Cestodiscus gemmifer, n. sp., var. nov. (Plate VII. fig. 7.)

The frustule here shown can only be regarded as a variety of Cestodiscus gemmifer, n. sp. It differs from the latter (1.) in the character of its granules, which are smaller and are sparsely and irregularly disposed in the centre, from which they radiate towards the circumference, leaving at first smooth alternating areas between the radii, but becoming crowded more peripherally, and finally diminishing, so as to give a striated appearance to the border; (2.) in the greater number—forty-eight—of its denticules; and (3.) in the narrower condition of the border, so that the denticules are placed nearer to the margin.

Cestodiscus gemmifer, n. sp., var. decrescens, nov. (Plate XII. fig. 11.)

This variety of the same typical Cestodiscus gemmifer may be distinguished from the latter in the following respects: (1.) The granules are large in the centre, and diminish towards the margin; and (2.) the periphery is ornamented with a quincuncially disposed granulation, while the outermost belt is very delicately striated.

Cestodiscus parmula, n. sp. (Plate VII. fig. 5.)

Valvis rotundis, granulatis; granuli potiores vel margaritæ e centro irregulari radiantes, quandoque spatiis intercedentibus, ad marginem confertæ et subito in strias exeuntes; ad zonam marginalem latam in plures circulos distinctam pauciores spinæ vel denticuli distribuuntur. Ad Oceanum Pacificum.

This frustule is especially distinguished by the extraordinary size of the round granules. The smooth umbilical area is absent, being replaced by one ornamented with a few large granules, and from this radiating granulated lines pass towards the periphery. Between these lines bare spaces may sometimes be observed, while secondary granulated lines become interpolated towards the peripheral ends of the former, and finally the granules become contiguous before passing abruptly into the condition of fine striæ. The convexity of the central part of the disc is moderate, and the margin—the inner part of which carries a considerable number of denticules—is broad and divided into several distinct concentric circles. It thus resembles one of the shields used in warfare by the ancient Romans, a circumstance which has suggested the specific name that has been adopted.

Cestodiscus (?) rapax, n. sp. (Plate XVIII. fig. 2.)

Forma rotunda, parva, circum convexa, medio concava; cellulis æqualibus, medio radiatim, in margine decussatim dispositis; pluribus (11) apicibus circum radiantibus, et ad instar ungularum assurgentibus.

This type differs greatly from all the previously mentioned Cestodisci, and its generic determination must for the present remain doubtful. Its form is discoid, its centre con-

¹ Parmula, a small round shield.