

drioid reticulation of stylote spicules in which one can distinguish lines of fibre running vertically towards the surface and there breaking up into projecting tufts of spicules.

Spicules.—(a) *Megasclera*; of one kind only, viz., smooth, curved styli (Pl. XIX. fig. 8), gradually and sharply pointed, usual size about 0·35 by 0·0126 mm. (sometimes a little larger). (b) *Microsclera*; rather rare and of one kind only, viz., palmate isochelæ (Pl. XIX. figs. 8a, 8b); with almost perfectly straight shaft, length about 0·03 mm.

As regards external form this is one of the most remarkable sponges in the collection, although its spiculation is extremely simple. Coming from a depth of 825 fathoms it affords a capital example of the manner in which deep-sea Monaxonida tend to assume a definite and symmetrical external form. To judge from the number of specimens brought home by the Challenger it would appear to be a very abundant species at the place where it was found. From the fact that the main stem always terminates in a lamella, and that the smallest lamella is always found at the bottom of the series, we may pretty safely assume that growth takes place not from above but from below, and that while the upper lamellæ are gradually increasing in size, new small lamellæ are being one by one intercalated between the lowest previously existing one and the base. The correctness of this view as to the mode of growth is practically proved by the existence in the smallest specimen of a very minute bud on the stem below the lowest of the two lobes (*vide* Pl. XVIII. fig. 3, a).

The only described sponge at all resembling this species in its remarkable external form which we can recall is *Foliolina peltata*, Schmidt,¹ but even here the resemblance is not very great.

Locality.—Station 196, October 13, 1874; lat. 48° 30' 0" S., long. 126° 58' 30" E.; east of Celebes Island; depth, 825 fathoms; bottom, hard ground; bottom temperature, 36°·9. Thirteen specimens and some fragments.

Esperiopsis challengerii, var. *meangensis*, Ridley and Dendy.

1886. *Esperiopsis challengerii*, var. *meangensis*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 341.

We propose the above name for a fragment of a stem and two fragments of a lamella which appear to have come from a specimen closely resembling the types of *Esperiopsis challengerii* in external appearance and also in spiculation. The differences, so far as we can at present judge, lie in the respective sizes of the spicules, and it is probable that when an entire specimen is found they will prove to be sufficiently great to justify the erection of a new species, when the varietal name given above will stand as a specific name. In favour of the view of the close relationship of the two is the nearness of their respective localities.

The spiculation of the variety in question is as follows:—(a) *Megasclera*; smooth, slightly curved styli, sharply pointed, varying a good deal in size, but much longer than

¹ Spong. Atlant. Gebiet., p. 42, pl. iv. fig. 4.