the ectosomal microxea as 0.05 mm. in length. Schmidt concludes his brief description with the remark that the sponge is "incontestibly very nearly related to Stelletta helleri, O. S., and would be identical with it, but for the absence of asters. One is right in the meanwhile in distinguishing the forms by particular names." As Oscar Schmidt showed remarkable facility in overlooking the minute spicules of a sponge, it would appear from this that the separation of the two species rests on very slender grounds.

Psammastra geodides (Carter).

Stelletta geodides, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 125, 1886.

Sponge.—Subspherical, sessile; surface minutely granulated, over low mulberry-like elevations; oscules small, numerous, situated in the grooves between the elevations. Cortex, 1 mm. in thickness, consisting of a collenchymatous outer portion, 0.92 mm. in thickness, widely excavated by intercortical cavities, and an inner fibrous portion, 2.6 mm. in thickness.

Spicules.—I. Megascleres. 1. Oxea, 2.5 by 0.025 mm. 2. Plagiotriæne, rhabdome 1.56 by 0.025 mm., chord 0.083 mm. long.

II. Microscleres. 3. Microstrongyle, ellipsoidal, minutely spined, 0.0083 by 0.0028 mm. 4. Oxyaster, centrum small, actines conical, 0.021 mm. in diameter.

Colour.—Dark slate tint, both fresh and in spirits. Size, 63 mm. in diameter.

Habitat.—Port Phillip Heads, South Australia; depth, 13 fathoms.

Remarks.—Mr. Carter kindly sent me tracings illustrating the structure of this sponge; these clearly show it to be an *Ecionema* with a cortex, and this it appears to me is the essential character of *Psammastra*, to which genus consequently I have assigned it. It differs from *Psammastra murrayi* in many respects; the conules are absent or only represented by the "low mulberry-like elevations," and there are no grains of sand in the cortex. The triæne is very similar to that of *Psammastra murrayi*, as is the oxea, but both are much smaller.

Genus 17. Algol, n. gen.

Rhabdastrose Stellettidæ possessing spicules like those of *Ecionema*, arranged like those of *Stryphnus*.

Algol corticata (Carter.)

Stellettinopsis corticata, Carter, Ann. and Mag. Nat. Hist., ser. 5, vo'. iii. p. 348, pl. xxviii. figs. 10-15, 1879.

Sponge.—Globular, sessile; surface smooth, even; oscules numerous, chiefly congregated at the summit; pores in sieves.

1 The name of a star.