Subfamily 1. Homasterina.

Genus 1. Myriastra, Sollas.

Myriastra, Sollas, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 188, 1886.

Sponge small, frequently more or less spherical; oscules distinct; pores in sieves, leading into widely ramifying subdermal cavities. Ectosome thin, collenchymatous. The microsclere is a chiaster.

Type—Myriastra subtilis (p. 113).

Genus 2. Pilochrota, Sollas.

Pilochrota, Sollas, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 189, 1886.

Oscules usually distinct; pores in sieves leading into radial incurrent canals which are not constricted on passing through the fibrous layer of the cortex. Ectosome differentiated to form a cortex which usually consists of a middle collenchymatous layer, an outer thinner and an inner thicker fibrous layer. The microsclere is a chiaster.

Type—Pilochrota haeckeli (p. 120).

Genus 3. Astrella, Sollas.

Astrella, Sollas, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 191, 1886.

The cortex is usually well developed, consisting of a thick outer layer of collenchyma, sharply defined from a thick inner layer of fibrous tissue; the collenchyma passes into a thin fibrous layer beneath the outer epithelium; pores in sieves. Chones completely differentiated, consisting of a main canal traversing the collenchymatous layer, proximally constricted into a narrow tube which passes through the inner fibrous layer, distally divided into several branches each of which terminates beneath a pore-area. The microsclere is a pycnaster.

Type—Astrella vosmaeri, n. sp. (p. 181).

Subfamily 2. EUASTERINA.

Genus 4. Anthastra, Sollas.

Anthastra, Sollas, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 191, 1886.

Sponge usually more or less spherical; oscules distinct or not; pores in sieves overlying extensive ramifying subdermal cavities. An anthaster is present in addition to a chiaster.

Type—Anthastra pulchra, n. sp. (p. 183).