

sun. On the other hand, the smoke-clouds are formed either of aqueous and other vapour, or of finely comminuted scorïæ.*

Another phrase frequently met with in popular narratives is even less supported by fact ; namely, that "a stream of lava was seen to issue from the crater." It may be doubted whether this is ever the case. Let the reader consider what an enormous mass of molten matter would require to accumulate, before it could fill up and overflow so great a basin as is presented by most volcanic craters. The source of the lava-stream is almost invariably in the *flank* of the mountain, and at a considerable distance below the crater-lip.

At the risk of wearying our readers with quotations, we cannot refrain from extracting the following account of an ascent to the crater of Vesuvius from a London journal.† It is not only remarkably graphic, but its unexaggerated details are so clear and so precise, as to furnish the reader with all the requisite data for forming a correct conception of what a volcanic crater really is.

"The ascent was made during an eruption, when crash was following crash in a manner that was sufficiently terrible. All the suffocating steams and vapours were being driven to one side of the mountain by a strong wind, so that the adventurers were able to go up from the windward side, stand upon the lip of the crater, look down into the roaring abyss, and see what a volcanic eruption looked like on the spot. The spectacle will not disappoint the most extravagant expectations. It is full of awe and majesty.

"The suddenness with which you come upon it is quite startling. Going up you neither see nor hear anything. One moment you are clambering up the side of the cone amid profound silence ; the next moment, as your head rises above the crater-lip, you encounter a roar and a blaze which make you shrink back a little. This surprise is probably occasioned by the formation of the crater. It is a huge bowl, which comes up to quite a sharp lip, about half a mile in diameter and some hundred yards in depth. Towards the bottom of this bowl, on the opposite side to where we stood, was a great hole, from which all the projectiles of the eruption were shot ; the surface of the bowl being composed of lumps of lava, stones, and cinders, all of them smeared with sulphur, precisely like those upon which we were standing. As you mount the cone there is between you and the gulf an enormous wall, which dulls everything alike for eye and ear.

"Even while on the steep of the cone itself you might be unaware that the mountain was disturbed. But a single step seems almost enough to transfer you from

* [Sir C. Lyell, "Principles of Geology," bk. ii., c. 25.]

† ["Pall Mall Budget," vol. i., Nov. 21, 1868—Art. "At the Crater of Vesuvius."]