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THE VOLCANO LETTER

A Weekly news leaflet of the Hawaiian Volcano Research Association

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No. 191

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August 23, 1928

KILAUEA REPORT No. 865

WEEK ENDING AUGUST 22, 1928

Hawaiian Volcano Observatory, U. S. Geological Survey
R. M. Wilson, Temporarily in Charge

At 9:50 a. m. August 18 the north wall of Halemaumau was working very slightly. Two falls of rocks were heard in 10 minutes from that side, and another from the north-east corner. The north wall and talus gave the appearance of having had numerous small slides. During the "Pageant to Pele," presented to a large audience at the side of the pit from 9 to 11 p. m., there was nearly constant avalanching, filling the air with dust, and at times drowning the exercises. By daylight August 19 could be seen heavy coatings of red dust on the floor and walls of Halemaumau and on the south Kilauea floor. The avalanching continued at irregular intervals, coming from blocks tumbling from the north rim, and gathering debris along their course. Examinations show that widely cracked areas formerly back of the north rim have gone in, and that there are numerous fresh cracks of varying sizes. Many of the new cracks are emitting steam, and several of those that are dry are allowing the escape of heat. At the present time there is still some sliding from the north rim.

The Observatory seismographs have recorded nine local tremors during the week ending August 22. These were all very feeble with the exception of one which occurred at 10:47 p. m. August 18. This one is classed as feeble, and was apparently caused by an unusually large avalanche in the pit of Halemaumau. Tremors of this magnitude can very seldom be ascribed to avalanches, yet the evidence points to the fact that this one is the result, and not the cause of an avalanche. The amplitude increases gradually to the maximum, and fades out again gradually; there are no phases to be recognized, as would be the case in a true earthquake. The record of the same disturbance from the Uwekahuna seismograph is 25% greater in amplitude, in spite of the fact that the magnification of that instrument is less than the corresponding factor for the instruments at the Volcano Observatory. This is easily explained in the case of an avalanche tremor by the fact that the Uwekahuna instruments are but 0.7 mile from the pit, while those at the Volcano Observatory are 2.6 miles away. This tremor was the climax of a series of five avalanche tremors, of which the first was at 9:41 p. m. Thus the Observatory seismographs bear witness to exceptionally heavy avalanching during the evening of the 18th, when there were present at the edge of the pit well over a thousand spectators who had come

there to see the entertainment furnished by the program of the Cook Sesquicentennial.

Microseisms throughout the week have been normal. Slight tilt has accumulated toward the northeast.

THE PAVLOF VOLCANO EXPEDITION

A letter from Dr. Jaggard dated July 11 gives us additional notes of the progress being made by the National Geographic Pavlof Volcano Expedition, of which he is the Director. The letter was written in camp at the north end of Pavlof Bay, just east of Pavlof Volcano. The party had just completed a trip into the interior of the Peninsula, where two camps were made on the northeast base of the volcano. From these camps a nine-day side trip was made to the region north of the mountain, where an interesting bit of volcanic topography was found similar in nature to the Chaos Jungle at Viola on Mount Lassen, California. A view into the crater of Pavlof was had, and two inner cones were seen. In the crater there was also visible an old lava flow and considerable steam from a number of solfataras. No hot springs were found, but mineral springs were discovered on two occasions.

The topographic section of the expedition had mapped 2,000 square miles of country. The expedition had taken 225 photographs and a considerable number of color plates. Wild flowers are there in abundance, and specimens of the different kinds have been collected and pressed. Dr. Jaggard says that fossils have been found and that the geology of the region is very interesting. The geologic details, however, must wait for a more thorough investigation by some geologist in the future who will be able to base his work upon the present reconnaissance and the topographic maps being made by the party.

The weather has been bad, especially from the point of view of the topographic party, who need clear weather for long distance photography and plane table operations. There have been hundreds of caribou seen, and 25 to 30 bears. The expedition has had no difficulty in keeping its larder stocked with meat, fish, and clams at all times. Salmon have been caught with a small seine operated by the "Honukai."

The "Honukai" is still holding its place as one of the most useful units in the expedition's transportation. It traverses the beaches with ease, and can go over the greater part of the dry tundra country. Swampy tundra and "niggerheads" have at times caused it to turn back, however. The use of the steel mats in soft places, as suggested by the experience with the "Ohiki" in Hawaii, has proved valuable in the extreme.

At the time of writing, the expedition was planning to go westward to Volcano Bay as the last lap of the season's explorations.

A radio message has just been received from Dr. Jaggard stating that the work was completed and the expedition was starting back home from Alaska on August 16.
R.M.W.