

indicating an indefinite progression of animal life in a descending scale of minuteness. We can, mathematically speaking, conceive one of these animals as perfect and complicated in its structure as an elephant or an eagle, but we do not find it so in nature. It appears, on the contrary, in these objects, as if we were, at a certain point of magnitude, reaching the boundaries of the animal world. We need not here consider the hypotheses and opinions to which these ambiguous objects have given rise; but, without any theory, they tend to show that the subordination of organic life is finite on the side of the little as well as of the great.

Some persons might, perhaps, imagine that a ground for believing the smallness of organized beings to be limited, might be found in what we know of the constitution of matter. If solids and fluids consist of particles of a definite, though exceeding smallness, which cannot further be divided or diminished, it is manifest that we have, in the smallness of these particles, a limit to the possible size of the vessels and organs of animals. The fluids which are secreted, and which circulate in the body of a mite, must needs consist of a vast number of particles, or they would not be fluids: and an animal might be so much smaller than a mite, that its tubes could not contain a sufficient collection of the atoms of matter, to carry on its functions. We should, therefore, of necessity reach a limit of minuteness in organic life, if we could demonstrate that matter is composed of such indivisible atoms. We shall not, however, build any thing on this argument; because, though the *atomic theory* is sometimes said to be proved, what is proved is, that chemical and other effects take place as if they were the aggregate of the effects of certain particles of elements, the *proportions* of which particles are fixed and definite; but that any limit can be assigned to the smallness of these particles, has never yet been made out. We prefer, therefore, to rest the proof of the