

distinguished from a *Navicula* by the absence of the characteristic nodule of the latter, but its striæ are interrupted by a simple longitudinal line.¹ This feature, taken in conjunction with the cuneato-acute appearance of its extremities, constitutes a very distinct specific type.

Synedra lanceolata, n. sp., var. *thaitiensis*, nov. (Plate XXV. fig. 18.)

This frustule, which is similar to the preceding, was found in a gathering from the port of Tahiti. It may, however, be distinguished from *Synedra lanceolata* by its somewhat finer striæ, which are interrupted by a fine line, but it cannot be regarded as more than a variety of that type.

Synedra atlantica, n. sp. (Plate XXV. fig. 16.)

Lanceolata, elongata; apicibus rotundatis; striis evidentioribus transversis continuis, binis lineis submarginalibus unilateraliter sectis. In Oceano Atlantico meridionali.

This Diatom was obtained from a sounding made in the middle of the South Atlantic. Its valves are lanceolate, and are provided with rounded apices. The striation is well marked transversely directed and continuous, but is cut on one side by two submarginal lines, the signification of which is not manifest, although they must be regarded as characteristic of the species.

Thalassiothrix (Grun.), Cstr.

Among the surface collections made in the Bay of Yedo and in the waters around Hong-Kong there has been found in great abundance a Diatom of a bacillar form, which is either long and straight, or short and slightly curved in appearance, and which generally occurs in small groups, the frustules being arranged either in a radiating manner or forming a zig-zag series. The individual Diatoms are bordered by lines of very elevated granules, so that the outer extremities are crowned by two apiculi. Similar frustules have also been observed by me in surface collections made in the Adriatic off the coast of Dalmatia, and on the Italian coast at Rimini and Fano. In specimens procured at the last-named localities, and which had not been subjected to any incinerating process, the frustules were found in groups of not more than eight, and were simple or double and united in a radiating manner, the inferior extremities being sunk in a small transparent cushion of the form of an armilla, which is destroyed by the action of heat. Not unfrequently a few similar frustules were seen in zig-zag position, and it was of interest to observe that when a normal radiating group of simple frustules was undergoing fission, and so becoming double, the cushion broke by the separation of two contiguous frustules.

¹ The *double* central line has been figured by mistake.