

vindictive infliction, nor of the want of benevolence in its operation. And the remarkable proofs which modern geology has presented of vast accumulations of heated and melted matter beneath the earth's crust, do make such an agent as volcanoes essential to the preservation of the globe. In order to make out this position, I shall not contend that all the earth's interior, beneath fifty or one hundred miles, is in a state of fusion. For even the most able and decided of those geologists who object to such an inference, admit that oceans of melted matter do exist beneath the surface. And if so, how liable would vast accumulations of heat be, if there were no safety-valves through the crust, to rend asunder even a whole continent? Volcanoes are those safety-valves, and more than two hundred of them are scattered over the earth's surface, forming vent-holes into the heated interior. Most of them, indeed, have the valves loaded, and the effort of the confined gases and vapours to lift the load produces the terrific phenomena of earthquakes and volcanoes. But if no such passages into the interior existed, what could prevent the pent-up gases from accumulating till they had gained strength enough to rend a whole continent, and perhaps the whole globe, into fragments? Is it not, then, benevolence by which this agency prevents so dreadful a catastrophe, even by means that bring some incidental evils along with them?

Some able writers do, indeed, object to the idea that volcanoes are safety-valves to the globe, deriving their objections from certain facts respecting the position of volcanic craters in the Hawaiian Islands, if I do not misrecollect. Without going into the details of that case, for want of time and space, it seems to me that the facts respecting the connection between earthquakes and volcanoes, admitted by all, will justify such a view of the latter as is expressed by the term "safety-valves." For earthquakes are but the incipient effects of the volcanic force within the globe; and if these effects have been so terrible at the beginning, what must be the full exhibition of that force, if not able to find a passage for the struggling gases and lava through the strata above them? Who can say that it might not rend a continent asunder, and, if deep enough seated, even the whole globe?

The question will undoubtedly be asked by every reflecting mind, why infinite wisdom and benevolence could not have devised a plan for securing the good resulting from volcanoes