

surface appeared freshly fractured and split, as if quite recently thrown out of the crater, and broken up on cooling.

At the summit is a sharp ridge, along which we walked : from it a slope of  $30^{\circ}$ , exactly the same as that of the outside of the cone, the natural slope no doubt of the lava fragments, leads down into the crater ; from the interior of which a dense smoke arose, hiding its form and extent entirely from view.

The wind was easterly (E. by N.), and drove the smoke away from the side on which we were. The smoke is excessively suffocating, and a sudden shift in the wind might be fatal to any one who was a short way down within the crater, or even at some places on its margin. It would not be easy to get down it in some places, at all events in a hurry. It was only possible to descend about 20 yards into the crater, and even then the vapours inhaled were very trying. Steam and acid vapours issued from cracks everywhere, decomposing the lava amongst which they passed. In most of the cracks were small quantities of sulphur.

From the margin of the crater overlooking the town of Ternate there was a magnificent view, embracing the island of Halmahera (Gilolo), which lay spread as a map beneath us, and the peak of Tidore, and many far-distant islands. Our guides rejoined us when we came down to the outer crater.

For the benefit of any future explorers of the Peak, which is very seldom ascended, I give the time required for the ascent. We left the house at 1,000 feet altitude at 4.30 A.M., reached the margin of the outer crater at 8.30 A.M., and the summit at 9.30 A.M. The temperature of the air at an altitude of 4,800 feet was  $71^{\circ}$  F. at 8.30 A.M. At the summit of the mountain it was  $68^{\circ}. 5$  F. at 9.30 A.M.