

The same eminent observer has applied the same consideration of extensive displacements of land and sea to explain the alternate bands of elevation and subsidence, which are inferred from his survey of modern coralligenous reefs and islands. (See Vol. I. p. 313.) In this generalisation it appears that the points of volcanic *eruption* all fall on *bands* of general elevation, where the uplifting force is at a maximum. Volcanic action might thus suggest itself as the local cause of this local maximum of elevation, did we not know that exactly the same relation of continental and mountain elevation obtains for areas of land and groups of mountains where no volcanic eruptions have happened. (Nevertheless, it is not to be denied, that the effect of volcanos is, generally, to augment the inequalities of level of the earth's surface.) If this view of Mr. Darwin be well established, it will go far to confirm the general probability of a refrigerating globe; for movements of such regularity and extent require a corresponding slowly and powerfully acting cause, such as a general change of temperature must be acknowledged to be. "A change of the form of the interior fluid surface of the globe," as Mr. Darwin very correctly expresses the general condition on which all these phenomena of simultaneous elevation and subsidence may be made to depend, is a result strictly deducible from the hypothesis of a refrigerating globe; and the interesting examples of gradual and prolonged elevation in Scandinavia, and perhaps of subsidence in Greenland, appear natural and obvious consequences of that doctrine, while more violent upward and downward movements in other parts of the globe are not at all opposed to it.

The elevation of mountains is, in the doctrine of refrigeration, a local, critical, and more or less sudden result of a general and gradually accumulated force; the contrary hypothesis supposes a vast multitude of minor movements, such as earthquakes, which now happen in volcanic regions; and that these successively contribute their effects in one direction. The *magnitude*