

by the aid of the microscope, through the transparent covering; and while yet retained within the body of the parent, other still minuter globules are developed within these, constituting a third generation of these animals. After a certain period, the young, which have thus been formed, escape by the bursting of the parent volvox, which, in consequence, perishes. Similar phenomena are presented by many of the Infusoria. In some of the Entozoa, likewise, as in the *Hydatid*, the young are developed within the parent; and this proceeds successively for an indefinite number of generations.* In most cases of the spontaneous evolution

* The mode in which infusory animalcules are produced and multiplied is involved in much obscurity. Many distinguished naturalists, adopting the views of Buffon, have regarded them as the product of an inherent power belonging to a certain class of material particles, which, in circumstances favourable to its operation, tends to form these minute organizations, and in this manner they explain how the same organic matter which had composed former living aggregates, on the dissolution of their union, reappears under new forms of life, and gives rise to the phenomenon of innumerable animalcules, starting into being, and commencing a new, but fleeting career of existence. Yet the analogy of every other department of the animal and vegetable kingdoms is directly opposed to the supposition that any living being can arise without its having been originally derived from an individual of the same species as itself, and of which it once formed a part. The difficulty which the hypothesis of the spontaneous production of infusory animalcules professes to remove, consists in our inability to trace the pre-existence of the germs in the fluid, where these animalcules are found to arise; and to follow the operations of nature in these regions of infinite minuteness. The discoveries of Ehrenberg relative to the organization of the *Rotifera* go far towards placing these diminutive beings more on a level, both in structure and in functions, with the larger animals, of whose history and economy we have a more familiar and certain knowledge, and in superseding the hypothesis above referred to, by showing that the bold assumption on which it rests, is not required for the explanation of the observed phenomena. In many of these animalcules, he has seen the ova excluded in the form of extremely minute globules, the 12,000th of an inch in diameter. When these had grown to the size of the 1700th of an inch, or seven times their original diameter, they were distinctly seen to excite currents, and to swallow food. The same diligent observer detected the young of the *Rotifer vulgaris*, perfectly formed, moving in the interior of the parent animalcule, and excluded in a living state, thus constituting them viviparous animals, as the former were