

physical properties of plasmic matter, to their complicate molecular construction.

Among the phenomena of conservative transmission, we must now mention, as the fifth law, the *law of abridged or simplified transmission*. This law is very important in regard to embryology or ontogeny, that is, in regard to the history of the development of organic individuals. *Ontogeny*, or the history of the development of individuals, as I have already mentioned in the first chapter (p. 10), and as I shall subsequently explain more minutely, is nothing but a short and quick repetition of *Phylogeny* dependent on the laws of transmission and adaptation—that is, a repetition of the palæontological history of development of the whole organic tribe or phylum, to which the organism belongs. If, for example, we follow the individual development of a man, an ape, or any other higher mammal within the maternal body from the egg, we find that the foetus or embryo arising out of the egg passes through a series of very different forms, which on the whole agrees with, or at least runs parallel to, a series of forms which is presented to us by the historical chain of ancestors of the higher mammals. Among these ancestors we may mention certain fishes, amphibians, marsupials, etc. But the parallelism or agreement of these two series of development is never quite complete; on the contrary, in ontogeny there are always gaps and leaps which indicate the omission of certain stages belonging to the phylogeny. Fritz Müller, in his excellent work, “Für Darwin,”¹⁶ has clearly shown, in the case of the Crustacea, or crabs, that “the historical record preserved in the individual history of development is gradually obscured, in proportion as development takes a more and