

America the rapid *clearing* of the country has rendered the winters less severe and the summers less hot; in other words, the extreme *temperatures of January and July* have been observed from year to year to approach somewhat nearer to each other. Whether in this case, or in France, the *mean* temperature has been raised, seems by no means as yet decided; but there is no doubt that the climate has become, as Buffon would have said, "less excessive."

I have before shown, when treating of the excavation of new estuaries in Holland by inroads of the ocean, as also of the changes *on our own coasts, that although the conversion of sea into land by artificial labours may be great, yet it must always be in subordination to the power of the tides and currents, or to the great movements which alter the relative level of the land and sea (Chap. XXI.)*. If, in addition to the assistance obtained by parliamentary grants for defending Dunwich from the waves, all the resources of Europe had been directed to the same end, the existence of that port might perhaps have been prolonged for several centuries (p. 297.). But, in the mean time, the current would have continued to sweep away portions from the adjoining cliffs on each side, giving to the whole line of coast its present form, until at length the town, projecting as a narrow promontory, must have become exposed to the irresistible fury of the waves.

It is scarcely necessary to observe, that the control which man can obtain over the igneous agents is less even than that which he may exert over the aqueous. He cannot modify the upheaving or depressing force of earthquakes, or the periods or degree of violence of volcanic eruptions; and on these causes the inequalities of the earth's surface, and, consequently, the shape of the sea and land, appear mainly to depend. The utmost that man can hope to effect in this respect is occasionally to divert the course of a lava-stream, and to prevent the burning matter, for a season, from overwhelming a city, or some other of the proudest works of human industry.

If all the nations of the earth should attempt to quarry away the lava which flowed during one eruption from the Icelandic volcanos in 1783, and the two following years, and should attempt to consign it to the deepest abysses of the ocean, they might toil for thousands of years before their task was accomplished. Yet the matter borne down by the Ganges and Burrampooter in a single year, probably very much exceeds, in weight and volume, the mass of Icelandic lava produced by that great eruption (p. 272.). So insignificant is the aggregate force exerted by man, when contrasted with the ordinary operations of aqueous or igneous agents in the natural world.

No application, perhaps, of human skill and labour tends so greatly to vary the state of the habitable surface, as that employed in the drainage of lakes and marshes, since not only the *stations* of many animals and plants, but the general climate of a district, may thus be modified. It is also a kind of alteration to which it is difficult to find any thing analogous in the agency of inferior beings; for we ought always, before we decide that any part of the influence of man is