

granite, the terminating zone of porphyry. The elevating power appears to have acted in the centre, as in the well-known case of Jorullo, in the neighborhood of the city of Mexico, where a level tract four square miles in extent rose, about the middle of the last century, into a high dome of more than double the height of Arthur's Seat.\* In the formation of our Scottish mountain, the gneiss and mica-slate of the district seem to have been upheaved, during the first period

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\* It is rarely that the geologist catches a hill in the act of forming, and hence the interest of this well-attested instance. From the period of the discovery of America to the middle of the last century, the plains of Jorullo had undergone no change of surface, and the seat of the present hill was covered by plantations of indigo and sugar-cane, when, in June, 1759, hollow sounds were heard, and a succession of earthquakes continued for sixty days, to the great consternation of the inhabitants. After the cessation of these, and in a period of tranquillity, on the 28th and 29th of September, a horrible subterranean noise was again heard, and a tract four square miles in extent rose up in the shape of a dome or bladder, to the height of sixteen hundred and seventy feet above the original level of the plain. The affrighted Indians fled to the mountains; and from thence looking down on the phenomenon, saw flames issuing from the earth for miles around the newly-elevated hill, and the softened surface rising and falling like that of an agitated sea, and opening into numerous rents and fissures. Two brooks which had watered the plantations precipitated themselves into the burning chasms. The scene of this singular event was visited by Humboldt about the beginning of the present century. At that period, the volcanic agencies had become comparatively quiescent; the hill, however, retained its original altitude; a number of smaller hills had sprung up around it; and the traveller found the waters of the engulfed rivulets escaping at a high temperature from caverns charged with sulphureous vapors and carbonic acid gas. There were inhabitants of the country living at the time who were more than twenty years older than the hill of Jorullo, and who had witnessed its rise.