

In all species the triænes usually lie with their cladi extended facially immediately beneath the sterrastral layer of the cortex; sometimes but rarely the cladi enter this layer and are then liable to deformations, more often both triænes and rhabdi pass through and project beyond the cortex, hispidating the surface. A second finer hispidation is frequently produced by small oxeas, which are confined to the cortex (cortical oxeas). Associated with these in some few instances are minute anatriænes, which much remind one of the cladose tylostyles described by Dendy and Ridley in *Proteleia sollasi*.

Genital Products.—Spermatozoa, but not ova, have been observed; for an account of the former see *Caminus* (p. 216).

Development.—The earliest form of *Geodia* which I have seen is a small Sponge, almost spherical, measuring 1·6 and 1·27 mm. along its polar and equatorial diameters; it occurred among the hispidating spicules of a specimen of *Rhaphidotheca marshall-halli*, S. Kent, belonging to the Rev. A. M. Norman's collection of Norwegian Sponges. Comparatively large as this specimen is, it yet presents points of difference from the parent Sponge of considerable interest: the ectosome is scarcely advanced beyond the stage of *Thenea muricata*, certainly not beyond that of *Myriastræa*; a thin membrane covers extensive subdermal cavities, just as described in the case of *Stelletta phrissens*, and chones are absent; just above and bulging out the lower face of the dermal membrane is a single layer of sterrasters; these lie more remote from one another than in the adult, but are united together by bundles of granular fusiform cells in precisely the same fashion: the sterrastral layer develops, therefore, in what corresponds to the roof of subdermal cavities, and thus we meet with confirmation almost amounting to proof of the conclusion arrived at in the case of *Stelletta phrissens*, viz., that in some cases the cortex is a highly developed dermal membrane and the chones centrifugal extensions of the subdermal cavities.

The Geodiidæ may be classified as follows:—

Subfamily 1. ERYLINA.

The megascleres are orthotriænes and rhabdi; anatriænes and protriænes are absent. The somal microsclere is a diactinate aster or spherule.

Genus 1. *Erylus*, Gray.

Erylus, Gray, Proc. Zool. Soc. Lond., p. 549, 1867.

Triate, Gray, Proc. Zool. Soc. Lond., p. 549, 1867.

The sterraster is seldom spherical; the somal microsclere is a centrotylote microrabdus. The incurrent chones are uniporal, and the oscule is the patent opening of a cloaca.

Type—*Erylus mammillaris* (O. Schmidt) (p. 238).