

*Spicules*.—(a) *Megasclera*; of one kind only, viz., long, smooth, slender, fusiform styli (Pl. XIX. figs. 6, 6'), size variable, about 0·8 by 0·028 mm., usually, however, slenderer. (b) *Microsclera*; of two kinds; (1) large palmate isochelæ (Pl. XIX. figs. 6b, 6c), of the *Esperella* type, only with equal instead of unequal ends, length about 0·037 mm.; (2) very minute and slender sigmata, usually much contort, enormously abundant, length about 0·013 mm.; (3) much larger, very slender sigmata (Pl. XIX. fig. 6a).

This is a very remarkable sponge, the most noticeable feature in which is the radiately symmetrical arrangement of the skeleton. In external appearance it somewhat resembles a *Cladorhiza*. In one of the specimens a great number of embryos (Pl. XLVI. fig. 7, e) were found just beneath the surface of the sponge, lying, for the most part, between the two sheaths of longitudinal fibres.

As the dark brown colour of the specimens is shared by other things in the same bottle it is possibly due to a discoloration of the spirit in which they were preserved; it should be noted that the tissues, even to the centre of the sponge, are all diffusely stained with the same rich chocolate tint.

Carter's *Esperia borassus* ("Porcupine" collection) has an almost identical external form, but our sponge stands alone in this respect among its immediate congeners.

The megasclera are large, but only about half as long as those of *Esperiopsis profunda* (see below), and the species is further remarkable for having sigmata.

*Locality*.—Station 145A, December 27, 1873; lat. 46° 41' S., long. 38° 10' W.; off Prince Edward Island; depth, 310 fathoms; bottom, volcanic sand. Three pieces.

*Esperiopsis edwardii*, Bowerbank, sp., var. *americana* (Pl. XIX. figs. 7, 7', 7a).

1866. *Isodictya Edwardii*, Bowerbank, Mon. Brit. Spong., vol. ii. p. 325; vol. iii., pl. lviii. figs. 15-18.

1866. (?) *Isodictya paupera*, *Id.*, *Op. cit.*, vol. ii. p. 328; vol. iii., pl. lv. figs. 4-7.

1866. (?) *Isodictya gracilis*, *Id.*, *Op. cit.*, vol. ii. p. 331; vol. iii., pl. lviii. figs. 23-26.

1880. *Amphilectus gracilis*, Vosmaer, Notes Leyden Mus., vol. ii. p. 111.

1883. *Amphilectus Edwardi*, Ridley, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 106.

Sponge massive, erect, in the form of a somewhat pyramidal column, 137 mm. in height and about 44 mm. in diameter at the base; based upon a stone, which is encrusted with Polyzoa. Colour in spirit greyish-yellow. Texture rather soft and spongy. Surface glabrous, but covered with low conuli. Dermal membrane distinct, thin, transparent. Pores small, and scattered in irregular groups over the subdermal cavities. Oscula not very numerous, scattered, about 3 mm. in diameter.

*Skeleton*.—(a) *Dermal*; the dermal membrane has no special skeleton; the ends of the primary fibres of the main skeleton abut against it, and it also contains a few scattered stylote spicules. (b) *Main*; this is rather diffuse and Halichondrioid, but with distinct primary fibres running vertically towards the surface.