

contain other creatures that appear to be exclusive of them, that our faith in the theory fails. The only theory of evolution which seems to meet this difficulty is that advanced by Mivart, Leconte, and Saporta, of "critical periods," or periods of rapid introduction of new species alternating with others of comparative inaction. This would much better accord with the apparently rapid introduction of many new forms of life over wide regions at the same period. It would also approach somewhat near, in its manner of stating the problem to be solved, to the theory of "creation by law" as held by the Duke of Argyll, or to what may be regarded as "mediate creation," proceeding in a regular and definite manner, but under laws and forces as yet very imperfectly known, throughout geological time.

It seems singular, in view of the facts of palæontology, that evolutionists of the Darwinian school are so wedded to the idea of one introduction only of each form of life, and its subsequent division by variation into different species, as it progressively spreads itself over the globe, or is subjected to different external conditions. It is evident that a little further and very natural extension of their hypothesis would enable them to get rid of many difficulties of time and space. For example, certain Millipedes and Batrachians are first known in the coal formation, and this not in one locality only, but in different and widely separated regions. If they took beginning in one place, and spread themselves gradually over the world, this must have required a vast lapse of time—more than we can suppose probable. But if, in the coal-formation age, a worm could anywhere change into a Millipede, or a fish into a Batrachian, why might this not have occurred in many places at once? Again, if the oldest known land snails occur in the coal formation, and we find no more specimens till a much later period, why is it necessary to suppose that these creatures existed in the intervening time, and that the later