

feet wide, which crossed one another in every direction. From some of these arose the most disagreeable odours. All above two feet in depth showed a bottom of dull red heat, and it was these glaring heated fissures which had presented the extraordinary spectacle described above.

At one extremity of the oval area was a small cone, from which the eruptions apparently proceeded. On observing them accurately, it was found that they occurred at tolerably regular intervals, but the observers were compelled to maintain a respectful distance, out of the reach of the red-hot scoriæ-showers. During the ten to fifteen minutes, however, that elapsed between each explosion Mr. Babbage was able to make a rush towards the opening in this subsidiary crater, and to look down upon the liquid lava seething and boiling in its natural caldron.

"Presently," he says, "I observed a small bubble swelling up on the surface of the lava; it became gradually larger and larger, but did not burst. I had some vague suspicion that this indicated a coming eruption; but on looking at my watch, I was assured that only one minute had elapsed since the termination of the last. I therefore watched its progress: after a time the bubble slowly subsided without breaking.

"I now found the heat of the rock on which I was reposing and the radiation from the fluid lava almost insupportable; whilst the sulphurous effluvium painfully affected my lungs. On looking round, I fortunately observed a spot a few feet above me from which I could, in a standing position, get a better view of the lake, and perhaps suffer less inconvenience from its vapours. Having reached this spot, I continued to observe the slow formation and absorption of these vesicles of lava. One of them soon appeared. Another soon followed, at a different part of the fiery lake; but, like its predecessor, it disappeared as quietly.

"Another swelling now rose about half-way distant from the centre of the caldron, which enlarged much beyond its predecessor in point of size. It attained a diameter of about three feet, and then burst, but not with any explosion. The waves it propagated in the fiery fluid passed on to the sides, and were thence reflected back, just as would have happened in a lake of water of the same dimensions.

"This phenomenon re-appeared several times, some of the bubbles being considerably larger in size, and making proportionally greater disturbance in the liquid of this miniature crater. I would gladly have remained a longer time, but the excessive heat, the noxious vapours, and the warning of my chronometer, forbade it. I climbed back through the gap by which I descended, and rushed as fast as I could to a safe distance from the coming eruption.

"I was much exhausted by the heat, although I suffered still greater inconvenience from the vapours. From my observation of the eruptions before my descent into this little crater, I had estimated that I might safely allow myself six minutes, but not more than eight, if I descended into the crater immediately after an eruption.

"If my memory does not fail me, I passed about six minutes in examining it, and the next explosion occurred ten minutes after the former one. On my return to Naples, I found that a pair of thick boots I had worn on this expedition were entirely destroyed by the heat, and fell to pieces on my attempt to take them off."