much closer resemblance to one obtained by the "Porcupine," and now in the British Museum, than to the original type.

Locality.—Station 49, May 20, 1873; lat. 43° 3' N., long. 63° 39' W.; south of Halifax, Nova Scotia; depth, 83 fathoms; bottom, gravel, stones; bottom temperature, 35°.0. One specimen.

Habitat.—British Seas (Bowerbank); off Shetland Islands ("Porcupine"); south of Nova Scotia (Challenger).

From the same station (Station 49) there is a second specimen of *Polymastia*; it is small and attached to a stone. It has three small fistulæ and is chiefly remarkable from the presence of a vast number of very long, projecting spicules, which form a deep, velvet-like coat over the body of the sponge. Unfortunately it has been dried up and we cannot be certain of the species to which it belongs; possibly it is *Polymastia mammillaris*,¹ but probably only a young form.

Polymastia corticata, Ridley and Dendy (Pl. XLII. figs. 4, 5, 5a, 5b, 5c; Pl. XLIV. fig. 3).

1886. Polymastia corticata, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 487. Sponge (Pl. XLIV. fig. 3) massive, sessile, cushion-shaped; with strongly convex upper surface, bearing very numerous mammiform processes; corticate; consisting of a dense, leathery cortex about 2.5 mm. thick, and an internal, rather friable, dense, amorphous mass of a pale yellow colour, from which the cortex easily separates. The single specimen in the collection is oval in shape, measuring about 87 mm. in length by 62 mm. in width and 37 mm. in thickness. The mammiform processes are of two very different sizes—(1) small, very abundant (there are considerably over one hundred on the single specimen), hollow, elongated, generally flattened and closed at the ends, which are frequently pointed; height about 8 mm., breadth at base 3 mm. (2) Very large, flattened and gradually conical tubes, very few in number (only four or five on the specimen), sometimes open fairly widely at the summit, with a fringe of spicules around the opening, sometimes, however, with no trace of an opening; height about 25 mm., breadth at base a little over 12 mm. In the immediate neighbourhood of the larger processes the smaller ones are scarce or absent. The larger processes, open at the ends, are evidently oscular tubes, each with a single osculum at the summit, while the nature of the small processes is doubtful. The colour of the sponge in spirit is milkwhite (this applies to the cortex only, the internal tissues being pale yellow). The surface is smooth but extremely minutely hispid. Pores in scattered groups of two or three, each group over a small round or oval subdermal cavity; they seem to occur on every part of the sponge, on both kinds of mammiform processes as well as on the general surface.

¹ Vide Bowerbank, Mon. Brit. Spong., vol. ii. p. 71.