

Hawaiian Volcano Observatory Record Book 1926

This volume is one of a series of record books compiled by the Hawaiian Volcano Observatory (HVO) from 1912 through early 1966. The pages for this volume were transferred by HVO to the Bishop Museum, in Honolulu, Hawai'i, in 1972 and are held at that institution (accession number 1972.265). In 2010, HVO entered a cooperative agreement with Bishop Museum to scan many of the record books in their repository. The scanning was done by HVO volunteer Frances Wong using a flat-bed scanner at a resolution equivalent to 600 dpi. The raw scans were then delivered to HVO volunteer Ben Gaddis, who processed each of the scanned pages by cropping and by adjusting the exposure and contrast using a photo editing program. The scanned and photographed pages for this volume were then combined to form this digital version of the record book. Quality control and posting was done by Tim Orr of the U.S. Geological Survey Alaska Volcano Observatory.

1926

Jan. 1

April

last of book

Pictures of Hoopuloa flow

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Friday	Date	January 1, 1926
	Saturday		" 2, "
	Sunday		" 3, "
	Tuesday		" 5, "

January 1
2:30 p.m.

A little sliding at the north. Pit dry; wind light N.E. At the S. station observed that the entire mass of the pinnacle below edge of pit has fallen, not a trace of it remains: the one farther east is still in place.

The rock bank at foot of SE. wall is the one place where the wall of pit descends to meet the lava floor: talus everywhere else.

There is much white stain on walls of pit, a sign of recent dry weather.

There is quite a marked yellow area in wall one quarter way down W. of N. station. (The old fuming solfatara locality.)

January 2
3 p.m.

With Lady MacRobert, Scotch geologist.

Pit quiet. A few stones slid. Nothing else remarkable.

January 3

To Mauna Iki. Find both the rusty patches on west side of summit sufficiently hot to light a stick. Formerly the southernmost of the two was not so hot.

Found cavern unchanged. Interior of white grotto appears cooler and with fewer salts. Inspection thro window above.

January 5
10 a.m.

Pit dry and white with coatings. After a long dry spell the hills near the rift chasm and Cone Peak are all white with salts on the washed new ash. Found a pahoehoe lava flow in a gulch (a quarter-mile from Kilauea leading E. into the big wash) overlying old ash and under the 1790 ash. The 1924 ash near the big rift chasm is only a few inches thick now owing to extensive washing away by rills.

Saw in the desert gulch sections at least 3 unconformities in ash ages. Notable freedom from stones and even level bedding in the thick lower series. The top of this level-bedded series is deeply eroded by gulches which were not present when the level-bedded series was deposited. The latter was deposited on pahoehoe. Ero Kilauea overflowed pahoehoe from S. bay before the level-bedded-series was thrown out. This was the last superfluent action before that of 1924, at the crater; but there was crack effusion in the rifts before 1790 and after the level-bedded ash epoch. The level-bedded series may have had its upper stony layers eroded away at the time of the gulch-making; it may have been much thicker than 30 feet upward, if the erosion was for some reason heavy.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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JOURNAL

Day	Date
Wednesday	January 6, 1926
Thursday	" 7, "
Saturday	" 9, "
Sunday	" 10, "

January 6
9:45 a.m.

A small fall of rock at N. corner. Flocculent steam in center of pit, W. pocket, and SW. talus. Soft and sulphurous steam at S. talus. Odor of sulphur, SE. wind. Slides making dust have been common of late. Two earthquakes yesterday.

Rock fall W. Red dust on N. talus. N. corner working repeatedly.

January 7
4:30 p.m.

At auto terminus wind is squally from N.E. At S.E. station wind from W. roaring in the low caverns on the rim. In bottom of pit steam tails all drift strongly N.E. The steam at cracks back from rim blow in all directions erratically.

Dust over pit frequently today. Rocks now falling N. and NW. Steam densest NW., S., SW., and NE. in radial lines up taluses. The SSW. talus under rift has a wet edge on its E. side with steam from the rock and sulphur below; lifting away from the wall?

January 9
11 a.m.

Pit quiet. N. station in place. Hardly any rock falls, a little at N.

January 10
4:30 p.m.

Pit dry. Very dry weather, tanks low. N. station flag gone; fallen in? There has been dust over pit frequently today. Falls now frequent both NW. and N. One dry streak on NE. side of S. talus next the solfataric rock bank, not noticed before.

T.A.J.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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JOURNAL

Day	Tuesday	Date	January 12, 1926
	Thursday		" 14, "
	Saturday		" 16, "
	Monday		" 18, "
	Tuesday		" 19, "

January 12
10-11 a.m.

Pit very dry. Hardly any visible vapor at S. talus, but the dry streaks in midst of wet ground are very pronounced. Made circuit of pit by E. and N. N. station has fallen in, and the ground there is cracked 15 to 30 feet back. A big slab of rim appears ready to fall off. Faint H₂S odor N. Wide crevasse behind beg slab of rim. Overhand N. very precipitous. Large notch from rift dyke to N. corner freshly fallen away N., and talus growing.

2:30 p.m.

Drove Sanitol with Beam and Yasunaka to Hole No. 3 on Kilauea floor to uncap well and take temperature at bottom. Temp. air 21.8° C., well 66.4° C (151.7° F) (July 1922 was 69°, air 22.5°) Temp. cone cracks near wells 57.0° C (July 24, 1922, these were 55.0°, air 21°)

Road to well in fair condition, improved along dirt bank by post-1924 wash.

Former temperatures as shown above were remarkably like the present.

January 14
10-11:30 a.m.

With President Coffman of University of Minnesota and Dr. Johnson, biologist, of Auckland University.

There were new cracks in the soil at trail ENE. of pit, parallel to pit rim. Noisy avalanches of much volume and making red cauliflowers occurred at N. corner of pit. Steam on bottom more voluminous.

January 16
2:15 p.m.

Steam areas very dry. No stones heard falling. Apparently more rock has fallen from NE. edge near NE. station. No fresh talus on bottom or avalanche dust recognizable.

January 18
5 p.m.

N. wall working. Rocks heard but not seen falling NE. and N. Fresh whitish talus east and north. Sulphur visible SE. floor. Some cracks in dirt fairly fresh back of S. station.

January 19
12:55 a.m.

Roar of avalanche heard, and a longer one 1:30 a.m., followed by a detonation at 1:40. Southerly wind brings avalanche dust in droplets of mud rain to H.V.O. on vegetation and laundry.

T.A.J.

January 19

9:30-11:30 a.m.

Walked around E. and N. sides of pit and back. The avalanches of last night have started N. and NE. walls working strongly. The wind was light from the W., a very unusual direction, and in consequence the E. side of Kilauea floor is reddened with dust from a succession of moderate slides in the night; this reddening is all over the area between Byron's Ledge and Halemauau.

9:45 a.m.

Saw how this happened in an avalanche of moderate size from wall above W. horn of N. sill. Time 9:45 a.m. After preliminary sliding, a big slice of the middle wall 200 feet above sill fell. Salmon colored cauliflower clouds and much roar. The dust cloud rose directly without crossing the bottom area, overlapped the rim NW., then hung low on the Kilauea floor moving slowly E. and thinning as it went.

The night's avalanches had come from above both the W. and E. horns of sill. Gray talus NE., red talus N. The sulphur spots E. of floor were not dusted, but the N. talus and NNW. wall were red with dust, and the N. talus had become a peaked conoid. Apparently the N. falls had been chiefly from the wall halfway up. At the NE. the falls had been mostly from the sill itself. After 10 a.m. the slides were small, first NE. and then N., and finally they became less. The impression is created that the sill itself somehow controls the avalanching, by connection with the lava source or by its cooling and contraction. Some of the stripped rock of the E. end of sill appears fibrous like asbestos.

