separation was a supposed difference in the distribution of the spherasters within the cortex; this does not exist.

It would appear possible that the sponge described by Ridley from the Seychelles as *Tethya cliftoni*, Bowerbank, may really be *Tethya seychellensis*, E. P. W.; while again it is possible, though not highly probable, that these two species may be identical. The chief character on which the distinction of *Tethya ingalli* rests is the absence of any marked differentiation in the tissue of the cortex, which is wholly fibrous throughout. Associated with this is the absence of intercortical cavities.

Two specimens were obtained by the Challenger, the larger is 45 mm. in diameter, and even in spirits retains a reddish tint. The smaller is only 9 mm. in diameter. The cortex is a solid fibrous felt throughout, and in the larger specimen it measures a little over 3 mm. in thickness. Spherasters are not generally distributed through it, but form a layer beneath the surface, 0.95 mm. thick; they extend, together with chiasters, along the course of the radial cortical canals, and are thickly crowded through the choanosome for some distance beneath the cortex.

Demus II. SPIRASPINTHARA.

Spintharophora in which the characteristic microsclere is some form of spiraster.

Family I. SCOLOPIDÆ.

The ectosome is a thin fibrous cortex, containing oxeas and microxeas radially arranged, palisade fashion. The megascleres are oxeas mostly collected into fibres, radially arranged. The microsclere when present is an amphiaster. The canal-system is probably eurypylous.

Genus 1. Scolopes.1

Scolopidæ in which an amphiaster is present, the sponge is not provided with a stalk, and is not of symmetrical form.

Scolopes moseleyi, n. sp. (Pl. XLIII. figs. 1-9).

Sponge (Pl. XLIII. fig. 1).—Large, massive, surface even, uniformly pilose; oscules and pores (?). Cortex densely spiculous.

Spicules.—I. Megascleres. 1. Oxea of the spicular fibres (Pl. XLIII. fig. 2), fusiform,

1 σκόλοπες, of, a palisade, stockade. The singular, σκολοψ, has been used with various modifications for more than one genus already, but not, so far as I am aware, the plural.