

knowledge of their existence, and of the curious phenomena they present: yet even the best instruments afford us but little insight into their real organization and physical conditions. On this account it is extremely difficult to assign their true place in the scale of animals. By most systematic writers they have been regarded as occupying the very lowest rank in the series, and as exemplifying the simplest of all possible conditions to which animal life can be reduced. *Monads*, which are the smallest of visible animalcules, have been spoken of as constituting "the ultimate term of animality;" and some writers have even expressed doubts whether they really belong to the animal kingdom, and whether they should not rather be considered as the elementary molecules of organic beings, separated from each other by the effects of chemical decomposition, and retaining the power of spontaneous, but irregular and indeterminate motion. It was conceived that all material particles belong to the one or the other of two classes; the first, wholly inert, and insusceptible of being organized; the second, endowed with a principle of organic aptitude, or capability of uniting into living masses, and constituting, therefore, the essential elements of all organization. According to this view, all vegetables or animals in existence would be mere aggregations of infusory animalcules, which gradually accumulate by continual additions to their numbers, derived from organic matter in the food: so that the body of man himself would be nothing more than a vast congregation of monads!

This bold and fanciful hypothesis, devised by Buffon, and recommended by its seductive appearance of simplicity, as well as by the glowing style and brilliant imagination of its author, has had many zealous partisans. The new world, which was disclosed to the wondering eyes of naturalists by the microscope, abounding in objects and in phenomena of which no conception could have been formed previously to the invention of that instrument, was peculiarly calculated to excite curiosity, and to inspire the hope of its revealing the secret of the living principle in the arrangement of the