

rises with great expansive force, followed by the lava which solidifies there like iron in a mold. Where fissures are vertical or highly inclined the igneous rock takes the form of *dikes* or *veins*; where the intruded material has forced its way more or less in a horizontal direction between strata of tuff, beds of non-volcanic sediments, or

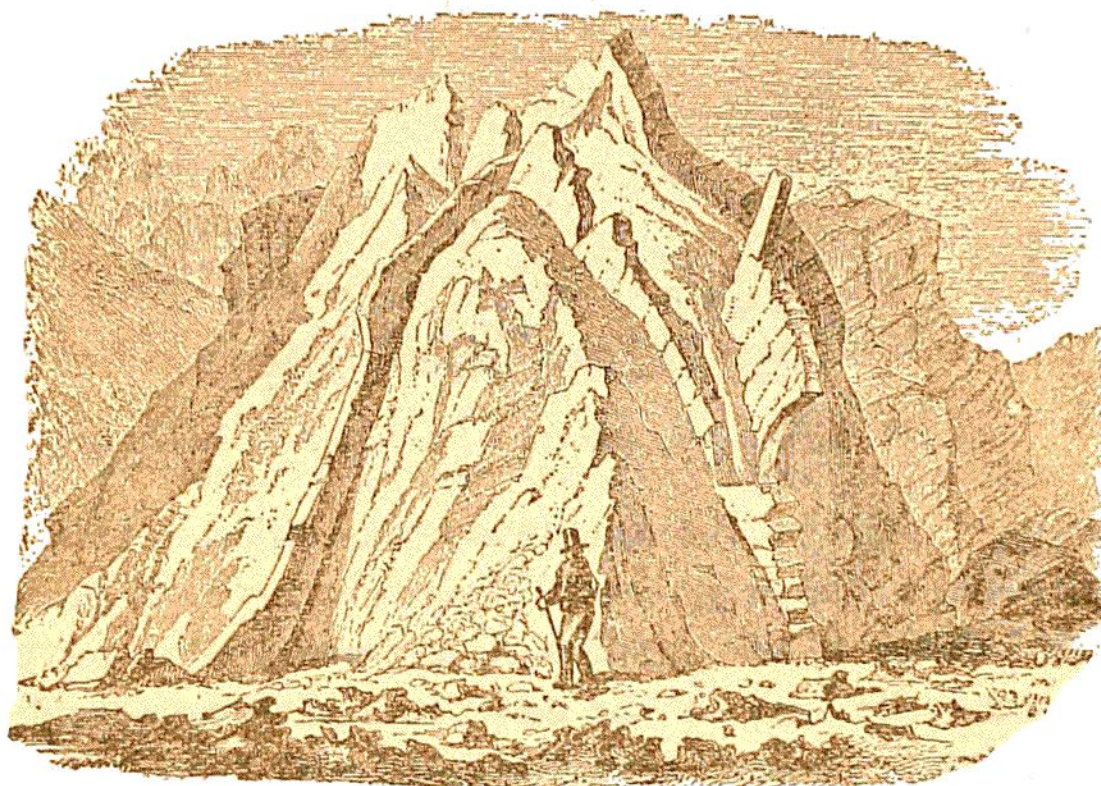


Fig. 42.—View of Lava-dikes, Valle del Bove, Etna (Abich).

flows of lava, it takes the form of *sheets* (*sills*) or *beds*. The cliffs of many an old crater show how marvellously they have been injected by such veins, dikes, or sheets of lava. Those of Somma, and the Valle del Bove on Etna (Fig. 42), which have long been known, project now from the softer tuffs like walls of masonry.<sup>46</sup> The crater cliffs of Santorin also present an abundant series of dikes. The permanent separation of the walls of fissures by the consolidation of the lava that rises in them as dikes must widen the dimen-

<sup>46</sup> S. von Waltershausen "Der Aetna," ii. p. 341.