being irregular and irregularly interrupted. The centre of the valve is for the most part smooth and bears only a small group of granules. Although it is not possible to determine the cause of the polygonal form it may be conjectured that it has resulted from the detachment of its outer border. The generic and specific determinations which have been given are to be looked upon as provisional—(1.) because the surface of the valve, like those of several of the species above enumerated, is very delicately striated, and (2.) because the outline here presented is probably abnormal.

Coscinodiscus megacoccus, n. sp. (Plate XVII. fig. 2.)

E minimis; cellulis vel areolis subhexagonalibus grandiusculis; margine cellulis subquadratis constituto. In Oceano Pacifico.

This very minute organism from the Pacific Ocean is singular in being covered by a limited number of large cellules and by possessing a distinct border of cellules or subquadrate granules. In these respects it presents affinities with the similarly ornamented Coscinodiscus subconcavus, Grun., which is figured in Schmidt's Atlas, plate lxii. fig. 7. It may, however, be readily distinguished from the latter—(1.) by its much smaller diameter, and (2.) by the fact that the cellules are notably larger than in any other known species.

Coscinodiscus (?) rudis, n. sp. (Plate XXII. fig. 4.)

Forma distinctis granulis æqualibus elevatioribus grandiusculis instructa, rudem superficiem efficientibus. Ad insulas Philippinas.

The generic determination of this disc, from the Philippine Islands, must be looked upon as provisional, as it may ultimately be found to belong to the genus *Pyxidicula*, Ehrenb., its valve being sufficiently convex to entitle us to express such a conviction. It is distinguished by its large and distinctly elevated papillæ or granules, which are hexagonal at the base, but orbicular at the summit. On account of these papillæ the external surface, when seen from the zonal aspect, is tuberculated in appearance—a circumstance which has suggested the specific name.

Coscinodiscus (?) venulosus, n. sp. (Plate XVII. fig. 1.)

Forma minima, centro lineolis sinuosis radiantibus distincto. Ad meridiem insulæ Kerguelen.

This small hyaline disc was observed in a collection made to the south of Kerguelen. It only shows a corona of tortuous and ill-defined lines around the centre, where a smooth irregularly bordered area occurs. Although I have provisionally placed this curious valve among the *Coscinodisci*, its generic determination is by no means free from doubt.