

immense variety of forms, sometimes creeping at the bottom of the sea, sometimes swimming on the surface. Only very few live in fresh water (*Gromia*, *Actinosphærium*). Most of them possess solid calcareous or flinty shells of an extremely beautiful construction, which can be perfectly preserved in a fossil state. They have frequently accumulated in such huge numbers as to form mountain masses, although the single individuals are very small, and often scarcely visible, or completely invisible, to the naked eye. A very few attain the diameter of a few lines, or even as much as a couple of inches. The name which the class bears is given because thousands of exceedingly fine threads of protoplasm radiate from the entire surface of their naked slimy body; these rays are quasi-feet, or pseudopodia, which branch off like roots (whence the term *Rhizopoda*, signifying root-footed), unite like nets, and are observed continually to change form, as in the case of the simpler plasmic feet of the *Amœboidea*, or *Protoplasts*. These ever-changing little pseudo-feet serve both for locomotion and for taking food.

The class of the *Rhizopoda* is divided into three different legions, viz. the chamber-shells, or *Acyttaria*, the sun-animalcules, or *Heliozoa*, and the basket-shells, or *Radiolaria*. The *Chamber-shells* (*Acyttaria*) constitute the first and lowest of these three legions; for the whole of their soft body consists merely of simple mucous or slimy cell-matter, or protoplasm, which has not differentiated into cells. However, in spite of this most primitive nature of body, most of the *Acyttaria* secrete a solid shell composed of calcareous earth, which presents a great variety of exquisite forms. In the more ancient and more simple *Acyttaria* this shell is a simple chamber, bell-shaped, tubular, or like the shell of