

Since Rabenhorst¹ constituted a variety *b* for a form with obtuse apices, the present frustule has been indicated as variety *c* on account of the acuteness of its extremities.

Stauroneis brebissonii, n. sp. (Plate XV. fig. 4.)

Oblonga, medio late constricta; apicibus cuneato-obtusis, subproductis; striis ad nodulos radiantibus et medio aream lævem linquentibus.

This is one of the most curious forms of the genus *Stauroneis*. The valve is of oblong form, being narrower in the middle than at its extremities, and the two longitudinal lines are slightly sigmoid. The extremities are cuneato-obtuse and exhibit a slight constriction. The striæ are strongly radiating towards the centre and towards the nodules, and they terminate as in *Pinnularia divergens*,² W. Sm. They are absent in the centre of the valve, so that this area is very wide and is bounded only by the nearest striæ. The zonal side is sub-rectangular.

This species is named in honour of one of the earliest naturalists who prosecuted the study of Diatoms, Alphonse de Brebisson.

Stauroneis oblonga, Bail. (Plate XX. figs. 7 and 11.)

Different sizes of this species are here represented. On comparing the figures with Plate xlvi., fig. 16, of A. Schmidt's Atlas, one cannot fail to recognise the justice of the determination here arrived at, although the definition of the species, which is given by Pritchard,³ does not at all agree with the present figures, which are of the form called "linear" by Bailey.

In this species it may often be observed that the striæ on one side touch the raphe, whilst on the other they stop short of it. This, however, cannot be compared with what takes place in *Alloioneis*, but is to be attributed to the fact that the raphe is raised and forms an oblique projection on one-half of the valve.

Stauroneis glacialis, n. sp. (Plate XXVII. fig. 11.)

Magna; valvis longitudinaliter late convexis, transverse arcte convexis; stauro lineari; striis dense transversis parallelis. In mari Antartico.

This curious navicular frustule was collected in the Antarctic Ocean. It is of large size, and its valve is very convex in a longitudinal direction but much more so in a transverse, so that it cannot be entirely brought into focus at the same time. A median stauros stretches in a linear manner between the raphe and the margins. The striæ, which are very fine, are directed transversely.

¹ Rabenhorst, *Flora Europæa Algarum Aquæ dulcis et submarinæ*, p. 251. Here variety *b* is characterised as follows: "Forma sub polis leniter constricta, apicibus obtusis."

² Synopsis of the British Diatomaceæ, vol. i. p. 57, pl. xviii. fig. 177.

³ This definition runs as follows: "Linear, with acute, cuneate ends, and oblique punctato-asperate striæ; stauros abbreviated, dilated outwards. . . . The size and markings of *Stauroptera aspera*, Ehrenb., but having its valves oblong, with parallel sides, and acute angular ends."—*History of Infusoria*, 4th edit. p. 914.