

structure and form, in the one case, and as to the ability for individuals belonging to any group of organized beings to intermarry and produce a fertile offspring, in the other. Both considerations are to be kept in view in determining what is to be regarded as a species, but especially the latter point. It is found, for instance, that the male mule, which is a cross between the horse and the ass, cannot give birth to another mule. Plants, in like manner, may be crossed, but the hybrids thus produced are infertile. This is one of the mysteries of the realm of nature. How organized beings came to be thus divided up into groups, and surrounded by a wall of separation, was the problem which Darwin set himself to solve. The task he placed before himself was this: to show that all the various forms of vegetable and animal life with which the globe is now peopled, or of which we find the remains preserved in a fossil state in the great earth museum around us, have come down from at least four or five progenitors, animals and plants in an equal number. But his speculation did not stop at that point and he adds, "Analogy would lead me one step further, namely, to the belief that all animals and plants have descended from some one prototype and that probably all the organic beings which have ever lived on this earth have descended from some one primordial form into which life was first breathed by the Creator."

The main propositions by which he would bring us to that conclusion may be summed up, as follows:

- (1) That observed and admitted variations spring up in the course of descent from a common progenitor.
- (2) That many of these variations tend to an improvement upon the parent stock, possessing some quality that is profitable or advantageous.
- (3) That by a continued selection of these improved specimens, as the progenitors of future stock, its powers may be increased illimitably.
- (4) That there is in nature a power continually and universally working out this selection and so fixing and