geological pursuits, and only require some expansion and illustration. The complex science of geology, which considers the adaptation of the earth to the support and welfare of living beings, consists of two very distinct portions, which require very different modes of investigation. The first department of geology relates to the inorganic part of our earth, as fitted for being the abode of plants and animals, and comprehends not merely the history of the mutations of the solid parts of the earth's crust, but also the no less important topic of meteorology or climate, and, in short, of every agent which may influence vital phenomena.

The fitness of the earth's crust, including its atmospheric ocean, for the support of organic beings, depends not on its quiescence, but on its incessant changes. The hard, undecomposed rock cannot afford food even to the moss or lichen; an atmosphere of absolute dryness, like that of the African Sahara, or of a temperature permanently below the freezing point, is scarcely compatible with the support of life. Consequently, rocks must be decomposed and comminuted to afford an appropriate soil: temperature and moisture must also be combined in due proportion, that physical agents may act beneficially on organised beings. These results are brought **about by the antagonism of various forces.**