

description of it from the report of many witnesses, and from the documents of the municipality, of which I was allowed to make use. From the 13th to the 16th of January, it seemed to the inhabitants as if heavy clouds lay beneath their feet, from which issued alternate slow rolling sounds and short, quick claps of thunder. The noise abated as gradually as it had begun. It was limited to a small space, and was not heard in a basaltic district at the distance of a few miles. Almost all the inhabitants, in terror, left the city, in which large masses of silver ingots were stored ; but the most courageous, and those more accustomed to subterranean thunder, soon returned, in order to drive off the bands of robbers who had attempted to possess themselves of the treasures of the city. Neither on the surface of the earth, nor in mines 1600 feet in depth, was the slightest shock to be perceived. No similar noise had ever before been heard on the elevated tableland of Mexico, nor has this terrific phenomenon since occurred there. Thus clefts are opened or closed in the interior of the earth, by which waves of sound penetrate to us or are impeded in their propagation.

The activity of an igneous mountain, however terrific and picturesque the spectacle may be which it presents to our contemplation, is always limited to a very small space. It is far otherwise with earthquakes, which, although scarcely perceptible to the eye, nevertheless simultaneously propagate their waves to a distance of many thousand miles. The great earthquake which destroyed the city of Lisbon on the 1st of November, 1755, and whose effects were so admirably investigated by the distinguished philosopher Emmanuel Kant, was felt in the Alps, on the coast of Sweden, in the Antilles, Antigua, Barbadoes, and Martinique ; in the great Canadian Lakes, in Thuringia, in the flat country of Northern Germany, and in the small inland lakes on the shores of the Baltic.* Remote springs were interrupted in their flow, a phenomenon attending earthquakes which had been noticed among the ancients by Demetrius the Callatian. The hot springs of Töplitz dried up, and returned, inundating every thing around, and having their waters colored with iron ocher. In Cadiz

* [It has been computed that the shock of this earthquake pervaded an area of 700,000 miles, or the twelfth part of the circumference of the globe. This dreadful shock lasted only five minutes: it happened about nine o'clock in the morning of the Feast of All Saints, when almost the whole population was within the churches, owing to which circumstance no less than 30,000 persons perished by the fall of these edifices. See Daubeney *On Volcanoes*, p. 514-517.]—*Tr*