

place only on a small scale, he applies unlimitedly by simple multiplication, and infers thirty feet of strata in a day, and nine hundred in a month. But he takes no notice of the extremely slow rate of deposit, in those circumstances which constitute the general course of nature; and which is demonstrated by facts innumerable in estuaries, in deltas, or in fresh-water lakes.

He exhibits the crude impertinence of a few foreign sophists, whose day in this respect is past, representing the succession of organized beings as becoming gradually more complete and perfect, so as to indicate an improvement by practice in the Creator's skill; and he notices not the fact that all the great geologists repudiate such a notion with abhorrence, and give physical evidence of its falsehood.

With respect to this subject, it should not be forgotten that, on account of the perishable substance of their structure, many species of both animal and vegetable creatures must have failed to perpetuate any memorials of themselves, in all the periods of the earth's antiquity. The more profoundly anatomical investigations are carried on, the more abundantly is it evinced that, within the range of the animal remains presented even in the earliest fossiliferous strata, the remark will hold, as a general truth, which has been made by eminently qualified judges, in relation to the vegetable kingdom:—"The result of this investigation is well worthy of attention. It shows that, so far from 'a gradual perfection of organization having been going on from the remotest period, till the latest geological epoch,' [the words of an able adverse writer,] some of the *most perfect* forms of each of the three great classes of the vegetable kingdom were among the very first created; and that, either the more simple plants of each class did not appear till our own era, or that no trace of them at an earlier period has been preserved." Lindley and Hutton's *Fossil Flora*; vol. I. pref. p. xix.

It would appear almost incredible that Dr. Y. should say, "Fishes, zoophytes, ammonites, belemnites, terebratulæ, &c. occur in almost every portion of them [the secondary strata]; but those in the inferior strata have as much similarity to the living races as those in the superior." P. 9. An assertion full of extreme inaccuracies! Can he, for example, push out of sight a most remarkable circumstance in the caudal prolongation of the back-bone, which distinguishes all the fish of the Magnesian Limestone and the earlier formations, from the subsequent; and from almost all existing species? This, and many other striking peculiarities in the fossil ichthyology, were discovered by the distinguished investigator, M. Agassiz. See Lyell's *Elements*, p. 417.