been evolved through natural selection acting through long periods of time from a few primitive and simple forms of life."

It will be observed that Mr. Darwin does not attach much weight to environment as a great agent or factor in the origin or modification of species. Other naturalists of eminence differ from Mr. Darwin in this respect, and maintain that the influence of surrounding physical conditions, as held by Lamarck, is quite as potent a factor as natural selection, in bringing about the changes which are ever taking place in the structure of organic life. It has often been observed that when certain kinds of animals change their habitat, organs that cease to be useful gradually disappear, while new organs or adaptations of already existing ones to changed habitat as surely come about. In the January number of the *Popular Science Monthly* there is published an article by A. S. Packard, whom most of you have heard about, on the effect of cave life on animals, in which he shows most conclusively that gradual loss of the organs of sight occurs to animals so situated, and that modification of other organs takes place, such as the lengthening of the antennæ or feelers, etc.,—that is, the sense of touch becomes greater as the necessities of the conditions demand its use. In such cases as these Dr. Packard thinks there is little room for the operation of natural selection, and that it plays a very subordinate part in the set of causes inducing the origin of these forms. I will not attempt to state the evidences which have been advanced by scientists to prove the relationship and unity of organic life as manifested by embryology, by rudimentary organs found in many animals for which now there is apparently no use, and by the fossil remains of animals now extinct but showing close affinity to those now living, but will only say in conclusion that the longer anatomical and geological investigations continue, the more surely does it appear that all animated beings began their life course in the form of a simple cell, and that by a long process of evolution they have come to be differentiated into the numberless forms in which we now find them, all tied together by an endless chain without even one missing link.