

## Excerpts from Mark Twain's Description of Kilauea

We got back to the schooner in good time, and then sailed down to Kau, where we disembarked and took final leave of the vessel. Next day we bought horses and bent our way over the summer-clad mountain-terraces, toward the great volcano of Kilauea (Ke-low-way-ah). We made nearly a two days' journey of it, but that was on account of laziness. Toward sunset on the second day, we reached an elevation of some four thousand feet above sea level, and as we picked our careful way through billowy wastes of lava long generations ago stricken dead and cold in the climax of its tossing fury, we began to come upon signs of the near presence of the volcano--signs in the nature of ragged fissures that discharged jets of sulphurous vapor into the air, hot from the molten ocean down in the bowels of the mountain. Shortly the crater came into view. I have seen Vesuvius since, but it was a mere toy, a child's volcano, a soup-kettle, compared to this. Mount Vesuvius is a shapely cone thirty six hundred feet high; its crater an inverted cone only three hundred feet deep, and not more than a thousand feet in diameter, if as much as that; its rims meagre, modest, and docile. Bur here was a vast, perpendicular, walled cellar, nine hundred feet deep in some places, thirteen hundred in others, level-floored, and ten miles in circumference! Here was a yawning pit upon whose floor the armies of Russia could camp, and have room to spare. Perched upon the edge of the crater, at the opposite end from where we stood, was a small lookout house---Say three miles away. It assisted us, by comparison, to comprehend and appreciate the great depth of the basin-it looked like a tiny martin-box clinging at the eaves of a cathedral. After some little time spent in resting and looking and ciphering, we hurried on to the hotel.

By the path it is half a mile from the Volcano House to the lookout house. After a hearty supper we waited until it was thoroughly dark and then started to the crater. The first glance in that direction revealed a scene of wild beauty. There was a heavy fog over the crater and it was splendidly illuminated by the glare from the fires below. The illumination was two miles wide and a mile high, perhaps; and if you ever, on a dark night and at a distance beheld the light from thirty or forty blocks of distant buildings all on fire at once, reflected strongly against overhanging clouds, you can form a fair idea of what this looked like.

A colossal column of cloud towered to a great height in the air immediately above the crater, and the outer swell of every one of its vast folds was dyed with a rich crimson luster, which was subdued to a pale rose tint in the depressions between. It glowed like a muffled torch and stretched upward to a dizzy height toward the zenith. I thought it just possible that it's like had not been seen since the children of Israel wandered on their long march through the desert so many centuries ago over a path illuminated by the mysterious 'pillar of fire.'" And I was sure that I now had a vivid conception of what the majestic "pillar of fire" was like which almost amounted to a revelation. Arrived at the little thatched lookout house, we rested our elbows on the railing in front and looked abroad over the wide crater and down over the sheer precipice at the seething fires beneath us. The view was a startling improvement on my daylight experience. I turned to see the effect on the balance of the company and found the reddest-faced set of men I almost ever saw. In the strong light every countenance glowed like red-hot iron, every shoulder was

suffused with crimson and shaded rearward into dingy, shapeless obscurity! The place below looked like the infernal regions and these men like half-cooled devils just come up on a furlough.

I turned my eyes upon the volcano again. The "cellar" was tolerably well lighted up. For a mile and a half in front of us and half a mile on either side, the floor of the abyss was magnificently illuminated; beyond these limits the mists hung down their gauzy curtains and cast a deceptive gloom over all that made the twinkling fires in the remote comers of the crater seem countless leagues removed-made them seem like the campfires of a great army far away. Here was room for the imagination to work! You could imagine those lights the width of a continent away-and that hidden under the intervening darkness were hills, and winding rivers, and weary wastes of plain and desert- and even then the tremendous vista stretched on, and on, and on!-to the fires and far beyond! You could not compass it-it was the idea of eternity made tangible-and the longest end of it made visible to the naked eye!

The greater part of the vast floor of the desert under us was as black as ink, and apparently smooth and level; but over a mile square of it was ringed and streaked and striped with a thousand branching streams of liquid and gorgeously brilliant fire! It looked like a colossal railroad map of the State of Massachusetts done in chain lightning on a midnight sky. Imagine it- imagine a coal-black sky slivered into a tangled net-work of angry fire!

