

tinual equilibrium — the last known term of a series whose law of variation is to be discovered.

Taking up this idea of the aspects of nature, at any particular epoch of the history of the earth (since the present laws of terrestrial and cosmical phenomena were appointed), being the last term of a long series — the complex effect of many anterior influences, we may proceed to inquire what monuments remain in nature of any previous aspects or conditions, and from these to infer the nature and amount of the agencies formerly concerned in producing and varying them. Having *ascertained* the series of *past* changes, we may venture to *speculate* on the *future* revolutions of the face of nature, to which the law of variation of the agencies concerned must necessarily lead.

Now, these are precisely the problems which it is the province of geology to consider. Gathering, from the labours of mineralogists, botanists, and zoologists, a knowledge of the existing species of inorganic and organic bodies; from geography, the account of the present configuration of the surface of the globe; from general physical researches, what is known of the constitution of the atmosphere, the ocean, and interior of the globe,—geology proceeds to inquire further, whether the mechanical, chemical, and vital phenomena, formerly exhibited on the earth, can be traced in their effects, so as to be put in comparison with those daily occurring; whether the mineral products of earlier eras of the world were identical in kind, and equal in rate of production, with the modern products of this description; whether the plants and animals of the ancient world were of the same structure as those which now adorn its surface; and whether the general physical conditions to which all these are correlated have always exerted the same kind and degree of influence as at present. In whatever way these questions are answered, they inevitably lead to speculation as to future revolutions which may vary the face of the globe; and thus geology, far from being the limited and narrow subject which