Remarks.—Schmidt's representations of the spicules of this sponge are so misleading, that no one without access to the type could identify it. The spinose styles which he describes and figures are not present, nor, though one might imagine so from the figure, are orthodragmas. The sponge is so similar to Astrella anceps, O. S., that it is only after considerable hesitation that I venture to keep the two species as distinct. The form of the cladome of the plagiotriæne in Astrella pumex, due to the very forwardly directed curve of the cladi, appears however to be somewhat characteristic. The spicules appear to be very variable in dimensions; those given are maxima. The reference of the species to Astrella is only doubtfully made.

Subfamily 2. EUASTERINA.

Anthastra æruginosa (Carter).

Stelletta æruginosa, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xvii. p. 123, 1886.

Sponge spherical, sessile; surface smooth; oscules distinct, irregularly scattered; pores in sieves; ectosome thin, 0.32 mm. in thickness.

Spicules.—I. Megascleres. 1. Oxea, 1·117 by 0·01 mm. 2. Orthotriæne, rhabdome 1·456 by 0·0125 mm., cladi 0·238 mm. in length, chord 0·42 mm. 3. Anatriæne, rhabdome 1·03 mm. long and probably longer, by 0·013 mm. in diameter; cladome small, well rounded in front, cladi 0·032 mm., chord 0·045 mm., sagitta 0·029 mm. in length.

II. Microscleres. 4. Anthaster, with few actines, each 0.012 mm. long. 5. Chiaster, numerous fine hair-like actines, not tylote, a minute spherical centrum sometimes present; 0.016 mm. in diameter.

Colour.—Verdigris-green or blue throughout. Size, 25 mm. in diameter.

Habitat.—Port Phillip Heads, South Australia; depth, 6 fathoms.

Remarks.—Mr. Carter generously presented me with a whole specimen of this sponge. It does not present the green colour from which the species takes its name. The oscule is small, with a well-defined margin, and leads into a small cloaca; neither the margin of the oscule nor the walls of the cloaca are hispidated by small oxeas. The small rounded cladome of the anatriæne is characteristic.

Anthastra mammilliformis (Carter).

Stelletta mammilliformis, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xvii. p. 124, 1886.

Sponge globoconical, mammilliform, sessile; surface more or less covered with attached grains of sand; oscule single, terminal, large. Ectosome thin; not a cortex.