In this small form the ventral line is almost as arcuated as the dorsal, so that the outline is suborbicular or approximately elliptical. The extremities are very obtuse, and the valve is delicately but irregularly punctated.

Euodia radiata, n. sp. (Plate XII. fig. 4.)

There is here represented a frustule which possesses a very different profile from the preceding, but has the same delicate striation of radiating puncta. The apices possess a hooked form, hence the varietal designation applied above. It was procured in the Atlantic Ocean.

Euodia ventricosa, n. sp. (Plate XII. fig. 5.)

Parva, subradiantibus lineis punctulata; linea dorsali admodum curvata, centrali late convexa; apicibus rotundatis. In Atlantico meridionali.

This small frustule is ornamented with subradiating lines of puncta, which are disposed in excentric curves. The dorsal line is strongly arched, while the ventral is less convex. The extremities are bluntly rounded.

The specific name has reference to the turgescence of the ventral margin.

Euodia ventricosa, n. sp., var. nov. (Plate XII. fig. 6.)

A variety which possesses a still more convex dorsal line than the typical species just described, is here shown. The ventral line, on the other hand, is less arched, but the character of the punctation and of the extremities is similar in both.

Systephania, Ehrenb.

This genus resembles the *Stephanopyxis* of Ehrenberg so strongly as to lead one to the belief that, like *Stephanopyxis*, Ehrenb., and *Creswellia*, Arnott,[1] they are identical. Professor H. L. Smith is inclined to regard the *Systephania* as simply a valve of *Stephanopyxis*, and although much may be said in favour of this view, the absolute identity has still to be demonstrated. It is indeed true that, according to Ehrenberg, the parallelism of the rows of cellules which cover the valve is to be regarded as characteristic, since this was visible in the two species then known, namely, *Systephania corona*, Ehrenb.,[2] and *Systephania diadema*, Ehrenb.;[2] but in a preparation kindly intrusted to me by Dr James Rae, R.N., and made from material procured at Richmond, Virginia, five specimens occur, one of which is figured on Plate IX. fig. 11. This undoubtedly constitutes a new and very distinct species of *Systephania*, although the cellules that occur on the valve are

[1] *Trans. Roy. Soc. Edin.*, vol. xxi. pt. iv. p. 538, pl. xiv. fig. 109.

[2] Ehrenberg, Mikrogeologie, pl. xxxiii. 15, fig. 22, and pl. xxxiii. 18, fig. 11.