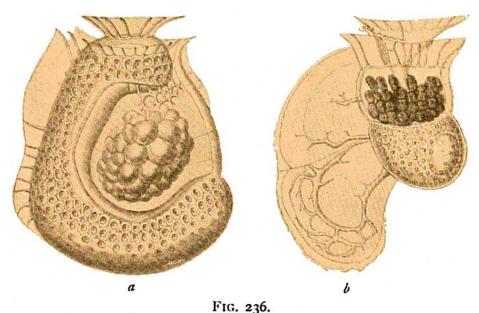
Besides these highly-organised forms, which I have given as instances, the peridineæ include many with a far more simple structure. There are, especially in the samples collected by



FIG. 235. ORNITHOCERCUS MAGNIFICUS. With brown flagellate cells in the space between the ring-borders $(\frac{4\pi}{2})$. (Schütt.)

means of the centrifuge, numerous series of small forms, both coloured and colourless, and often with very poorly developed cell-walls. These, too, have already got or will shortly be given names, although many of them are probably nothing more than development-We can stages of the larger forms. recognise the whole series by their characteristic ring-furrow, so that we are seldom left in doubt as to the classification of even the simplest types. Still a good deal remains to be done before we can claim a thorough acquaintance with their development-history and systematic arrangement.

Coccolithophoridæ. The third series of pelagic algæ consists of brown flagellates, the chief place amongst which is occupied by calcareous flagellates or coccolithophoridæ (see Fig. 239). Their cells are



a, Citharistes apsteini $(\frac{7.8.8}{1})$; b, Histioneis gubernans $(^{0.7.8}_{1})$, both with cells of brown flagellates in special chambers. (Schütt.)

generally nearly globular, with one or two cilia and one or two brown chromatophores, and they are protected by remarkable shields of lime which unite into a complete defensive covering, though sometimes with a big opening in front. The cell does not