## THE VOLCANO LETTER

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WEEK ENDING SEPTEMBER 11, 1929
Section of Volcanology, U. S. Geological Survey
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The week at Halemaumau lava pit has produced nothing new. Occasional dust is seen from small slides, but these are often caused by visitors rolling stones. Two notches up the wall north and northwest are deepening by avalanche erosion, and the buttress between them is likely to fall in the future.

Near the 1919 desert chasm, a quarter mile southwest of the Kilauea rim, there are patches one or two feet long of Pele's hair and pumice droplets scattered about in the holes of the sand. These have accumulated to leeward from the February and July lava fountains of Halemaumau.

Only four very feeble local earthquakes are registered for the week at Kilauea. The day records of September 5 and September 10 were omitted, owing to repairs. Microseismic motion increased slightly September 6 to Septem-9. Apparent tilt, imperfectly recorded, was moderate NE.

## **ALEUTIAN NOTES**

Alaskan Volcanoes 1929.

Mr. Austin E. Jones, seismologist for the Section of Volcanology, has spent the summer at Dutch Harbor and Kodiak establishing seismograph stations. He reports that a party landed on Bogoslof Volcano July 27, 1929, and found it very quiet. This is in line with its behavior in 1928, when the heap of steaming lava, in the midst of the circular lagoon, which had been so active in 1926-27, was much cooler and showed less steam than in the previous year.

Akutan Volcano had been reported in strong activity in 1928, and this year on June 18 the lower slopes were lightly covered with ash. It was reported fuming again during July, 1929.

Mount Cleveland and a volcano to the west of it, in the region of the Islands of the Four Mountains, were smoking heavily in July. A mountain west of Kanatak on the Peninsula was reported fuming in March. In the Katmai group Mount Martin and Mageik have been seen steaming throughout the year. Shishaldin, the great volcano on Unimak Island, was "flaming high" on May 28, 1929, and glowing matter was overwelling the edge of the crater and rolling down the slopes. On June 17 Shishaldin was quiet though steam was visible when the crater was inspected with field glasses. It was fiery again June 23 and appeared to have opened three new craters low on the north side. On August 4 the summit steam was barely

visible to the naked eye. In 1928 Shishaldin was smoking heavily in August.

The above note on the fuming of Mount Cleveland recalls the heavy earthquake just south of those islands at the edge of the Aleutian deep reported in the Volcano Letter No. 220. This occurred March 6, 1929.

## Aleutian Seismograph Stations.

Mr. Jones started work in the middle of June, 1929, at Dutch Harbor digging a cellar and building a hut over it to house the seismograph in the reservation of the U.S. Naval Radio Station at Dutch Harbor, Unalaska Bay, on Amaknak Island, a mile to the north of Unalaska village. The instrument was making a test run on July 16 and thereafter. It is a pair of Hawaiian type horizontal pendulum recording E-W and N-S components on smoked paper. The magnification is X135 and the damping by vanes immersed in oil. The time control is a Howard master clock, and an electric connection makes it possible for the operator from the radio station to impress directly on the seismogram the time signal received daily from Mare The location of the hut is lat. 53° 53' Island, California. N. and long. 166° 32' 07" W. The distance is about 400 feet SSE. from the radio station on the line of the hand railway leading to the station jetty. The excavation was carried to a depth of five and a half feet where rock was reached. The hut is a 10 by 10 foot shed projecting one and one-half-feet above ground at the back, with double sheathing and a double window, roofed with tar paper, and banked up with earth and sod.

The instrument pier is Y-shape so that the stem holds the drum and the two arms carry uprights at their ends, all of concrete, which support the pendulums. The concrete is reinforced with steel.

The station is operated by Mrs. McDonald, wife of the Chief Radioman, using 120th meridian time (Pacific Coast). Microseisms were very faint in July, and the instruments registered two small local shocks and an earthquake indicating epicenter about 90 miles distant, not felt.

Work was started on reestablishment of the Kodiak seismograph station, by Mr. Jones, early in August. The 1927-28 station has been in the basement of the dwelling house of the Agricultural Experiment Station on the hill back of Kodiak, now turned over to the Bureau of Fisheries. On August 10 the concrete dairy house of the station was turned over to the Geological Survey for use as a seismograph laboratory. This is sturdily built of concrete with walls in places 30 inches thick. The Bureau of Fisheries occupies the establishment only during the summer season, but a local operator has been secured for year-around recording with the two-component Hawaiian seismograph, identical in model with those at Dutch Harbor, Lassen Volcano Observatory, Kealakekua, and Hilo.

Mr. Jones is to be congratulated on his successful season in constructing these stations, much of which he did with his own hands, and the Section of Volcanology is grateful for the cordial assistance given by the officers and men of the Bering Sea Patrol. U. S. Coast Guard, and the Naval Radio Service, and by the officers of the Bureau of Fisheries at Kodiak.