

mindful marshalling of the "evidences" which suggest the doctrine of descent he won the conviction of the biological world. He made the old idea of Darwinism a current intellectual coin. In so doing he was greatly aided by Spencer and Wallace, Hæckel and Huxley. (b) He applied the conception to various sets of facts, such as the expression of the emotions, and the descent of man, and showed what a powerful organon it was. Here again he was greatly aided by his contemporaries, and Spencer's work in this direction is even more important than Darwin's. (c) At the same time as Alfred Russel Wallace he promulgated the theory of natural selection—a generalization second in importance only to the general doctrine of evolution. It may be briefly stated as follows:—

Offspring very frequently differ from their parents in possessing some new feature or variation. In other words, there is something novel in the expression of the inheritance. The reasons for this are obscure, but as to the fact of the frequent occurrence of variations there is no doubt.

In the course of nature there is a manifold struggle for existence, due to a variety of causes, such as the tendency of population to outrun the means of subsistence, or the inconstancy of external conditions. As the result of this struggle, only a small percentage of the organisms born become adults or reproductive. In this process of elimination there will tend to be a weeding out of those with relatively less fit variations, and a survival of those with relatively more fit variations.

Moreover, the favourable congenital variation possessed by the survivors is handed on in inheritance to their offspring, and tends to be intensified when the new generation is bred from parents both possessing the happily advantageous character.

The natural elimination of the relatively less fit variants, or, what comes to the same thing, the natural selection of the relatively more fit variants, explains the transformation and adaptation of species, and the general progress from simpler to higher forms of life.

Darwin held that "natural selection has been the