

This elegant naviculoid frustule, found in the interesting collection from the port of Tahiti, recalls, when viewed in profile, the *Navicula proserpinæ* of Ehrenberg,<sup>1</sup> which is identical with the *Navicula kützingii*<sup>2</sup> of Grunow. Its two lobes are subcordate and the extremities are cuneato-acute. The nodule, which in Ehrenberg and Grunow's type is large and quadrate, is here very small, nor does the frustule present such longitudinal bands as separate the striæ of the *Navicula proserpinæ* and *Navicula kützingii*.

In *Navicula thaitiana* the radiating moniliform striæ gradually become less visible towards the centre.

*Navicula entomon*, Ehrenb., var. *thaitiana*, nov. (Plate XX. fig. 17.)

We have here represented a frustule which is probably only a variety of *Navicula entomon*,<sup>3</sup> Ehrenb. Its centre is more contracted than that of the typical species, and its two lobes present an elegant elliptical profile. Both forms possess lines of slightly subradiating but manifest granules, which differ from those of all other bi-lobed navicular frustules. The present diatom has a very strong round central nodule, but this characteristic, taken by itself, cannot be regarded as sufficient to constitute a species.

*Navicula entomon*, Ehrenb., var. (?) (Plate XX. fig. 10.)

This frustule can scarcely be said to be sinuately constricted, but its raphe, which is slightly bent when viewed in profile, really possesses a double curvature and is flanked on both sides by a band of granules.

With reference to these peculiarities it is to be remarked that they are probably merely developmental stages in the life-history of the species. Thus in the younger frustule the raphe may be straight instead of bi-curved, while in embryonic phases the granules are not well defined but become more and more marked as age advances.

*Navicula grunowii*, Rabenh. (?) (Plate XV. fig. 9.)

The present figure represents an elegant *Navicula* possessing a valve which is almost linear in profile. On comparison with Plate lxx. of Schmidt's Atlas it is found to coincide almost exactly in its characteristics with *Navicula pristiophora*, Janisch, and with *Navicula grunowii*, Rabenh.<sup>4</sup> It may accordingly be regarded as intermediate between

<sup>1</sup> = *Diploneis proserpinæ*, Ehrenb., *Monatsber. d. k. Akad. d. Wiss. Berlin*, 1858, p. 14; see Pritchard, *loc. cit.*, p. 893.

<sup>2</sup> This form is shown in Plate xiii. fig. 24 of Schmidt's Atlas; see also *Verhandl. d. k. k. zool.-bot. Gesellsch. in Wien*, 1860, p. 532, T. i. fig. 15.

<sup>3</sup> Established by Ehrenberg in 1840; = *Pinnularia entomon*, Ehrenb. (*Verb. T. i. 1, F. 3 et 4*; Kütz., *Bac.*, p. 100, T. xxviii. fig. 74); and = *Diploneis entomon*, Ehrenb. *Mikrogeol.*, T. xix. f. 30; see also Pritchard, *loc. cit.*, p. 893.

<sup>4</sup> See Schmidt's Atlas, pl. lxx. figs. 72 and 73; and Rabenhorst's *Flora Europæa Algarum*, sect. 1, p. 203, *Lipsiæ*, 1864.