

or polygonal form, prevented him from recognising affinities between two groups of forms so distinct from one another, and although from the disposition of the granules, in lines radiating from the sides and sparsely disseminated in the centre, he thought of constituting a special group for *Triceratium harrisonianum* and *Triceratium margaritaceum*, Ralfs, he was unaware of the importance of the folded character of the former, which, taken in conjunction with the special distribution of the granules, should have induced him to class it with *Stictodiscus*.

Again, Greville<sup>1</sup> determined as *Triceratium inflatum*, a three-sided form furnished with lines or veins radiating from the margin to the middle of the radii, and possessing puncta or granules which were large and sparsely disposed in the central part, but smaller and more numerous on the circumference. These characters, however, are precisely those of the genus *Stictodiscus*, so that the organism should be named *Stictodiscus inflatus*.

The name *Triceratium lineolatum*, Grev.,<sup>2</sup> cannot, however, be corrected in the same manner, because though in this veins or folds occur on the plane of the valve at its margin, the valve is elsewhere covered throughout with equal, minute, radiating granules—a character which I have never met with in any of the different specific forms of *Stictodiscus*.

That, on the other hand, *Triceratium parallelum*, Grev.,<sup>3</sup> is a true *Stictodiscus* cannot be doubted. It possesses four or six angles, its centre is areolated by furrows or folds which are distributed in a retiform manner, and its border is furnished with granules disposed in radiating lines. It should therefore be named *Stictodiscus parallelus*.

To the same genus should also be ascribed *Triceratium quadratum*, Grev. (*loc. cit.*, fig. 19), because it shows short folds at the circumference, and the surface is covered with radiating lines of granules, which however are few, and scattered in the central space. It may also be observed that Greville reports having seen specimens with a sort of umbilicus, or, at least, a somewhat irregular circle of smaller cellules, around which the ordinary cellules are often more or less scattered before they pass into radiating lines—a circumstance which would seem to indicate that the frustule in question is a *coronated Stictodiscus*.

In the case of *Triceratium polygonium*, Grev.,<sup>4</sup> we have to deal with a true *Stictodiscus*. This beautiful Diatom, with its six straight sides and obtuse angles, not only possesses elegant lines of radiating granules except in the centre, which is slightly reticulate, but, as shown in the figure, as many depressed lines or folds as exist in the recognised forms of *Stictodiscus* occur at the margin. The name should accordingly be changed to *Stictodiscus polygonius*.

The *Triceratium quadricorne* of Greville<sup>5</sup> is also probably a *Stictodiscus*, as its surface

<sup>1</sup> *Micr. Journ.*, n. s., vol. iii. p. 232, pl. x. fig. 15.

<sup>2</sup> *Micr. Journ.*, n. s., vol. iii. p. 233, pl. x. fig. 16.

<sup>3</sup> *Micr. Journ.*, n. s., vol. v. p. 104, pl. ix. figs. 22 and 23.

<sup>4</sup> *Micr. Journ.*, n. s., vol. v. p. 105, pl. viii. fig. 14.

<sup>5</sup> *Micr. Journ.*, n. s., vol. v. p. 103, pl. ix. fig. 16.