

On Plate XXVI. fig. 10, there may be seen *Biddulphia tuomeyi*, Bail.,¹ and on Plate XXX. fig. 6, a variety of this—*Biddulphia tuomeyi*, Bail., var. *pacifica*, nov., from the Pacific Ocean.

Biddulphia roperiana, Grev.,² is represented on Plate XXVI. fig. 4.

Triceratium, Ehrenb.

Soon after Ehrenberg established the genus *Triceratium* among the *anguliferous* Diatoms, frustules were found which exactly corresponded to its essential characters, but which had valves with four or five angles, and these frustules were admitted into the genus as exceptional forms—*Triceratium* being defined as possessing “valves rarely with four or five angles.”³ Later on, frustules with six, seven, and even twelve angles had to be enrolled, as, for example, the *Triceratium eulensteinii* of Grunow (see A. Schmidt, Atlas, Plate lxxv. fig. 6). Although this last species is probably a real *Stictodiscus*, it can hardly be doubted that, if Ehrenberg had foreseen the extension of his genus to embrace polyangulated frustules, he would have chosen the name *Polyceratium*. The following is the definition of the genus *Triceratium* as given by Pritchard:—“Frustules cellular, free, simple, in lateral view triangular (rarely with four or five angles).”

More than 200 species have been ascribed to this genus, about 150 being figured in the *Microscopical Journal* alone. It is to be remarked, however, that many of these so-called “species” have no real claim to be regarded as true specific types, and several forms which have been observed amongst the Challenger material have been relegated to polygonal types of *Stictodiscus*, although they might at one time have been placed in the present genus.

Triceratium pulvillus, n. sp. (Plate VI. fig. 8.)

Valvis quadratis, areolatis vel cellulatis; laterales lineæ late concavæ; apices acuto-rotundati; areolæ æquales, hexagonales; processu terminali nullo. Ad mare Philippinarum.

This quadratè frustule from the Philippine Sea possesses greatly hollowed-out sides and acute rounded extremities. The whole surface is occupied by equal areolæ or hexagonal cellules, there being no trace of any process on the extremities.

Triceratium thaitiense, n. sp. (Plate XIII. fig. 14.)

Hexagonum, lateribus concavis, apicibus rotundatis; valva punctulis rariusculis signata. In portu:Thaiti.

This hexagonal form was observed in a collection made with a tow-net, at a small depth in the port of Tahiti. It is provided with concave sides and rounded extremities, but

¹ = *Zygoceros tuomeyi*, Bail., *Amer. Journ.*, vol. xvi. pl. iii. figs. 3-9; Pritchard, *op. cit.*, p. 848, pl. vi. fig. 10.

² *Micr. Journ.*, vol. vii. pl. viii. figs. 11-13.

³ Pritchard, *op. cit.*, p. 853.