brown or black cinder-like slags and irregular ragged cakes, bristling with jagged points ("aa" °), which, in their onward motion, grind and grate against each other with a harsh metallic sound, sometimes rising into rugged mounds or becoming seamed with rents and gashes, at the bottom of which the red-hot glowing lava may be seen (Fig. 46). In lavas possessing somewhat greater fluidity, the surface presents froth-like, curving lines, as in the scum of a slowly

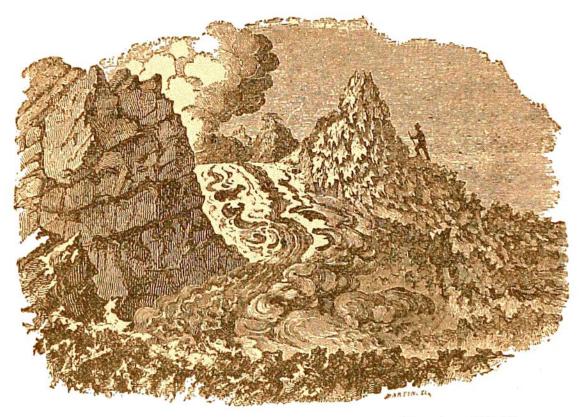


Fig. 46.-View of portion of a Lava-stream on Vesuvius (Abich).

flowing river, or is arranged in curious ropy folds, as the layers have successively flowed over each other and congealed ("pahoehoe" <sup>66</sup>). These, and many other fantastic coiled shapes were exhibited by the Vesuvian lava of 1858, and are admirably displayed by the peculiarly liquid glassy lavas of Kilauea.<sup>66</sup> Basalts possessing extreme liquidity

<sup>&</sup>lt;sup>66</sup> For descriptions of Vesuvian lava-streams, see the various memoirs and works cited, ante, p. 333. For those of Etna, Sartorius von Waltershausen and **A**. von Lasaulx, "Der Aetna," ii. p. 390. The rugged scoriaceous lava-surfaces are known in Hawaii as aa, the smooth coiled and ropy surfaces are there called