

Petrosia similis, var. *compacta* (Pl. II. fig. 13 ; Pl. III. fig. 5).

Sponge (Pl. III. fig. 5) cylindrical, ramose, erect (?), or repent (?). The single specimen in the collection consists of a stout, irregularly cylindrical basal (?) portion, which bifurcates at one extremity into two but slightly divergent, more slender branches, about equal in length to the original piece. Total length 143 mm. Diameter of unbranched portion about 18 mm., and of branches about 10 mm. *Colour* in spirit light brownish-yellow. *Texture* stony hard but brittle. *Surface* uneven, smooth in appearance, but harsh to the touch. *Dermal membrane* rather coarse, translucent, allowing the subjacent skeleton reticulation to show through. *Oscula* large, conspicuous, circular, with their margins level (or almost so) with the general surface of the sponge, diameter about 4 mm. *Pores* scattered through the dermal membrane.

Skeleton.—The main skeleton is a very dense and compact, but rather irregular reticulation of spiculo-fibre and spicules, in which primary fibres are readily distinguishable, running vertically to the surface. Seen from the surface, the uppermost layer appears as a reticulation of stout spiculo-fibre with rounded meshes about 0.35 mm. in diameter, on which the dermal membrane rests directly.

Spicules.—Short, rather stout, slightly curved, fairly gradually and fairly sharply pointed oxea (Pl. II. fig. 13), measuring about 0.22 by 0.0145 mm.

This sponge is not unlike *Schmidtia variabilis*, var., from the same station, in external form, but may at once be distinguished by the much smaller spicules and denser texture. It is distinguished from the type of the species by its much more compact structure, and by the absence of the tufts of spicules supporting the dermal membrane, but agrees well in the size of the spicules. In its stony texture it resembles *Petrosia dura*, Nardo, but differs from typical specimens of that species in its external form, which is ramose, instead of tuberous or tuberously ramose. The skeleton-fibre also is by no means so compact and well developed, and the meshes of the main skeleton are much smaller. The spicules, again, are smaller, and do not exhibit that remarkable variability in size which characterises those of *Petrosia dura*.¹

Locality.—Station 208, January 17, 1875 ; lat. 11° 37' N., long. 123° 31' E. ; Philippine Islands ; depth, 18 fathoms ; bottom, blue mud. One specimen.

Petrosia truncata, Ridley and Dendy (Pl. II. fig. 14 ; Pl. III. fig. 1).

1886. *Petrosia truncata*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 327.

Sponge (Pl. III. fig. 1) massive, sessile. The single specimen in the collection is unfortunately only a fragment. It consists of a massive basal portion about 25 mm.

¹ Our knowledge of *Petrosia dura*, enabling us to make the above comparisons, is derived chiefly from specimens in the British Museum, obtained from Professor Schmidt. For descriptions of the species, *vide* Nardo, *Isis*, 1833, p. 522 ; Schmidt, Spong. Adriat. Meeres, p. 76, Taf. vii. fig. 13 ; Balsamo-Crivelli, *Atti Soc. Ital. Sci. Nat.*, vol. v. p. 293, Taf. v^a. figs. 1, 2, 3.