

This elegant disc is ornamented at the margin with sparsely disposed lines of granules. These become irregular towards the centre, and are replaced there by an irregular corona of small points. The presence of this corona has induced me to include this frustule among the *Stictodisci*, although the folded condition of the valve, which is the principal generic character, could not be distinguished. It is to be noted, however, that in the different species the folds are found more or less clearly defined, and when they are very slight they become almost invisible, so that the impossibility of recognising them here is not necessarily opposed to the determination that has been arrived at.

Stictodiscus radiatus, n. sp. (Plate I. fig. 1.)

Granulis in lineas radiantes plicis divisas distributis; plicis ad centrum evanescentibus; centrum granulis caret. Ad Zebu ex insulis Philippinis.

This frustule, and its variety shown in Plate I. fig. 3, belong to the radiate section of the genus *Stictodiscus*. They are closely related to the *Stictodiscus californicus* of Greville,¹ which in its turn is akin to *Stictodiscus johnsonianus*, Grev.,² differing from it in the indistinct and shorter radii, and in the condition of the peripheral zone from which these radii spring. This zone is marked in *Stictodiscus johnsonianus* by a series of round or somewhat elliptical granules which are situated opposite the peripheral ends of the radii, while in *Stictodiscus californicus* it bears semi-elliptical areolæ which usually alternate with the radii. In the forms now under examination, on the contrary, the radii are notably long and the centre always remains free from granules, while the great number of the radii—although by itself a character of no great significance—cannot be overlooked.

Although the type-specimen shown in Plate I. fig. 1 bears a great resemblance to its variety seen in fig. 3 there are some differences which must be noted. Thus in addition to the greater number of granules which are radially disposed and ornament the valves in fig. 3, there is also present here a somewhat prominent granule at the extremity of each fold, and the radii begin with two small granules. In the course of the radii each granule is elevated upon a subrectangular areola. Much importance cannot be attached to the granules at the extremities of the folds, as their existence is doubtful in some cases—similar appearances often occurring at the margin of the valve in changing the focal distance. The subdivision of the radii into compartments serves to indicate the connection between the *radiate* and *radiato-areolate* forms of *Stictodiscus*. The following definition may be given of the varietal frustule:—"Lineis crebriusculis granulorum in areas rectangulares, granulum in margine ad ortum cujusque plicæ. Ad oras Japonicas."

Stictodictus eulensteini, Cstr. (Plate I. fig. 7.)

Triceratium eulensteini, Grun., A. Schmidt's Atlas, pl. lxxv. figs. 6 and 7.

In Plate I. fig. 7 there is represented an exceedingly elegant form of *Stictodiscus*, which indicates the transition from the *discoïdal* to the *triangular* and *polygonal* types.

¹ Schmidt's Atlas, pl. lxiv. fig. 4.

² *Micr. Journ.*, n. s., vol. i. p. 41, pl. iv. fig. 3.