

depression, rather more than a mile in diameter, and from 300 to 400 feet deep, contains at the bottom a shallow lake of bitter saline water, depositing crystals of trona (native carbonate of soda), the *nitrum* of the ancients. Except to the north and northeast, it is encircled with a raised rim of irregularly piled blocks of basalt, identical with that of the beds through which the cavity has been opened. The rim never exceeds 100 feet, and is often not more than 40 or 50 feet in height, and cannot contain a thousandth part of the material which once filled the crater. No other evidence of volcanic discharge from this vent is to be seen. Some of the contents of the cavity may have been ejected in fine particles, which have subsequently been removed by denudation; but it seems more probable that the existence of the cavity is mainly due to subsidence after the original explosion.¹⁰³

In most cases, explosions are accompanied by the expulsion of so much solid material that a cone gathers round the point of emission. As the cone increases in height, by successive additions of ashes or lava to its surface, these volcanic sheets are laid down upon progressively steeper slopes. The inclination of beds of lava, which must have originally issued in a more or less liquid condition, offered formerly a difficulty to observers, and suggested the famous theory of Elevation-craters (*Erhebungskratere*) of L. von Buch,¹⁰³ Elie de Beaumont,¹⁰⁴ and other geologists.

¹⁰³ This cavity may possibly mark one of the vents from which the basalt floods issued. On explosion-craters and lakes, see Scrope's "Volcanoes." Lecoq, "Epoques geologiques de l'Auvergne," tome iv.; compare also Vogel-sang, "Vulcane der Eifel," and in Neues Jahrb. 1870, pp. 199, 326, 460. On Lonar Lake, see Malcolmson, Trans. Geol. Soc. 2d ser. v. p. 562. Medlicott and Blanford's "Geology of India," p. 379.

¹⁰³ Pogg. Ann. ix., x., xxvii. p. 169.

¹⁰⁴ Bull. Soc. Geol. France, iv. p. 357. Ann. des Mines, ix. and x.