Visited the debris and floor N. and NE. of pit. Thin red sand coating on rocks and floor; colors the country but is a mere film.

Steam rather thick W. floor. Blue fume S. talus.

January 23

3 p.m.

Nothing whatever new. The pit has appeared dusty from small slides. The bottom is dusty but not on the sulphur spots. Talus red with fresh debris N., and gray E. The north and NE. walls continue to work.

T.A.J.

JOURNAL

Day	Date
Wednesday	January 27, 1926
Thursday	" 28, "
Saturday	" 30, "

January 27
9:30 a.m.

Pit quiet. Southerly wind. Steam abundant S., SW., center, and W. No slides seen. Groove up NE. wall vertically, with fresh talus ENE., under it, as though a crack or fault there headed to Keanakakoi. The west boss is fresh gray rock below from recent falls, red area smaller than before.

January 28
1:45 p.m.

About noon saw dust cloud rise from pit. Now there is a slide going at east notch, the groove up and down east wall through the extension of NE. sill. At bottom region of east wall, air full of dust. S. wind. Steady sliding E.; notches in wall half way up. Pit dry. The east wall seems to be extending the N. sill undermining effect.

January 30
2:30 p.m.

Nothing new at the pit.

T.A.J.

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Day	Monday	Date	February 1, 1926
	Wednesday		" 3, "
	Thursday		" 4, "
	Saturday		" 6, "
	Sunday		" 7, "

February 1
6 p.m.

Nothing new. High NE. wind. No glow. The NE. talus is growing high and sharp pointed.

T.A.J.

February 3
5 p.m.

Pit quiet. Talus slopes, floor, and walls for the most part are quite dusty. There was an avalanche from the west wall of Kilauea Crater, south from Uwekahuna, about 12 noon (J. C. Beam).

R.H.F.

February 4
12:30 p.m.

Everything the same. No slides heard. Dust now rare over pit. Sulphurous fume south talus. Numerous notches in north wall. Zone of color follows W. contact of N. sill. The bedding is confused where the fossil talus ends upward W.

February 6
2:30 to
4:30 p.m.

Saw a mixture of deep maroon and gray fragments fresh on NE. talus.

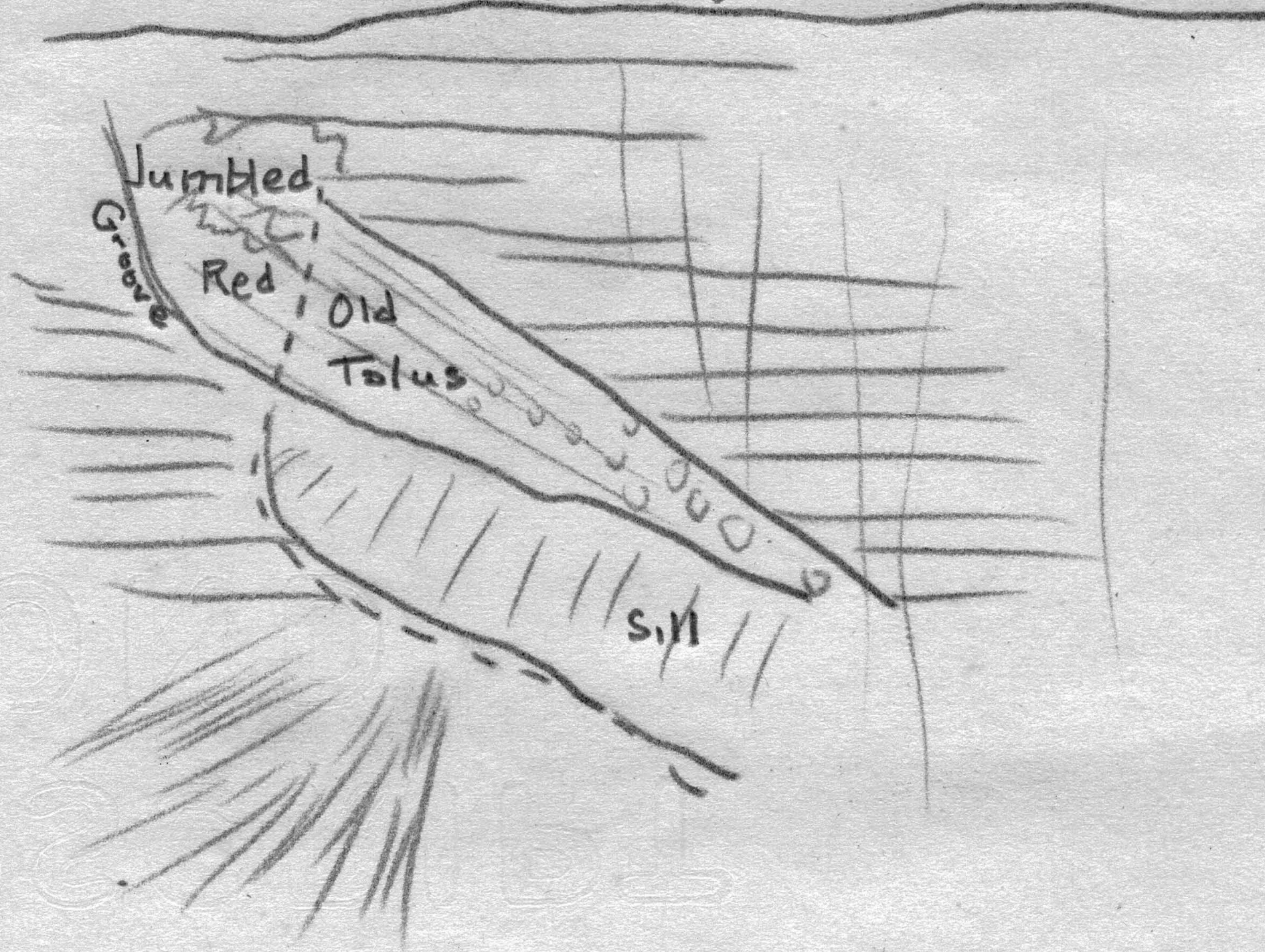
Walked around pit by S. and W. At first all was very still. Wind was light southerly, and the steam jets were nucleated all over the N. floor of Kilauea. Smelled sulphur at NE. edge. Fresh cracks were found in the soil WNW. of pit. There were small slides SW. and NE., mostly after 3:30 p.m. The vapor on S. talus was blue, that at SW. rift talus was a little yellowish, and that at W. pocket was white.

February 7
5:30 p.m.

Light S. wind. Vapor from pit increases as night approaches. The flocculency of W. pocket steam tails not nearly so great as at S. talus, at first. The jets were being drawn towards the S. Then something imperceptible occurred to make the W. jets more voluminous. Perhaps there is nucleation by gas eddying about the bottom. Faint sulphur smell was perceptible. Slight rock falls occurred more at the N. than elsewhere.

Earthquake felt Maui and Honolulu 11:30 a.m.(?) (Wireless)

T.A.J.



Sketch showing by dotted line peculiar contact line between both fossil talus and west horn of N. sill, and the rocks farther west.

February 8
1:24 p.m.

Dust cloud observed by J. C. Beam.

R.H.F.

February 8
1 p.m.

After 1 p.m. there was much rising of dust at NE. corner of pit, and this happened off and on at other times. Evidently that corner was "working." Light southerly wind.

6 p.m.

NE. corner was dropping rocks from middle part of wall in bunches every few minutes, making red cauliflowers. New red debris on top NE. talus. This lasted 20 minutes, then the falls were fewer and scattered.

