Coscinodiscus obovatus, n. sp. (Plate VIII. fig. 4; Plate XVIII. fig. 7; and Plate XXII. fig. 9.)

Valvis obovatis; cellulis æqualibus ad marginem radiantibus, medio decussatis. In mari Pacifico.

The valves represented in the present figures all possess an oval outline. The cellules are arranged in rows which proceed from the periphery towards the centre, but around this point the ornamentation varies in character, although it often assumes a simple linear and decussate arrangement. In the form shown in Plate XVIII. fig. 7, which may be regarded as the typical form, the margin is provided with an undulating line. The frustules were all found in the Pacific Ocean.

Coscinodiscus curvatulus, Grun., var. nov. (Plate III. fig. 10.)

In this figure there is represented a very small disc which is richly covered with granules, disposed in seventeen radiating lines, passing from the periphery to the centre. Each line originates at a marginal indentation, and the granulation between the lines is arranged parallel to them in each intermediate area. This valve can only be regarded as a variety of *Coscinodiscus curvatulus*, Grun.,[1] in which the lines, instead of being straight, are slightly curved—a distinction which is of little importance.

Coscinodiscus reniformis, n. sp. (Plate XII. fig. 12.)

Frustulum reniforme; striis radiantibus; cellulis grandiusculis, ad centrum minuentibus.

This novel valve possesses a reniform outline, and is ornamented with radiating cellules which decrease in size towards the centre. That it is a normal and not a teratological form is shown by the circumstance that several specimens have been observed either entire or in fragments from different and widely separated localities.

Coscinodiscus lentiginosus, Janisch. (Plate V. fig. 4.)

Mediocris, punctulorum lineis radiantibus, rariusculis, interruptis. In mari Antarctico.

At Station 146, off Marion Island, lat. 46° 46′ S., long. 45° 31′ E., in a depth of 1375 fathoms, the valve here figured, along with many other discoidal forms, was obtained. The entire collection has already been reported on under No. 207 of the interesting series of Diatoms edited by Cleve and Möller, but I am not aware that the present species has been referred to by Janisch in any other publication. Although the naming of a species in a preparation is not regarded as equivalent to the publication of the form, yet the designation *lentiginosus* given by Janisch is so apposite that it has been retained here.

[1] A. Schmidt's Atlas, pl. lvii. fig. 33: "Die radialen Krümmungen haben in den beiden Schalen eine entgegengesetzte Richtung."