These rows, none of which reach the centre, are of different lengths. The central space bears a number of irregularly scattered granules, while the periphery is marked by minute strize and is adorned by a beautiful corona of distinct granules.

Ethmodiscus japonicus, n. sp. (Plate XXII. fig. 2.)

E maximis; valvis vix perspicue radianter striatis; margine finissime striolato, et brevium distinctiarum lineolarum corona decorato. Ad sinum Yedo, in mari Japonico.

A rich gathering of pelagic Diatoms made with surface nets in the Bay of Yedo contained this magnificent hyaline disc, which, in a dry preparation, measured 145 μ . The very delicate marginal hoop, under oblique illumination, reveals a very fine striation. The corona consists of beautiful small radiating lines, and the valve is covered by very delicate, almost invisible, radiating bands.

The specific name has been derived from the locality in which it was first recorded.

Ethmodiscus japonicus, n. sp., var. nov. (Plate XVI. fig. 1.)

We have here represented a form which resembles *Ethmodiscus japonicus*. It may be distinguished from the latter, however, by having the intervals between the short small lines which adorn the perimeter of the disc somewhat narrower and by being of smaller size.

Ethmodiscus coronatus, n. sp. (Plate XXII. fig. 7.)

Mediocris; valvis tenuissime striolatis, duplici alterno granulorum ordine marginali coronatis, et raris granulis sparsis. Ad mare Arafura.

This species is rather small but elegant. It possesses a discoidal surface which is delicately striated, and bears a few irregularly disposed round granules. There is also present a beautiful corona formed by two alternate rows of granules which are thinly scattered around the margin of the valve.

Ethmodiscus coronatus, n. sp., var. α and β . (Plate XII. figs. 7, 13.)

Two varietal forms of the preceding species are here figured. They differ from the typical frustrule in having a marginal corona which, instead of being regular and formed by two alternate lines, is irregular and of several rows.

Ethmodiscus humilis, n. sp. (Plate XVII. fig. 4.)

Forma minima discoidalis, granulo centrali et granulorum ordine circum signata. In mari Antarctico.

This species is from a depth of 325 fathoms. It occurred among mud in a sounding taken among the ice-masses of the Antarctic. Its form is that of a small disc which bears a single granule in the centre, and a marginal line of similar granules.

The simplicity of the ornamentation of this form has suggested its specific name.