February 10
11:45 a.m.

Low humidity, clear day, hard NE. gale increasing at noon. Kilauea and Uwekahuna and the desert making clouds of dust. Grit flying along trail from car to pit. Almost impossible to stand at edge of pit. Pit full of dust clouds. No avalanches heard in spite of the wind disturbance. Impossible to walk against the wind on account of grit in eyes. Could see S. talus, and there was little steam there or at the cracks back of SE. sta. The dust does not nucleate steam, and wind does not make avalanches.

3 p.m.

With violent NE. wind blowing at Kilauea, quiet convection cloud formed and reformed straight up over Mokuaweoweo, showing there was no wind there.

T.A.J.

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Day	Date	February 14, 1926
Sunday		
Monday	"	15, "
Thursday	"	18, "
Saturday	"	20, "
Monday	"	22, "
Tuesday	"	23, "

February 14
9:15 a.m.

Pit quiet. Moderate bottom vapor. Little stones move occasionally on the walls. Only fresh debris is on NE. slide. No dust over pit lately.

February 15
2:30 p.m.

Exactly the same except that the vapor jets are drier. A greenish yellow sulphate patch N. of center on lava floor.

February 18
10:30 a.m.

Noticed nothing new. Moderate steam after rain. Hardly any rock motion.

February 20
2:15 p.m.

Fresh falls of red and gray big rocks on NE. talus. The wall above shows where they fell from. No motion now. Must have had a spell of sliding February 19. Steam after rain.

February 22
3:30 to 4 p.m.

Same conditions in pit. Cloudy and drizzly. S. talus steam densest and blue compared with elsewhere. Note on SW. talus, at dry steaming area, that two boulders, 2 ft. each in diameter, are nucleation centers, or condensation centers for jets denser than on either side. In a half-hour wait, only one slide, an avalanche making buff dust starting high up NW. wall. The NE. wall has recently peeled at E. end of N. sill clearing off the rock and changing the detail of the bend from the U-sill to the straight sill.

February 23
10:30 a.m.

Rainy. Steam bottom and walls in great volume suggesting direct contact of rain water and hot surfaces. A second condensation over the pit as a whole. One small avalanche east side.

T.A.J.

JOURNAL

Day Thursday
SundayDate February 25, 1926
" 26, "February 25
5 p.m.

Some rock sliding west. Most of the fresh debris NE. Noticed from E. part of Kilauea earlier in afternoon very rapid rise of steam west side of pit, with eddies of light NE. wind. Looks as though air must be very hot in parts of pit.

J. C. Beam at work yesterday and today, assisted by Finch, Jaggar, Yasunaka, and Hirato, starting taping off Kilauea floor from Beggar trig station as a beginning, into equilateral triangles with bases on E-W lines, 300 meters on a side. Lay off with 100 foot tape E-W and N-S line from Beggar as base lines. 984.24 ft. equal 300 m. Established 5 points E. of Beggar. Third point is just N. of Bore-hole #3.

This net of equilateral triangles is for new bore-hole temperature measurement.

February 28
10:30 a.m.

At pit with Dr. F. W. Preston of Standard Plate Glass Co., Pittsburg. He says that raising glass to $1,400^{\circ}$ makes trouble, turbidity, effervescence, and ruins the glass: cause unknown, a lower effervescence at $1,000^{\circ}$. See Washburn's article University Ill. Checks with Brun. Says glass has no fusing point: a continuous curve.

Pit as usual. No slides.

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JOURNAL

Day	Date
Monday	March 1, 1926
Thursday	" 4, "
Sunday	" 7, "
Tuesday	" 9, "
Wednesday	" 10, "

March 1
3 p.m.

With Col. Birdseye and Mr. Burkland, U.S.G.S.
Slide from SW. wall W. of cavern. Otherwise no changes.
Two steam vents S. wall yellow with sulphur.
Beam finishing taping N-S line across crater as base-line
for boring net.

March 4
7 a.m.

All day on floor chaining.
About 7 a.m. saw dust clouds from avalanches in Halemaumau,
NE. side. All day these slides were going on, maximum about
noon; noisy. Red dust on N. taluses. New debris on NE. talus.
Slides sometimes from NW. and SW., but biggest ones were strip-
ping NE. wall. Sulphur stain on wall conspicuous at steaming
place W. of S. talus.

March 7
4 p.m.

There were other slides reported on the 5th, and some were
seen about noon the 6th. Today pit mostly quiet. Small slide
W. Fresh debris on NE. and SW. taluses, and walls stripped NE.
and W. of SW. caverns. Vapor jets small--weather dry. White
dikes dipping about 50 or 60 degrees west have been revealed
by stripping of upper part of W. boss. They cut the bed rock,
and look as though they came from the underlying gray intrusive.

March 9
9:30 a.m.

One rock loosened near W. boss. Otherwise pit quiet.
Much red dust on east half of north sill. Usual dry places in
steam S. and SW. taluses, but the pit in general is very dry.

March 10
9:30 a.m.

Nothing new. A little sliding NE. Fresh debris on SW.
talus.

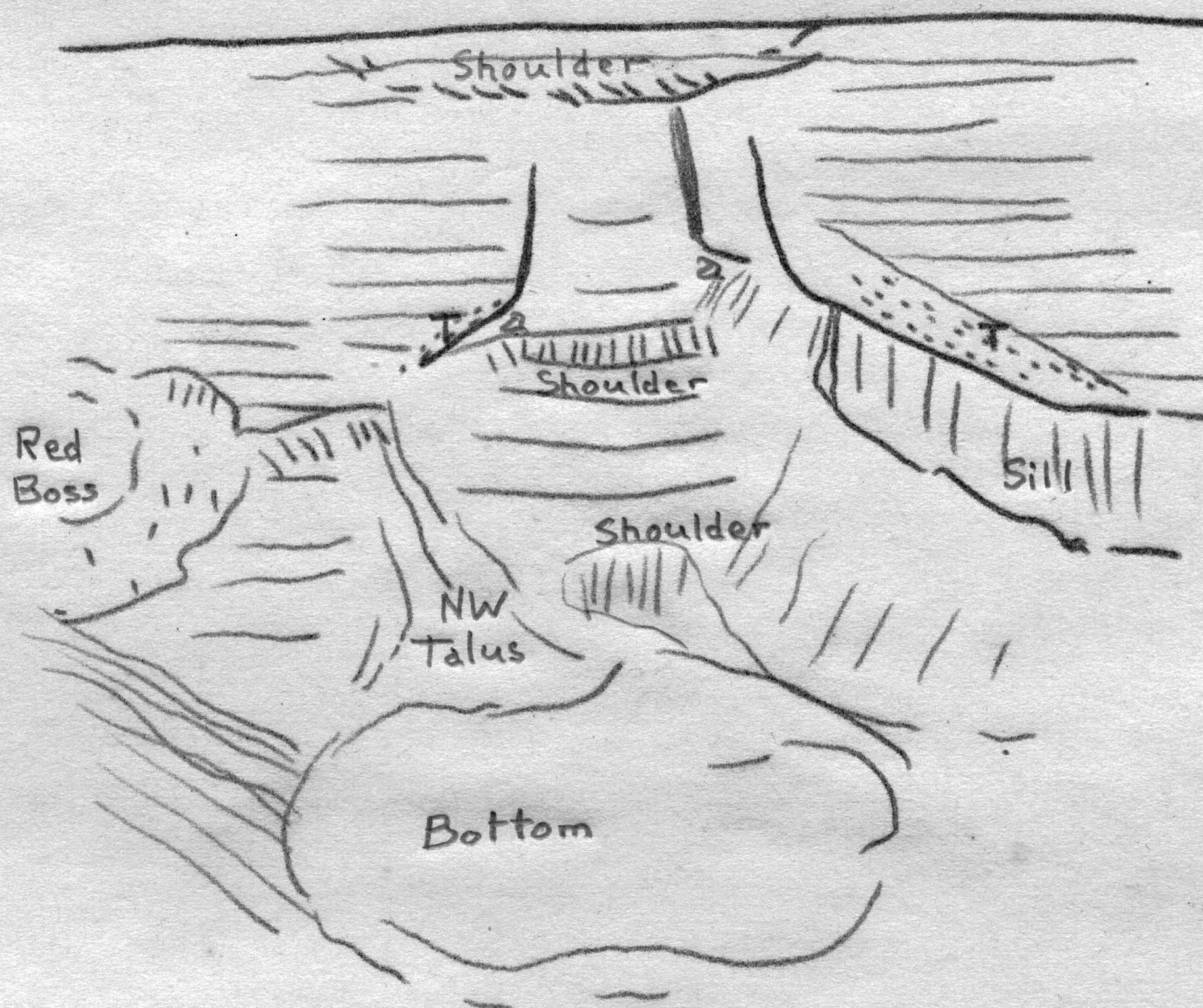
T.A.J.

