

During the earthquake at Lima, October the 28th, 1746, the sea, swelling suddenly to an elevation of eighty feet, dashed against the unfortunate city of Callao, and wholly engulfed it. A new irruption carried away the very soil on which Callao had once stood. All the ships in harbour were wrecked or foundered, and the raging waves were covered with masts, and spars, and timbers. The smaller craft were submerged where they rode at anchor ; the large ships broke their cables and drifted ashore. Four of these were transported by the rolling wave for a league and a half beyond the walls of the city. All these vessels perished, with their crews and cargoes. Of the whole population of Callao—who had gone forth in the morning to work or make merry, to love or hate, addressing themselves to the pleasures or duties of life without any presentiment of the coming doom—of all this population only fifteen persons succeeded in effecting their escape to Lima. When the inhabitants of the latter city had so far mastered their terror and recovered their composure that they could bethink themselves of the misfortunes of others, they found, under the pile of wreck which had once been well-equipped barques, nothing but putrefying corpses, or a few poor, mutilated wretches dying of hunger for want of strength to drag their crippled limbs to the abundant stores of food that lay almost within their reach.

During the earthquake which, in 1692, shook the coasts of Jamaica, the sea rose to a prodigious height. An English frigate was hurled by the waves over the houses and spires of the town of Port-Royal, and deposited, it is said, on one of the furthest buildings, whose roof it crushed in, remaining suspended between the walls.

DURATION AND DIRECTION OF THE EARTHQUAKE SHOCKS.

The duration of an earthquake is very variable. In some countries the spasms, so to speak, are protracted for weeks and even for whole months : at Peru the tremulous motion has continued for several consecutive years. In certain regions these convulsions are periodical. At Jamaica, for instance, a shock is expected once a year. In other regions they are felt for six months or a year consecutively ; and then centuries pass away without a renewal of the agitation. In some the phenomenon does not last above a day, an hour, perhaps a second. Nothing, then, varies more than the duration of an earthquake.*

* [It may here be noted that the greater number of earthquakes occur in the first, or winter, and the last, or autumnal, quarters of the year ; that is, when the earth is nearest to the sun. More earthquakes take place at new and full moon than at the quadratures, and more when she is in perigee, nearest the earth, than when she is in apogee, or at her greatest distance. The igneous action, in its effort to free itself, is evidently assisted by the comparative proximity of the moon and sun to the earth, and by the concurrence of the two luminaries in a line passing through our globe.]