

Diatoms were taken in the tow-nets, this was regarded as indicating the presence of coast water. A few species of Infusoria belonging to the above-mentioned genera are, however, constantly met with far from land attached to Diatoms, Radiolaria, Copepods, dead shells of *Spirula*, and other organisms.

Ceratium (*Peridinium*) *tripos* was very frequently observed in chains, from two to twenty-one being attached together, as shown in the annexed woodcut (fig. 334). Although

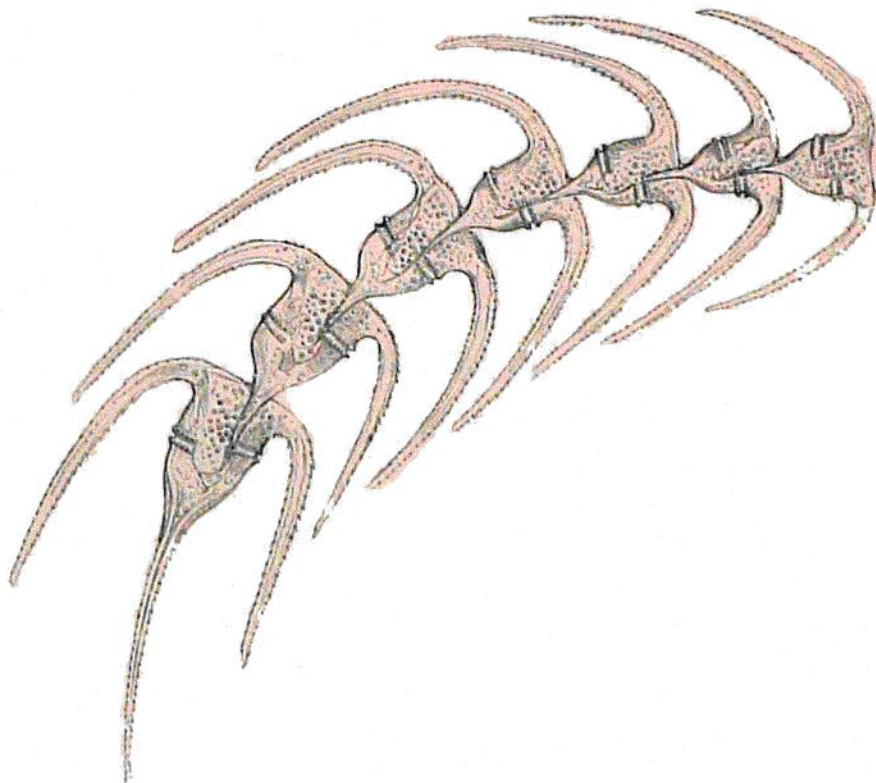


FIG. 334.—*Ceratium* (*Peridinium*) *tripos* in catenâ, after Murray.

Ceratium tripos occurs in great abundance in shore waters, occasionally filling the tow-nets with a yellow coloured slime, it was only observed *in catenâ* in the open ocean far from land. Neither flagellum nor cilia were observed in the chains of *Ceratium tripos*; a similar observation is recorded by Pouchet.¹ There appear to be good reasons for regarding these organisms as unicellular Algæ rather than Infusoria.²

¹ Sur l'évolution des Péridiniens, &c., *Comptes rendus*, t. xcv. p. 794, 1882; Contribution à l'histoire des Cilio-flagellés, *Journ. de l'anat. et phys.*, t. xix., No. 4, 1883.

² Mr. J. T. Cunningham, who has recently been making observations on these organisms at the Scottish Marine Station, writes:—"The possession of greatly developed horns, or arms, of a flattened triangular body, and of a large aperture in the case interrupting the equatorial groove, distinguishes the genus *Ceratium* from other Peridiniidæ. The genus was instituted by F. von Paula Schrank. *Ceratium tripos*, the most conspicuous species, was first described by O. F. Müller under the name *Cercaria tripos*. C. L. Nitsch first gave it its present name.

"Dr. R. S. Bergh* has recently published investigations on the nature and affinities of the Cilio-flagellata, and gives a complete discussion of the species of *Ceratium*. He treats the question from a morphological point of view, and believes

* Der Organismus der Cilioflagellaten eine phylogenetische Studie, *Morphol. Jahrb.*, Bd. vii. pp. 177-288, 1882.