seaweeds on a rock called St Clement's near the port of Ancona, and which was also abundantly represented in a collection of Diatoms from the aquarium of the Zoological Station at Naples. This organism might easily be confounded at first sight with Diatoma hyalinum, Kg.; but a careful examination of the former reveals the fact that the markings are more frequent on the zonal side, and that in the middle of one of the longitudinal lines an appearance resembling the letter C is presented. The frustules, as in all Tabellariae, are united in a zig-zag series, and it is exceptional to see one frustule by the side of another or lying isolated. They are connected with each other by means of small membranous cushions generally placed at the angles. In the longitudinal series the position of these points of union alternates from right to left, but in the lateral series they are on the same side in all. Hence in this genus, as in Cocconeis and Achnanthes, the valves are dissimilar to one another, the loculus of one being round.

The genus Cyclophora may accordingly be defined as follows:—Frustula tabulata, rectangula, in fascias conjuncta, rarius soluta; isthmo gelineo alterne concatenata; a fronte linearia vel parum inflata; valvis inæqualibus, quarum una loculo centrali instructa.

This genus, of which Cyclophora tenuis, Cstr., is the typical species, has been accepted by all micrographers. Prof. H. L. Smith has recognised it in a recent collection made in America, and Grunow, in the Synopsis des Diatomées de Belgique, has given on Plate xxxvi. figures of Cyclophora tenuis, Cstr., and of a variety—Cyclophora tenuis, Cstr., var. tropica—which was collected in the vicinity of Honduras, the Barbados, and the Isle of France.

In a note annexed to his table Grunow remarks that in addition to the longitudinal lines, the valves show very fine transverse lines and two terminal nodules; but it is to be noted that the longitudinal lines, at least, are only on the zonal side. If these two characteristics really exist the definition should be modified, and the existence of the two terminal nodules would render the systematic position of the genus very problematical. On the valves I have hitherto been able to distinguish nothing except the loculus and a slight central line on one of the valves.

## Cyclophora tenuis, Cstr., var. nov. (Plate XXV. fig. 3.)

We have here delineated two frustules from the Philippine Islands, which were united together and evidently belong to the same genus. These frustules resemble in their profile the figure of *Cyclophora tenuis* given by Grunow, but do not agree

<sup>&</sup>lt;sup>1</sup> Kütz., Bac., p. 47, pl. xvii. fig. 20; Smith, Synopsis of the British Diatomaceæ, vol. ii. p. 41, pl. xli. fig. 312; Pritchard, op. cit., p. 778, pl. iv. fig. 16.

<sup>&</sup>lt;sup>2</sup> The original note is as follows: "Les valves ont des lignes médianes et des nodules terminaux bien marqués. Ces derniers sont un peu éloignés des extrémités qui sont obtuses. Les striæ transversales dépassent le nombre de 30 en 0.01 mill. Les lignes longitudinales sont délicates et un peu ondulées."