

*Astellia dorsigera* (O. Schmidt).

*Stelletta dorsigera*, O. Schmidt, Spong. Adriat. Meeres, Suppl., p. 31, 1868.

*Sponge*.—Spherical, surface raised into very irregular conules; pores large, in sieves, cortex thick, differentiated into a cavernous outer half and a dense fibrous inner half, containing a few grains of sand and other foreign bodies scattered through it. Outer ends of the chones enlarged into wide cavities into which the pores open; inner ends conical, constricted into narrow canals, which open into the subcortical crypts.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, sharply pointed, 3.0 by 0.06 mm.

2. *Orthotriæne*, rhabdome conical, sharply pointed or strongylate; cladi conical, sharply pointed. Rhabdome 1.6 by 0.06 mm., cladi 0.127 mm., chord 0.223 mm. long.

II. Microsclere. 3. *Chiaster*, centrum very small, actines cylindrical, strongylate or truncate, varying in number from four to many; average diameter 0.016 mm., forms with four actines only, as much as 0.024 mm. in diameter. These asters form a layer beneath the epithelium, and are distributed generally throughout the sponge.

*Colour*.—Blackish-brown externally, greyish-white within.

*Habitat*.—Lesina, in the Adriatic Sea.

*Remarks*.—At first I assigned this sponge to the genus *Psammastra*, but since it does not contain the characteristic microstrongyle, I am now inclined to regard it as an aberrant form of *Astellia*, from which it differs chiefly in possessing conules. These, however, are different in character from those of *Psammastra murrayi*, being much more irregular. The orthotriænes are subject to modifications somewhat similar to those of the last-named species; thus they are frequently reduced to oxystrongyles and oxytylotes, the latter usually retaining their triæne character by a branching of the axial fibre; the former usually not, but yet frequently indicating their origin by the presence of one or more cladi irregularly given off some distance below the strongylate end; in one instance an oxystrongyle was observed bearing a single normal dichocladus.

The pores are large, varying from 0.0326 to 0.1 mm. in diameter.

*Astellia pumex* (O. Schmidt).

*Stelletta pumex*, O. Schmidt, Spong. Adriat. Meeres, Suppl., p. 32, pl. iii. fig. 9, 1864.

*Sponge*.—Irregularly incrusting, surface hispid.

*Spicules*.—I. Megascleres. 1. *Oxea*, 2.13 by 0.044 mm. to 2.7 by 0.06 mm. 2. *Plagiotriæne*, rhabdome 1.43 by 0.055 mm., cladus 0.286 mm. long.

II. Microsclere. 3. *Pycnaster*, small and variable in form, passing into oxyasters, spherasters, and chiasters without change of size, 0.019 mm. in diameter.

*Colour*.—Blue-black externally, yellowish-white within.

*Habitat*.—Venetian Canal.