

and irregularly striated, and the intercostal areas are punctated; while in the latter, in addition to the intercostal quadrately arranged punctations, the margin is denticulated and ornamented with a distinct corona of minute granules. As serving still more conclusively to determine the independence of the two organisms, it may be noted that while the symmetry of the radial costules of *Campylodiscus lepidus* indicate that augmentation must go on all round the periphery, in the present frustule somewhat larger intercostal areas are found at the diametrically opposite points, so that it is manifest that increase takes place in these regions.

***Campylodiscus oceanicus*, n. sp.** (Plate XI. fig. 4.)

Valvis flexuosis; costulis longiusculis, quorum apicibus cellulæ vel costulæ interponuntur; area centrali tereti subrotunda. In mari Pacifico.

This flexuous Diatom was collected in the Pacific Ocean. In it the radiate costules encircle a smooth and almost round area. At their summit these alternate with another order of costules, which seem to be elongated cellules. These are continued to the extremity of the submarginal wing, for which they form a support.

***Campylodiscus nitens*, n. sp.** (Plate XI. fig. 6.)

Forma parva, flexuosa; costulis subradiantibus grandiusculis aream hyalinam limitantibus; costulæ superius rotundo-complanatæ brevi spatio veluti granulo terminato distinctæ. Ad Zebu, ex insulis Philippinis.

This small discoid form was collected in the neighbourhood of Zebu in the Philippine Islands. It is distinguished by possessing a series of subradiate costules, whose outer extremities are somewhat rounded, and separated from one another by small interspaces that are bounded by small round granule-like bodies, which more centrally are replaced by simple lines. In the centre there is a smooth area of moderate size.

***Campylodiscus wallichianus*, Grev., var. *thaitiensis*, nov.** (Plate XVI. fig. 6.)

This magnificent frustule, of which several specimens were collected at the port of Tahiti, surpasses all the others in the elegance of its ornamentation. It consists of a large and slightly folded disc, the curve being reversed with respect to the two axes. Almost the entire surface is occupied by subradiating canaliculi, which terminate marginally in rows of distant erect spines. The canaliculi gradually disappear as they approach the centre, where a biconcave smooth area exists. Around the two rounded extremities of this area there are a number of more sharply defined punctations, the most external of which form a semicircle, a circumstance which serves to give greater prominence to the area in these regions.

On comparing this frustule with others previously known, it is found to be most closely