JOURNAL

Day Thursday
SundayDate March 11, 1926
" 14, 1926March 11
2:45 p.m.

Pit dry and still. A few pebbles moving on W. wall.

Sketch of NW. Wall of Pit



Note, as shown in sketch, the angles (a) between cross-sections of old upright walls, and flatter 30° slopes below, under old fossil taluses, at W. end of N. sill, and at top of NW. talus. Query: Is not this the habitual shape of any pit funnel, the 30° slope protected by talus, and the vertical slope above created by caving? And may not the shoulders represent the flat funnels of 1823, 1868, 1886? If so, are the sill and W. boss 1868?

March 14
10:30 a.m.

With Gordon Runkle of Vancouver.

Dry pit. The steam vent near center of floor shows no steam and much sulphur. Big dust cloud seen about 10 a.m.

T.A.J.

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JOURNAL

Day	Date
Monday	March 15, 1926
Tuesday	" 16, "
Thursday	" 18, "
Friday	" 19, "
Sunday	" 21, "

March 15
3:20 p.m.

Quiet. Some rocks dribbling off W. wall. The dyke and cracks above SW. rift caverns are dusty to the top with whitish color in contrast to rock on either side. This appears as the due to an avalanche track from the very top; talus below shows nothing unusual. From a distance, this white streaking effect is seen over the dyke farther west in the same wall.

March 16

A prolonged tremor several minutes on seismogram middle of day. Appears to have been a slide.

March 18
4:30 p.m.

The steaming hole in wall W. of S. talus is growing increasingly yellow with sulphur. New rocks lie on NE. talus. On walking around to edge of SW. rim, above SW. rift dyke and tunnels, found that a piece of edge had fallen the length of rift notch, carrying thick sand and dust layer of 1924. This buff dust had given the color to streak seen during the last week.

March 19
10:30 p.m.

About 10:30 p.m. a long swaying earthquake dismantled both instruments and caused loud squawking of pheasants. Apparent distance of origin 80 miles; equal to Hawaii channel. Dispatches of March 20 say strongly felt in Honolulu, strongest at Koko Head. Felt as severe at Kohala, and knocked over ink bottles at Tribune-Herald office, Hilo. Small waves reported at Wailupe Naval Station near Koko Head, Honolulu.

Next morning smaller shock felt at Kohala.

March 21
11 a.m.

Nothing new at pit. There are two streaks of dust on SW. wall. Both apparently due to slides of ash from the top, on opposite sides of a block hanging out from rim just W. of SW. station. The easternmost is the dyke crack.

Small jolt at 11:39 a.m. felt.

T.A.J.

Hawaiian Volcano Observatory

JOURNAL

Day	Monday	Date	March 22, 1926
	Wednesday	"	24, "
	Monday	"	29, "
	Wednesday	"	31, "

March 22
2 p.m.

Nothing new at pit. A few rocks trickling down slopes now and then. Odor of H_2S . The hot cracks at E. edge Kilauea have made much sulphurous alum lately.

Boring. Yesterday, March 21, the Cletrac-Fordson tractor-compressor was delivered at H.V.O. Today with Beam, Jaggar, Yasunaka, Hirata, the eastern bore-locations, about 25 of them, were located by stadia transit shots from the E-W line already taped. Spent long day on E. floor of crater. This region appears quite accessible for the tractor, with some scouting. Think best markers for holes will be 9 ft. poles and galvanized iron discs. The Scott gasoline drill would be ideal for Kilauea Iki, the cliffs, and Keanakakoi.

March 24
4 p.m.

Rainy. Pit full of steam. Fumaroles on bottom dense with steam in the rain. Also the walls in places. NE. wall remarkably dry looking.

Dust from a slide seen about 2 p.m., and the NE. talus afterwards showed some new debris, apparently from the big sill.

Boring. Drove tractor-compressor and truck to drill road N. of gravel spit. Found front axle not free to pivot right and left on pin supporting frame when rough ground was entered. Stopped and covered machine. The strain pulled off one water hose (between compressor and radiator), and broke one band holding air tank.

March 29
4 p.m.

Crater shows much steam. Rainy and southerly weather. West walls very red. New place fallen away revealing dark gray fresh rock at the lower side of the northeast sill in the northeast corner of the pit.

March 31
1 p.m.

Nothing new at the pit. Fresh debris on northeast talus from the sill. Abundant vapor. There have been no avalanches of late.

T.A.J.

JOURNAL

Day	Date
Saturday	April 10, 1926
Sunday	" 11, "
Monday	" 12, "
Tuesday	" 13, "

(April 10--Outbreak of Mauna Loa)

April 10
8:30 a.m.
9:05 a.m.

Halemaumau quiet save for small avalanche at SW. rift chasm.

Two avalanches were seen to fall from SW. wall of Halemaumau. First one observed by Mrs. T. A. Jaggar was to W. of SW. rift, and second nearly over rift as viewed from Observatory.

R.H.F.

8:30 a.m.

Rocks sliding from SW. rift. Everything looked about the same.

9:a.m.

From H.V.O. saw two broad masses of the wall of Halemaumau at SW. rift lean forward and fall into pit.

11 a.m.

Nothing new to be seen from Uwekahuna along SW. cracked ared of Kilauea.

I.P.J.

April 11
3 p.m.

Pit full of steam, and faint odor of H_2S perceptible. Steam lifted, and a view of pit could be seen. Floor vapor was abundant.

R.H.F.

8:20 a.m.
11 a.m.
3 p.m.

Dust cloud up N. wall of Halemaumau

Thin dust at Halemaumau

At Halemaumau; raining with SW. wind, so got only glimpses of inside. Couldn't see place of rock fall SW. of April 10, but the scar was plainly visible from H.V.O. in the morning. Sulphur smell.

I.P.J.

April 12
5 p.m.

Abundant steam around crater. Good view had of interior. Wall quite red. Steam abundant. The steam arising from middle of line in SW. talus was issuing in rather dense jets.

R.H.F.

April 13
2:30 p.m.

Alex, guide, posted at pit for the day to watch hot whitish spot just below where tourists stand and at a little to the left, at base of wall.

Steaming vigorously, and some blue fume. The dry streak of same character up SW. talus the same as before. Noticed dark spots on sill. Walls generally damp from rain, but sill was damp-looking in spots only.

Crack crossing tourist trail at junction of Volcano House trail has considerably widened.

