

In the third and last place, nature must be regarded as *unconscious*. Throughout all the changes which have resulted in the evolution of man, the process has been purely automatic. No thought, no idea, no plan, no purpose has entered into the great cosmic movement. As the winds blindly obey the physical laws of the earth's especial character, due to its motions, its proximity to the sun, its orbital inclination, and its methodless land and water distribution; as the clouds gather, break, and pour their contents back upon the earth, and then vanish or go flying across the sky, impelled by wild, senseless, and reckless forces; as the cataract plunges and the volcano belches in obedience to stern physical impulses, to which no one thinks, except metaphorically, of attributing motive or intelligence—so all the great secular processes of nature, including the development of organic forms and of man, have been impelled by blind and mindless energies, guided by no intelligence or conscious power, either from within or from without.

The inherent motions of the ultimate atoms of primordial matter, as eternal, uncreatable, and indestructible as those atoms themselves, must be regarded as the all-sufficient cause of all the results we see, however complex and wonderful we may consider these results to be. But really there is no occasion for wonder. The first step in primordial aggregation is the only fact that need draw upon our imagination. Granted that material units tend to cohere into units of higher orders—a fact of common observation in all the established sciences—and the evolution of a man is no more remarkable than the evolution of a metal or a crystal. In the history of the universe there is no time-limit. A process once set up in a given direction may reach all the degrees that can be embraced in a finite series: it may be oversloughed at its inception by counter tendencies, it may continue for an unlimited period at a uniform rate, or it may go on increasing in an arithmetical or a geometrical progression for a vast but finite period, and eventually equilibrate itself. The fundamental principles of Evolution, as formulated by Spencer, require that all processes shall, in fact, reach a limit, and be followed by a reversal of the activities which they have manifested. But to finite beings, this great cycle, or the ascending series of any cosmical process, may as easily be so prolonged in time as to be practically infinite in duration, as to be reduced to the mere span which can be watched by the human eye. The process that has evolved the solar system, or the sidereal system of which it forms a part, has lasted no longer, relatively to absolute eternity of time, than has that which measures the birth, lifetime, and death of an infusorium as it takes place under the continuous gaze of the microscopist. Neither, if measured by this standard, is the degree of organization of a Newton greater than that of a vibrio. There are some who smile at the mention of such sweeping comparisons; but the human mind must learn to accustom itself to contemplate nature in its true relations and magnitude, and the human race can never rise to a just conception of nature, or of the reciprocal relations of man and nature, until the notion of infinitude, both in time and space as well as in power, has been definitely formed. It is narrow, finite, anthropomorphic conceptions of the uni-