then the capital, where more houses are said to have been left standing than in the whole island beside, three quarters of the buildings, together with the ground they stood on, sank down with their inhabitants entirely under water.

Subsidence in the harbour. — The large store-houses on the harbour side subsided, so as to be twenty-four, thirty-six, and forty-eight feet under water; yet many of them appear to have remained standing, for it is stated that, after the earthquake, the mast-heads of several ships wrecked in the harbour, together with the chimney-tops of houses, were just seen projecting above the waves. A tract of land round the town, about a thousand acres in extent, sank down in less than one minute, during the first shock, and the sea immediately rolled in. The Swan frigate, which was repairing in the wharf, was driven over the tops of many buildings, and then thrown upon one of the roofs, through which it broke. The breadth of one of the streets is said to have been doubled by the earthquake.

According to Sir H. De la Beche, the part of Port Royal described as having sunk was built upon newly formed land, consisting of sand, in which piles had been driven; and the *settlement* of this loose sand, charged with the weight of heavy houses, may, he suggests, have given rise to the subsidences alluded to.\*

There have undoubtedly been instances in Calabria and elsewhere of slides of land on which the houses have still remained standing; and it is possible that such may have been the case at Port Royal. The fact at least of submergence is unquestionable, for I was informed by the late Admiral Sir Charles Hamilton that he frequently saw the submerged houses of Port Royal in the year 1780, in that part of the harbour which lies between the town and the usual anchorage of men-of-war. Bryan Edwards also says, in his History of the West Indies, that in 1793 the ruins were visible in clear weather from the boats which sailed over them. † Lastly, Lieutenant B. Jeffery, R. N., tells me that, being engaged in a survey between the years 1824 and 1835, he repeatedly visited the site in question, where the depth of the water is from four to six fathoms, and, whenever there was but little wind, perceived distinct traces of houses. He saw these more clearly when he used the instrument called the "diver's eye," which is let down below the ripple of the wave.

At several thousand places in Jamaica the earth is related to have opened. On the north of the island, several plantations, with their inhabitants, were swallowed up, and a lake appeared in their place, covering above a thousand acres, which afterwards dried up, leaving nothing but sand and gravel, without the least sign that there had ever been a house or a tree there. Several tenements at Yallows were buried under land-slips; and one plantation was removed half a mile from its place, the crops continuing to grow upon it uninjured. Between Spanish Town and Sixteen-mile Walk, the high and per-

<sup>\*</sup> Manual of Geol., p. 133., second edition.

<sup>†</sup> Vol. i. p. 235. 8vo ed. 3 vols. 1801. ‡ Letter to the Author, May, 1838.