Here and there were gleaming holes a hundred feet in diameter, broken in the dark crust, and in them the melted lava-the color a dazzling white just tinged with yellow-was boiling and surging furiously; and from these holes branched numberless bright torrents in many directions, like the spokes of a wheel, and kept a tolerably straight course for a while and then swept round in huge rainbow curves, or made a long succession of sharp worm-fence angles, which looked precisely like the fiercest jagged lightning. These streams met other streams, and they mingled with and crossed and recrossed each other in every conceivable direction, like skate tracks on a popular skating ground. Sometimes streams twenty or thirty feet wide flowed from the holes to some distance without dividing-and through the opera-glasses we could see that they ran down small, steep hills and were genuine cataracts of fire, white at their source, but soon cooling and turning to the richest red, grained with alternate lines of black and gold. Every now and then masses of the dark crust broke away and floated slowly down these streams like rafts down a river. Occasionally the molten lava flowing under the superincumbent crust broke through-split a dazzling streak, from five hundred to a thousand feet long, like a sudden flash of lightning, and then acre after acre of the cold lava parted into fragments, turned up edgewise like cakes of ice when a great river breaks up, plunged downward and were swallowed in the crimson cauldron. Then the wide expanse of the "thaw" maintained a ruddy glow for a while, but shortly cooled and became black and level again. During a "thaw," every dismembered cake was marked by a glittering white border which was superbly shaded inward by aurora borealis rays, which were a flaming yellow where they joined the white border, and from thence toward their points tapered into glowing crimson, then into a rich, pale carmine, and finally into a faint blush that held its own a moment and then dimmed and turned black. Some of the streams preferred to mingle together in a tangle of fantastic circles, and then they looked something like the confusion of

ropes one sees on a ship's deck when she has just taken in sail and dropped anchor-provided one can imagine those ropes on fire.

Through the glasses, the little fountains scattered about looked very beautiful. They boiled, and coughed, and splattered, and discharged sprays of stringy red fire-of about the consistency of mush, for instance-from ten to fifteen feet into the air, along with a shower of brilliant white sparks-a quaint and unnatural mingling of goutts of blood and snow-flakes! We had circles and serpents and streaks of lightning all twined and wreathed and tied together, without a break throughout an area more than a mile square (that amount of ground was covered, though it was not strictly "square"), and it was with a feeling of placid exultation that we reflected that many years had elapsed since any visitor had seen such a splendid display-since any visitor had seen anything more than the now snubbed and insignificant "North" and "South" lakes in action. We had been reading old files of Hawaiian newspapers and the "Record Book" at the Volcano House, and were posted.

I could see the North Lake lying out on the black floor away off in the outer edge of our panorama, and knitted to it by a web-work of lava streams. In its individual capacity it looked very little more respectable than a schoolhouse on fire. True, it was about nine hundred feet long and two or three hundred wide, but then, under the present circumstances, it necessarily appeared rather insignificant, and besides it was so distant from us.

I forgot to say that the noise made by the babbling lava is not great, heard as we heard it from our lofty perch. It makes three distinct sounds-a rushing, a hissing, and a coughing or puffing sound; and if you stand on the brink and close your eyes it is no crick at all to imagine that you are sweeping down a river on a large low-pressure steamer, and that you hear the hissing of the steam about her boilers, the puffing from her escape-pipes and the churning rush of the water abaft her wheels. The smell of sulphur is strong, but not unpleasant to a sinner.

We left the lookout house at ten o'clock in a half cooked condition, because of the heat from Pele's furnaces, and wrapping up in blankets, for the night was cold, we returned to our Hotel.

The next night was appointed for a visit to the bottom of the crater, for we desired to traverse its floor and see the "North Lake" (of fire) which lay two miles away, toward the further wall. After dark half a dozen of us set out, with lanterns, and native guides, and climbed down a crazy, thousand-foot pathway in a crevice fractured in the crater wall, and reached the bottom in safety.

The irruption of the previous evening had spent its force and the floor looked black and cold; but when we ran out upon it we found it hot yet, to the feet, and it was likewise riven with crevices which revealed the underlying fires gleaming vindictively. A neighboring cauldron was threatening to overflow, and this added to the dubiousness of the situation. So the native guides refused to continue the venture, and then every body

deserted except a stranger named Marlette. He said he had been in the crater a dozen times in daylight and believed he could find his way through it at night. He thought that a run of three hundred yards would carry us over the hottest part of the floor and leave us our shoe-soles. His pluck gave me back-bone. We took one lantern and instructed the guides to hang the other to the roof of the look-out house to serve as a beacon for us in case we got lost, and then the party started back up the precipice and Marlette and I made our run. We skipped over the hot floor and over the red crevices with brisk dispatch and reached the cold lava safe but with pretty warm feet. Then we took things leisurely and comfortably, jumping tolerably wide and probably bottomless chasms, and threading our way through picturesque lava upheavals with considerable confidence. When we got fairly away from the cauldrons of boiling fire, we seemed to be in a gloomy desert, and a suffocatingly dark one, surrounded by dim walls that seemed to tower to the sky. The only cheerful objects were the glinting stars high overhead.

