This beautiful triangular frustule, from the neighbourhood of the coast of Japan, has slightly convex sides and rounded angles. The granules are disposed at right angles to each of the margins along regular lines, and so form a well-marked peripheral belt which circumscribes a central triangular space ornamented with irregularly disposed granules, very minute points, and short irregular wavy lines, but in the centre two coronæ of smaller granules occur. At the three rounded angles of the triangle the regular lateral granulation is replaced by many lines of small points, which are arranged in a fan-like manner. Although no folds are to be found in this species its fundamental Stictodiscoid character is indicated (1.) by the peculiar disposition of the granules along the sides; (2.) by the general character of the granulation, which recalls that of Stictodiscus anceps, n. sp.; (3.) by the presence of central coronæ; and (4.) by the general similarity of the granulation of the angles to that of the twelve salient points of Stictodiscus eulensteinii.

The specific name has reference to the existence of a double corona at the centre of the valve.

## Stictodiscus bicoronatus, n. sp., var. punctigera, nov. (Plate XIII. fig. 2.)

This is another triangular Diatom which recalls the general characteristics of the preceding, except that it possesses cuneate rounded extremities, punctiform granules, and a more regular double corona of small points. The marginal granules, though small, are arranged in well-defined lines, which are not sharply limited on the inner side. The granules occupying the subcentral area are irregularly and very sparsely disseminated. Inside of the double corona no granules occur. These characters, however, do not seem to be of sufficient importance to justify the establishment of a new species.

The name of this variety is intended to recall the elegant character of the valvular punctation.

## Stictodiscus elegans, n. sp. (Plate XIII. fig. 3.)

Forma triangularis lateribus subrectis; plicæ a lateribus radiantur, medio reticulatim dispositæ; granulis raris ordinate circum distributis, medio rarioribus et inordinatis; ad apices rotundatos punctulorum lineæ crebræ radiantur. In mari Japonico.

This beautiful triangular frustule has the marginal rows of granules separated by folds, which become reticulate in the centre. In the central area the granules are sparsely and irregularly disposed, while the three rounded extremities are occupied by radiating lines of small points. Each of the margins is ornamented by a band of oval granules, which are largest in the middle, and gradually become finer towards the extremities. These may indicate a kind of elevated marginal corona, such as is found in some species of *Triceratium*. The external limiting line of this frustule is very slightly convex on its outer side.