

atoms of organic bodies. During the greater part of the last century, infusory animalcules were the subject of frequent and laborious microscopical research, and gave rise to endless conjecture and speculation as to their origin, their vitality, and their functions in the economy of nature. Notwithstanding their minuteness, considerable differences of organization were perceived to exist among them: but many naturalists still clung to the idea that monads, the most diminutive of the tribe, and whose very presence can be detected only by the application of the highest magnifying powers, are homogeneous globules of living matter, without organization, but endowed with the single attribute of voluntary motion: and even this property was denied to them by some authors.

All these fanciful dreams have been dispelled by the important discoveries of Ehrenberg, who has recently found that even the *Monas termo* is possessed of internal cavities for the reception and the digestion of its food; and who has rendered it probable that their organization is equally complex with that of the larger species of infusoria, such as the *Rotifera*, in which he has succeeded in distinguishing traces of a muscular, a nervous, and even a vascular system.

Those animalcules, whose form can be at all distinguished, exhibit a great diversity of shapes, and variety of modes of progressive motion. Many, as the *Cyclidium*, have the appearance of a thin oval pellicle, smoothly gliding in all directions through the fluid: some, as the *Volvox*, are globular; others, as the *Cercaria*, are shaped like a pear, tapering at one end, and often terminating in a slender tail, so as to resemble a tadpole. In many, this tail is of great length; in some, as the *Furcocerca*, it is forked; in others, it takes spiral turns, like a corkscrew. The *Kerona* has processes like horns. The shape of the *Vibrio* is cylindrical, and more or less pointed at one or both ends, like an eel, or a serpent, which animals it also resembles in its undulatory mode of swimming.\* Some, as the *Gonium*, have an angular, others,

\* Animalcules referrible to this genus are met with in great numbers in blighted wheat, (Fig. 2, p. 58,) in sour paste, and in vinegar which has lost