

soft, transparent contractile feelers, called pseudopodia (*false-feet*). The shell is calcareous, and in the specimen before us, *Lign.* 50, has been removed by weak hydrochloric acid; the soft body of the animal is thus exposed, and is seen to extend to the innermost cell. Several minute infusoria, which it has swallowed, are shown lodged in some of the cells (*Lign.* 50, *a, a.*). The connecting tube, which occupies the place of the siphunculus of the *Nautilus*, is the intestinal canal. I have selected this figure, in preference to one of the perfect shell, to illustrate the nature of the remarkable fossil, *Lign.* 49, fig. 5, which is evidently either the soft body of a *Rotalia* preserved in silex, or a cast of the interior of the shell; whichever it may be, a more interesting example could not be found, to prove how entirely those animals differed in their internal organization from the *Nautilus*, which in their external aspect they so much resemble. The septa of a very minute *Nautilus* in flint, *Lign.* 49, fig. 4, form an excellent object for comparison. Fig. 5 is in the cabinet of Mr. Hamlin Lee; and I have a similar specimen, discovered by the Rev. J. B. Reade. I have *Rotalia* from Alabama (collected by Dr. Bailey), in which the body of the animal appears to be covered by papillæ, as in the recent *Nonionina*. The student must be prepared to meet with these *Polythalamia* under very different aspects, according to the position in which they happen to be presented. In a foreshortened view they resemble two