of descent. He therefore proposed that the element of time should enter into the definition of a species, and that it should run thus: 'A species consists of individuals all resembling each other, and reproducing their like by generation, *so long as the surrounding conditions do not undergo changes sufficient to cause their habits, characters, and forms to vary.*' He came at last to the conclusion, that none of the animals and plants now existing were primordial creations, but were all derived from pre-existing forms, which, after they may have gone on for indefinite ages reproducing their like, had, at length, by the influence of alterations in climate and in the animate world, been made to vary gradually, and adapt themselves to new circumstances, some of them deviating, in the course of ages, so far from their original type as to have claims to be regarded as new species.

In support of these views, he referred to wild and cultivated plants, and to wild and domesticated animals, pointing out how their colour, form, structure, physiological attributes, and even instincts, were gradually modified by exposure to new soils and climates, new enemies, modes of subsistence, and kinds of food.

Nor did he omit to notice that the newly acquired peculiarities may be inherited by the offspring for an indefinite series of generations, whether they be brought about naturally,—as when a species, on the extreme verge of its geographical range, comes into competition with new antagonists, and is subjected to new physical conditions; or artificially,—as when, by the act of the breeder or horticulturist, peculiar varieties of form or disposition are selected.

But Lamarck taught not only that species had been constantly undergoing changes from one geological period to another, but that there also had been a progressive advance of the organic world from the earliest to the latest times, from beings of the simplest to those of more and more complex struc-