

the effect extend over whole countries, as in South America,—or along lines of coast, as in Sussex,—or be confined to a single island,—or even to the broken columns of a temple, as at Puzzuoli.* But while the land is rising in the more northern latitudes, it appears to be sinking on the shores of the Mediterranean. Breislak mentions † that numerous remains of buildings are to be seen in the Gulf of Baiæ; ten columns of granite, at the foot of Monte Nuovo, are nearly covered by the sea, as are the ruins of a palace built by Tiberius in the island of Caprea. Thus, while the level of the sea is becoming lower in the north, it is *rising* in the Mediterranean; and as all the parts of the ocean communicate, the sea cannot permanently rise in one part and sink in another, but must rise and fall equally to maintain its level; we must therefore consider it as demonstrated, that these changes have proceeded from the elevation and depression of the land. If we bear in mind the insignificance of the masses affected by these operations, as contrasted with the earth itself (see page 14), we may readily conceive that as fissures and inequalities are produced in the varnish of an artificial globe by heat and cold, in like manner the elevation of mountain chains, the rending of extensive tracts of country, and the subsidence of whole continents, may be occasioned by

* See Playfair's admirable comments on this geological problem.—*Illustrations*, p. 433.

† Playfair.