

incomprehensible to us. The opponents of the Theory of Descent can in no way explain any single one of these series of phenomena or their deeper connection with one another. So long as they are unable to do this, *the Theory of Descent remains the one adequate biological theory.*

We should, on account of the grand proofs just enumerated, have to adopt Lamarck's Theory of Descent for the explanation of biological phenomena, even if we did not possess Darwin's Theory of Selection. The one is so completely and *directly proved* by the other, and established by mechanical causes, that there remains nothing to be desired. The laws of *Inheritance* and *Adaptation* are universally acknowledged *physiological* facts, the former traceable to *propagation*, the latter to the *nutrition* of organisms. On the other hand, the *struggle for existence* is a *biological* fact, which with mathematical necessity follows from the general disproportion between the average number of organic individuals and the numerical excess of their germs. But as Adaptation and Inheritance in the struggle for life are in continual interaction, it inevitably follows that *natural selection*, which everywhere influences and continually changes organic species, must, by making use of *divergence of character*, produce new species. Its influence is further especially favoured by the active and passive *migrations* of organisms, which go on everywhere. If we give these circumstances due consideration, the continual and gradual modification or transmutation of organic species will appear as a biological process, which must, according to causal law, of *necessity* follow from the actual nature of organisms and their mutual correlations.