

only partially disposed in a parallel manner, so that in this particular the original definition of Ehrenberg ought not to be applied too rigidly.

***Systephania raëana*, n. sp.** (Plate IX. fig. 11.)

Densius cellulata, ordinibus subparallelis, bina aculeorum corona decorata interna spinis densiusculis subregularibus, altera rarioribus et irregularibus. Fossilis ad Richmond in Virginia.

This new fossil species, which has been named in honour of Dr James Rae, R.N., differs from those hitherto recorded not only in not having the cellulation of the valve always parallel, but also in being markedly more minute. Its most distinctive characteristic, however, consists in the double corona of puncta with which it is ornamented, the inner series being more numerous and regular than the outer. The frustule was found in a collection made at Richmond, Virginia.

***Systephania aculeata*, Ehrenb., var. α nov.** (Plate IX. fig. 6.)

The form here figured, which must be ascribed to the present genus, was procured in the Sea of Japan and in the vicinity of Hong Kong by H.M.S. Challenger. It possesses a convex outline, while the areolation is wide and hexagonal. A delicate but distinct corona is manifest about the middle of the radii of the valve. The character of the areolation and of the corona point to an affinity with *Systephania aculeata*; Ehrenb., although in the latter the corona is submarginal.

***Systephania aculeata*, Ehrenb., var. β nov.** (Plate XXX. fig. 3.)

The valve here shown is another variety of the typical *Systephania aculeata* of Ehrenberg, its corona occupying a position much nearer the margin than that of the variety α above referred to.

***Systephania* (?) sp. (?)** (Plate XXX. fig. 2.)

The beautiful disc here figured was collected near the Bermudas. It, like the preceding, is convex and ornamented by large hexagonal areolæ, while a number of irregularly disposed submarginal puncta may readily be recognised. At the periphery a band of very large cellules occurs and gives a somewhat remarkable appearance to this interesting form.

As only a single specimen of this curious frustule has been observed, its generic and specific determination must for the present remain problematical, although it may ultimately be found to belong to the genus *Systephania*.