

particular, the shape of the apex is constant in each type. As in the variety last mentioned there are two smooth longitudinal areas, but these are slightly constricted in the middle, where they are ornamented by a few prominent rounded dots.

The specific name is taken from the character of the apex.

Navicula bullata, Norman, var. *rhomboidea*, nov. (Plate XXX. fig. 7.)

This bullate navicular frustule is subrhomboidal in shape, and the prolonged apices of the valves are rounded. The valve is plicated by several longitudinal furrows, but, although this characteristic is exceedingly distinct, the form can be regarded only as an interesting variety of *Navicula bullata*. As in the previous varieties there are a few well-marked dots at the centre of the smooth longitudinal areas which are here plano-convex in outline and situated around the central area of the valves. This specimen was gathered at Zebu.

Navicula brasiliensis, Grun. (Plate XX. figs. 1 and 3.)

We have here represented the typical form of the *Navicula brasiliensis* of Grunow,¹ but the valves cannot be said to be "oval," nor the apices "very acute," as that author, whose figure agrees entirely with the present one, has declared. In Grunow's frustule, moreover, the central nodule is "large and subquadrate," but in the form now being considered the raphe is interrupted by a subrotund areola.

This form was obtained at the port of Tahiti.

Plate XX. fig. 3, represents a very small navicular frustule from the same locality in which the central areola is round. It accordingly corresponds more exactly with the frustule described by Grunow.

Navicula mammalis, n. sp. (Plate XX. fig. 2.)

Elliptico-lanceolata; apicibus mammiformibus; lineis granulatis radiantibus, ad centrum cessantibus. Ad mare Philippinarum.

This form was obtained from a sounding made in the neighbourhood of the Philippine Islands. Its shape is elliptico-lanceolate, and it possesses mammiform apices. The radiating granular striæ extend from the periphery towards the median raphe, which, however, they do not reach. The central nodule is surrounded by a smooth areola, which is marked only by two arched shadows.

The name of this species is derived from the character of its extremities.

Navicula subrhomboidea, n. sp. (Plate XX. fig. 4.)

Parva, lanceolato-rhomboidea; apicibus cuneatis; striis punctulatis, transversis, lineam mediam attingentibus. In mari Pacifico.

¹ *Verhandl. d. k. k. zool.-bot. Gesellsch. in Wien*, 1863, T. xiv. fig. 10,