

striking individual differences where they would not exist if the conditions of nutrition had not been altered. The many complicated conditions of nutrition are never absolutely identical in two individuals of a species.

Now, just as we see that the mutability or adaptability has a causal connection with the general relations of nutrition in animals and plants, so too we find the second fundamental phenomenon of life, with which we are here concerned, namely, the capability of *transmitting by inheritance*, to have a direct connection with the phenomenon of *propagation*. The second thing that a farmer or gardener does in artificial breeding, after he has selected, and has consequently availed himself of the mutability, is to endeavour to hold fast and develop the modified forms by Inheritance. He starts from the universal fact that children resemble their parents, that "the apple does not fall far from the tree." This phenomenon of Inheritance has hitherto been scientifically examined only to a very small extent, which may partly arise from the fact that the phenomenon is of such everyday occurrence. Every one considers it quite natural that every species should produce its like; that a horse should not suddenly produce a goose, or a goose a frog. We are accustomed to look upon these everyday occurrences of Inheritance as self-evident. But this phenomenon is not so simply self-evident as it appears at first sight, and in the examination of Inheritance the fact is very frequently overlooked that the different descendants, derived from one and the same parents, are in reality *never* quite identical, and also never absolutely like the parents, but are always slightly different. We cannot formulate the principle of Inheritance, as "Like produces like," but we