

Coscinodiscus (?) sp. (?) (Plate X. fig. 10.)

The form which is represented in this figure is up to the present time unique and must be looked upon as an organism of a very uncertain nature. The valve is oval, and provided with a wide hyaline border. The surface is covered with uniform, densely, but irregularly disposed granules, and the boundary between the hyaline and granulated surfaces is irregular in form. The specimen figured is the only one which has been observed, and occurs in a preparation made by Dr Rae, and kindly placed by him at my disposal. This being so, the exact systematic position which should be assigned to it must in the meantime remain a matter of doubt, though it may be provisionally assigned to the genus *Coscinodiscus*. It was collected in the neighbourhood of Zebu, one of the Philippine Islands.

Coscinodiscus diophthalmus, n. sp. (Plate XVI. fig. 4.)

Valvis cellulosis, duplicem præbentibus areolam ovalem depressam; cellulis rotundis grandiusculis ad centrum decrescentibus. In mari Pacifico.

Among the many interesting preparations made by Dr Rae and forwarded to me by Mr John Murray, were some labelled *Coscinodiscus excavatus*, which could not be reconciled with the Diatom so named by Greville. The latter has been defined in the following manner by Pritchard:¹—"Disc large, with hexagonal cellules decreasing in size towards the centre, which has three conspicuous depressions alternating with the same number of elevations." On the other hand, the valve now in question possesses *round* cellules, while, in place of the three alternating elevations and depressions, there exists two large depressed oval hyaline areas, which appear as perforations, and an equal number of slight elevations. Unless these structures can be compared with the two processes of the genus *Auliscus*, Ehrenb., they find no analogy among other known Diatoms. The depressions do not certainly show that they are closed by a siliceous plate, since in the interior and at a lower level no other cellulated wall could be discovered, yet the valve cannot be considered as an abnormal or teratological one, because it has been recognised in three collections which were made in widely separated localities in the Pacific Ocean. The true systematic position of this Diatom must accordingly for the present remain a matter of doubt. The specimens observed have been of different dimensions, and the large round cellules ornamenting the valves were observed to decrease slightly in size towards the centre.

Coscinodiscus diophthalmus, n. sp., var. *monophthalma*, nov. (Plate XVI. fig. 7.)

This variety is provided with a single perforation-like depression and a single elevation. The general sculpturing of the valve resembles that of the preceding species, and, like the latter, the present form was collected in the Pacific Ocean.

¹ Pritchard, *op. cit.*, p. 829 pl. viii. fig. 26; Schmidt's Atlas, pl. lxx. fig. 1.