

when seen in the zonal aspect, are symmetrical in themselves, but each is unsymmetrical with reference to the transverse axis. Their surface is ornamented with large irregularly disposed granules. No distinct connecting zone is seen, the two adjoining valves being immediately united. In some frustules a smooth belt may be observed between the two valves.

The specific name has reference to the form of the frustule.

Eucampia balaustium, n. sp., var. *minor*, nov. (Plate XVIII. fig. 6.)

We have here represented a form which must be regarded as a mere variety of the preceding type, differing from it in its smaller size, and in having the extremities somewhat blunted.

It is important to note that, as may be observed in this figure, the last valve in the series differs from the others, having the two extremities less prominent and of equal length. In this circumstance *Eucampia* resembles *Bacteriastrum*, *Chætoceros*, and probably also *Hemiaulus*.

Mölleria (Cleve), Cstr.

As above referred to (see *Eucampia*, p. 97), this genus, instituted by Cleve in honour of M. Möller, of Wedel, Holstein, does not differ essentially from *Eucampia*, except by the presence of a nodule in the centre of the valve, and by possessing two unequal terminal processes. Hence the genus may be defined as follows:—*Frustula cuneata in spiralem seriem conjuncta; valvis ovalibus centrali nodulo instructis, et in duos inæquales processus desinentibus; zona connectens plerumque crebre costata vel plicata.*

Mölleria cornuta, Cleve. (Plate XXV. fig. 8.)

We have here shown a small specimen of *Mölleria cornuta*, Cleve,¹ which has hitherto been unique in its kind. Two frustules are seen in series, and the shorter of the two has been checked in the act of fission, so that two new valves, in process of formation, may be observed through the belt. Similar observations have already been made in the case of *Biddulphia*, and in other types possessing two symmetrical valves.

Mölleria antarctica, n. sp. (Plate XVIII. fig. 8.)

Forma cuneata grandiuscula, valvis ellipticis vix perspicue punctulatis et nodulo centrali instructis; cingulo costulato vel plicato, bipartito; processibus terminalibus parum productis. In mari Antartico.

¹ Cleve, *Examination of Diatoms found on the surface of the Sea of Java, Bihang k. Svensk. Vet. Akad. Handl.*, Bd. I. No. 11, p. 7, Stockholm, 1873.