

and serving as means of union into zig-zag chains. In acid preparations the differentiation of the *Synedra* from species belonging to the genus *Thalassiothrix* is a matter of greater difficulty, but in general this may be done by remembering that the latter are distinguished by lateral rows of much raised thorn-like points so that each of the outer extremities terminates in two projecting apiculi.

*Synedra capitulata*, n. sp. (Plate XXV. fig. 13.)

Lineari-lanceolata, apicibus dilatatis, rotundatis, valvis medio lævibus, ad marginem ordine brevissimarum linearum circumdati. In mare Philippinarum.

This very elegant Diatom, which was obtained in a sounding made in the neighbourhood of the Philippine Islands, possesses a linear-lanceolate outline. Its extremities are dilated and rounded, and the valve is surrounded by thick short lines, whilst the remainder of the surface is smooth.

The specific name has reference to the capitate appearance of the extremities.

*Synedra philippinarum*, n. sp. (Plate XXV. fig. 15.)

Gracillima; valvis angustissime lanceolatis; apicibus linearibus obtusis; striis transversis continuis. In mari Philippinarum.

This very slender frustule, also from the sea in the vicinity of the Philippine Islands, presents a slightly arched appearance. The extremities are linear and obtuse, and the striæ are transverse and continuous. The fact that this species was represented by many specimens is opposed to the idea that it was originally a freshwater form which had been floated into the ocean, although it may be noted that most slender and crooked forms of the genus are from fresh water.

*Synedra fimbriata*, n. sp. (Plate XXV. fig. 14.)

Rhomboideo-lanceolata; apicibus rotundatis; striis transversis, ad marginem evidenti-  
oribus et vittam linearem constituentibus. Ad oras Philippinarum.

The valve in this type is sub-rhomboideo-lanceolate. The centre is convex, the convexity lessening towards the rounded extremities. The surface of the valve is ornamented with continuous transverse striæ, which become salient near the margins, and thus form a more prominent outline—a circumstance which has suggested its specific name.

*Synedra lanceolata*, n. sp. (Plate XXV. fig. 20.)

Parva, lanceolata; apicibus cuneato-acutis; striis perspicuis transversis, linea lævi medio interruptis; striæ 1400 in millimetro numerantur. Ad insulam Heard.

This frustule was collected near Heard Island in the Antarctic Ocean. It may be