I.P.J.

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JOURNAL

Day	Date
Wednesday	April 14, 1926
Wednesday	" 21, "
Friday	" 30, "

April 14
3:30 p.m.

Could see nothing new except dryness of walls. Heard rocks twice.

I.P.J.

April 21
12 noon

Dust of avalanche over Halemaumau. Also seen several times yesterday.

T.A.J.

April 30
4:40 p.m.

One rock heard falling W. New talus SSE. from a recent fall, probably due to earthquake; rocks there light gray. Steam jets dry and thin. Other taluses remarkably free from fresh material. Vapor has increased at top of NE. talus. A core of red rock left in relieve at W. boss (by slides?).

T.A.J.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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JOURNAL

Day	Saturday	Date	May 1, 1926
	Monday		" 3, "
	Tuesday		" 4, "
	Wednesday		" 5, "
	Friday		" 7, "
	Saturday		" 8, "
	Monday		" 10, "

May 1
10:42 a.m.

Big avalanche cloud of pink dust at Halemaumau. Rises from W. end and spreads E.

T.A.J.

May 3

Avalanches frequent today. Between 2:40 and 3 p.m. they were almost continuous.

May 4

This day also marked by many avalanches.

May 5
2 p.m.

Small avalanches noted. Most of avalanching has been from NW. wall. Steaming light.

May 7
2 p.m.

Steam very thin. Small avalanches frequent.

May 8
9-11 a.m.

Rock slides frequent. Occasionally avalanches sent large dust clouds well above rim. Rim badly shattered at NW. in places, so that slight jars cause rock slides.

R.H.F.

May 10
4:30 p.m.

Halemaumau little changed. A few stones fell W. NW. talus appears to be red with fresh dust and W. pocket of floor below it is dusty and shows little vapor. Groove down face of wall under NNE. station, with fresh talus below. Red lump in E. end of NE. sill has been losing its projections of red rock. Yellow spot in S. wall W. of S. talus barely shows any color at all. Yellow salts on center floor make a small spot without steam. Simultaneous slides NNW. and NW. Another slide NW. at 4:47. Pink dust. The wall is freshly stripped above NW. talus in a wide scar. Small fall NNE. This groove lies between the rift dyke and NE. corner, and directly under the cracks in front of NNE. flag. The free-looking projecting lump in the upper part of the W. boss is still in place.

4:41 p.m.

4:50 p.m.

JOURNAL

(2)

Day	Monday	Date	May 10, 1926
	Wednesday	"	12, "
	Thursday	"	20, "
	Saturday	"	22, "
	Wednesday	"	26, "

May 10
(Cont'd)

More small falls NE. and NW. While the upper walls of pit are very dry, there are very wet (?) layers and cracks, dark chocolate brown with moisture, on both sides of the NW. talus at the bottom of the cliffs. They are partly steaming, but not all so.

May 12
9:30 a.m.
ff.

The diminution of steam at W. pocket of bottom, as compared with a few months since, is very marked. The hot steam pockets are now S. talus, center floor, SSW. wall base, middle of SW. talus, and wall next W. of SW. talus. Of these the S. and SW. talus vents are notably dry after heavy rain last night, hence very hot.

The rain has washed away all the sulphur and sulphate stains. The walls are dark with moisture. Three sets of dykes stand out light colored NE. and SW. The NE. sill and W. boss are drier than elsewhere. Odor of H₂S arises at SE. rim (air calm). Rather continuous tumble of small rocks, mostly N. One avalanche there developing a new niche across the W. end of fossil talus. Blue fume at S. talus and center floor. Dry belt up NE. corner fault zone.

T.A.J.

May 20
10 a.m.

Pit quiet. Steam abundant. S. floor edge and SW. talus especially.

May 22
10 a.m.

Pit quiet. Steaming as usual at N. floor and SW. talus, and but little steam escaping at S. floor edge. This indicates that the actual output of steam is variable.

May 26
10 a.m.

Rock falls heard occasionally. But little steam escaping from usual vents in pit; the amount from S. floor being especially thin.

R.H.F.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date	June 3, 1926
Thursday	June 3,	1926
Sunday	" 6,	"
Tuesday	" 8,	"
Thursday	" 10,	"
Friday	" 11,	"
Monday	" 14,	"
Wednesday	" 16,	"

June 3

Pit very quiet. Steam in small amounts only.

June 6

Pit quiet. Walls were red. Considerable steam was escaping.

June 8
10 a.m.

Pit quiet, though steam was escaping in abundance from numerous vents. SW. wind blowing, and much steam was escaping from cracks near pit rim.

June 10
1 p.m.

Steam abundant, especially from S. floor vent. E. wind blowing, and much steaming from cracks back of rim.

June 11
6 a.m.

Halemaumau full of steam and with a dense cloud continuous from rim up to 1,500 feet or more.

June 12
10 a.m.

Steam from pit very distinct. Red persisted on N. Wall, but inconspicuous elsewhere.

June 14
10 a.m.

Steam abundant from vent at S. edge, and rather thin at other vents. Occasional rock falls could be heard.

June 16
4 p.m.

Halemaumau quiet. Small rock falls heard. Steam abundant from S. vent.

R.H.F.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date
Sunday	June 20, 1926
Tuesday	" 22, "
Wednesday	" 23, "
Thursday	" 24, "
Saturday	" 26, "
Wednesday	" 30, "

June 30
10 a.m.

Pit quiet. Steam from all vents on floor and talus.

June 22
10 a.m.

Pit quiet. Amount of steam escaping was relatively small.

June 23
11 a.m.

Scarcely any steam visible at S. vent, though steam was visible from SW. talus and NW. floor. The small sulphur patch on SSW. talus near bottom is becoming more conspicuous.

June 24

Pit quiet. Steam most abundant from W.

June 26

Pit quiet. Steam is slight.

June 30

Pit quiet with but little steam.
Avalanches noticed in late afternoon.

R.H.F.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Friday	Date	July 2, 1926
	Saturday	"	3, "
	Sunday	"	4, "
	Monday	"	5, "
	Wednesday	"	7, "
	Saturday	"	10, "
	Monday	"	12, "
	Tuesday	"	13, "
	Wednesday	"	14, "

July 2 Avalanches from N. wall quite common.

July 3,4,5 Avalanches continued on these days.

July 7
2 p.m. Avalanches continue from N. wall. All sections of rim above N. intrusion body have been in motion

July 10 Avalanches that send dust clouds above rim occurred occasionally. The sulphur stained area on SW. wall appeared quite wet.

July 12 Avalanches noted during forenoon.

July 13
4 p.m. Avalanches frequent during the day. One small one above E. end of N. intrusive at 4 p.m.

July 14
2 p.m. Large avalanche at 12:13 p.m. filled pit with dust. Small rock falls from N. and W. walls at 2 p.m. As shown by scars and avalanche material, most of the avalanches have been from N. wall.

R.H.F.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date	July 15, 1926
Thursday	July 15,	"
Saturday	17,	"
Tuesday	20,	"
Monday	26,	"
Wednesday	28,	"
Friday	30,	"
Saturday	31,	"

July 15

Pit quiet. Only rock falls heard.

July 17
3 p.m.

Steam abundant from the many vents.

July 20
9 a.m.

Pit quiet. No rock falls heard. Steam escaping in dense volutes from NW. vents, and scarcely visible at other places.

July 26

Pit quiet. Small rock fall heard at SW. Avalanches had fallen from W. wall.

July 28
4 p.m.With H. E. Gregory.
Small rock fall from W. wall. Steam conspicuous at SW. talus and at W. Tall fume column on Mauna Loa.July 30

Large avalanche about 2 p.m.

