1902 Pine Valley, Utah Earthquake

November 17, 1902 12:50 p.m.

Magnitude 6

Newspaper Articles

This publication is an archive of newspaper articles relating to the

1902 PINE VALLEY, UTAH EARTHQUAKES Monday, November 17, 1902 12:50 p.m. Magnitude 6

Friday, December 5, 1902 (exact time unavailable) Magnitude 5

Newspaper articles were collected as the basic step of an earthquake education project funded by the U.S. Geological Survey under the National Earthquake Hazards Reduction Program (NEHRP). The project, entitled *Personalizing the Earthquake Threat in the Intermountain West*, involves researching and archiving newspaper articles, individual accounts, photographs, and additional sources of information for 48 earthquakes that have occurred in Utah, Idaho, Wyoming, and Montana since settlement. This information forms the basis for several earthquake education products: World Wide Web site publication of information collected, travelling photographic exhibit, scripted slide sets, manuscript for short book, and classroom activity packets.

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1902 Pine Valley, Utah earthquake - listing of newspaper articles

NEWSPAPER: Deseret Evening News

Date	Headline	Page	Information Categories	Utah Towns Mentioned
11/19/1902	Earthquake Shocks in Dixie	1	B, E, N, P	Pine Valley, St. George - Washington Co. Salt Lake City - Salt Lake Co.
11/19/1902	No Eruption at Mt. Baldy	1	G, I	Milford - Beaver Co.
11/19/1902	Pinto Damaged by Earthquake	2	B, E, N, P	Pinto - Washington Co.
11/19/1902	Earthquake Gossip	2	G, I	none
11/20/1902	Pine Valley Seismic Disturbances	2	В, Е	Pine Valley - Washington Co.
11/21/1902	St. George Damaged By Earthquake	3	B, E, G, N, P	St. George - Washington Co.
11/22/1902	Pine Valley Earthquake Capers	3	E, G, N, P	Pine Valley, Gunlock - Washington Co.
11/25/1902	Bloomington; More Earthquake Gossip	4	E, G, P	Bloomington - Washington Co.
11/25/1902	Santa Clara Nearly Every House Injured	4	B, E, G, I, N	Santa Clara - Washington Co.
11/25/1902	Local Briefs	4	G, I	Toquerville - Washington Co.
11/28/1902	Conditions Around Mt. Baldy	5	G, P	Mt. Baldy, Beaver City - Beaver Co.
12/09/1902	Last date searched			

1902 Pine Valley, Utah earthquake - listing of newspaper articles

NEWSPAPER: Salt Lake Herald

Date	Headline	Page	Information Categories	Utah Towns Mentioned
11/18/1902	Earthquake Sways Big Buildings of Salt Lake	6	B, E, G, N, P, S	Pine Valley, Santa Clara, St. George - Washington Co. Salt Lake City - Salt Lake Co.
11/18/1902	People Are Frightened	8	B, E, G, N	Cedar City, Parowan - Iron Co. Pine Valley - Washington Co.
11/19/1902	Mount Baldy is Active	8	G	Mount Baldy - Beaver Co.
11/25/1902	Last date searched			

NEWSPAPER: Salt Lake Telegram

Date	Headline	Page	Information Categories	Utah Towns Mentioned
11/17/1902	Earthquake Shocks City	9	E	Salt Lake City - Salt Lake Co.
11/18/1902	Active Volcano Reported in Beaver County in Southern Part of Utah	10	B, E, G	St. George, Santa Clara, Pine Valley - Washington Co. Parowan, Cedar City - Iron Co. Mount Baldy - Beaver Co.

11/20/1902 Last date searched

1902 Pine Valley, Utah earthquake - listing of newspaper articles

NEWSPAPER: Salt Lake Tribune

Date	Headline	Page	Information Categories	Utah Towns Mentioned
11/18/1902	St. George Shaken Up	11	B, E, G, N, P	Santa Clara, St. George, Toquerville - Washington Co.
11/18/1902	Had Some Earthquaking	11	E	Lund - Iron Co.
11/19/1902	Salonica Has Earthquake; No Better Than the Utah Article, However	11	E	none
11/20/1902	Evidence of Volcano	12	G	Salt Lake City - Salt Lake Co.
11/20/1902	State Briefs	12	E	Tropic - Garfield Co.
11/21/1902	Troubles at Parowan	12	E, N	Parowan - Iron Co.
11/24/1902	Utah Peak Flashes Fire	12	G	Pine Valley Mtns - Washington Co.
11/24/1902	Matters In Piute	13	E	Marysvale - Piute Co.
11/24/1902	Earthquake Shocks in Wayne	13	E	Notom - Wayne Co.
11/25/1902	Latest on the Volcano	13	G, I	New Harmony - Washington Co.
12/05/1902	No Earthquake in Four Days	13	E	St. George - Washington Co.
12/06/1902	A Shocking Time	14	B, E, I, P	Pine Valley, Pinto - Washington Co.
12/07/1902	(no headline)	14	E	Pine Valley Washington Co.

