related to the *Campylodiscus wallichianus* of Greville ;[1] but it differs from the latter in its considerably larger size, its far greater number of canaliculi, and in the arrangement of its spines, which, in the Grevillean species, appear in the middle part of the lines only, and not throughout their whole length as in the form from Tahiti. Moreover, the central area of *Campylodiscus wallichianus* is linear, and is sharply defined round its entire margin, and not at the two extremities only as in the present case.

These points of distinction cannot, however, be regarded as essential, but depend merely on the greater or less number of certain details of structure in the two types, so that the Diatom now in question has been indicated merely as a variety of the Grevillean frustule.

Campylodiscus anceps, n. sp. (Plate XVI. fig. 2.)

Valvis rotundis, vix curvatis ; e maximis ; triplici granulorum circulo bis opposite interrupto, a quo plurimæ (64) brevissimæ costulæ dimanant. Ad Zebu in mari Philippinarum.

This is the most singular and novel form of *Campylodiscus* which has to be recorded. It possesses a large and almost perfectly spherical disc, which is bounded by a triple granulated margin, from which there proceed centripetally numerous short costules. At two diametrically opposite points the marginal bands are interrupted, and at these points small embryonic costules occur. By means of oblique illumination it may be seen that the internal border of the rim is very finely striated, while the centre is devoid of ornamentation of any kind. It is also noteworthy that, contrary to what occurs in all other known species of the genus, the valve is almost smooth. It differs too from the other species by the absence of marginal wings ; but the non-existence of these is explained by the all but entire absence of a valval curvature.

This curious frustule might be regarded as presenting a transition to the genus *Coscinodiscus*, were it not for the diametrically opposite areolæ that occur upon its rim, where augmentation takes place, and in this respect it approaches nearer to the genus *Surirella*.

The diameter of this novel form is 170 μ.

Nitzschia, Hassall, W. Sm.

The genus *Nitzschia*, which was instituted by Hassall in 1845 in memory of one of the first observers who called the attention of naturalists to the great family of the Diatomaceæ, embraces the free compressed more or less bacillar frustules, whose linear keeled valves are provided with one or more longitudinal lines of puncta, the keel being often excentric. This last character is sufficient to distinguish it from the genus *Amphi-*

[1] This frustule is figured in Schmidt's Atlas, pl. xiv. figs 15. and 16.