July 31

Pit very quiet. Steaming was inconspicuous.

R.H.F.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Monday	Date	August	2,	1926
	Wednesday		"	4,	"
	Saturday		"	7,	"
	Tuesday		"	10,	"

August 2

Pit quiet. Most abundant steam at SW. and NW.

August 4

Steaming about equal from three principal vents in Halemaumau.

August 7
10 a.m.

Small avalanches observed from W. wall. Signs of recent avalanching from N. wall. Steam escaping from S. vent in dense volutes.

August 10
10 a.m.

Odor of H_2S noticeable back of S. rim. Recent movement has developed a small crack about 250 feet back of S. rim.

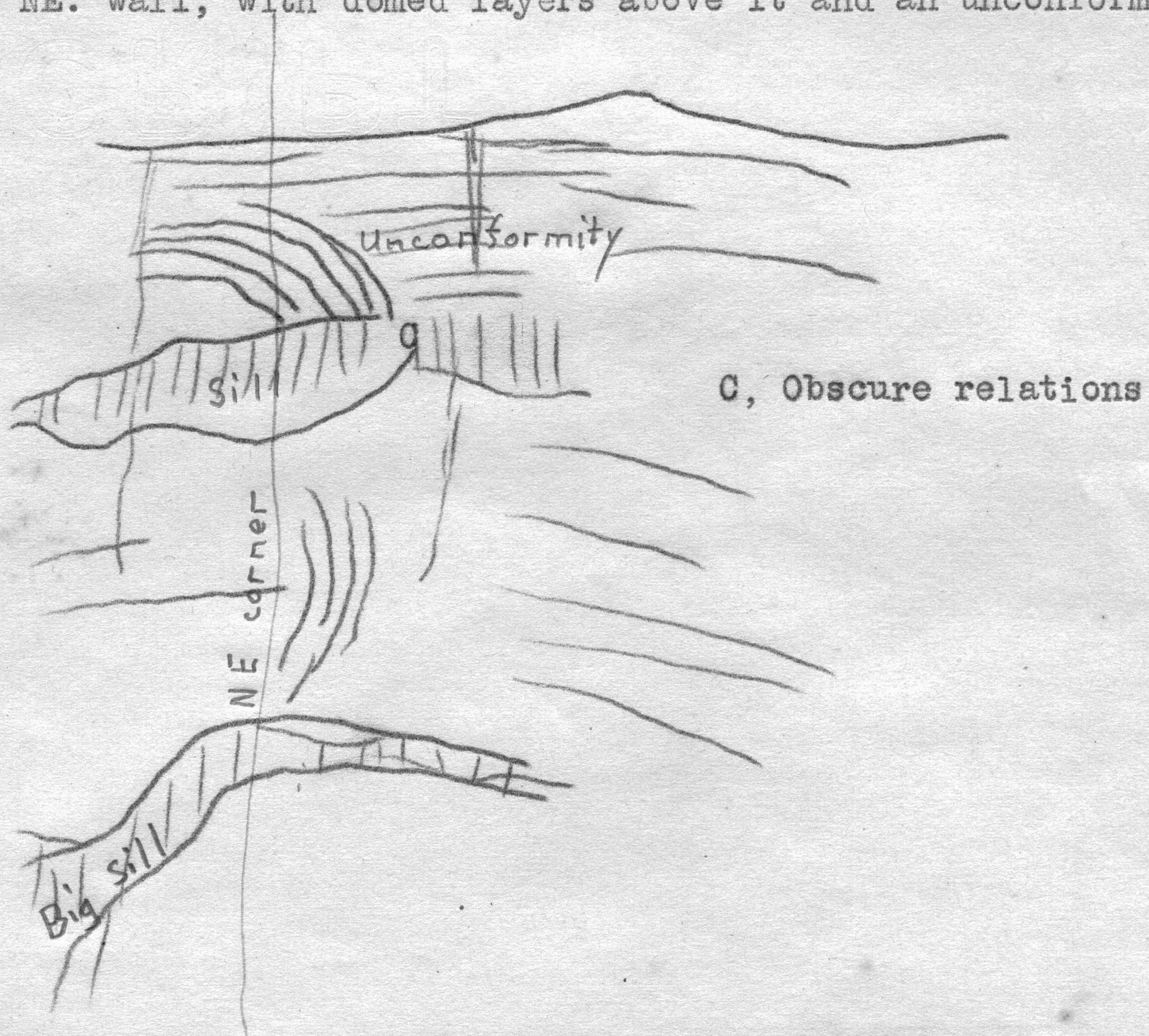
R.H.F.

Day	Thursday	Date	August 12, 1926
	Sunday		" 15, "

August 12
10:30 a.m.

Conditions at Halemaumau extraordinarily dry. Visible vapor at central floor, NW. talus, S. talus, and SW. talus. S. talus hotter and more voluminous steam than elsewhere apparently. Thin steam along E. cracks outside of pit, and at top of SSE. wall. Thick vapor at cracks top of SW. wall and usual places SSW. and W. Sulphurous spot on lower wall between S. and SSW. taluses. Sulphur at base of E. talus and E. base of SW. talus.

An upcurved sill of white intrusive one-quarter of way down NE. wall, with domed layers above it and an unconformity.



This is freshly exposed by recent caving.

One stone heard to fall in one-half hour. This was at the NE.

August 15
10 a.m.

With H.R.H. Gustav Adolph, Crown Prince of Sweden, the Crown Princess, Hon. Geo. Carter, and guests.

No slides. Pit quiet. Conditions unchanged.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Monday	Date	August 16, 1926
	Tuesday	"	17, "
	Thursday	"	19, "
	Sunday	"	22, "
	Monday	"	23, "
	Wednesday	"	25, "
	Monday	"	30, "

August 16
3 p.m.

No change. Counted six weakly colored sulphur spots:
2 E. talus, 1 SE. wall and talus, 1 base S. wall, 2 SW. talus.
Two avalanches in course of a half hour.

August 17
3 p.m.

With Dugald C. Jackson and Mrs. Jackson. One strongish
avalanche from NW. wall preceded by a smaller. Drizzling rain,
and steam somewhat increased.
Dust seen in pit at noon.

August 19
5 p.m.

Pit same. One slide well marked over NW. talus, and some
smaller ones.

August 22
11 a.m.

Pit wet and red. Sulphur on bottom much washed out; it
must be yellow stained alum.

August 23
5 p.m.

Pit quiet and fairly dry.

August 25

High wind. Some dust in pit, and much dust in desert.

August 30
6 p.m.

Remarkable cloud from Mokuaweoweo southward; hangs in brown
shreds, top straight; seems to have a stem at the crater. Farther
SW. there is a normal rain cloud over Kahuku. Above this is a
brown cirrus like the trail of an earlier fume puff. Can this
cloud be a fume puff.

There are extraordinary numbers of tremors this week, so
perhaps something is preparing.

T.A.J.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Wednesday	Date	September 1, 1926
	Sunday		" 12, "
	Wednesday		" 15, "
	Sunday		" 19, "

September 1
10 a.m. to
12:30 p.m.

Halemaumau making about 8 slides per hour, mostly from NE. wall. New yellow sulphur base of E. talus. Some of the NE. slides are free-falling rock from a zone of fresh breaks right under NE. station. Cracks fresh, back of and at this station, which will fall in soon. Other fresh cracks back of W. rim. Notice a light dyke in NE. wall trending apparently towards Kilauea Iki. S. talus steam vent seems to puff and looks very hot.

100 earthquakes this past week.

September 12
10 a.m.

