

HAWAIIAN LEGENDS OF VOLCANOES

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Hawaiian Legends of Volcanoes by W. D. Westervelt

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W. D. WESTERVELT

**HAWAIIAN
LEGENDS OF
VOLCANOES**



GIANT TREE FERNS ON THE ROAD TO KILAUEA

HAWAIIAN LEGENDS

of

VOLCANOES

(MYTHOLOGY)

Collected and Translated from the Hawaiian

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AND GHOST-GODS," "LIFE OF KAMEHAMEHA," ETC.



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FOREWORD

However doctors may differ concerning the way that our earth came into being, most of them agree that in its early days meteoric bodies from space flew together and produced a hotter globe than at present. Perhaps its surface was all covered with vast circular lakes of lava such as our telescopes reveal in great perfection, ring upon ring, over the surface of the moon. On the moon these rings and pits are now cold, remnant from a time when the gases from the inside of our satellite were bubbling forth from a great internal heat supply and bringing with them oceans of slag which seethed and swirled in circular pools which formed symmetrically within ramparts of their own spatter.

The earth is not without traces of similar circular ramparts in the shape of long curved chains of volcanoes, mostly in the sea, which would appear as ridges if the ocean were to dry up. The line of the Hawaiian Islands from Kauai to Mauna Loa on the large island of Hawaii is such a curved ridge, now of enormous height

above the bottom of the Pacific, but perhaps at one time much lower and more extended into something like a circle. These islands appear to have been built by overflows of lava from a curved crack which followed along the old rampart, just as we now find smoke-cracks along the small ramparts which restrain the hot lavas in Halemaumau in the pit of Kilauea. The last activity along this crack appears to have moved slowly through thousands of years from west to east, and each volcanic mountain that was built made a stopper to force the liquid out along the crack farther eastward until finally two live volcanoes, Mauna Loa and Kilauea, were left at the extreme east end, still spouting out the liquid and building up domes.

Some men of science say that the molten liquid, which is mostly an iron-stained glass, foamy with the intensely hot gases which escape from the inside of the earth, comes from an under layer beneath the outer crust of the earth, which would be found anywhere if we went down deep enough. Others say that it comes from scattered pockets of liquid under a stiff shell and over a stiffer inner globe. However this may be, there is some agreement that the depth from which the liquids come is about seventy miles and we know that vast quantities of gas escape with them. Possibly the gases

unite chemically with each other and so themselves produce some of the heat.

It is clear that heat and gas action are the motive agents which make volcanoes so lively, so much so that simultaneously Mauna Loa and Kilauea may maintain liquid columns of lava at two different elevations ten thousand feet apart. This is accounted for by the fact that the melted glass is so charged with gases under high pressure that it seethes up and down in the cracks and tubes which it occupies according to their form and size, and according to the coming together or opening apart of their walls, just as any sparkling wine makes a foam which rises or falls according to the suddenness of the uncorking or to the size of the glass into which it is poured.

Sudden uncorking is an apt simile for volcanoes in general, as most of them, unlike Kilauea, erupt very suddenly and explosively. This is due to the way in which the gas-charged liquid has become confined under the solidified mountain, and so only at long intervals becomes so hot and so insinuating that it finds a way out and, once released, spouts like the open safety-valve of a steam engine until the gas pressure is relieved. But even Kilauea is not guiltless of terrific and destructive explosive eruption. About 1790, thousands of tons of gravel and

boulders and dust were strewn over Hawaii from Kilauea, covering hundreds of square miles, destroying the vegetation, and killing some of the people. This would appear to be a crisis reached every few centuries, and perhaps dependent on a building up of the mountain by lava to a certain height where the foam column is so confined that it can no longer overflow and so is compelled to explode.

Mauna Loa is a much more productive volcano than Kilauea, for its flows have covered a vast territory with new lava within the century past, whereas Kilauea has done much less overflowing. Everything indicates that Kilauea is older than Mauna Loa. Mauna Loa with its flows is tending through the ages to bury up Kilauea, and it is quite possible that within a few centuries there will be flows from Mauna Loa which will cascade over the wall into Kilauea crater and so make Kilauea Mountain appear to be a mere spur of Mauna Loa. Mauna Kea to the north appears to have been a great circular volcano about one hundred miles in diameter, and when it had extinguished itself by too much building, its lava took refuge in making two new cones out on the edge of the old mountain, namely Kilauea and Hualalai. These built up until they had nearly exhausted the lava available, owing to their height, and then a new vent,

Mauna Loa, burst out in the center, filling a long spoon-shaped valley between them and to the southwest of Mauna Kea. The new mountain has now built itself up to a height almost equal to that of Mauna Kea and probably in a few centuries will begin exploding and heaping up cinder cones just as Mauna Kea did before it finally became extinct.

Some such story as this outlines the tremendous events, explosions, whirlwinds, avalanches, lava flows, earthquakes, and fiery blasts which composed the narrative of the domain of Pele before man appeared upon the scene. We do not know how much more frequent these things were in the old days, but there were probably eras of quiet and eras of excitement just as at present. It behooves us to give the closest possible attention to all the events of the present and to record them faithfully, so as to render to the scientific historian of the future a consecutive account of all the details which will lead up to some great crisis in the days to come.

T. A. JAGGAR, Jr.,

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KILAUEA CRATER, OCTOBER, 1916.