

to have been made to determine this point, which is the more worthy of investigation, because it may throw some light on an opinion often promulgated of late years, that there is a tendency in the Chilian coast, after each upheaval, to sink gradually and return towards its former position.

Peru, 1746.—Peru was visited, on the 28th of October, 1746, by a tremendous earthquake. In the first twenty-four hours, two hundred shocks were experienced. The ocean twice retired and returned impetuously upon the land: Lima was destroyed, and part of the coast near Callao was converted into a bay: four other harbours, among which were Cavalla and Guanape, shared the same fate. There were twenty-three ships and vessels, great and small, in the harbour of Callao, of which nineteen were sunk; and the other four, among which was a frigate called St. Fermin, were carried by the force of the waves to a great distance up the country, and left on dry ground at a considerable height above the sea. The number of inhabitants in this city amounted to four thousand. Two hundred only escaped, twenty-two of whom were saved on a small fragment of the fort of Vera Cruz, which remained as the only memorial of the town after this dreadful inundation. Other portions of its site were completely covered with heaps of sand and gravel.

A volcano in Lucanas burst forth the same night, and such quantities of water descended from the cone that the whole country was overflowed; and in the mountain near Pataz, called Conversiones de Caxamarquilla, three other volcanos burst out, and frightful torrents of water swept down their sides.*

There are several records of prior convulsions in Peru, accompanied by similar inroads of the sea, one of which happened fifty-nine years before (in 1687), when the ocean, according to Ulloa, first retired and then returned in a mountainous wave, overwhelming Callao and its environs with the miserable inhabitants.† This same wave, according to Lionel Wafer, carried ships a league into the country, and drowned man and beast for fifty leagues along the shore.‡ Inundations of still earlier dates are carefully recorded by Ulloa, Wafer, Acosta, and various writers, who describe them as having expended their chief fury some on one part of the coast some on another.

But all authentic accounts cease when we ascend to the era of the conquest of Peru by the Spaniards. The ancient Peruvians, although far removed from barbarism, were without written annals, and therefore unable to preserve a distinct recollection of a long series of natural events. They had, however, according to Antonio de Herrera, who, in the beginning of the seventeenth century investigated their antiquities, a tradition, “that many years before the reign of the Incas, at a time when the country was very populous, there happened a great flood; the sea breaking out beyond its

* Ulloa's Voyage, vol. ii. book vii. chap. vii.

† Ibid. vol. ii. p. 82.

‡ Wafer, cited by Sir W. Parish, Geol. Soc. Proceedings, vol. ii. p. 215.