

resting - cells. *Halosphæra* occurs over the whole Atlantic Ocean, and follows the Gulf Stream to its farthest ramifications in the north near the coasts of Norway and Spitzbergen. In the North Sea there are quantities, especially in the winter, and they form their zoospores in May, and thereby commence their new generation.

Just as *Halosphæra* differs from all the rest of the pelagic algæ in having a pure green colour, so, too, it has its own special mode of reproduction. The other forms, whose development-history we know, are reproduced by division, and this goes on incessantly, the rate of increase depending upon different conditions of existence. *Halosphæra* does not undergo division, but continues to grow for a comparatively lengthy period, and then finally transforms all its contents, as has just been stated, into a great number of zoospores.

In addition to *Halosphæra viridis* there are one or two similar species that have been described, but they do not call for any particular discussion.

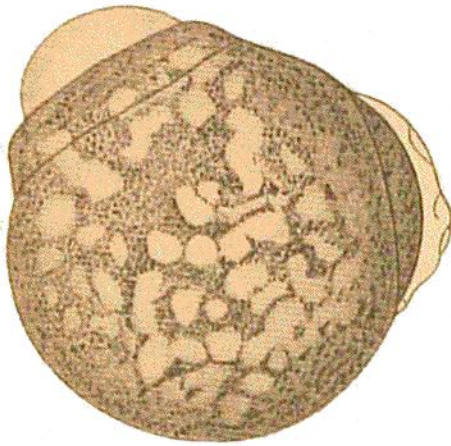


FIG. 242.—*HALOSPHERA VIRIDIS*,  
THROWING OFF ITS OLD CELL-  
WALL (7<sup>th</sup>).

In the foregoing I have sketched the most important types of pelagic algæ and their biology, but the picture would not be complete if I omitted to describe the drifting species of seaweed. These do not really belong

Floating seaweeds.

to the open sea. They grow along the coasts in the littoral zone, and their gas-filled bladders assist them in maintaining their position whatever be the state of the tide. The violence of the waves finally tears them loose, and then these same gas-bladders keep them for a long time floating on the surface. These patches of seaweed are to be met with in every coastal sea, the chief kinds along the coasts of North Europe being *Fucus vesiculosus* and *Ascophyllum nodosum*, and in the Mediterranean species of *Cystosira*. They may also drift right out into oceanic waters, and in the Sargasso Sea we have an immense eddy where the patches of weed often collect in enormous quantities. The prevailing weed is *Sargassum bacciferum*, but one frequently gets patches of *Ascophyllum nodosum* as well, the whole being derived from the coasts of Central America. The Sargasso weed is easily recognisable, owing to its