

CHAPTER VII.

DESCRIPTIONS OF CERTAIN SIGNAL CALAMITIES:—THE EARTHQUAKE OF LISBON (1755)
—THE EARTHQUAKE OF CALABRIA (1783)—THE EARTHQUAKE OF RIO-BAMBA
(1797)—THE EARTHQUAKE OF ECUADOR AND PERU (1868).

LISBON, 1755.



ON the 1st of November 1755, at fifteen minutes to ten A.M., the sky being clear and cloudless, the thermometer standing at $64^{\circ} 25'$ F., a report like that of thunder suddenly echoed under the city of Lisbon.

This awful roar was followed by three shocks.

The first was hardly perceptible ; but about thirty seconds afterwards, the ground experienced an oscillation which lasted from thirty to forty seconds, and proved to be of such violence that most of the houses of the city began to totter. The dust raised by their downfall was so dense as completely to obscure the sun. In about a couple of minutes this dust settled to some slight extent, and enough light was afforded to enable the startled inhabitants to look about them and reconnoitre the amount of injury effected, when a third shock convulsed everything anew. The houses which had previously escaped toppled headlong with a frightful roar ; the sky grew dark ; it was the image of chaos. The oscillations of the earth, which still continued to shake—the dim twilight of the day—the groans of the dying and the wounded—the frantic shrieks of alarm from those who had been saved, but every moment apprehended a terrible fate—and the howls of the terrified animals—increased the horror and confusion of the catastrophe. But in about ten or twelve minutes the movements of the soil ceased.

[It was then found that Lisbon had ceased to exist. The calamity had occurred on All Saints' Day, one of the great festivals of the Roman Church. Eager crowds had accordingly thronged to the sacred edifices, where lamps were blazing, and incense was ascending in fragrant clouds of odour, and robed priests and acolytes moving to and fro in solemn procession, while the sounds of noble music pealed over the heads of kneeling worshippers. And in the midst of their devotions, on priest and votary alike, had fallen the sudden doom ; swifter and more terrible even than the appalling fate which seventeen centuries before had smitten the bright cities in the shadow of Vesuvius. The incense no longer spread in perfumed waves upon the air ; the chant was lost in an awful hush and silence, followed almost immediately by a storm of cries and groans which all the organs of Lisbon had vainly attempted to drown. Out from aisle and nave streamed the startled crowds : they rushed into the