on steep slopes than that tears or drops of wax should not do so.[106] Lyell, in successive editions of his works, and subsequently by an examination of the Canary Islands with Hartung, brought forward cogent arguments against the Elevation-crater theory.[107] A comparison of Fig. 53 with Fig. 54 will show at a glance the difference between

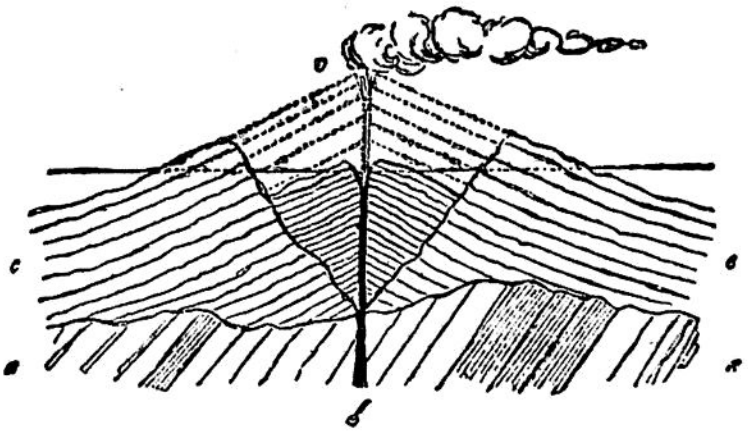

Fig. 54.—Diagram-section of a normal Volcano.

*x x*, Pre-volcanic platform, supposed here to consist of upraised stratified rocks, broken through by the funnel *f*, from which the cone of volcanic materials *c c* has been erupted. Inside the crater *v*, previously cleared by some great explosion, a minor cone may be formed during feebler phases of volcanic action, and this inner cone may increase in size until the original cone is built up again, as shown by the dotted lines.

this theory and the views of volcanic structure now universally accepted. The steep declivities on which lava can actually consolidate have been referred to on p. 386.

The conical form of a volcano is that naturally assumed by a self-supporting mass of coherent material. It varies slightly according to the nature of the materials of the cone, the progress of atmospheric denudation, the position of the crater, the direction in which materials are ejected, the force and direction of the wind during an eruption, the growth

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[106] Comptes Rendus, i. (1835), 460; xli. (1855), p. 919. Geol. Soc. France: Memoires, ii. p. 105, and Bull. xiv. 217. Societe Philom. Paris, Proc. Verb. 1843, p. 13.

[107] Phil. Trans, 1858, p. 703. See the remarks of Fouqué, "Santorin," pp. 400–422.