

ries than the geological into periods and epochas ; nor is the certainty less great, or the chance of transposition in any degree less slight in the one case than in the other. For, respecting at least the main geologic systems, their order of succession, and the organisms which they contain, the evidence is as positive and conclusive as it is regarding any piece of human history whatever. There are, however, certain geologic inferences very extensively adopted, which are founded rather on negative than on positive evidence ; and these must of necessity, be subject, during the course of discovery, to modification and change. And we find resting mainly on this department of the negative,—I should, perhaps, rather say of the assumptive,—two of the extremer schools of the present day,—that school which, founding on a certain progressive rise, in the course of the geologic periods, from lower to higher types, both animal and vegetable, would infer that what we term creation is in reality but development,—the low, in the lapse of unmeasured ages, having passed, it is alleged, into the high ; and another school, represented by at least one very masterly geologist, which teaches that there has been no upward progress in creation, but that the earth, in all the periods of its history represented by the geologic systems, must have existed under the same great conditions in which it now exists, and have produced, mingled with inferior forms, plants of the same superior classes, and, if we except man himself, animals of the same high divisions of the vertebrata.

What, however, are the positive facts with which, as geologists, we are called on to deal ? In the Tertiary Flora we find great abundance of true dicotyledonous trees,—in its Fauna, frequent forms of the mammals, which, in at least the later ages of the division, are of high types. We pass into the great Secondary division, and find trees as abundant in its Flora, in at least some of the middle deposits, as in any of the Tertiary