

the one being found mainly in the dermal crust and scattered through the soft tissues, and the other in the stout fibres.

This is a very pretty and interesting little species; it seems to be perfectly distinct from all previously known, and its habit of agglutinating comparatively large foreign objects on to the surface of the body is very peculiar, although other species may acquire an accumulation of minute particles of dirt. One function of this crust is possibly to conceal the sponge from its enemies.

The skeleton arrangement in the fistular processes calls to mind the corresponding arrangement in *Proteleia sollasi*, but there is only a single, though more regular circle of fibres (*cf.* figs. 3 and 7, Pl. XLII.). The number of these fibres appears to be inconstant.

*Locality*.—Station 75, July 2, 1873; lat. 38° 38' 0" N., long. 28° 28' 30" W.; off the Azores; depth, 450 fathoms; bottom, volcanic mud. Two specimens.

Genus *Proteleia*, Dendy and Ridley (Pls. XLII. XLIV.).

1886. *Proteleia*, Dendy and Ridley, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 152.

Sponge sessile, corticate; upper surface covered with mammiform processes. Megasclera tylostylote and (or) stylote; and also spicules with grapnel-like apices projecting freely beyond the surface of the sponge.

This is one of the most interesting of the new genera which we have been obliged to found. It comes very close to *Polymastia* but differs from that genus in the possession of the grapnel-like spicule. This feature seems to approximate it to the Tetractinellida, but this question has been fully discussed by us elsewhere (*vide* Ann. and Mag. Nat. Hist., *loc. cit.*).

*Proteleia sollasi*, Dendy and Ridley (Pl. XLII. figs. 6, 7, 8, 8a, 8b, 8c, 8d, 8e, 8f, 8g, 8h; Pl. XLIV. fig. 2).

1886. *Proteleia Sollasi*, Dendy and Ridley, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 153, pl. v.

Sponge (Pl. XLIV. fig. 2) sessile, apparently coating, consisting of a flattened, cake-like expansion with slightly convex upper surface, from which arise abruptly numerous short, thick, cylindrical, mammiform projections of various sizes. The single specimen in the collection is about 63 mm. long by 31 mm. broad, and about 13 mm. thick. The mammiform processes vary somewhat in size, being, when full grown, about 8 mm. long by 4 mm. in diameter at the base; they are almost solid and very stiff and firm, contrasting strongly with those of *Polymastia robusta* and *Polymastia mammillaris* in this respect, at present they are all closed at the summit, and