

well as its marginal alæ are striated, while each of the areas between the canaliculi is ornamented by a granule or ocellus.

Surirella multicostata, n. sp. (Plate X. fig. 6.)

Forma cuneata; area centrali hyalina lanceolato-cuneata, et lineolarum corona terminata; numerosis costulis vel canaliculis (58) radiantibus; margine et spatiis interstitialibus striatis. Ad Zebu.

This large cuneate valve, which was collected in the neighbourhood of Zebu, is provided with a smooth central lanceolato-cuneate area, which is circumscribed by irregular rows of small transversely disposed lines. It is distinguished by the possession of a corona of very numerous canaliculi or radiating costules. The marginal alæ, the interspaces between the canaliculi and the border, are delicately striated.

Surirella thaitiana, n. sp. (Plate XIX. fig. 3.)

Valva obovata, area lanceolata centrali transverse undulata, et lineolis terminata, canaliculis duplici ordine radiantibus ad verticem striatis; margine evidenter granulato. In portu Thaiti.

This elegant frustule was found in a rich collection made at a small depth at the port of Tahiti. It possesses an oval profile, and is provided with a central lanceolate area, which is circumscribed by a row of small lines, and also presents a few slight undulations. Its double row of medially constricted canaliculi are not separated by any interspaces, and the canaliculi exhibit at their extreme ends an incipient serrated striation. The margin is evidently granulated, and at its narrow extremity there are to be found a few canaliculi, which are hardly outlined, and which indicate the locality in which the increase of the Diatom occurs—a process which generally is bilateral and takes place at the poles of the valve.

Surirella grandiuscula, n. sp. (Plate X. fig. 5.)

Forma subovata, e majoribus; area hyalina centrali lineolarum ordine interrupto cincta; canaliculis inæqualibus per alas intercedentes et in alas marginales exeuntes distinctis; margine et alis striatis. In mari Pacifico.

This Diatom, which is of unusual size, was obtained in a sounding of great depth made in the centre of the Pacific Ocean. Its long axis measures not less than 196 μ ., and it possesses a slightly ovate form with a large smooth central area, which is circumscribed by an interrupted irregular row of short lines. There is a circlet of large canaliculi, which become a little shorter and narrower as they approach the inferior or narrow extremity, and are separated by interspaces which terminate in marginal alæ. These alæ and the large border are striated, while, at the same time, a small group of striæ mark the centre of each intercanalicular space.