

mination of a specimen sent me by Mr. Whiteaves, along with other sponges which he obtained there. After a critical comparison of this with Bowerbank's types, I can distinguish no difference of specific value. The spicules agree remarkably well in dimensions, the only difference in this respect being the presence in the American specimen of some very slender forms of oxea, 2.5 by 0.016 mm. in length and breadth, which are absent in the British forms. The occurrence of the same species in such widely separated localities is explicable on the supposition that its distribution is Arctic—an idea which is supported by the fact that it has not been dredged south of latitude 57° N., other species replacing it as we proceed southwards. It probably belongs to the northern group in which *Thenca muricata* and *Craniella cranium* are included.

*Pæcillastra scabra* (O. Schmidt).

*Stelletta scabra*, O. Sch., Spong. Adriat. Meeres, Suppl., iii. p. 19, pl. iv. fig. 3, 1868.

*Sponge*.—A flat cake-like mass, about 20 mm. thick, and as large as a hand; ectosome but slightly developed; canals large and open.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, 0.887 mm. long. 2. *Orthotriæne*, rhabdome 0.1775 mm., cladi 0.05 mm. long.

II. Microscleres. 3. *Microxea*, with an irregular nodose or roughened surface, 0.127 mm. long. 4. *Spiraster*, 0.0316 mm. long.

*Habitat*.—Coast of Algiers.

*Remarks*.—The dimensions of the spicules were obtained by measurements made from a type-slide in the British Museum collection. I did not succeed in finding any true asters, and as the general facies of the spicules is more that of *Pæcillastra* than *Stelletta*, I with some hesitation refer the sponge to the former genus; it may possibly be more nearly allied to *Characella*. The megascleral oxea is remarkably small, and if the spicules on Schmidt's slide fairly represent those of the sponge, it may be considered as affording a good specific character.

*Pæcillastra amygdaloides* (Carter).

*Pachastrella amygdaloides*, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xviii. p. 406, pl. xiv. fig. 22, 1876.

*Sponge*.—A rounded mass, sessile; surface even, rough; oscule, the patent opening of a shallow cloaca; pores in the interstices among the microxeas. Size, 25 mm. long by 15 mm. broad and 10.5 mm. high.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, sharply pointed, 1.62 by 0.014 mm. 2. *Triod*, actines 0.7 by 0.06 mm. The rudiment of a fourth actine is represented by a short axial fibre, and is sometimes developed into a short strongylate cylindrical process.