

Major Owen regards *Orbulina* as a distinct organism, nearly allied to *Globigerina*, but differing so far from it as to justify its separation into a special subgenus. He considers the small inner chamber of *Orbulina* to represent the smaller chamber of *Globigerina*, and the outer wall as the equivalent of the large outer chamber of *Globigerina*, developed in this form as an investing chamber. Count Pourtales, Max Schultze, and Krohn, on the other hand, believe—on account of the close resemblance in structure between the two shells, their constant association, and the undoubted fact that an object closely resembling a young *Globigerina* is often found within *Orbulina*—that the latter is simply a special reproductive chamber budded from the former, and capable of existing independently. I am rather inclined to the latter view, although I think much careful observation is still required to substantiate it; and some even of our own observations would seem to tell somewhat in the opposite direction. Although *Orbulina* and *Globigerina* are very usually associated, they are so in different proportions in different localities; and in the icy sea to the south of Kerguelen, although *Globigerina* was constantly taken in the surface-net, not a single *Orbulina* was detected. Like *Globigerina*, *Orbulina* is most fully developed and most abundant in the warmer seas.

Associated with these forms, and, like them, living on the surface—and dead, with their shells in various stages of decay, at the bottom—there are two very marked species or varieties of *Pulvinulina*, *P. Menardii* and *P. Micheliniana*. The general structure of *Pulvinulina* resembles that of *Globigerina*. The shell consists of a congeries of from five to eight chambers, arranged in an irregular spiral. As in *Globigerina*, the last chamber is the largest; the inner smaller chambers are usually filled with yellow sarcode; and, as in *Globigerina*, the last chamber is frequently nearly empty, a small irregular mass of sarcode only occupying a part of the cavity. The walls of the