remain indefinite, both as regards the historical and geological scales of time, unless we can find tests independent of successive deposition, and of remains of human art, and yet comparable with natural monuments both in the ancient and modern, the geological and the historical, ages of the world.

These are the organic remains of plants and animals; and before employing their powerful and abundant testimony in solving the difficulties which attend a classification of lacustrine deposits, we must be satisfied on two points.

1. That faithful observation and correct inferences have established the fact that to every successive geological period belonged characteristic groups of marine plants and animals, which, in every region yet explored, may by comparison of selected genera and species, be discriminated from marine groups of earlier and later date, whose *remains are buried in that region.*

2. That through the whole series of strata, the organic productions of the land and fresh water, which are mixed with or interposed in beds among marine strata, present variations of form and structure similarly related to geological time.

On these points the reader who consults Vol. I. chap. v. of this work, and considers the drawings and notices of the organic remains of the several systems of strata, will probably need no farther proof, except what the following investigation may yield. There remains, then, only the difficulty of deciding how far the relics of plants, shells, fishes, reptiles, and quadrupeds, which occur in the lacustrine sediments of all ages, are *sufficiently numerous and characteristic* to justify positive inferences. This must be left to the judgment of geologists in each particular case, attention being always directed to the circumstances which accompany the inhumation of terrestrial and aquatic beings in the present condition of nature; for it is very certain that only a small proportion of land or fresh-water plants, mollus-