

*Skeleton*.—In each branch there is a central axis, formed of a very dense reticulation of closely packed, tylostylote spicules. These pass into rather loose and irregular, radiating fascicles of spicules, which terminate in a "dermal crust," composed of divergent brushes of tylostylote spicules whose points project very slightly beyond the surface. Just below the surface there also occur a few more or less horizontally placed spicules, which, together with the radiating brushes, are so arranged as to give to the surface its reticulate appearance.

*Spicules*.—*Megasclera*; of one kind only, viz., smooth tylostyli (Pl. XLV. figs. 7, 7a, 7b, 7c, 7d), almost or quite straight, with well-developed, nearly globular heads and slightly fusiform shafts, tapering very gradually to a very sharp point at the apex. In size these spicules vary very much, smaller ones being found towards the outside and larger ones in the centre of the sponge. Often in the case of the smaller spicules the head and neck are bent at a slight angle to the remainder of the shaft. The spicules vary in length from about 0.175 to about 0.875 mm., and in diameter from about 0.0094 to about 0.025 mm.; the spicules in the dermal crust being commonly about 0.28 mm. and those of the deeper parts about 0.7 mm. long.

Mr. Carter refers twice in the *Annals and Magazine of Natural History* to his *Suberites antarcticus*,<sup>1</sup> and as his type of the species (dry) is in the British Museum there is no doubt as to what the species really is, although it has not hitherto been fully described. The above description is taken entirely from the Challenger specimen, which is a very fine one, and preserved, of course, in spirit. In Mr. Carter's specimens the branches are much more flattened and very much more anastomosing than in the Challenger example.

It will be seen that this species comes near to *Suberites perfectus*, nobis, but it differs from it in its manner of growth and in its extraordinary dark colour (?), which may be a very characteristic feature. There are also slight differences between the spicules of the two species, but these do not amount to much.

*Locality*.—Off Christmas Harbour, Kerguelen; depth, 70 fathoms. One specimen.

*Habitat*.—Antarctic Seas (Carter); Kerguelen (Challenger).

<sup>1</sup> *Loc. cit. supra* and *Ann. and Mag. Nat. Hist.*, ser. 5, vol. ix. p. 350. Mr. Carter here says:—"Dredged by Sir James Ross in 74½° S. lat., in 206 fathoms (Expedition of 1841), undescribed. *Character*. Stipitate branched; branches digitate, nodose, pollachotomous; structure subcavernous; colour dark house-mouse; spicule pin-like, with large spherical head. Size of specimen about 5½ × 3 inches."