

argus, A.S., in fig. 12; and finally, *Stictodiscus morsianus*, A. S., in figs. 19 and 20. The forms marked figs. 21, 22, and 23 are given as doubtful, while those of figs. 13, 14, and 15 are interpreted as internal valves¹ of *Stictodiscus*—a determination which seems to rest on no other foundation than the presence of evanescent folds towards the centre, there being no trace of any such reticulate arrangement as occurs in *Stictodiscus*. It would seem rather that such discs belong to the genus *Cyclotella*, of which they would constitute a new species.

On plate lxxv. fig. 1, Schmidt has represented a superb polygonal *Stictodiscus* under the name of *Triceratium multiplex*, Janisch (?). It possesses a central corona, and the almost regular short lines of granules form a belt at the circumference, while the middle of the surface is covered with sparsely disposed granules of a similar kind. The very large valve, which has arrived at its complete development, scarcely preserves traces of the folded condition of its surface, but I do not hesitate to designate it *Stictodiscus multiplex*.

In fig. 2 of the same plate the organism represented as *Triceratium jeremianum*, A. S., is another subquadrate *Stictodiscus* with subradiating folds which alternate with granular lines, that subsequently become rare and are irregularly scattered in the middle. Many lines of small granules occur at the angles, and these point, as in other allied forms, to its progressive development. This form should accordingly be designated *Stictodiscus jeremianus*.

At figs. 6 and 7 Schmidt also shows two different forms of *Triceratium*, established by Greville, which, as already said, must be named *Stictodiscus eulensteinii*; while the *Triceratium harrisonianum*, Grev., shown at Plate lxxv. figs. 14 to 16 should be designated *Stictodiscus harrisonianus*.

On plate lxvi. of this Atlas several other forms which have been named *Triceratium* appear to me to be true *Stictodisci*, although the essential characters of the latter genus are in these less evident than in the above-mentioned cases.

In considering the new types belonging to the genus *Stictodiscus* which have been brought home by the Challenger I shall first refer to the discoidal forms, and then pass on to those which are polygonal.

I. DISCOIDAL FORMS OF STICTODISCUUS.

Stictodiscus anceps, n. sp. (Plate I. fig. 5.)

Granulis raris in lineas subregulares radiantes distributis; centrum punctulorum corona distinctum. Ad oras Japonicas.

¹ "Nach meiner festen Ueberzeugung *innere Schalen v. Stictodiscus*. Solche innere Schalen, welche namentlich bei *Asteromphalus* und *Asterolampra* vielfach vorkommen und irrthümlich als besondere Arten benannt sind, sind leicht daran zu erkennen, dass sie theils einen Stich ins Violette haben theils der feineren Sculptur ermangeln, überhaupt roher gestaltet sind. Grunow bestimmt die vorliegenden Figuren als Schalen von *Melosira clavigera*, Grunow."