The ectochrote and the inner fibrous layer are both very thin; the former consisting of the outer epithelium and a single layer of underlying spherasters.

The chones open to the exterior by a single poral canal about 0.16 mm. long, which centrally perforates a thick muscular sphincter; for the inner half of their course they are reduced to a very narrow canal, 0.8 mm. long, which runs through a muscular sphincter, about 0.32 mm. in diameter in the instance measured. The outer margin of the sphincter is not in immediate contact with the sterrasters of the sterrastral layer, but passes into a fibrous collenchyma. The poral canal is lined by a layer of spherasters (4) beneath the epithelium; the endochonal canal by a mixture of astral forms, oxyasters (5), oxeate spherasters (6), and spherasters of larger size than those of the ectochrote, one measuring as much as 0.024 mm. in diameter, but otherwise similar.

The choanosome contains numerous embedded foreign bodies, including spicules of other sponges; amongst the latter is a tylostyle bearing recurved spines, and this occurs also incorporated with the cortex.

The flagellated chambers are comparatively large and the aphodal canals wide and unusually long, their length depending on the distance of the chamber from the nearest excurrent canal. Many of the chambers measure 0.0355 mm. in breadth by 0.0316 mm. in length, the prosopyle 0.016, and the apopyle from 0.02 to 0.0276 mm. in diameter.

SUPPLEMENTAL ACCOUNT OF SPECIES NOT IN THE CHALLENGER COLLECTION.

Family I. GEODIIDÆ.

Subfamily 1. ERYLINA.

Erylus discophorus (O. Schmidt).

Stelletta discophora, O. Schmidt, Spong. Adriat. Meeres, p. 47, pl. iv. fig. 5, 1862. Triate discophora, Gray, Proc. Zool. Soc. Lond., p. 549, 1867.

Sponge.—A very irregular, flattened, tuberose mass. Cortex thin, 0.2 to 0.25 mm. in thickness. Skeleton consisting chiefly of tangentially disposed oxeas and sterrasters, covered externally by an ectochrotal felt of microstrongyles, which also line the sides of the chones. Chones simple cylindrical tubes, opening to the exterior by a single pore, from 0.08 to 0.24 mm. in diameter, and to the interior by an apparently sphinctrate aperture which lies in the intercladal area formed by the cladomes of the dichotrizenes. Oscules (?). Choanosome; canals furnished with numerous velar diaphragms. Skeleton consisting of oxeas, partly scattered, partly arranged in thick bundles having no definite direction, except on approaching the cortex, towards which they are directed at right angles; of dichotrizenes, some of which are irregularly scattered through the sponge, and others