

called "Notes on Inorganic Evolution," speaks of the production and conservation of more stable species, as above described, as a gradual "selection of inert forms," and further, as "a survival of the most inert." But as inertness consists in stability, and in fitness to resist alike the chemical and the mechanical agencies which destroy other species, it is evident that this phraseology is but another statement of the formula of "the survival of the fittest."

The great principle of the change of the mineral matters which existed in former conditions of our planet, into other forms more stable under the altered conditions of later ages, is but an extension to the mineral kingdom of the laws already recognised in astronomical and biological development. As was written in 1884, "That a great law presided over the development of the crystalline rocks was from the first my conviction, but until the confusion which a belief in the miracles of metamorphism, metasomatism, and vulcanism had introduced into geology had been dispelled, the discovery of such a law was impossible." To this we may add that "the great successive groups of stratiform crystalline rocks mark necessary stages in the mineralogical evolution of the planet;" and that the principles which we have elsewhere laid down will help us "to recognise the existence and the necessity of an orderly lithological development in time." The reader who desires to follow the questions here raised will find them discussed in the author's "Mineral Physiology and Physiography," (Boston, 1886,) at much length, in chapters v., vi., vii. and viii., and further noticed in the Appendix, p. 688, where will be found references to previous pages here cited.