

The microstrongyles occupy the position of a somal aster, *i.e.*, they not only form a layer beneath the epithelium of the cortex (Pl. XVIII. figs. 14, 17), but occur dispersed throughout the choanosome. They are evidently derived from the large oxyaster, or both from a common form like the large aster of *Caminus vulcani*, to the microxeca of which the microstrongyles bear a remarkable resemblance. The tension which led to the modification of the sterraster, and the reduction of the oxyaster to a microstrongyle, also manifests itself by sometimes, though very rarely, giving a spiral elongation to the oxyaster, which then reminds one of the plesiaster of some species of *Thenca*.

The chiaster, in some of its varieties indistinguishable from the chiaster of *Myriastræ* amongst the Stellettids, first appears in the inner fibrous layer of the cortex, and thence extends through the choanosome, chiefly, if not only, occurring beneath the epithelium of the canal walls. The oxyaster is confined to the choanosome, and though it also occurs along with the microstrongyle and the chiaster immediately beneath the epithelium, its more usual position is somewhat more removed from it, deeper within the sarcenchyma. Numerous transitional forms of aster occur between the chiaster and oxyaster, so that no sharp line of demarcation can be drawn between them.

Genus 2. *Caminus*, O. Schmidt.

The sterraster is spherical, and the somal microsclere a spherule. The roofs of the incurrent chones are cribri-poral; the oscule is the patent opening of a cloaca.

Caminus sphæroconia, Sollas (Pl. XXVII.).

Caminus sphæroconia, Sollas, Prelim. Account, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 196, 1886.

Sponge (Pl. XXVII. fig. 1).—Massive, growing upwards into massive, rounded lobes; attached. Oscules situated on the summits of the lobes, large, with wide, smooth margins, leading into a large cloaca, which receives the excurrent canals, opening over its lower half by wide patent mouths.

Pores in sieves, forming the roofs of incurrent chones; the upper surface of the sponge is raised into a polygonal network of low ridges, which mark out the limits of each chone, the polygonal spaces being roofed over by the poriferous membrane. On the lower surface the polygonal outlines are less marked.

The outer layer of the cortex consists of vesicular tissue beneath the epithelium, crowded with but one form of microsclere, the spherule.

Spicules.—I. Megascleres. 1. *Strongyle* (Pl. XXVII. fig. 3), small, cylindrical, straight, curved, or somewhat rapidly bent in the middle, with rounded ends, 0.5 by 0.016 mm.