

parent mountain long after the eruption which gave it birth has ceased. The lava of the eruption at Santorin in 1866-67 at first welled out tranquilly, but after a few days its outflow was accompanied by explosions and discharges of incandescent fragments, which increased until they had covered the lava dome with ejected scorix, and had opened a number of crateriform mouths on its summit."

There can be no doubt, as above remarked, that the condition of liquidity of the lava has in some measure determined the form of the eruptions. In one case, there are quiet outwellings of the more liquid lavas, as at Hawaii; in another, there are explosive discharges and cinder-cones, accompanying the more viscid lavas, as at most modern volcanoes. The former has been the condition favorable to the most colossal outpourings of molten rock, as we see in the basalt-plateaus of Britain, Faroe, Greenland, Idaho, and Oregon, the Ghauts, Abyssinia, etc. This subject is again referred to at p. 433.

Crystallization of Lava.—Pouring forth with a liquidity like that of molten iron, lava speedily assumes a more viscous condition and a slower motion. Obsidian and other vitreous rocks have consolidated as glass: yet that they are not always extremely fluid is indicated by the arrest of the obsidian stream half-way down the steep northern slope of Volcano. Even in such perfect natural glass as obsidian, microscopic crystallites and crystals are usually present, and in prodigious numbers (pp. 205, 282). In most lavas, devitrification has proceeded so far before the final stiffening, that the original glassy magma has passed into a more or less completely lithoid or crystalline mass.

" Fouqué, "Santorin," p. xv.