

Stauroneis, Ehrenb., Kg.

Although some authors, impelled by a desire of reducing the number of generic distinctions among Diatoms, have united into a single genus not only the *Pinnulariæ* and *Naviculæ* but also the *Stauroneides* and *Stauropteræ* of Ehrenberg, such a course cannot be regarded otherwise than as prejudicial to science. It is to be remarked, however, that the genera *Stauroneis* and *Stauroptera*, which do not contain a large number of species, may be amalgamated, so that, following the example of W. Smith, Pritchard, and others, any free navicular frustule with a middle line, terminal nodules, and a central stauros or transversely enlarged nodule, may be called a *Stauroneis*.

Stauroneis pacifica, n. sp. (Plate XX. fig. 9.)

Lanceolato-oblonga; apicibus obtusis; nodulo centrali in aream linearem ad marginem attingente; striis moniliformibus tenuissimis radiantibus, lineam mediam non attingentibus. In oceano Pacifico.

This frustule possesses a navicular lanceolate form, and is provided with obtuse prolonged extremities. The stauros extends to both margins. The striæ are very delicate granular, radiating and approximately parallel, they are obliquely disposed, and terminate before reaching the median line.

The species is named after the ocean in which it was first observed.

Stauroneis thaitiana, n. sp. (Plate XX. fig. 16.)

Parva, elliptico-lanceolata; apicibus cuneato-rotundatis; area transversa lineari brevi; striis tenuissimis transversis, parallelis. Ad portum Thaiti.

This small and elegant form from the rich collection obtained at the port of Tahiti possesses an elliptico-lanceolate outline, and is provided with roundly cuneate extremities. The central nodule expands transversely as a narrow linear area which stops before reaching the margin. The striæ are very fine, transverse and parallel. The raphe is enclosed in a smooth narrow linear area.

Stauroneis salina, W. Sm., var. *c*, nov. (Plate XX. fig. 13.)

Probably this frustule must be regarded as a mere variety of the *Stauroneis salina* of W. Smith.¹ The following points of distinction between the typical species and the variety may however be noted:—(1.) The extremities of the latter are considerably more acute than those of the former; and (2.) the striæ, although erroneously represented coarser in the present species, are approximately of the same degree of fineness in both.

¹ *Op. cit.* vol. i. p. 60, pl. xix. fig. 188.