12/11/1902 Last date searched

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EARTHQUAKE SHOCKS IN DIXIE Seismic Disturbance In Pine Valley Plays Havoc With Chimneys And Ornaments— Two Distinct Shocks, The First Lasting For Over A Minute

Pine Valley, Nov. 17—Shortly before 1 p.m. today an earthquake shock of considerable strength was felt here. It was so pronounced as to take off the tops of a number of chimneys and shake ornaments from brackets in a great many residences. Five minutes later another came which, however, was not quite so severe. The first lasted for over a minute and the last for 30 seconds. The shocks seemed to move from north to south.

SEVERE IN ST. GEORGE

St. George, Nov. 17—Four shocks of earthquake ware felt here today. The first two at 1 p.m., were very severe and many buildings are damaged. Santa Clara is also badly damaged.

TOUCHED SALT LAKE

The edge of the earthquake above referred to, touched this city and frightened a number of people. The tremor was felt at 12:45 p.m., at which minute and hour the clock in the office of the United States weather bureau stopped, and the shock was felt severely enough in the lower stories to badly frighten some of the lady type-writers. In fact one of them grabbed her machine and put for the street in wild dismay, while her employer went upstairs for the elevator, to ascertain from the weather office what the outlook for further seismic squalls was. The quake was felt in the McCornick building and was reported as quite noticeable in the southern part of town. No damage beyond jarred nerves had been reported early in the afternoon.

[Deseret Evening News; November 17, 1902]

NO ERUPTION AT MT. BALDY Report Published In A Morning Paper Merely A Report And Nothing Else— The Stillness Of Olden Times Yet Prevails There

Milford, Nov. 19—The report current in Salt Lake to the effect that Mt. Baldy is in active eruption, is merely a report and nothing else, as there is not the least semblance of truth in it. Mt. Baldy can be seen plainly from this city and to all appearances the same stillness prevails there today as has always prevailed, so far, at least, as the recollection of the oldest inhabitant is concerned.

Mount Baldy is the loftiest peak in the region wherein it rears its head, being that portion of the Wasatch range which divides Beaver and Piute counties. For this reason it can be seen at great distances and so constitutes a kind of landmark for herders, stockmen, prospectors and others who have occasion now and then to travel in the long desert stretches west and northwest of that locality. It derives its name from the fact of its having no growth of any kind upon its summit, although at its base and for some distance up its sides vegetation is abundant, in places even rank. It is the rockiest of all rocky mountains, being in fact one great undivided rock, probably solid all through, but with somewhat varying characteristics, gold mines here and there alternating with the barrenness which elsewhere prevails. The waters of Clear Creek—one of the most beautiful streams in the state, flow along its entire northern boundary and here the abode of the white man is numerous. Nothing is popularly known of any crater either at its summit or anywhere along its sides.

[Deseret Evening News; November 19, 1902]

DESERET NEWS

PINTO Damaged By Earthquake Schoolhouse And Dwellings Injured—21 Shocks Felt

Special Correspondence.

Pinto, Washington Co., Nov. 17—One of the hardest earthquakes ever felt in this section struck our town at 1:07 p.m. today, apparently coming from the north, many chimneys and ceilings have fallen off, and there was great consternation among the inhabitants, who rushed out of doors and remained there for some time. At this time, 1:55 p.m., 20 other distinct shocks have been felt making things rattle in good shape—now another has just occurred as this is written making 21 in all. Our schoolhouse is badly damaged. Much of the ceiling has fallen and been loosened, and both chimneys will have to be taken down. People are afraid to remain indoors.

At 2:30: There have been no more shocks and the people have entered their houses again and beginning to clean up the plaster, etc., scattered over the floor. [Deseret Evening News; November 19, 1902]

EARTHQUAKE GOSSIP Considerable Talk But No Further Disturbance Has Been Reported

There was a good deal of earthquake gossip on the streets today, especially since the report that Mt. Baldy in eastern Beaver county was in a violent state of eruption, and the occurrences of three years ago are being revived. No advices had been received this noon at the United States weather office as to further seismic disturbances in the southern part of the state. There is considerable speculation as to the effects of the present unsettled terrestrial conditions upon the water supply of the state, and some citizens are predicting some radical action on the part of the great lake.

[Deseret Evening News; November 19, 1902]

PINE VALLEY Seismic Disturbances Cause Considerable Alarm And Some Damage

Special Correspondence.

Pine Valley, Washington, Co., Nov. 17—The earthquake that reached here at 12:50 p.m. thoroughly frightened the whole community. The first shock lasted about one minute, the second came five minutes later, the last of at least six distinct shocks was at 20 after 1 o'clock. Most of the chimneys in the town are down. Robert Gray's house seemed to fare the worst; both chimneys were thrown down and the rear wall made unsafe. The walls of Bishop Snow's fine brick residence were badly cracked. [Deseret Evening News; November 20, 1902]

ST. GEORGE Damaged By Earthquake Buildings Shaken And Cliffs Torn Asunder—Some Made "Seasick"

Special Correspondence.

St. George, Washington Co., Nov.18—About 24 earthquake shocks occurred in this region. The first and most severe came at 1 p.m. yesterday. Many clocks stopped at that hour. The shaking continued at intervals through the night till about daylight this morning. The tower of the Temple was seen to oscillate at the first shock and the clock stopped, but no damage was done to that sacred edifice. Brick and adobes fell from many chimneys and many ceilings were cracked. Our new Woodward school building being among the worst to suffer.

