1881, p. 117, pl. x. fig. 5, *a. b. c. d. e.*

1882. *Esperia Cunninghami*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. ix., p. 300, pl. xi. fig. 17.

This species has already been described by Ridley (*loc. cit.*), we shall therefore only add a few particulars to that description. The pores, which have not been hitherto described, are very distinctly shown in the Challenger specimen. They are round openings in the dermal membrane, about 0·1 mm. in diameter, which occur irregularly scattered between the reticulations of the dermal skeleton; they do not seem to be localised in pore-areas.

Immediately beneath the dermal membrane occur immense quantities of large globular yellow cells, measuring 0·02 mm. in diameter, usually aggregated in heaps so as to resemble the roe of a herring. When mounted in Canada balsam without staining, these bodies appear of a deep yellow colour. They stain fairly readily with borax carmine; when treated with a strong solution of iodine in hydriodic acid they assume a purple tinge, and then become black. Sometime a distinct, large nucleus can be distinguished, but more often the cells seem simply to be filled with a granular substance. We think there can be little doubt that these bodies are parasitic Algæ, and not, as stated in Ridley's original description, pigment-cells.

This species was originally discovered by the "Nassau" expedition, and is mentioned in Dr. Cunningham's Notes on the Natural History of the Strait of Magellan, 1871, p. 481.

Locality.—Station 313, January 20, 1876; lat. 52° 20′ S., long. 67° 39′ W.; east of Cape Virgins, near the entrance to the Strait of Magellan; depth, 55 fathoms; bottom, sand; bottom temperature, 47°·8. One good-sized fragment.

Habitat.—Sandy Point, Strait of Magellan (Ridley, "Alert"); Otter Island, Patagonia (Cunningham); east of Cape Virgins (Challenger).

Esperella murrayi, Ridley and Dendy (Pl. XIII. figs. 11, 13, 14, 16, 17, 18; Pl. XIV. figs. 1, 1*a*).

1886. *Esperella murrayi*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 338.

Sponge (Pl. XIV. fig. 1) massive; lobate. Arising from a comparatively narrow base (41 mm. in greatest diameter), it rapidly expands, and is broadest near the summit, having a maximum breadth of 116 mm. Height, 162 mm. The shape may be roughly compared to that of an inverted triangular pyramid. A broad, rounded lobe occupies each corner of the base of the pyramid; and between these lobes, instead of a flat base there is a deep depression, while down each of the remaining