## Ethmodiscus obovatus, n. sp. (Plate XVII. fig. 5.)

Forma minima late obovata, nodulo grandiusculo umbilicali, raris punctulis circum sparsis, et margine distinctioribus granulis signato, instructa. Ad mare Arafura.

This type has some resemblance to the last, but its form is oval, and it exhibits a slight deviation in the regularity of its outline at one point. It possesses a large granule in its centre and its margin is also marked by a number of somewhat smaller though distinct granules. Between the marginal corona and the centre of the disc a small number of irregularly disposed rounded points occur.

## Ethmodiscus perichantinos, n. sp. (Plate XXII. fig. 3.)

Forma suborbicularis, vix conspicue striolata, irregulari punctulorum agmine umbilicali, raris punctulis ad marginem et variæ magnitudinis sparsa, et punctulorum corona spinulosa cincta. In mari Arafura.

This species, of which several specimens were obtained in the Arafura Sea, has a rounded and irregular outline, and exhibits a radiating striation which is very difficult to recognise. There is an irregular group of small granules at its centre, its margin is strewn with thinly scattered puncta, and its border is granulated and thorny.

The specific name of this form is derived from the condition of its border.

## Ethmodiscus diadema, n. sp. (Plate XVIII. fig. 1.)

Forma mediocris, convexiuscula, radianter striolata, margine variorum processuum corona insignita. In Antarctico, ad meridiem insulæ Heard.

This type, which was found in the icy Antarctic Sea to the south of Heard Island, possesses a disciform convex frustule. It has conspicuous radiating striæ and its margin is adorned by several (20) large granules or more salient points, which are disposed at somewhat irregular intervals.

The specific name has reference to the presence of salient marginal puncta.

The examination of several fragments of connecting zones belonging to the extremely large Diatoms already alluded to, revealed the existence of several species, of which the following are noteworthy:—

## Ethmodiscus gigas, n. sp. (Plate XIV. fig. 5.)

Forma rotunda, maxima; valvis convexis inæqualibus quarum una cum area umbilicali (?); lineolis radiantibus (?); cingulo cylindrico punctulato. Diametrum = 1633  $\mu$ . In Atlantico, ad insulas Capo Verde.

This is a very large form provided with valves which are unequal, one being more convex than the other. It possesses an umbilical areola which may be of varying size,