Triceratium abyssale, n. sp. (Plate XIII. fig. 6.)

Forma orbiculato-triangularis, apicibus late rotundatis, in ocellum exeuntibus; lateribus convexis; valva punctulis æqualibus radianter signata. In mari Indico.

This form possesses large rounded extremities and convex sides, so that the frustule becomes suborbicular. The valve has equal radiating lines of punctations slightly converging at the obtuse apices, each of which terminates in a large ocellus. The specimen was obtained at a depth of 2050 fathoms.

Triceratium insutum, n. sp. (Plate XXV. fig. 7.)

E maximis; valvis novem-angulatis, areolatis; lateribus concavis; areolis hexagonalibus, grandiusculis, inæqualibus; valva exterius areolata, inferius arctissime et radianter striolata. In mari Philippinarum.

This species possesses nine angular points, and between each adjoining pair a concave margin. The surface is covered by very large subhexagonal areolæ, which gradually diminish in size from the centre towards the periphery. The valve exhibits fine radiating striæ, and the areolæ present at the bottom irregularly rounded spaces, which bear one or more distinct and irregularly disposed granules or points. It appears certain that these two kinds of ornamentation belong to two distinct strata of the diatomaceous cell wall, which may sometimes become detached from one another. I became convinced of this when Dr James Rae, R.N., drew my attention to a Triceratium in which only a part of the inner striated layer still adhered to the valve. A similar doubly laminated wall may be seen in Triceratium favus, Ehrenb., and in Triceratium grunowianum above referred to; but the nine-angled frustule now in question cannot be united with these, not only because of the little points in the centre of the areoles, but still more because of the absence of the raised terminal processes which are presented by the others.

In consequence of this bilamination of the frustular wall, it becomes necessary to exercise great caution in the establishment of new species of this genus.

Triceratium atlanticum, n. sp. (Plate XVII. fig. 3.)

Forma quadrato-globosa, cellulis grandiusculis a quinque majoribus mediis radiantibus, et leviter ad quatuor ocellos terminales convergentibus. In Oceano Atlantico ad insulas Azores.

This specimen possesses four very obtuse angles, between each of which the sides are convex, so that the resulting form is suborbicular. The cellules are of somewhat large size, and radiate from a small central rosette formed of five large cellules. Each of the angles presents an elliptical ocellus, and towards each of the four extremities the cellules become slightly convergent.