Nearly everybody ran out of doors and appeared to think the street was the safest place. A few did not

retire to bed during the entire night; many children as well as older people said "come in" when the door was shaking and the windows rattling during the evening.

The first shock produced the sensation of seasickness, and not a few "cast up" their accounts just as they do on ship board in a storm. Clouds of dust were seen in many directions, caused by falling rocks and cliffs as far as 25 miles distant. From what we can learn Santa Clara and Pine Valley fared worse than St. George.

Nov. 19—Several shakes and rumbles of earthquake occurred last night followed by a very cold wind and rain storm today.

[Deseret Evening News; November 21, 1902]

PINE VALLEY Earthquake Capers Rocks Are Rent From Mountain Side And All Nature Stirred

Special Correspondence.

Pine Valley, Washington Co., Nov. 17-The earthquake that visited this region was the greatest sensation that the citizens here ever experienced. The severity of the first shock that came at 12:50 p.m. carried terror to most of the people. Women fainted while others gathered their sick children in their arms and fled out of their homes. One sister was just lighting a fire in her fire place when the bricks began to come down the chimney. In trying to get out of their houses the people were hit by the swaying doors and jambs. The last of six distinct shocks was felt at 1:20 p.m. The damage was done by the first shock which lasted just a minute by the watch. Clocks were stopped and ornaments shaken down and broken. The bricks falling from the meetinghouse chimney started Bishop Snow's team to run and he had all he could do to stop them, though he had the brake on and lines tied to the brake.

The air seemed filled with electricity and everybody felt its effects. Dust was seen to rise in the

mountains, and those up the canyons saw great rocks weighing many tons torn from their place on the mountain sides and dashed down into the canyons below. In Grass valley not a great way from the head of the field, a great rock of several tons was rent from the mountain side, swept the pinion pine and cedar trees before it and nearly buried itself as it struck the level ground.

At Biglow's ranch, six miles above Gunlock, the shock was very heavy, 32 distinct shocks being felt. The first one they thought occurred about 12 noon, and they kept on at intervals until 10 p.m. Rocks were rent and rolled down from the precipices with a roar. The first shock was accompanied with a roar like the rushing of a heavy wind through the timber. No fatalities have as yet been heard of, but it was extremely dangerous to man and beast in the mountain passes, owing to the many rolling rocks. Poultry and domestic animals were also greatly frightened by the commotion. [Deseret Evening News; November 22, 1902]

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BLOOMINGTON More Earthquake Gossip

Special Correspondence.

Bloomington, Washington Co., Nov. 20—We had one of the heaviest shocks of earthquake Monday that we have ever known. There were three different shocks. The first shock came about 1 o'clock in the afternoon, and between the second and third shock there was an elapse of about ten minutes. No damage so far reported. The school children were considerably frightened while being so badly shaken. On the various ledges of rock on the hills in various parts of the country, rocks were thrown from the mountain sides and sent rolling down to the valleys below and clouds of dust rose in the air.

[Deseret Evening News; November 25, 1902]

SANTA CLARA Nearly Every House Injured Damage Done By Earthquake—Residents Panic Stricken

Special Correspondence.

Santa Clara, Washington County, Nov. 18—The people of this little burg were almost panic stricken as a result of the earthquake which occurred at two minutes to one o'clock yesterday afternoon. The damage resulting is variously estimated at from \$500 to \$1,500. There is scarcely a house in town that was not damaged. Glassware was broken, etc. Our new meeting house was considerably damaged as was also the schoolhouse. Children rushed from the building some of them crying with fright, others yelling and it was found necessary to close the school for the afternoon. Many residents were afraid to re-enter their homes during the night. The people generally had a severe shaking up and a bad scare. In all there were about three shocks felt and four vibrations. The first shock is the one that did the damage. Huge boulders came rolling down the mountains near here. [Deseret Evening News; November 25, 1902]

LOCAL BRIEFS

W. M. White of Beaver is in town and says that the second story reported about volcanic eruptions in the vicinity of Toquerville is all a fake, just as the other one was about Mt. Baldy. "But," he added, "that country is

all volcanic in that part of the state, and if eruptions do once break through the crust, it is all day with it." [Deseret Evening News; November 25, 1902]

CONDITIONS AROUND MT. BALDY Interesting Description By One Who Is Well Posted—Says It Is The Product Of A Tremendous Volcanic Upheaval At Some Primitive Date

To the Editor:

Beaver City, Nov. 23—In scanning the pages of the last issue of the Semi-Weekly News I notice some reference to the eruption of Mt. Baldy. Evidently your Milford correspondent is not as well posted as some others are with reference to conditions in that vicinity. While it is very true that Mt. Baldy is not in active eruption, it is also a matter of fact that it is the product of a tremendous volcanic upheaval at some primitive date. Blue lake (which is about 400 yards across and is situated just on the south side) is unquestionably the mouth of the crater. There are also numerous other evidences westerly and southerly from this point; in fact the whole formation, I may say, is of a volcanic nature in the directions above mentioned.

Every one in Beaver will have occasion for some time to come to remember the 13th of November, 1901, the date of our great earthquake, the whole earth seemed to be in a state of commotion.

