

those of *Esperiopsis challengerii* proper. Length (in the lamella) up to about 0.63 mm.; breadth usually about 0.015 mm. In the fragment of stem the megasclera are much stouter, measuring about 0.6 by 0.025 mm. A few spicules of the stouter kind also occur in the lamella, their presence being apparently due to the breaking up and branching of the supporting stem; this shows that the fragments of lamella and stem probably belong to the same thing. (b) *Microsclera*; palmate isochelæ, large and numerous, length about 0.05 mm. (often less, and sometimes up to 0.072 mm.).

It will be seen that both microsclera and megasclera are considerably larger than in the types of *Esperiopsis challengerii*.

Locality.—Station 214, February 10, 1875; lat. 4° 33' N., long. 127° 6' E.; east of Meangis Island, south of Philippine Islands; depth, 500 fathoms; bottom, blue mud; bottom temperature, 41°.8. Fragments only.

Esperiopsis profunda, Ridley and Dendy (Pl. XIX. figs. 1, 1a, 1b).

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

There are in the collection two deep-sea sponges which we unite under the above name; neither is in very good condition; indeed the larger specimen is very imperfect and hence our description of the external form is taken from the smaller. Sponge consisting of a slender stem, composed of spiculo-fibre, expanded slightly below so as to form a flattened base, and gradually dilating above into a narrow, tubular, elongated head; we have found no definite opening from the exterior into the central cavity of this head, but the condition of the specimen does not warrant the assertion that none such exists. Total height of sponge, 44 mm.¹ Longer diameter of tubular head (which in its present condition is flattened) 4 mm.; diameter of stem near base 0.7 mm. *Colour* in spirit light yellowish-grey. *Texture* very soft and spongy. *Surface* hispid. *Dermal membrane*, *Oscula*, and *Pores* unknown.

Skeleton.—The skeleton of the head consists of a loose and confused reticulation of long stylote spicules, derived from the breaking up of the stem, at the point where it joins the head, into a number of thin, loose fibres, which radiate upwards through the walls of the tube and are crossed irregularly by other stylote spicules.

Spicules.—(a) *Megasclera*; of one kind only (Pl. XIX. fig. 1), viz., very long, rather slender and often very slightly curved, smooth styli, with evenly rounded base (sometimes, however, becoming tylostylote), and tapering very gradually to a sharp point at the apex; size about 1.4 by 0.0157 mm. (b) *Microsclera*; of one kind only, viz., large, palmate isochelæ (Pl. XIX. figs. 1a, 1b), with almost straight shaft and rather narrow front palm; these spicules may attain a length of 0.09 mm., but smaller ones about 0.05 mm. long are much more common.

¹ The larger specimen is a little over 100 mm. in height.