action and by their becoming accustomed to changed conditions of existence, etc. Next, W. Herbert, in 1822, expressed the opinion that species of animals and plants are nothing but varieties which have become permanent. In like manner Grant, in Edinburgh, in 1826, declared that new species proceed from existing species by continued transformation. In 1841 Freke maintained that all organic beings must be descended from a single primitive type. In 1852 Herbert Spencer demonstrated minutely, and in a very clear and philosophic manner, the necessity of the Doctrine of Filiation, and established it more firmly in his excellent "Essays," which appeared in 1858, and in his "Principles of Biology," which was published at a later date. He has, at the same time, the great merit of having applied the theory of development to psychology, and of having shown that the emotional and intellectual faculties could only have been acquired by degrees and developed gradually. Lastly, we have to mention that in 1859 Huxley, the first of English zoologists, spoke of the Theory of Descent as the only hypothesis of creation reconcilable with scientific physiology. The same year produced the "Introduction to the Flora of Tasmania," in which Hooker, the celebrated English botanist, adopts the Theory of Descent, supporting it with important observations of his own.

All the naturalists and philosophers with whom we have become acquainted in this brief historical survey, as men adopting the Theory of Development, merely arrived at the conception that all the different species of animals and plants which at any time have lived, and still live, upon the earth, are the gradually changed and transformed descendants of one or some few original and very simple