Like a great many others my curiosity was aroused and I made up my mind to visit the section where there seemed to be the greatest disturbance, which occurred to us to be Mt. Baldy, or thereabouts. The south fork of North creek which heads at Blue lake, and is one of the largest streams that flows from the great peaks, was the course selected to reach the lake. On emerging at the mouth of the canal to our great surprise we saw great stones directly in our path that had been torn loose by that tremendous shock. So much so was this the case that where there was a possible wagon road prior to the disturbance we found it necessary in several places to either move a great amount of rock or cut a new trail that we might pass on horseback. We also found great cracks from 4 to 8 inches wide around the upper ends of the lake. It looked as though the earth at this point had been raised and settled leaving these marks behind.

Later on myself and one other made up our minds to go to the topmost peak of Mt. Baldy. We found also that it was not unmolested. Some few years ago the government had a signal station on Mt. Baldy and built a cabin near the top which was partly into the solid rock spoken of by our Milford friend. To our surprise we found this cabin completely thrown down and a great gash in the solid side of the excavation.

These with many other evidences seem to me to be very convincing that there was, and is, something seriously wrong with the interior of the globe at this particular point. Will also state that slight shocks and tremors have been felt in that district up to within the last few weeks. I myself have made no less than five trips up in this section this last summer and am thoroughly convinced in my own mind that it was something more than a mere slip of the earth's crust, as has been stated by some of the eminent men of the state.

We may never live to see Mt. Baldy an active volcano, but more unlikely things sometimes happen. We will hope that it may never occur, but should nature make much stronger effort we will undoubtedly more fully realize the peril of our neighbors namely, Martinique and Guatemala.

L. W. H.

[Deseret Evening News; November 28, 1902]

EARTHQUAKE SWAYS BIG BUILDINGS OF SALT LAKE Sharp Shock Yesterday Afternoon Creates A Scare But Does No Damage In The City Reports From Southern Part Of State Indicate That Tremor Was Violent And People Were Badly Frightened

St. George, Utah, Nov. 17—Today at three minutes to 1 o'clock occurred the severest earthquake ever experienced here. There were in all nine shocks, all being over by 1:30. The first shock was very severe, shaking down chimneys, and in some cases being so violent that pictures hanging on the walls were turned around with face to the wall. The new school building was so shaken up that the ceilings were cracked and shattered and all the plaster fell down.

The panic there was so great that the children ran pellmell from the building. The teachers, losing all control of the pupils, rushed to the head of the stairs, endeavoring to save them from falling headlong in their wild panic and being trampled to death. One little girl fainted and was carried out by one of the big boys. The shocks continuing, school was adjourned for the day.

Reports from the Santa Clara, west of here, say that not a chimney remains standing. One house in Pine valley is ruined. During the shocks clouds of dust rose just north of here, rocks rolled from the hills, buildings shook as with the ague, clerks ran from the stores, women ran from the houses with their children in their arms and confusion reigned supreme.

The tower of the temple oscillated ten inches at its top, and it is feared that the spire on the tabernacle is shaken from its perpendicular. More and heavier shocks are predicted tonight.

Salt Lake City and other districts of Utah were shaken yesterday by a severe earthquake. No lives were lost, but panics were created among the people in outside cities of the state, and considerable damage was done. In this city the disturbance was felt very plainly. The tall buildings in the whole business district were shaken. Floors trembled violently, clocks were stopped, electric chandeliers swayed, walls shook, and people on upstairs floors tottered as if tipsy. Two distinct shocks were felt here shortly before 1 p.m. The waves traveled across the city from southwest to northeast.

In the vicinity of St. George and Pine valley the disturbance was most severe. This district was apparently the center of seismic activity. As many as nine distinct shocks were felt in places. Chimneys toppled over and buildings were almost wrecked. Massive rocks, shaken from the hillsides, crashed down the mountains, raising clouds of dust and creating terror among the people living in the valleys.

Panic-stricken Children

In St. George the panic-stricken school children rushed pellmell out of the building. It was with difficulty that serious accidents were prevented. Terror-stricken women, with their children clasped to their breasts, rushed out of their quaking houses, and excitement ran to the highest pitch. Towers of tall buildings were displaced and much damage was done. In places hot and cold springs were increased in their flow, and the waters became muddy. Clouds of dust were observed near the mountains in the districts of most violence.

In the St. George district heavier and more disastrous shocks were expected last night and today. The excitement in that district is great.

The first intimation of the seismic disturbance in Salt Lake was noticed at 12:50. Tenants in the Dooly building felt the shock very perceptibly. The walls swayed slightly and the floors trembled.

Stopped the Clock

The clock in the weather bureau, hanging on the west wall, was stopped. For 1 second or more the pendulum swung at right angles to its proper direction, then came to a standstill. A half minute later it was noticed to sway again, then come to a stop. The suspended electric light globes on almost every floor of the building were noticed to sway violently from southwest to northeast. People who were standing upon the upper floors felt themselves begin to reel as if they had a bilious attack. For some time they could hardly realize what was happening. The waves traveled diagonally across the city towards City Creek canyon. They were of such breadth that they covered almost the entire business district.

