

*Navicula*, sp. (?) (Plate XXVII. figs. 3 and 7.)

We have here delineated two other navicular forms, both being represented in their zonal aspects, probably owing to the fact that they possess very narrow valves. Both possess a similar striation, but while the profile in fig. 3 is curvilinear, that in fig. 7 is straight. This difference may be explained by saying that in fig. 3 the zonal side is seen somewhat obliquely.

The perfect resemblance of the striation and the identity of their locality—both being found to the south of Heard Island—render it very probable that both forms represent the same species, or at most that one is a variety of the other.

Although the minute transverse striation might point to an identity between these forms and *Navicula liber*,<sup>1</sup> Sm., such an opinion, on closer examination, cannot be entertained, the striation, which is characteristic of the connecting zones in the present frustules, differing from the corresponding sculpturing in Smith's species.

*Navicula*, sp. (?) (Plate XXVII. fig. 10.)

This figure represents a single valve which must belong to another species of *Navicula*. Its general outline is plano-convex, and its extremities well defined and bluntly recurved. The longitudinal axis exceeds two and a half millimetres in length. It is transversely granulated, save in the narrow areola which surrounds the central nodule. The probability that this is a sporangial frustule may be borne in mind.

No navicular form hitherto recorded possesses so large a size as the present one, whose specific designation must, however, remain undecided till further observations have been made.

#### *Alloioneis*, Schumann.

The late Professor Schumann, recognising the advisability of separating from the extensive genus *Navicula* all those forms that possess distinctive characters in common, established the genus *Alloioneis* for frustules which, while they were symmetrical in their external profile, had long striæ on one side of the raphe and short on the other.

This new genus, which has been accepted, amongst others, by the Swedish micrographer Professor P. T. Cleve, has been defined by Schumann<sup>2</sup> as follows:—"Navicula, ab altera lineæ longitudinalis parte pinnulis longis, ab altera parte pinnulis brevibus prædita, sectione transversa rhomboidea."

*Alloioneis antillarum*, Cl. et Grun., var. nov. (Plate XV. fig. 5; Plate XX. fig. 14; Plate XXVIII. fig. 14.)

Plate XX. fig. 14, represents a diatom which resembles the species established by Cleve under the name of *Alloioneis antillarum*, Cl. et Grun.<sup>3</sup> It may be noted, however,

<sup>1</sup> Smith, *op. cit.*, vol. i. p. 48, pl. xvi. fig. 133.

<sup>2</sup> Die Diat. d. H. Tatra, p. 73, 1867.

<sup>3</sup> Diatoms from the West Indian Archipelago, by P. T. Cleve, p. 8, pl. i. fig. 11, 1878, published in *Bihang k. Svenska Vet. Akad. Handl.*, Band V., No. 8.