

twelfth century of our era. In proof of the drying up of the Runn, some towns far inland are still pointed out as having once been ancient ports. It has, moreover, been always said that ships were wrecked and engulfed by the great catastrophe; and in the jets of black muddy water thrown out of fissures in that region, in 1819, there were cast up numerous pieces of wrought iron and ship nails.* Cones of sand six or eight feet in height were at the same time thrown up on these lands.†

We must not conclude without alluding to a *moral* phenomenon connected with this tremendous catastrophe, which we regard as highly deserving the attention of geologists. It is stated by Sir A. Burnes, that "these wonderful events passed *unheeded* by the inhabitants of Cutch;" for the region convulsed, though once fertile, had for a long period been reduced to sterility by want of irrigation, so that the natives were indifferent as to its fate. Now it is to this profound apathy which all but highly civilized nations feel, in regard to physical events not having an immediate influence on their worldly fortunes, that we must ascribe the extraordinary dearth of historical information concerning changes of the earth's surface, which modern observations show to be by no means of rare occurrence in the ordinary course of nature.

To the east of the line of this earthquake lies Oojain (called Ozene in the *Periplus Maris Erythr.*). Ruins of an ancient city are there found, a mile north of the present, buried in the earth to the depth of from fifteen to sixteen feet, which inhumation is known to have been the consequence of a tremendous catastrophe in the time of the Rajah Vicramaditya.‡

Since the above account was written, a description has been published of more recent geographical changes in the district of Cutch, near the mouth of the Koree, or eastern branch of the Indus, which happened in June, 1845. A large area seems to have subsided, and the Sindree Lake had become a salt marsh.§

Island of Sumbawa, 1815.—In April, 1815, one of the most frightful eruptions recorded in history occurred in the province of Tomboro, in the island of Sumbawa, about 200 miles from the eastern extremity of Java. In the April of the year preceding the volcano had been observed in a state of considerable activity, ashes having fallen upon the decks of vessels which sailed past the coast.|| The eruption of 1815 began on the 5th of April, but was most violent on the 11th and 12th, and did not entirely cease till July. The sound of the explosions was heard in Sumatra, at the distance of 970 geographical miles in a direct line; and at Ternate, in an opposite direction, at the distance of 720 miles. Out of a population of 12,000, in the province of Tomboro, only twenty-six individuals survived. Violent

* Capt. Burne's Account.

† Captain Macmurdo's Memoir, Ed. Phil. Journ. vol. iv. p. 106.

‡ Von Hoff, vol. ii. p. 454.; for fur-

ther particulars, see book iii. chap. xiii.

§ Quart. Geol. Journ., vol. ii. p. 103.

|| MS. of J. Crawford, Esq.