The shocks were perhaps most severely felt in the McCornick building, that being the tallest building in the path of the waves. The walls shook and the floors trembled violently. The clock pendulum in the office of the American Smelting & Refining company, on the top floor, swung at right angles to its natural direction. A clerk, who was standing at a tall desk, writing, felt the desk begin to shake so violently that he could not write. He noticed that everything in the room was shaking and felt himself swayed to and fro. At first he

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thought he had been seized with an attack of dizziness, but when he saw the light globes swinging like pendulums, and the clock pendulum going the wrong way, he realized what was happening. The shaking of the building was felt down to the lower floor.

Windows and Desks Rattled

In the Commercial block, the two shocks were felt very perceptibly. The building trembled, and the windows rattled as if blown by a strong wind. Desks shook and people in the building swayed as if they were tipsy. A desk in H. J. Dininny's office near the top of the building, at which he was writing, shook so violently that he could not write. In describing the shocks, Mr. Dininny said:

"I was sitting at my desk, writing, and a client was sitting on the other side. Suddenly the desk began to tremble so that my pen went all over the paper. I thought my client was shaking the table with his foot and I told him to stop. He replied that he wasn't shaking the table. I looked at him and saw him swaying to and fro and felt myself begin to sway. In an instant I became dizzy and thought I was going to fall over. I could then feel the whole building shaking and realized that we were having an earthquake."

No Damage Was Done

People in the other offices of the building felt the same shaking. Along State street the shocks were felt very plainly in even the two and three-story buildings. Along Main street evidences of the seismic disturbance were noticed in almost all of the brick and stone buildings. The shock was not severe enough, however, to cause the plastering to crack in any of the buildings, or do any damage. Persons walking along the streets, of course, did not notice the disturbance, and it was not felt in the residence districts.

At the Warm Springs and Hot Springs the shaking was not perceptible, but the effects of the disturbance were noticed, it is said, in a slight increase of the flow of the water. This increase is always noticed in springs of that kind after a seismic disturbance.

In the past few years Utah has been visited by a number of earthquakes, all of more or less violence. The last one of any consequence before that of yesterday was on Dec. 13, 1899. The center of disturbance in this instance was in Sevier county. Houses were shaken down, and a number of walls were cracked even in this city. Since that time several slight shocks have been felt in the southern portion of the state, but they did not reach Salt Lake.

Center of the Disturbance

Reports from various parts of the state show that

the disturbance of yesterday had its center in the vicinity of St. George and Pine valley, the volcanic district of the state. The evidences of former volcanic disturbances in the state and the frequent recurrence of these seismic disturbances has caused considerable conjecture among local scientists about the probability of future volcanic disturbances here. Of course earthquakes are attributed to volcanic disturbances or great landslides on the interior of the earth. Either of these disturbances causes waves of vibration to travel through the earth's crust, much in the same manner as waves move on a basin of water when a small pebble is dropped into the liquid. The waves travel in concentric circles. They travel more rapidly and with much more violence through strata of rock. Consequently, places underlying which are great rock beds will feel the shock of an earthquake where a town not above such a stratum of rock will not feel the disturbance at all.

In Volcanic District

There is no seismograph in the state to take records and measurements of seismic disturbances, but what data has been gathered in regard to them by the local weather bureau show that practically all of the quakes have had their centers of disturbance in the volcanic district of the state. This fact, coupled with the fact that in these districts there may be found today extinct volcano cones, hot springs and other evidences of volcanic action at some time past, gives rise to the question of whether there may not again be volcanic activity in these regions. In the southwestern portion of the state there is an old mound, supposed to be an extinct volcano cone, that it is said now emits vapors that are much warmer than the surrounding air. These vapors maintain their same temperature winter and summer.

From this and other evidences some scientists who have made a study of the geological conditions of the state have said that the state might be shaken at any time by volcanic eruptions. Other scientists laugh at the idea. However, these volcanic evidences lead to the supposition that the earthquakes which have shaken the state were produced by volcanic action somewhere in the interior of the earth, rather than by sub-terrestrial landslides.

Owing to the lack of instruments, the local weather men have done little to observe the seismic disturbances in the state, but Director Murdoch proposes to take steps now to secure a seismograph for installation somewhere in the state.

[Salt Lake Herald; November 18, 1902]

PEOPLE ARE FRIGHTENED Seven Distinct Shocks Were Felt At Pine Valley

Pine Valley, Utah, Nov. 17—Seven distinct earthquake shocks were felt here today between 10:30 a.m. to 1 and 1:20 p.m. The first and fourth were very strong, lasting about one minute each and doing general damage. Chimneys were toppled over and bottled fruit, milk pans, etc., inside houses were scattered. One brick dwelling house in the southwestern part of the town is so badly damaged that future occupancy will be extremely precarious. The front of the Co-op store, a brick building, was shaken loose, so that another slight shock might throw it over.

The waves of disturbance seemed to come from the south. A natural spring of cold water, used for domestic purposes, shot up in effervescent style and suddenly became colored as with yellow clay. The flow is perceptibly increased. People were badly frightened and excitement is still high.

Got Good Shaking Up

Parowan, Utah, Nov. 17—About 1 o'clock today an earthquake was distinctly felt here. It seemed to come from the south, going to the north. No damage was done, only a good shaking or waking up.

