

below, possibly indicate a real alliance between the species. The single specimen is remarkable for the presence of a great number of large, nucleated sperm-cells (?), which are closely packed together, so as almost entirely to fill the soft parts of the sponge.

*Locality*.—Off Marion Island; depth, 50 to 75 fathoms. One specimen.

We have from Station 320 an interesting series of specimens which should perhaps be considered as belonging to a slight variety of the above species; they do not, however, appear to be distinct enough from the type to justify us in giving a varietal name. They occur, for the most part, encrusting dead branches of a *Sporadopora*, on which they form colonies (Pl. XLI. fig. 2), the different cushion-like individuals being united together by their bases; there is usually more than one osculum to each individual, situated at or near the summit of the sponge. The growth appears to be altogether rather more robust and the spicules of a rather larger average size than in the type. We noticed in this variety a feature which we had not observed in the type, namely, that towards the base of the sponge the cortical layer of projecting brushes of tylostylote spicules gives place to a confused layer of short, stout, fusiform tylostyli, calling to mind the similar layer in *Tentorium semisuberites*. The sponge is further remarkable as forming colonies by continuous gemmation, in a manner very rare in siliceous sponges.

*Locality*.—Station 320, February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; off the mouth of the Rio de la Plata; depth, 600 fathoms; bottom, green sand; bottom temperature, 37°·2. Several specimens.

*Suberites microstomus*, n. sp.<sup>1</sup> (Pl. XLI. fig. 3).

Sponge (Pl. XLI. fig. 3) sessile, hemispherical. The single specimen in the collection is about 25 mm. in diameter and is attached to a piece of black, volcanic rock. *Colour* in spirit pale yellow. *Texture* very firm and dense, with a very strongly developed, fibrous cortex (ectosome) about 0·9 mm. thick. *Surface* fairly even, minutely granulated. *Oscula* very minute, but distinct, very slightly raised above the general surface of the sponge and with no thin-walled tubular projections as in *Suberites caminatus*, nobis (cf. woodcut, Fig. 7 and Pl. XLI. figs. 2, 3). *Pores*, small openings between the cortical brushes of spicules, leading into large, elongated, rather lacunar subdermal cavities in the cortex.

*Skeleton*.—The main skeleton is very well developed and composed of very stout bands of spiculo-fibre, which radiate to the surface, expanding at their ends in a brush-like manner and merging in a distinct cortical layer composed of dense brushes of much smaller, radiately disposed spicules, whose apices project for some distance beyond the surface of the sponge. It is important to notice that the special cortical layer of spicules

<sup>1</sup>This is the sponge referred to in our Preliminary Report (*Ann. and Mag. Nat. Hist.*, ser. 5, vol. xviii. p. 485) as a slight variety of *Suberites caminatus*, nobis, with very small, non-tubular oscula.