

The soft and delicate parts of animal and vegetable organisms rapidly decompose after death ; but the firmer and denser structures, such as the bones and teeth of the former, and the woody fibre of the latter, possess considerable durability, and under certain conditions will resist decay for many years, or even centuries. And when deeply imbedded in the earth, protected from atmospheric influences, and subjected to the conservative effects of various mineral solutions, the decomposition even of the most perishable tissues is often arrested, and their organization, transformed into stone, may be preserved for incalculable periods of time. Certain animal structures are even more permanent than those of vegetables, and the shells or cases of innumerable species of animalcules being composed of lime and silex or flint, are so indestructible, and occur in such inconceivable quantities, that the belief of some eminent naturalists of the last century, that every grain of flint, lime, and iron, may have been elaborated by the energies of vitality, can no longer be regarded as an extravagant hypothesis.

Some idea may be formed of the large proportion of the solid materials of our globe, which has unquestionably originated from this source, by the following list of strata, which are wholly, or in great part, composed of animal remains.