Stictodiscus trigonus, n. sp. (Plate XIII. fig. 1.)

Forma triangularis, apicibus obtuso-rotundatis, lateribus tumidulis; granuli medio irregulares et rariores, ad latera lineis per plicas separatis, ad apices punctuli densiores. In mari Japonico.

The slightly tumid sides, and obtuse, rounded angles of this form are noteworthy. The granules are few, and irregularly placed in the centre, but are more abundant and arranged in lines divided by folds at the sides, while they are smaller and still more numerous at the extremities. The gradually decreasing size of the granules from the centre towards the periphery is a well-marked characteristic of this Diatom.

Stictodiscus hexagonus, n. sp. (Plate XVII. fig. 17.)

Valvis hexagonis, granulatis; apicibus late rotundatis; margine granulorum ordine terminato; granulis grandiusculis circum subregularibus, medio nonnullis; superficies medio plicata. In Atlantico septentrionali.

The present curious hexagonal frustule has very rounded angles, and a line of small round granules at the extreme border. The convex surface is flattened at the margin, and is ornamented medially by large granules. These occur in sparsely disposed subregular lines at the periphery, but are almost entirely absent in the centre, where the surface is reticulate, the meshes of the network being very variable in size and irregular in form. At the angles a few closer lines of granules are to be observed. These are disposed in a fan-shaped manner, as in all the polygonal forms of the genus. An intra-marginal thin line, almost parallel throughout to the edges of the frustule, forms a well-marked boundary line between the peripheral and intermediate areas, on the latter of which a reticulation such as is found at the centre is not manifest.

Stictodiscus hexagonus, n. sp., var. nov. (Plate XVII. fig. 14.)

A variety of the last-mentioned type is here represented. It differs from the typical frustule in the smaller size of the disc and granules, in the relatively larger size of the central network, and in the total absence of those lines of small granules that constitute the margin of the valve of *Stictodiscus hexagonus*. Both the frustules were found in the South Atlantic.

Cestodiscus, Grev.

This genus was instituted by Greville in 1865 to include some very elegant discoidal frustules, which differed from *Eupodiscus* only in possessing numerous marginal processes instead of a few. It greatly resembles the genus *Aulacodiscus*, and might, indeed, be identified with it if the intra-marginal shortly tubular processes of the latter were not connected with the centre by means of a distinct furrow formed by a well-defined interval