Brick House Cracked

Cedar City, Nov. 17—A very sharp shock of earthquake was experienced here at 12:47 today, lasting twenty or thirty seconds. No serious damage is reported, but some brick houses were cracked and a great many people scared. [Salt Lake Herald; November 18, 1902]

MOUNT BALDY IS ACTIVE Seismic Disturbance Of Monday Has Reopened Its Crater

Telegraphic reports tend to show that the seismic disturbance of Monday afternoon was more severe in the southern part of the state, especially in the Dixie country, than in any other portion of Utah. Those who are familiar with the geological formation of Utah are not surprised that the cities in the extreme end of the state should feel the effects of such disturbances more than those in the northern part, for in the south, in the vicinity of St. George, there are surface evidences of seismic disturbances which occurred not many centuries ago.

Within less than twenty miles of St. George there are to be seen thirteen cones of extinct volcanoes. The pioneers recall, in their younger days, of the Indians telling them that they could remember when the sides of a very large crater, not many miles east of the scene of the Mountain Meadows massacre, were warm.

Dr. D. A. Turner of Milford, Beaver county, said yesterday that Mount Baldy, in that county, is in a semistate of eruption. The explosions, accompanied by a shower of ashes, can be heard twenty miles away. Occasionally great plumes of smoke arise from the old crater, and the rumblings of the earth are little short of terrifying.

Mount Baldy is about 12,000 feet high. Scientists have always maintained that in times gone by it was an active volcano. Dr. Turner thinks that new lava is present in the crater and that the rocks on the inside are quite hot.

[Salt Lake Herald; November 19, 1902]

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SALT LAKE TELEGRAM

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EARTHQUAKE SHOCKS CITY Two Distinct Disturbances Noted, But No Damage Was Done

Two distinct earthquake shocks were felt in this city shortly before 1 o'clock this afternoon. The first shock occurred at 12:54 o'clock, and the second which was much more pronounced, at 12:56 o'clock this afternoon.

Occupants of the tall buildings in the business district noticed the shocks distinctly, and the disturbances were very pronounced in the telephone exchange building, where a number of the operators were somewhat frightened by the shaking. No damage was done.

The second shock was so strong in the weather bureau headquarters that the clock was thrown out of plumb and stopped. The hands pointed to exactly 12:56 o'clock p.m. The direction of the seismic wave could not be determined, nor could its general direction. The local branch of the weather bureau is not supplied with a seismograph, and there is not one in the entire State.

The weather bureau officials here feel that an instrument of this kind would be very useful, as the disturbances are of comparatively frequent occurrence. There have been at least five slight earthquake shocks here within the past three years. Observer Murdoch of the weather bureau has requested that one be installed here, but up to this time his request has not been granted.

Reports from Ogden and other points in the State say that the earthquake was not felt. [Salt Lake Telegram; November 17, 1902]

ACTIVE VOLCANO REPORTED IN BEAVER COUNTY IN SOUTHERN PART OF UTAH Earthquake Disturbances Are Probably Due To Eruption In Mt. Baldy, Says Dr. D. A. Turner Of Milford Earthquake Damage In Southern Utah

Reports from outside towns of the State show that the earthquake which was felt here yesterday afternoon and which was chronicled in last night's Telegram, was felt with greater violence in other parts of the State.

Telegraphic advices from St. George state that the disturbance was the most severe ever experienced in the southern part of the State. There were nine shocks, the last of which was felt at 1:30. The first shock was so violent that chimneys were shaken down, ceilings were cracked and in the new schoolhouse the plaster fell from the walls. A panic was narrowly averted in the schoolhouse and it was only by the most strenuous exertion that the teachers prevented a stampede among the pupils. School was adjourned for the day.

Not a chimney was left standing in Santa Clara, west of St. George, and one house was destroyed in Pine valley. Clouds of dust arose from the hills near Santa Clara, caused by masses of boulders falling down the mountain sides.

The tower of the St. George temple swayed ten inches at its top and it is feared that the tabernacle spire is shaken from the perpendicular.

At Parowan the shock was distinctly felt, though no damage was done. At Cedar City the shock was very sharp and lasted twenty or thirty seconds, but no damage was sustained beyond the cracking of a number of brick walls.

Dr. D. A. Turner of Milford, Beaver county, who is in the city today, says that Mount Baldy, in Beaver county, in the southwestern part of the State, is a volcano, which at times is quiescent, and occasionally takes on activity. The volcanic eruptions occur with greater or less frequency, and the explosions which occur there can be heard and occasionally felt at Milford, which is twenty miles away.

Occasionally great plumes of smoke and dust arise

from the crater of this mountain, and rumblings of the earth are of frequent occurrence. The explosions are frequently followed by slight earthquakes, which can be felt in the surrounding country for miles.

Dr. Turner, who explored the side of this mountain within the past few days, believes that new lava is present in the crater, and that the rocks at the crater were still hot. There were rumblings in the mountain at that time.

Mount Baldy is a peak of the Wasatch range and is more than 12,000 feet high. It has been known as an extinct volcano for years and inert lava is still to be seen on the sides of the crater.

This is believed to be the center of the earthquake disturbance of yesterday, which reports show was very violent in southern Utah. Dr. Turner left Milford, however, before their occurrence.