Rain yesterday has made the wall redden. NE. station established by Beam has fallen in. Last week it was on the edge. Same edge greatly cracked back for 20 feet. Falls of rock numerous here NE.

S. talus dry spot is fuming hotly with blue steam. The other sulphur places developing yellow color as before. NE. talus continues to grow. Fresh red slide on N. talus, and gray on NE. talus

September 15
9:15 a.m.

Clear morning, NE. wind.

Blue sulphur fume mixed with steam puffing up from dry solfatara in S. talus. This place shows white stain.

Ledge steam at E. side of NE. sill, S. of NE. talus, solfatara at base of SE. wall, E. and W. of S. talus, N. side of SW. talus, and W. side of N. talus. E. talus solfatara, and SE. ledge both yellow. Some traces of sulphate stain at base of NW. talus in steam patch. No slides in 25 minutes stay.

A boulder on floor NE. has left a gray trail down talus above it.

September 19
2 p.m.

At pit with C. Skottsberg, Swedish botanist. No changes noticed except that alum and yellow sulphur stain has grown during last few weeks on rock bank at foot of SE. wall.

Steam condenses over pit as weather is drizzly. Skottsberg says the blue-green algae are present in the hot cracks and the mosses lodge on top of the blue green. Then follow the other forms of vegetation. The blue-green often on cool as well as hot places.

T.A.J.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date
Tuesday	September 21, 1926
Wednesday	" 22, "
Thursday	" 30, "

September 21

5:40 p.m.

Equinox.

Pit quiet. Sulphur stain strong at foot of E. talus. More of NE. wall has fallen, and lies as wet dark gray fragments on talus below.

Note that line of vapor jets extends up N. side of NW. and S. taluses, and up middle of SW. talus. The S. talus jet puffs strongly and sulphurously at its lower part.

The W. boss has left a core piece in relief that appears likely to fall.

There are three pittings in N. wall like the one at top of NW. talus.

September 22

5 p.m.

With A. L. Day and Bailey Willis.

No change at pit. No slides heard.

September 30

5:30 p.m.

Pit quiet. Small slide west side. Vigorous boiling up of sulphurous steam at S. talus.

New rock on top of NE. talus. Yellow stain strong at solfataras at base of E. talus. There appears to be fresh material on red slide at middle of big NE. sill.

Wet cracks across top of large SW. talus as tho landslip were starting.

Several small slides heard.

T.A.J.

JOURNAL

Day	Wednesday	Date	December	8, 1926
	Saturday		"	18, "
	Wednesday		"	29, "
	Friday		"	31, "

December 8
11:40 a.m.

Blackened patch, surrounded by bright yellow sulphur patch possibly 25 feet across at steaming area of S. talus. This was formerly gray and dry in the midst of steam-wetted talus. There is now a dry streak, but the yellow area may be less hot than the dry patch of before.

Pale yellow is the steam patch at base of NW. talus.

Somewhat brighter yellow is the patch at base of E. talus.

White salts are again on the bank of rock at base of SE. wall.

There is faint sulphur stain at two points at SW. side of floor, and two points lower part of SW. talus.

Rock trickles at NNE. talus, middle of big sill, heard twice in 20 minutes.

NE. corner of pit appears to have fallen away more, and there is new debris on the talus below.

The steam at S. talus does not appear so blue as before.

Steam hole at base of S. wall. Three steam jets near top of SW. talus; 4 on NW. talus. A line of steam follows edge of landslip debris on floor. Steam near base of SE. wall. Five slight steam jets on NE. talus. Pit walls and bottom are dry.

December 18
10 a.m.

Pit wet with recent rains. Several of the yellow sulphurous areas are less colored, showing that much of the yellow color is soluble salt stained with sulphur. Small slides noted twice at north wall. Steam enhanced in apparent volume by the rainfall.

Very still air, and not a trace of hissing from any of the steamjets audible at the rim of pit.

December 29
3 p.m.

Dribbling rock falls at NW. and at SW. rift caverns. Wilson and Hodges report the same yesterday. New red sand on the talus slopes at these two places, particularly the extreme W. side of the N. talus.

Bright yellow sulphur at vent in S. talus. Walls dark red and wet. Weather moist and steam jets everywhere in evidence.

Vague suggestion of roar of a steam jet heard twice; probably an error.

December 31
5 p.m.

Very slight falls from walls. Much steam and moisture. The talus slopes contain some fresh material. The NE. wall appears to be nearer the trail than formerly.



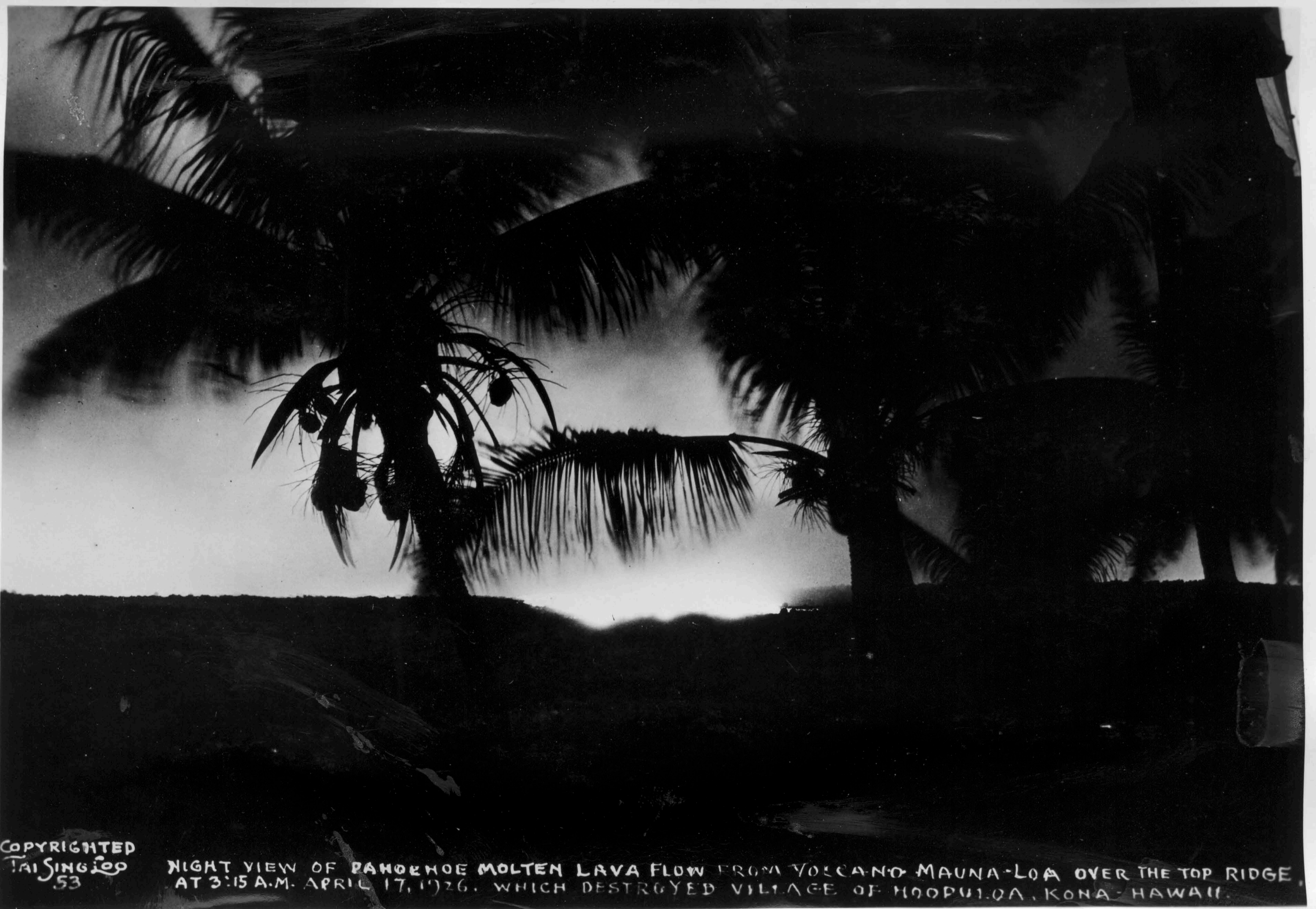
Steam and littoral explosions in ocean. 1926 flow of Mauna Loa.



