

The specimen figured was obtained in a sounding made near the Azores in the Atlantic Ocean.

### Stictodiscus, Grev.

This genus was established by Greville in a communication read on 12th March 1861,<sup>1</sup> and he classed in it *Discoplea (?) rota*<sup>2</sup> and *Discoplea rotula*,<sup>3</sup> Ehrenberg, as well as *Actinoptychus dives*,<sup>4</sup> which, as already suggested by Ehrenberg, might be generically associated with *Cyclotella rota* and *Cyclotella rotula*. The words of Ehrenberg are (under his definition of *Discoplea (?) rota*): "Proxime ad *Actinoptychum divitem* in Græcia fossilem accedens forma, et cum ea forsan, et cum sequente (*Discoplea (?) rotula*) in peculiari genere reponenda."

To this genus Greville at this time ascribed six species, and later Kitton<sup>5</sup> made us acquainted with *Stictodiscus crozieri*. Grunow<sup>6</sup> added his *Stictodiscus angulatus* in the Typenplatten of Möller, while Cleve<sup>7</sup> announced his *Stictodiscus novaræ* in a paper communicated to the Royal Swedish Academy of Science on 15th September 1880.

The definition of the genus *Stictodiscus*, as given by Greville, ran as follows:—"Frustules simple, discoid, divided by radiating lines into numerous plicate compartments. Lines not reaching the centre. Compartments furnished with conspicuous transparent, pore-like points. (In the four typical species, large scattered puncta also occupy the blank central portion of the disc.)"

Among the materials collected by the Challenger Expedition a considerable number of specimens of *Stictodiscus* has been observed, but these were only found in a few localities, the most noteworthy of which are the Japanese coast and Zebu in the Philippine Islands. The examination of these specimens has convinced me that the structural peculiarities, and particularly the folded compartments, are somewhat variable and do not always afford sufficient ground for establishing new species. All the forms may be reduced to two principal sections, namely (1.) *radiate Stictodisci*, in which the discs possess compartments and the folds are simply radiating; and (2.) *radiato-areolate Stictodisci*, in which the discs have radial folds which proceed from the circumference, but soon bifurcate or are interrupted so as to bound numerous polygonal areas. It is to be noted, however, that this classification, though of use in facilitating the description of forms so similar to

<sup>1</sup> *Micr. Journ.*, n. s., vol. i. p. 39.

<sup>2</sup> *Monatsber. d. k. Akad. d. Wiss. Berlin*, 1844, p. 202; *Mikrogeol.*, pl. xxxv. A 22, fig. 6.

<sup>3</sup> Ehrenberg, *Mikrogeol.*, pl. xxxv. A 22, fig. 7.

<sup>4</sup> Ehrenberg, *Mikrogeol.*, pl. xix. fig. 12; Ralfs in Pritchard's *History of the Infusoria*, 4th ed., p. 840.

<sup>5</sup> *Micr. Journ.*, 1873, pl. xxxviii. fig. 2.

<sup>6</sup> In Schmidt's *Atlas* (explanation of plate lxxiv. figs. 26-30), a note is appended to Grunow's *Pseudostictodiscus angulatus* to the following effect: "Grunow bemerkt dazu, die beiden Schalen seien nicht ganz gleich, die flachere habe keine Rippen, und immer in der Mitte einen rudimentären Stachel, der in meinen Zeichnungen fehle; die Ecken etwas vorspringend, darum den Biddulphien sich nähernd."

<sup>7</sup> *Kongl. Svensk. Vetensk.-Akad. Handl.*, 1880, Bd. xviii. No. 5, p. 21, pl. v. fig. 66.