In this very striking frustule a marginal corona exists on one edge. This usually escapes notice, because the flat form of the Diatom prevents it from being recognised, save on the valval side. The form of the entire frustule is triangular, and the margins are convex, while each extremity terminates in an elongated subulate process. The areolæ are hexagonal, and remarkable in having small rounded granules at their angles. This circumstance cannot be considered fortuitous, and, in conjunction with the other characters of the frustule, must be regarded as adequate for the establishment of a new species.

Triceratium sarcophagus, n. sp. (Plate VI. fig. 3.)

Trigonum, lateribus convexiusculis, apicibus cornutis, asperis; valvis convexis, late areolatis vel cellulatis; areolis vel cellulis hexagonis. In mari Arafura.

The specific name of this form is applied from the peculiar appearance presented when seen from its zonal aspect. It is triangular, and possesses slightly convex sides and terminal horn-like processes. In its general aspect it shows some affinity to *Triceratium favus*, Ehrenb., but the areolæ are smaller in the latter, and the terminal processes are not rough, as they are in this frustule.

Triceratium favus, Ehrenb., var. *late-areolata*, nov. (Plate IX. fig. 3.)

This form only differs from *Triceratium favus*, Ehrenb., in having the areolæ one-third larger. It was obtained in the Sea of Japan.

Triceratium favus, Ehrenb., var. *pacifica*, nov. (Plate VI. fig. 1.)

The areolæ in this variety are still larger; the ratio of their size to that of the type-specimen being as 19 to 8. It possesses four concave sides, and a small horn-like process at each extremity. It was obtained in the Pacific Ocean.

Triceratium tumescens, n. sp. (Plate VI. fig. 9.)

Triangularis, lateribus convexis; apicibus cuneato-obtusis; processibus spheroidalibus; valvis areolatis; areolis hexagonalibus, inæqualibus. In mari Japonico.

This triangular form possesses very tumid sides, obtuse extremities and processes, and unequal hexagonal areolæ. It presents a superficial resemblance to *Triceratium fimbriatum*, Wall.,[1] but it may be readily distinguished from it by the character of its terminal processes, which resemble a compressed spheroid, instead of being elevated and conical. It was obtained in the Sea of Japan.

Triceratium armatum, Roper, var. δ, nov. (Plate VI. fig. 2.)

This elegant triangular form from the immediate neighbourhood of Japan is provided with straight sides, and its extremities are notably elongated, forming well-marked subu-

[1] *Micr. Journ.*, vol. vi. p. 247, pl. xii. figs. 4–9.