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THE HUGE WAVE OF A-A LAVA CREEPT ACROSS THE GOVERNMENT ROAD, AT 12:30 P.M.,
APRIL 15, 1926. HONOMALINO, KONA-HAWAII. NOTE DR. BIGGER TAKEN MOVIES RECORDS OF FLOW

Hoopuloa flow crossing road - 1926.



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NIGHT VIEW OF PAHOEHOE MOLTEN LAVA FLOW FROM VOLCANO MAUNA-LOA OVER THE TOP RIDGE
AT 3:15 A.M. APRIL 17, 1926. WHICH DESTROYED VILLAGE OF HOOPULOA, KONA-HAWAII.

April 16, 1926



Jets of blue flame coming from distilled vegetation near lava flow from Mauna Loa, above Hoopuloa.



Lava stream from Mauna Loa filling up Hoopuloa Bay. 8:00 a.m.
April 18, 1926. Photo By Thomas Boles.



Lava flow from Mauna Loa volcano crossing the branch road just above Hoopuloa, about noon April 17, 1926.



First boulder, or snowball, to reach the shoreline road at Hoopuloa. 6:10 a.m. April 18, 1926

Photo: Thomas Boles



General View of Lava stream approaching Hoopuloa, Hawaii

Photo: T. Boles, Superintendent



Lava burring underbrush and cactus just above Hoopuloa, Hawaii.

Hoopuloa Flow



Lava stream from Mauna Loa volcano pouring into the sea at Hoopuloa Hawaii, 7:00 and 7:15 a.m. April 18, 1926 Photo: Thomas Boles



Hoopuloa



Lava flow blocking the shore line road at Hoopuloa, and pouring into the sea.
8:00 a.m. Photo by Thomas Boles, Superintendent.



Photo: K. Maehara

Hoopuloa

Ms. Gp. 2 Box 11.6



Lava from Mauna Loa ~~burning~~ burning trees and houses in Hoopuloa.
 4:00 a.m., Sunday, April 18, 1926.



CP 101,361

Hoopuloa



JOURNAL

N.S. Grogg 2 Box 11.6



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PART OF THE LITTLE HAWAIIAN VILLAGE OF HOOPULOVA JUST BEFORE THE LAVA OVERWHELMED IT.
SHOWING LITTLE PIG ON THE ROAD. 8:15 A.M. APRIL 18, 1926.

CP 101,360



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A-A LAVA FLOW INTO THE HOOPULOVA BAY. APRIL 18, 1926



Taising Leo
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THE A-A LAVA FROM VOLCANO MAUNA-LOA, JUST GREPT OVER ACROSS THE ROAD AT 12 M.
HONDMALINO RONA HAWAII, APRIL 17, 1926.



Taising Leo
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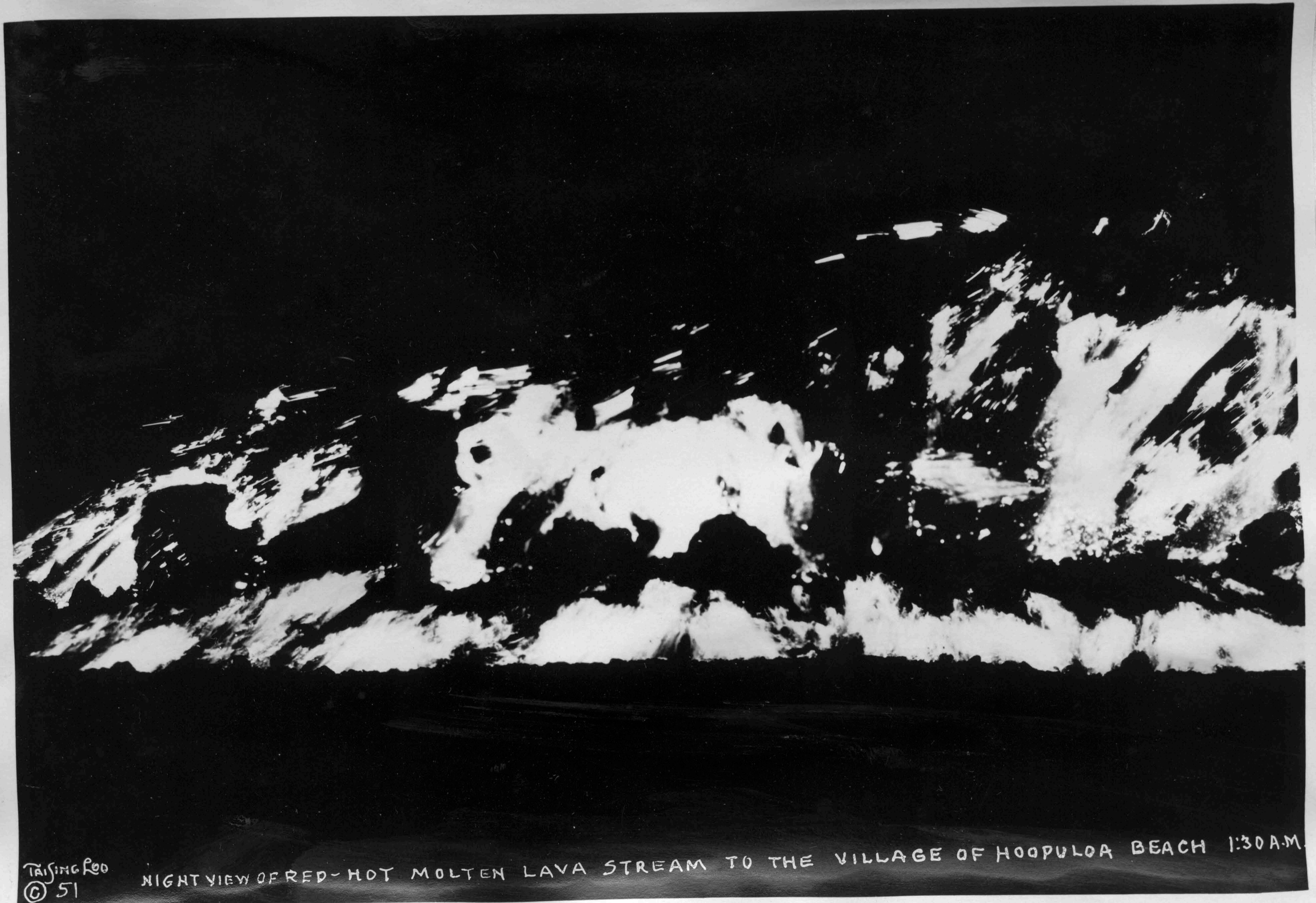
VIEW OF HAWAIIAN VILLAGE OF HOOPULOA AFTER THE DESTRUCTION.





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THE NEW A-A LAVA OF HONOMALINO FLOW APRIL 23, 1926 5 P.M.



Tai Sing Leo
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NIGHT VIEW OF RED-HOT MOLTEN LAVA STREAM TO THE VILLAGE OF HOOPULOA BEACH 1:30 A.M.