By and by Marlette shouted "Stop!" I never stopped quicker in my life. I asked what the matter was. He said we were out of the path. He said we must not try to go on till we found it again, for we were surrounded with beds of rotten lava through which we could easily break and plunge down a thousand feet. I thought eight hundred would answer for me, and was about to say so when Marlette partly proved his statement by accidentally crushing through and disappearing to his armpits. He got out and we hunted for the path with the lantern. He said there was only one path and that it was but vaguely defined. We could not find it. The lava surface was all alike in the lantern light. But he was an ingenious man. He said it was not the lantern that had informed him that we were out of the path, but his feet. He had noticed a crisp grinding of fine lava-needles under his feet, and some instinct reminded him that in the path these were all worn away. So he put the lantern behind him, and began to search with his boots instead of his eyes. It was good sagacity. The first time his foot touched a surface that did not grind under it he announced that the trail was found again; and after that we kept up a sharp listening for the rasping sound and it always warned us in time.

It was a long tramp, but an exciting one. We reached the North Lake between ten and eleven o'clock, and sat down on a huge overhanging lava-shelf, tired but satisfied. The spectacle presented was worth coming double the distance to see. Under us, and stretching away before us, was a heaving sea of molten fire of seemingly limitless extent. The glare from it was so blinding that it was some time before we could bear to look upon it steadily. It was like gazing at the sun at noon-day, except that the glare was not quite so white. At unequal distances all around the shores of the lake were nearly white-hot chimneys or hollow drums of lava, four or five feet high, and up through them were bursting gorgeous sprays of lava-gouts and gem spangles, some white, some red

and some golden- a ceaseless bombardment, and one that fascinated the eye with its unapproachable splendor. The more distant jets, sparkling up through an intervening gossamer veil of vapor, seemed miles away; and the further the curving ranks of fiery fountains receded, the more fairy-like and beautiful they appeared.

Now and then the surging bosom of the lake under our noses would calm down ominously and seem to be gathering strength for an enterprise; and then all of a sudden a red dome of lava of the bulk of an ordinary dwelling would heave itself aloft like an escaping balloon, then burst asunder, and out of its heart would flit a pale-green film of vapor, and float upward and vanish in the darkness--a released soul soaring homeward from captivity with the damned, no doubt.

The crashing plunge of the ruined dome into the lake again would send a world of seething billows lashing against the shores and shaking the foundations of our perch. By and by, a loosened mass of the hanging shelf we sat on rumbled into the lake, jarring the surroundings like an earthquake and delivering a suggestion that may have been intended for a hint, and may not. We did not wait to see.

We got lost again on our way back, and were more than an hour hunting for the path. We were where we could see the beacon lantern at the look-out house at the time, but thought it was a star and paid no attention to it. We reached the hotel at two o'clock in the morning . . .

Kilauea never overflows its vast crater, but bursts a passage for its lava through the mountain side when relief is necessary, and then the destruction is fearful. About 1840 it rent its overburdened stomach and sent a broad river of fire careening down to the sea, which swept away forests, huts, plantations and everything else that lay in its path. The stream was five miles broad, in places, and two hundred feet deep, and the distance it traveled was forty miles. It tore up and bore away acre-patches of land on its bosom like rafts-rocks, trees and all intact. At night the red glare was visible a hundred miles at sea; and at a distance of forty miles, fine print could be read at midnight. The atmosphere was poisoned with sulphurous vapors and choked with falling ashes, pumice stones and cinders; countless columns of smoke rose up and blended together in a tumbled canopy that hid the heavens and glowed with a ruddy flush reflected from the fires below; here and there jets of lava sprang hundreds of feet into the air and burst into rocket-sprays that returned to earth in a crimson rain; and all the while the laboring mountain shook with Nature's great palsy, and voiced its distress in moanings and the muffled booming of subterranean thunders.

Fishes were killed for twenty miles along the shore, where the lava entered the sea. The earthquakes caused some loss of human life, and a prodigious tidal wave swept inland, carrying everything before it and drowning a number of natives. The devastation consummated along the route traversed by the river of lava was complete and incalculable. Only a Pompeii and a Herculaneum were needed at the foot of Kilauea to make the story of the irruption immortal.

(from Mark Twain's *Roughing it in the Sandwich Islands*)