

action cannot fail to produce a powerful impression on the mind, and cause it to revert to those principles enunciated in the first lecture, which taught us that the early condition of the earth, and of the worlds around us, may have been one of vapour or fluidity (page 22). Here we see the most solid and durable materials of the globe reduced to a liquid state—seas of molten rocks, with their waves and billows, their surge and spray, giving birth to torrents and rivers, which, when cooled, become the hardest and most indestructible mineral masses on the surface of our planet !

The constant escape of aeriform fluids from volcanic vents ; the irresistible force which such elastic vapours exert when pent up and compressed—an effect with which our steam-boats and locomotive engines have made every one familiar ; the immense production of such gaseous elements which must be taking place in the interior of the globe, from the igneous action which we have seen is going on unremittingly ; afford a satisfactory explanation of the nature and cause of earthquakes, and of those elevatory movements by which the foundations of the deep are broken up, and raised into chains of mountains thousands of feet above the level of the sea. The volcanic vents are, in fact, the safety-valves from which the caloric and gaseous fluids from the interior of the earth escape into the atmosphere : when these channels become choked up, the confined gases occasion earthquakes, and elevations