motions which may be attributed to subterranean fires. The following series of phenomena seems to indicate communications at enormous distances. On the 30th of January, 1811, a submarine volcano broke out near the island of St. Michael, one of the Azores. At a place where the sea was sixty fathoms deep, a rock made its appearance above the surface of the waters. The heaving-up of the softened crust of the globe appears to have preceded the eruption of flame at the crater, as had already been observed at the volcanos of Jorullo in Mexico, and on the appearance of the little island of Kameni, near Santorino. The new islet of the Azores was at first a mere shoal; but on the 15th of June, an eruption, which lasted six days, enlarged its extent, and carried it progressively to the height of fifty toises above the surface of the sea. This new land, of which captain Tillard took possession in the name of the British government, giving it the name of Sabrina Island, was nine hundred toises in diameter. It has again, it seems, been swallowed up by the ocean. This is the third time that submarine volcanos have presented this extraordinary spec-tacle near the island of St. Michael; and, as if the eruptions of these volcanos were subject to periodical recurrence, owing to a certain accumulation of elastic fluids, the island raised up has appeared at intervals of ninety-one or ninetytwo years.\*

At the time of the appearance of the new island of Sabrina, the smaller West India Islands, situated eight hundred leagues south-west of the Azores, experienced frequent earthquakes. More than two hundred shocks were felt from the month of May 1811, to April 1812, at St. Vincent; one of the three islands in which there are still active volcanos. The commotion was not circumscribed to the insular portion of eastern America; and from the 16th of December, 1811, till the year 1813, the earth was almost incessantly agitated in the valleys of the Mississippi,

\* Malte-Brun, Géographie Universelle. There is, however, some doubt respecting the eruption of 1628, to which some accounts assign the date of 1638. The rising always happened near the island of St. Michael, though not identically on the same spot. It is remarkable that the small island of 1720 reached the same elevation as the island of Sabrina in 1811.