

geology proper and of palæontology concur in the main to prove, that while the globe has been at repeated intervals, and indeed frequently, though after immensely long periods, altered and altered again, until it has assumed its present condition, so have also animals and plants, living upon its surface, been again and again extinguished and replaced by others, until those now living were called into existence with man at their head. The investigation is not in every case sufficiently complete to show everywhere a coincidence between this renovation of animals and plants and the great physical revolutions which have altered the general aspect of the globe, but it is already extensive enough to exhibit a frequent synchronism and correlation, and to warrant the expectation that it will, in the end, lead to a complete demonstration of their mutual dependence, not as cause and effect, but as steps in the same progressive development of a plan which embraces the physical as well as the organic world.

In order not to misapprehend the facts, and perhaps to fall back upon the idea, that these changes may be the cause of the differences observed between the fossils of different periods, it must be well understood that, while organized beings exhibit through all geological formations a regular order of succession, the character of which will be more fully illustrated hereafter, this succession has been from time to time violently interrupted by physical disturbances, without any of these altering in any way the progressive character of that succession of organized beings. Truly this shows that the important, the leading feature of this whole drama is the development of life,¹ and that the material world affords only the elements for its realization. The simultaneous disappearance of entire faunæ, and the following simultaneous appearance of other faunæ, show further that, as all these faunæ consist of the greatest variety of types,² in all formations, combined everywhere into natural associations of animals and plants, between which there have been definite relations at all times, their origin can at no time be owing to the limited influence of monotonous physical causes, ever acting in the same way. Here, again, the intervention of a Creator is displayed in the most striking manner, in every stage of the history of the world.

¹ DANA, (J. D.,) Address, q. n., p. 94, note 1.

² AGASSIZ, (L.,) Geol. Times, q. n., p. 25.