

and which are sometimes festooned with stalactites of lava (p. 387).

Size of Lava-streams.—In some cases, lava escaping from craters or fissures comes to rest before reaching the base of the slopes, like the obsidian current which has congealed on the side of the little volcanic island of Vulcano.⁶⁹ In other instances, the molten rock not only reaches the plains but flows for many miles away from the point of eruption. Sartorius von Waltershausen computed the lava emitted by Etna in 1865 at 92 millions of cubic metres, that of 1852 at 420 millions, that of 1669 at 980 millions, and that of a prehistoric lava-stream near Randazzo at more than 1000 millions.⁷⁰ The most stupendous outpouring of lava on record was that which took place in Iceland in the year 1783. Successive streams issued from a fissure about 12 miles long, filling up river-gorges which were sometimes 600 feet deep and 200 feet broad, and advancing into the alluvial plains in lakes of molten rock 12 to 15 miles wide and 100 feet deep. Two currents of lava which, filling up the valley of the Skapta, escaped in nearly opposite directions, extended for 45 and 50 miles respectively, their usual thickness being 100 feet. Bischof estimated that the total amount of lava poured forth during this single eruption "surpassed in magnitude the bulk of Mont Blanc."⁷¹

Varying liquidity of Lava.—All lava, at the time of its expulsion, is in a molten condition. It usually

⁶⁹ Recent eruptions in this island have consisted entirely of ashes. A. Baltzer, *Zeitsch. Deutsch. Geol. Ges.* xxvi. (1875), p. 36. G. Mercalli, "Le Eruzioni dell' Isola Vulcano," *Rassegna Nazionale*, 1889; also a paper by same author in *Atti. Soc. Ital. Sci. Nat.*, vol. xxxi.

⁷⁰ "Der Aetna," ii. 303.

⁷¹ Lyell, "Principles," ii. p. 49. Helland, "Lakis Kratere," cited ante, p. 345.