SENATOR LEWIS KNOWS OF TWO EXTINCT VOLCANOES

Senator A. B. Lewis of Beaver county, in talking of earthquakes in southern Utah, today said:

"Earthquakes are of almost annual occurrence in Beaver and Washington counties, but there are no active craters there to my knowledge. There is an extinct crater southwest of Frisco, and another northeast of Minersville. The severest shock I remember was six years ago. I was in a mine 300 feet deep at the time. The noise down there sounded like an explosion. When I got out of the mine the people were greatly excited over the shock. It broke windows, rattled dishes out of cupboards and tore rocks loose from ledges. A shock last year lowered the level of Puffer lake, and as a result increased the flow of water in Beaver river. This same earthquake stopped most of the waterflow in the Horn Silver mine."

[Salt Lake Telegram; November 18, 1902]

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ST. GEORGE SHAKEN UP

Washington County Visited By An Earthquake

Damage At Santa Clara

Hardly a Building in Town Escaped Injury—Chimneys Were Thrown Down, Plaster Shaken Loose and Dishes Broken in Cupboards—Children Fled in Terror From the Public Schools— Most Severe Quake, Followed by Seven Minor Shocks—Toquerville and Lund Shaken

St. George, Utah, Nov. 17—A series of earthquakes were felt here today. The most severe shock occurred at 12:53 p.m. Houses throughout the city were badly shaken and rocks and bricks fell from the chimneys on several houses.

In the Woodward school plaster fell like rain from the ceilings and the building rocked; the children screamed and ran from the house. The teachers were unable to pacify them, and school was adjourned for the day. Large rocks were shaken off the hills near town.

Seven other distinct shocks were felt, much lighter than the first, at intervals of several minutes. At Santa Clara, five miles west of here, the shock was much heavier than at St. George, hardly a building in the town escaping without some injury. The chimneys were shaken off of most of the buildings, some were cracked, and plaster fell all over the floor. Dishes were broken in cupboards. The people are very much excited.

FELT AT LUND

Shock Lasted One Minute and Twenty Seconds Lund, Utah, Nov. 17—A severe earthquake shock, lasting one minute and twenty seconds, was felt here at 12:53 this afternoon.

DAMAGE AT TOQUERVILLE Three Shocks Were Felt There Yesterday Afternoon

Toquerville, Utah, Nov. 17—The severest shock of earthquake ever experienced at Toquerville occurred at ten minutes to 1 o'clock this afternoon, followed by two lighter ones. Every house was badly shaken, many walls are cracked and some chimneys thrown down. Women and children were badly frightened. [Salt Lake Tribune; November 18, 1902]

HAD SOME EARTHQUAKING Salt Lake Experienced Slight Seismic Disturbance at Noon Yesterday—Nothing Shattered Except a Few Nerves

Salt Lake was visited by an earthquake yesterday—at least by the tail end of one. Just a few minutes after 12:30 p.m. the earth became nervous for a brief space, and trembled with a considerable degree of earnestness. In the big business blocks and buildings of the city the shock was felt the strongest, although no damage was done, except to the nerves of a few individuals and to a few clocks, which were stopped. The clock in the office of the weather bureau in the Dooly block stopped at precisely 12:45, when the first shock was felt.

The disturbance is thought to have been the last waves of a series of rather severe shocks felt in the southern part of the State, particularly at St. George. At that place four distinct shocks were felt and several buildings were damaged slightly. [Salt Lake Tribune; November 18, 1902]

SALONICA HAS EARTHQUAKE No Better Than The Utah Article, However

Vienna, Nov. 18—A dispatch to the Neue Frie Presse from Salonica, today, announced that three violent earthquakes, accompanied by wind of extraordinary violence, were felt there during the night. No serious damage was done. [Salt Lake Tribune; November 19, 1902]

SALT LAKE TRIBUNE

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EVIDENCE OF VOLCANO Weather Bureau Officials Found What They Think Is Volcanic Ashes On Windows Yesterday

That there is a volcano in operation somewhere the remote corners of southern Utah is now the belief of the weather bureau officials. This conclusion was drawn from the fact that a grayish powder, exactly resembling volcanic ashes, was found on the south window sills of the big business blocks of the city. On the sills of the rear windows of the weather bureau the deposit was plainly visible when the office was opened yesterday morning, and a similar deposit was found in numerous other places. The deposit was plainly not dust, either common or alkali, and the fact that there was a strong wind blowing from the south all the preceding night gives rise to the belief that the powder is really of volcanic origin. The mysterious earthquake shocks of Monday afternoon give color to the belief. It is also regarded as probable that an active volcano could make its appearance in some of the uninhabited tracts of the southern part of the State without immediate discovery. [Salt Lake Tribune; November 20, 1902]

STATE BRIEFS

A very distinct shock of earthquake was felt in Tropic, Garfield county, on the 17th inst.; no damage. [Salt Lake Tribune; November 20, 1902]

TROUBLES AT PAROWAN

Parowan, Nov 18—A slight shock of earthquake was felt here yesterday afternoon at 1 o'clock, but it was strong enough to shake dishes and other wares on shelves. [Salt Lake Tribune; November 21, 1902]

UTAH PEAK FLASHES FIRE Reliable Parties Tell Of Volcanic Activity In Pine Valley Mountains On Day Of Earthquake

Lund, Nov. 23—Mr. George Jackson of Toquerville tells a story that during the progress of the earthquake on the 17th, Mr. Reed of New Harmony stated that while within sight of the Pine valley mountains, traveling by wagon from New Harmony to Leeds, he observed a big black smoke on top of one of these peaks, and which was later followed by a flash of fire of a few seconds' duration. Of what color or how large the fire was he did not state.

