wreath. *Calciosolenia murrayi* resembles, to some extent, the shape and structure of *Rhizosolenia*, as the shields of lime are not rounded like those of most other species, but rhomboid and spirally bent, so that between them they form a cylindrical tube, pointed at either end, and furnished at the extremities with one or two fine calcareous setæ.

Notwithstanding their small dimensions these microscopic calcareous algæ occupy a very important place in the economy of the sea, and their shields of lime, which may be met with in geological deposits dating from as far back as the Cambrian period, show that they have retained their shape practically unaltered through immeasurable ages. They are almost entirely oceanic, and mostly belong to the warmer seas. In coastal waters, where the salinity is lower, they are scarcer, but the commonest species, the little *Pontosphæra huxleyi*, has been found even in the Baltic, and there were such immense quantities of it in the inner parts of the Christiania fjord during the hot summer of 1911 (5 to 6 million cells per litre) that the calcareous cells with their strong refraction gave the sea quite a milky appearance.

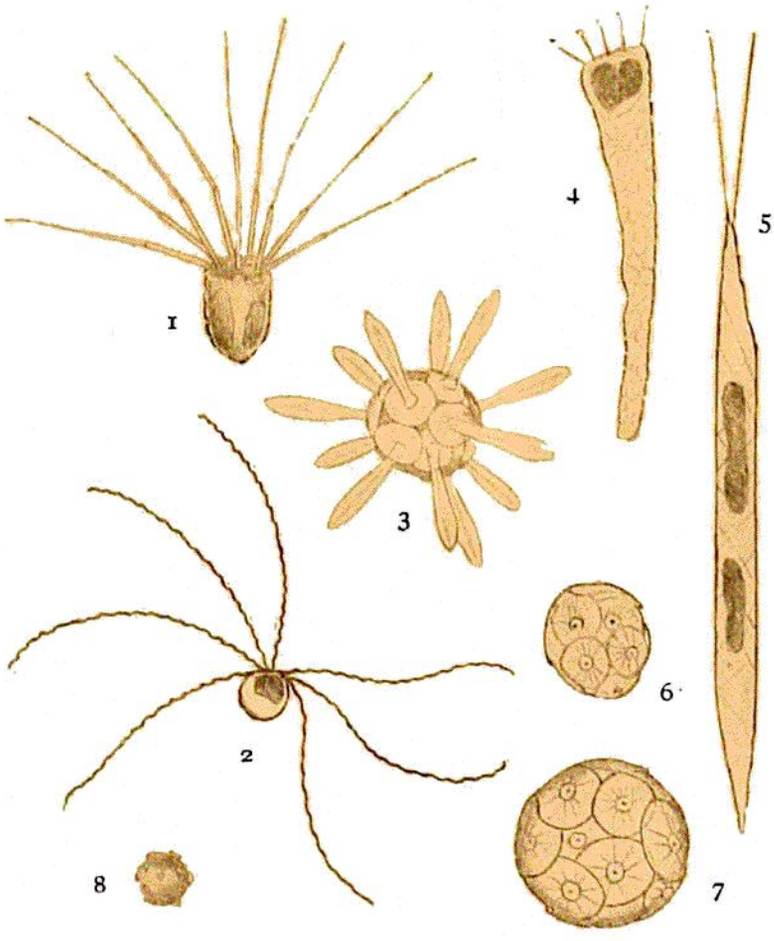


FIG. 239.—DIFFERENT TYPES OF COCCOLITHOPHORIDÆ. (1900).

1, *Michaelsarsia elegans*; 2, *Ophiaster formosus*; 3, *Rhabdosphæra claviger*; 4, *Syracosphæra prolongata*; 5, *Calciosolenia murrayi*; 6, 7, *Coccolithophora leptopora*; 8, *Pontosphæra huxleyi*.

**Naked flagellates.**

The naked flagellates in the sea are still only imperfectly known, though, no doubt, the part they play is quite a considerable one. In coastal waters they occur sometimes in such abundance that we have actually been able, even with our present defective methods, to discover and describe a number of species. In the open sea we are best acquainted with the passive and