## MAUNA LOA.

horizon, while its lower side was dimmed by a whitish haze, that seemed to unite it to the island of Hawaii. The same haze enveloped the hills of Kohala on our right, and the western extremity of Hawaii. Nearer to us was Hualalai, the third great mountain of Hawaii, up whose sides a compact mass of white fleecy clouds was impelled by the sea-breeze. To our right rose in bold relief Mauna Kea, covered with its snowy mantle; and at our feet was spread out, between the three great mountains, the black plain of lava, overhung by a dusky pall of clouds. All these features were so blended into each other by the mist, as to exhibit a tone of harmony that could hardly be conceived, considering the variety of the forms, characters, and distances of the objects, and which seemed to blend earth, sea, and sky into one. I can never hope again to witness so sublime a scene, to gaze on which excited such feelings that I felt relieved when I turned from it to engage in the duties that had called me to the spot.

It was not without some nervous excitement that I placed my instrument on the highest point of Mauna Loa, within a few feet of its crater, and turned it upon Mauna Kea, to measure the difference in the height of these twin giants of the Pacific.

The very idea of standing on the summit of one of the highest peaks in the midst of this vast ocean, in close proximity to a precipice of profound depth, overhanging an immense crater "outrageous as a sea," with molten rock, would have been exciting even to a strong man; but the sensation was overpowering to one already exhausted by breathing the rarefied air, and toiling over the lava which this huge cauldron must have vomited forth in quantities sufficient to form a dome sixty miles in diameter, and nearly three miles in height.

I was still in doubt which mountain I should find the highest; for although previous measurements had given it in favour of Mauna Kea, yet I had found Mauna Loa about three hundred feet higher than it had been reported to be. Double the zenith angle was soon obtained, and decided it in favour of Mauna Kea, and subsequent calculations gave one cone of it as one hundred and ninety-three feet above the place where I stood. Although twin mountains, they are of very different character. Mauna Kea is a vast mound topped with cones, nine in number, whilst Mauna Loa is a smooth dome. On the former the frosts of winter prevail, while the latter has internal fires, and occasionally vomits forth its lava to the very point where the other begins to rise, covering its broad flanks with layers of rocks.

We had not much time to spare, and as soon as Lieutenant Budd joined me, we continued our route, in order to reach the encampment

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