It develops that later a Mr. W. B. Savage of

Toquerville was en route from Leeds to Toquerville and he witnessed the same phenomenon. The story was also told by the two Batty boys, who were out getting wood near these mountains. As the story is from reliable parties, and verified by other parties, it is generally accepted. The Pine valley mountains are about fifty miles south of here, and no settlements are closer than seven miles of where the smoke was noticed.

[Salt Lake Tribune; November 24, 1902]

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MATTERS IN PIUTE Quiet After the Complete Republican Victory–Marysvale Growing

Marysvale, Nov. 19—After election and complete Republican victory in Piute county, matters in general are assuming normal condition.

Monday we had a few earthquakes and Tuesday John P. Meakin came. Just what, if any, connection

there may be between the two events, deponent sayeth not, but the people here, and especially the ladies, pray for less quake and more Meakin. [Salt Lake Tribune; November 24, 1902]

EARTHQUAKE SHOCKS IN WAYNE

Notom, Nov. 18—Two distinct earthquake shocks were felt here, one yesterday at 1 a.m. and one at 2 a.m.

[Salt Lake Tribune; November 24, 1902]

LATEST ON THE VOLCANO The Smoke Keeps Moving On, And The Fire Disappears

Lund, Nov. 24—According to a story from the town of New Harmony, which lies twelve miles from the Pine valley mountains on the east, a big explosion was heard immediately with the shock of earthquake recently.

Reports from this town indicate that no fire was observed issuing from the mountains, but two long

columns of white smoke arose from two places on the Pine valley mountains, which kept up for an hour and a half and formed into a huge cloud, which remained over the mountains for an hour. No ashes dropped from the clouds, so far as known. [Salt Lake Tribune; November 25, 1902]

NO EARTHQUAKE IN FOUR DAYS

St. George, Dec. 4—People in this vicinity are rejoicing. They believe the earthquakes are over. It

has been four days since a shock was felt. [Salt Lake Tribune; December 5, 1902]

SALT LAKE TRIBUNE

PINE VALLEY, UT SERIES 1902 pg. 14 Nov. 17, 12:50 p.m. M6±; Dec. 5 M5.0

A SHOCKING TIME Pine Valley Is Visited By A Series Of Earthquake Shocks

Lund, Dec. 4—Two freighters who arrived here from Pine Valley today say that people in that town are becoming greatly alarmed at the way the earthquakes are still being felt.

Since the "real article," on the 17th of last November, not a single day has passed without either one or two shocks having been experienced and it is getting to be something terrible.

Shocks are getting to be a regular thing day and night, and, in addition, just before the shocks commence, there are mumblings and rumblings heard.

At present there is not a chimney in Pine valley which is not damaged. Every chimney has been cracked and broken off on top or tumbled over. The fireplaces, in most cases, have been abandoned and chimneys made of stovepipe are now doing service.

There is little use to try to repair the chimneys, as they do not get well set before a good, big shock puts them to the bad again. The later shocks which have been experienced are a little out of the ordinary, as compared with that of the 17th. Immediately preceding the shock comes a low rumble and then a murmuring, which is later followed by a wavy shock. Trees and shrubbery have the appearance of an article floating in water when a swell strikes it. On account of the recent shocks, one house has had to be abandoned, on account of shocks cracking it every time.

Pine valley is situated away up in the mountains bearing the same name. The situation is in a veritable cup, on the side of a big mountain. To the south, about fifteen miles, are five or six craters which have some day undoubtedly thrown lava as good as the next ones. These are in a section called Diamond valley, the section being rarely visited, except by cowboys in the summer time. It is quite likely that if a trip could be made over there something would be found which would explain the murmurings which come from the bowels of the earth at Pine Valley.

The population of the town is about three hundred, and all of the inhabitants are getting frightened, as the shocks keep coming day after day, and many a night has passed when not a soul in the town has slept. The female element is especially frightened, and the heads of families are making their visits to neighboring settlements, of late, few and far between, fearing to leave lest their houses will be demolished before they return. Almost any time, it is stated, you can put your ear to the ground and hear a low roar, like a stove burning. Surprising as it may seem, no one has so far made any attempts to get away, and no fear of an earthquake swallowing them up or of a volcano bursting out seems to be entertained by these people. However, they admit that there is "something doing" underneath them, and that it is about time it stopped.

As the place is situated so far up in the mountains, this is the first trip made out of the town since the earthquake, on account of the heavy snow which has fallen in that vicinity.

At Pinto the public school has not been in session, on account of the earthquake shocks; but as the shocks down there are getting less school will be recommenced tomorrow.

[Salt Lake Tribune; December 6, 1902]

(No Headline)

Pine valley, in this State, is having a gentle shaking up by earthquakes, that in their long continuance and generally little harmless results remind one of the accounts of the earthquakes in and about New Madrid, Missouri, early in the last century. It is to be hoped that, however long the "quakes" may repeat themselves, they may repeat themselves also in their harmlessness. [Salt Lake Tribune; December 7, 1902]