III

GEOPHYSICS

Let us, accordingly, now examine such phenomena as are likely to occur upon the surfaces of bodies which in the course of cosmic evolution have acquired a solid crust. In faithfully carrying out such a plan, the sciences of geology and meteorology must be brought under contribution, and climatic conditions must receive especial attention. Not, to be sure, that our globe in every respect can fairly be taken as meteorologically typical of all incrusted bodies. On the contrary, there are a large number of phenomena which are unquestionably of highest significance in favoring the existence of life on this particular planet which appear to be accidental and probably somewhat uncommon.1 Such are the

¹ These also have been favorite subjects in the works on natural theology. The Bridgewater Treatises of Whewell and of Prout are replete with illustrations, those of Whewell often moderately expounded, while Prout's are, as a rule, most curious and antiquated.

"Lastly, who will venture to assert that the distribution of sea and of land, as they now exist, though apparently so disproportionate, is not actually necessary as the world is at present constituted? What would be the result, for instance, if the Pacific or the Atlantic oceans were to be converted into continents? Would not the climates of the exist-