in both, and in the arrangement of the fibre, though this is rather more definite in the main skeleton in Bowerbank's sponge.

Locality.—Off the south-west coast of Patagonia. One specimen.

Habitat.—British seas (Bowerbank); off south-west coast of Patagonia (Challenger).

Halichondria solida, Ridley and Dendy (Pl. II. figs. 5, 5a).

1886. Halichondria solida, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 326.

Sponge massive, sessile, encrusting, growing over a mass of nullipore. The single specimen in the collection is about 62 mm. long by 37 mm. broad and 31 mm. thick. Colour in spirit greyish-yellow. Texture extremely compact; firm, but slightly compressible. Surface uneven, rather rough to the touch; may be minutely hispid in places. Dermal membrane difficult to make out, inseparable from the underlying tissues. Oscula doubtful; few if any; possibly the sponge is lipostomous.

Skeleton.—There is no special dermal reticulation distinguishable as such from the main skeleton. The main skeleton consists of a densely felted mass of long oxeote spicules, densely packed, but without order and without discernible fibres. Hence there is no great difference in appearance between a surface section and a section taken at right angles to the surface.

Spicules.—More or less curved, large, smooth, fusiform oxea (Pl. II. figs. 5, 5a),

almost invariably rounded off instead of pointed at each end (thus becoming strongylote), and with the end often rather wrinkled or roughened in appearance. Size extremely variable, both as regards length and thickness. The largest spicules are by no means the thickest; length up to about 1.1 mm., thickness up to about 0.038 mm.; the degree of curvature also varies very much.

This species may be distinguished by its very dense and compact structure, the absence of any skeleton fibres, and the rounding off of the ends of the spicules. If it were not for the absence of a definite skeletal fibre, it would be rather referable to *Petrosia*, especially considering the tendency of its spicules to become blunted (cf. Petrosia truncata, infra).

Locality.—Reefs, Tahiti; September 28, 1875; depth, 30 to 70 fathoms. One specimen.

Halichondria solida, var. rugosa.

We propose the above name for a single, large, massive, sub-columnar, sub-lobose specimen of a dark chocolate-brown colour. It differs from the type of the species (1) in its dark colour; (2) in the nature of the surface, which is roughened by little

¹ Tinged with violet owing to the presence of a darkly-coloured horny sponge on the same mass.