

CHAPTER XXX.

EARTHQUAKES — *continued.*

Earthquake of Java, 1772 — Truncation of a lofty cone — St. Domingo, 1770 — Lisbon, 1755 — Great area over which the shocks extended — Retreat of the sea — Proposed explanations — Conception Bay, 1750 — Permanent elevation — Peru, 1746 — Java, 1699 — Rivers obstructed by landslips — Subsidence in Sicily, 1693 — Moluccas, 1693 — Jamaica, 1692 — Large tracts engulfed — Portion of Port Royal sunk — Amount of change in the last 150 years — Elevation and subsidence of land in Bay of Baiæ — Evidence of the same afforded by the Temple of Serapis.

IN the preceding chapters we have considered a small part only of those earthquakes which have occurred during the last seventy years, of which accurate and authentic descriptions happen to have been recorded. In examining those of earlier date we find their number so great that allusion can be made to a few only respecting which information of peculiar geological interest has been obtained.

Java, 1772. — Truncation of a lofty cone. — In the year 1772, Papandayang, formerly one of the loftiest volcanos in the island of Java, was in eruption. Before all the inhabitants on the declivities of the mountain could save themselves by flight, the ground began to give way, and a great part of the volcano fell in and disappeared. It is estimated that an extent of ground of the mountain itself and its immediate environs, fifteen miles long and full six broad, was by this commotion swallowed up in the bowels of the earth. Forty villages were destroyed, some being engulfed and some covered by the substances thrown out on this occasion, and 2957 of the inhabitants perished. A proportionate number of cattle were also killed, and most of the plantations of cotton, indigo, and coffee in the adjacent districts were buried under the volcanic matter. This catastrophe appears to have resembled, although on a grander scale, that of the ancient Vesuvius in the year 79. The cone was reduced in height from nine thousand to about five thousand feet ; and, as vapours still escape from the crater on its summit, a new cone may one day rise out of the ruins of the ancient mountain, as the modern Vesuvius has risen from the remains of Somma.*

St. Domingo, 1770. — During a tremendous earthquake which destroyed a great part of St. Domingo, innumerable fissures were caused throughout the island, from which mephitic vapours emanated and produced an epidemic. *Hot springs* burst forth in many places

* Dr. Horsfield, *Batav. Trans.* vol. viii. p. 26. Dr. H. informs me that he has seen this truncated mountain ; and, though he did not ascend it, he has con-
versed with those who have examined it. Raffles's account (*History of Java*, vol. i.) is derived from Horsfield.