

should be obliged to have recourse to the action of supernatural forces; that is, to the interference of miracles in the natural course of things. It is only through miracles that these revolutions of the earth could have been brought about, and it is only through miracles that, after their cessation and at the commencement of each new period, a new animal and vegetable kingdom could have been created. But science has no room for miracles, for by miracles we understand an interference of supernatural forces in the natural course of development of matter.

Just as the great authority which Linnæus gained by his system of distinguishing and naming organic species led his successors to a complete ossification, as it were, of the dogmatic ideas of species and to a real abuse of the systematic distinction implied by it, so the great services which Cuvier had rendered to the knowledge and distinction of extinct species became the cause of a general adoption of his theory of revolutions and catastrophes, and of the false views of creation connected therewith. The consequence of this was that, during the first half of our century, most zoologists and botanists clung to the opinion that a series of independent periods in the organic history of the earth had existed; that each period was distinguished by distinct and peculiar kinds of animal and vegetable species, that these were annihilated at the termination of the period by a general revolution; and that, after the cessation of the latter, a new world of different species of animals and plants was created.

It is true some independent thinkers, above all the great physical philosopher, Lamarck, even at an early period, set forth a series of weighty reasons which refuted Cuvier's